PUBLIC NOTICE OF THE AVAILABILITY OF THE
KAISER PERMANENTE SPECIALTY MEDICAL OFFICE BUILDING PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT
(SCH 2016071010)

NOTICE IS HEREBY GIVEN that on November 15, 2016, the City of Irwindale, acting as Lead Agency, issued for public review and comment a Draft Environmental Impact Report (EIR) that evaluates potential environmental effects associated with the proposed Kaiser Permanente Specialty Medical Office Building Project (proposed project).

The 45-day public comment period will commence on November 15, 2016 and conclude on December 29, 2016. The Draft EIR is available for review on the City's website at http://ci.irwindale.ca.us/index.aspx?NID=368. Copies of the Draft EIR are available for public review at the City of Irwindale Planning Division (16102 Arrow Highway, 2nd Floor), Irwindale City Hall (5050 Irwindale Avenue), and Irwindale Public Library (5050 Irwindale Avenue). Please submit comments on the environmental analysis in the Draft EIR to the address provided below no later than 6:00 p.m. on December 29, 2016.

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In accordance with state law, a 45-day public review period has been established for the Draft EIR. Following the close of the public review period, responses to comments on the Draft EIR will be prepared, and, together with the Draft EIR, will constitute the Final EIR. This notice of availability is required to be filed with the County Clerk's office for a period of not less than 30 days.

PROJECT LOCATION: The approximately 4.04-acre project site consists of an irregular-shaped parcel, located within the City of Irwindale, Los Angeles County, California. Specifically, the proposed project is located at 12761 Schabarum Avenue Irwindale, California 91706 (Assessor Parcel Number 8546-031-090), north of Ramona Boulevard and west of Durbin Street. The project site is generally bounded by the Vulcan Durbin Quarry to the north, industrial/business park uses to the east and south, and the Interstate 605 (I-605) freeway to the west. Figure 1 shows the project location in a regional context, and Figure 2 shows the project site boundaries. The project site was previously operated by Jacmar Foods Distribution from 1999 until 2014. Jacmar Foods Distribution vacated the project site in the summer of 2015 and relocated to the City of Industry. Pursuant to Section 15087(c)(6) of the California Environmental Quality Act, the project site was identified on the Los Angeles County Hazardous Materials System database as having a permitted status (Permit No. 000302577) with no violations reported, as enumerated under Section 65962.5 of the Government Code.

PROJECT DESCRIPTION: Kaiser Permanente proposes the development of a three-story, approximately 59-foot high, outpatient MOB with a maximum building gross square footage of 90,000 square feet (sf). An approximately 11,357-sf urban plaza will be located on the central portion of the project site along with a public amphitheater, east of the proposed MOB. Additionally, an approximately 1,200-sf native garden will be located on the northern portion of the project site, immediately north of the proposed MOB. Based on information provided by Kaiser Permanente representatives, the following four existing specialty care departments at the Baldwin Park Medical Center campus would be relocated to the proposed new MOB: 1) Podiatry, 2) Ophthalmology, 3) Gastroenterology, and 4) Outpatient Surgery.

Table 1 (Kaiser Permanente Medical Office Building Departments) outlines the various departments that would be included in the proposed MOB and the components within each department.

Table 1

Kaiser Permanente Medical Office Building Departments

Departments	Components
Ophthalmology Clinic	• 14 provider offices • 30 exam rooms • Up to 17 specialty testing rooms • Pretest area • Sub wait for dilation • 1 clinic minor procedure room • Associated clinic and administrative support spaces
Gastroenterology Clinic	• 16 provider offices • 12 exam rooms • 1 minor clinic procedure room • Offices and work station for clinic and administrative support staff • Module shared with Podiatry
Gastroenterology Procedure Lab	• 5 procedure suites • 18 pre- and post-op holding bays • Scope wash • Nurses stations • Work space for procedure suite clinical and administrative support staff
Podiatry Clinic	• 8 provider offices • 13 exam rooms • 1 minor clinic procedure room • 1 cast room with 4 casting bays • Mini C Arm • Associated clinic and administrative support spaces • Module shared with Gastroenterology (GI) clinic
Imaging Department	• 1 General Rad Digital X-ray room with portable foot machine and scoliosis unit • Dexa machine • Work area for technicians
Ambulatory Surgery Unit	• 5 main operating rooms • 1 Ophthalmology procedure room (total of 6 rooms) • PACU with 20 pre-op/post-op bays • 4 pre-op/post-op chairs • Onsite sterile processing • Office for physician in charge • Associated clinic and administrative support spaces
Laboratory	• 2 phlebotomy draw stations • Work station for full-time equivalent (FTE) employees
Pathology	• 1 grossing and accession station • Work station for FTE(s)
Pharmacy	• Small size outpatient pharmacy

Table 1

Kaiser Permanente Medical Office Building Departments

Departments	Components
Support Services Departments	• Clinical technology • Environmental Services (EVS) • Materials management • Facilities and plant maintenance • Information technology • Supply chain • Security
Administrative Suite	• 1 office for building administrator

The proposed project would provide a total of approximately 450 parking spaces. Proposed parking will include the construction of a five-story, an approximately 115,339-sf, 339-space parking structure on the northeastern portion of the project site. The proposed parking structure would be 64 feet 5 inches in height. Approximately 111 additional parking spaces will be provided in a surface parking lot to be located along the southern, western, and northern sides of the project site. A drop-off/pick-up zone will be provided just south of the new parking structure, along the northeastern portion of the MOB. The proposed project will also include associated landscaping and infrastructure improvements as well as ancillary uses including a "Thrive" bar (e.g., café), coffee cart, pharmacy, a small biweekly farmer's market, conference center, and other weekly healthcare-related events.

The project site is already improved with street frontage, curbs, gutters, sidewalks, parkway landscaping, and utilities stubbed to the property line. The proposed site plan is shown on Figure 3.

The proposed project would require the following land use entitlements to allow for a specialty MOB on the project site:

1. Conditional Use Permit;
2. Zone Variance; and
3. Site Plan Design Review.

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

a. Regional Water Quality Control Board (RWQCB), Los Angeles Region – National Pollutant Discharge Elimination System (NPDES) Construction General Permit
b. RWQCB, Los Angeles Region – Stormwater Pollution Prevention Plan (SWPPP)
c. RWQCB, Los Angeles Region – 401 Water Quality Certification – Waste Discharge Requirement (WDR)
d. South Coast Air Quality Management District (SCAQMD) – Dust Control Plan
e. SCAQMD – Permits for stationary sources, such as the proposed generator, two boilers, and two water heaters.
f. Office of Statewide Health Planning and Development (OSHPD) - Review and approve the plans and specifications of the proposed MOBs to ensure compliance with the provisions of the CBC, Title 24, California Code of Regulations.
g. Los Angeles County Department of Public Works/Building Division – Issuance of all permits related to on-site construction.

ENVIRONMENTAL IMPACTS: The Draft EIR identifies that the proposed project would result in no impact or less than significant impacts in the following environmental impact categories: agricultural and forestry resources, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources, population and housing, recreation, transportation and traffic, and utilities and service systems. With the incorporation of mitigation measures identified in the Draft EIR, the potentially significant impacts of the proposed project in the following categories would be reduced below a level of significance: aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, and noise. No significant and unmitigable impacts have been identified in the Draft EIR.

PUBLIC HEARINGS: The City will hold a public meeting on Thursday, December 1, 2016, at 5:00 p.m. at 5050 Irwindale Avenue, Irwindale, CA 91706 (Irwindale Council Chambers). The purpose of the meeting is to present information about the proposed project, the City's process and timelines, and to solicit input, including written comments, on the content of the Draft EIR. Interested parties, including public agencies, are encouraged to attend the meeting to learn more about the proposed project and the environmental review process and to express any concerns about the proposed project, including any mitigation measures and alternatives. The public meeting information and the Draft EIR are posted at the following website: http://ci.irwindale.ca.us/index.aspx?NID=368

Date: November 15, 2016

Signature:

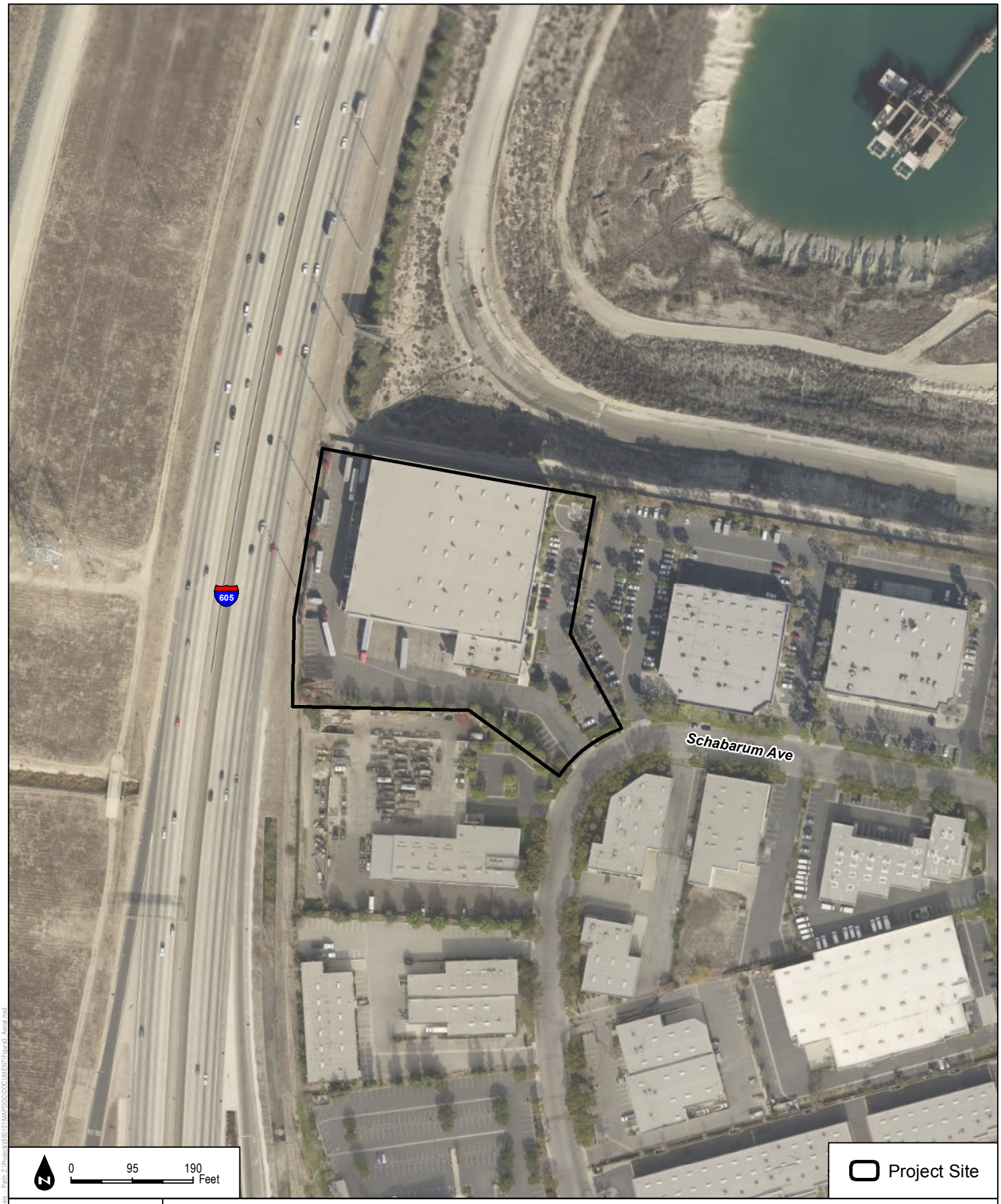
Attachments: Figure 1, Regional Location
Figure 2, Project Site
Figure 3, Proposed Site Plan

DUDEK

FIGURE 1

Regional Location

Kaiser Permanente Specialty Medical Office Building



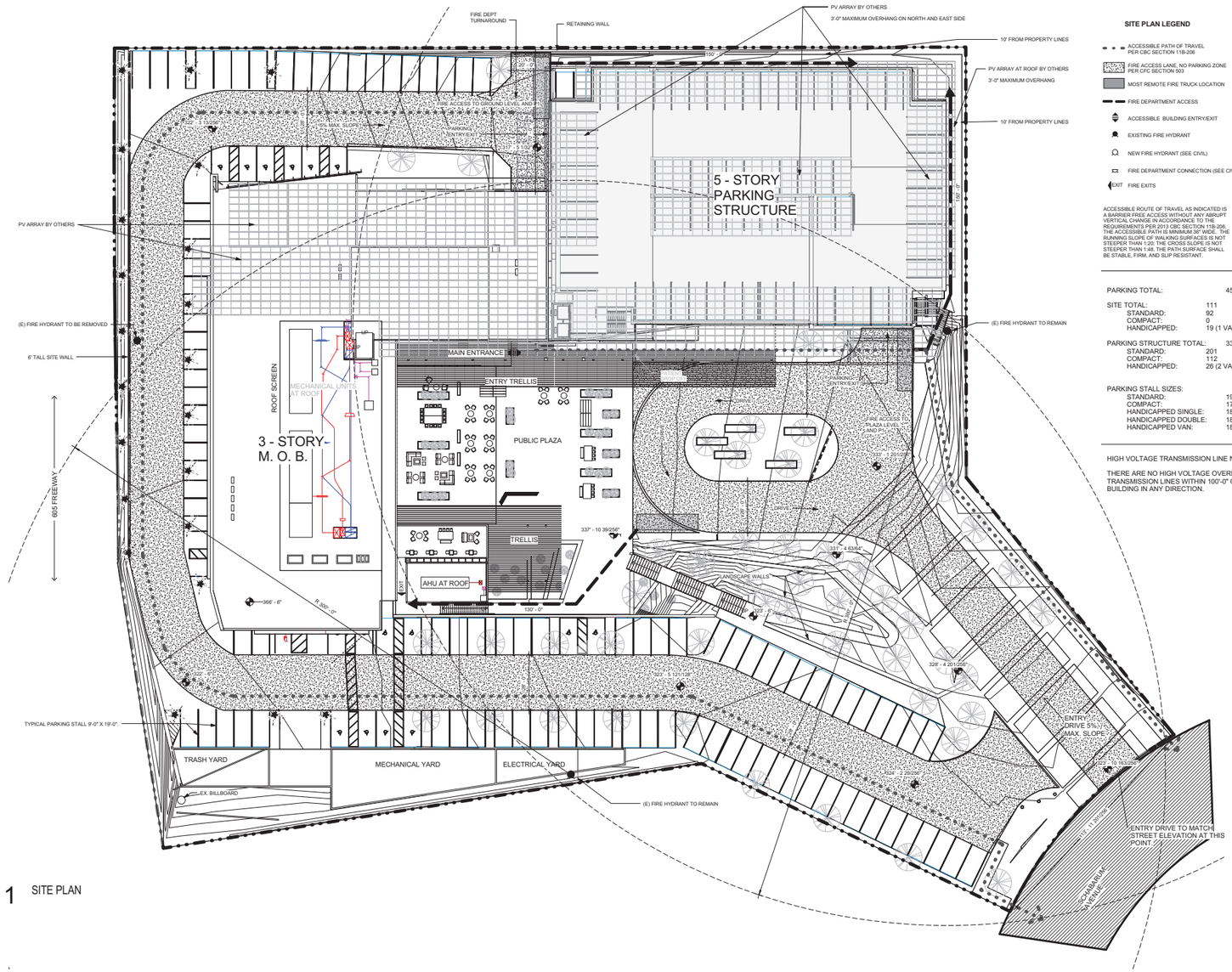
SOURCE: Los Angeles County 2014

FIGURE 2
Project Site

DUDEK

Kaiser Permanente Specialty Medical Office Building

Date: 4/28/2016 – Last saved by: ajrogis – Path: Z:\Projects\06\01\MAP\DOC\DOC\MENT\Figure3_Aerial.mxd



1 SITE PLAN

SITE PLAN LEGEND

- ACCESSIBLE PATH OF TRAVEL PER CBC SECTION 11B-206
- FIRE ACCESS LANE, NO PARKING ZONE PER CFC SECTION 503
- MOST REMOTE FIRE TRUCK LOCATION
- FIRE DEPARTMENT ACCESS
- ACCESSIBLE BUILDING ENTRY/EXIT
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT (SEE CIVIL)
- FIRE DEPARTMENT CONNECTION (SEE CIVIL)
- EXIT FIRE EXITS

ACCESSIBLE ROUTE OF TRAVEL AS INDICATED IS A BARRIER FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGE IN ACCORDANCE TO THE REQUIREMENTS PER 2013 CBC SECTION 11B-206. THE ACCESSIBLE PATH IS MINIMUM 36" WIDE. THE RUNNING SLOPE OF WALKING SURFACES IS NOT STEEPER THAN 1:20. THE CROSS SLOPE IS NOT STEEPER THAN 1:48. THE PATH SURFACE SHALL BE STABLE, FIRM, AND SLIP RESISTANT.

PARKING TOTAL:	450
SITE TOTAL:	111
STANDARD:	92
COMPACT:	0
HANDICAPPED:	19 (1 VAN ACCESSIBLE)
PARKING STRUCTURE TOTAL:	339
STANDARD:	201
COMPACT:	112
HANDICAPPED:	26 (2 VAN ACCESSIBLE)
PARKING STALL SIZES:	
STANDARD:	19'-0"D X 9'-0"W
COMPACT:	17'-0"D X 9'-0"W
HANDICAPPED SINGLE:	18'-0"D X 14'-0"W
HANDICAPPED DOUBLE:	18'-0"D X 22'-9"W
HANDICAPPED VAN:	18'-0"D X 16'-0"W

HIGH VOLTAGE TRANSMISSION LINE NOTE:

THERE ARE NO HIGH VOLTAGE OVERHEAD TRANSMISSION LINES WITHIN 100'-0" OF THE BUILDING IN ANY DIRECTION.

CO ARCHITECTS

5055 Wilshire Boulevard, 9th Floor
Los Angeles, California 90036
323.525.0500 phone, 323.525.0955 fax

THE CLIENT / UNIVERSITY / HOSPITAL NAME

IRWINDALE SPECIALTY MEDICAL OFFICE BUILDING

12761 SCHABARUM AVENUE
IRWINDALE, CA 91706

FACILITY# xxxx PC# xxxx

KEY PLAN

SITE PLAN

SCALE: As indicated
DATE OF FIRST ISSUE: 29 JANUARY 2016

EXTERIOR ENVELOPE DESIGN
CO PROJECT NO.: 15018.00

A1.01

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SOURCE: CO Architects, 01/29/216.

FIGURE 3
Proposed Site Plan

DUDEK

Kaiser Permanente Specialty Medical Office Building

DRAFT

Environmental Impact Report for the Kaiser Permanente Specialty Medical Office Building Project

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NOVEMBER 2016

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AB	Assembly Bill
ADA	Americans with Disabilities Act
ANSI	American National Standards Institute
AOC	Area of Concern
AQMP	Air Quality Management Plan
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
ASTM	American Society for Testing and Materials
ASU	Ambulatory Surgery Unit
ATCM	Airborne Toxic Control Measure
B.P.T.	Baldwin Park Transit
BACT	best available control technology
BAU	business-as-usual
BLM	Bureau of Land Management
BMP	best management practices
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEPA	California Environmental Protection Agency
CALINE4	California LINE Source Dispersion Model
CalOSHA	California Occupational Safety and Health Administration
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CH_4	methane
CHRIS	California Historical Resources Information System
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2E	carbon dioxide equivalent
COC	contaminant of concern
CPUC	California Public Utilities Commission
CREC	controlled recognized environmental conditions
CRHR	California Register of Historical Resources
CSDLAC	County Sanitation Districts of Los Angeles County

Acronym/Abbreviation	Definition
CUP	Conditional Use Permit
D/T	dilutions to thresholds
DA	Design Review
DOGGR	Division of Oil, Gas, and Geothermal Resources
DTSC	Department of Toxic Substances Control
E.M.T.	El Monte Transit
EB	Eastbound
EDR	Environmental Data Resources Inc.
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EVS	Environmental Services
F.T.	Foothill Transit
FAR	floor area ratio
FDD	Facilities Development Division
FTE	full-time equivalent
GHG	greenhouse gas
GI	Gastroenterology
GWP	global warming potential
H_2O	water vapor
H_2S	hydrogen sulfide
HA	Hydrologic Area
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
HDPE	high-density polyethylene
HFC	hydrofluorocarbon
HHDT	heavy heavy-duty trucks
HMBP	hazardous materials business plan
HOV	High Occupancy vehicle
HREC	historical recognized environmental conditions
HSA	Hydrologic Sub-area
HU	Hydrologic Unit
HUC	hydrologic unit code
HVAC	heating, ventilation, and air conditioning
I-10	Interstate 10
I-210	Interstate 210
I-605	Interstate 605
ICU	Intersection Capacity Utilization
IS/NOP	Initial Study and Notice of Preparation
ITE	Institute of Transportation Engineers'
JOS	Join Outfall System
LACFD	Los Angeles County Fire Department
LACM	Natural History Museum of Los Angeles County

Acronym/Abbreviation	Definition
LCFS	Low Carbon Fuel Standard
LDA	light-duty automobiles
LDT1	light-duty trucks 1
LEED	Leadership in Energy and Environmental Design
LHD2	light-duty trucks 2
LID	low impact development
LLG	Law & Greenspan
LOS	levels of service
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
MHDT	medium-heavy duty trucks
MMBTU	million metric British thermal units
MMT	million metric tons
MOB	medical office building
MOE	measure of effectiveness
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAIOP	National Association of Industrial and Office Properties
NDMA	N-nitrosodimethylamine
NETR	National Environmental Title Research
NF_3	nitrogen trifluoride
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Development
PCB	polychlorinated biphenyls
PCE	passenger car equivalent
PEER	Permit Engineering and Evaluation Report
PFC	perfluorocarbons
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns in diameter
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in diameter
PPV	peak particle velocity
PRC	Public Resource Code
PRIMP	Paleontological Resources Impact Mitigation Program

Acronym/Abbreviation	Definition
PTE	Potential to Emit
PV	photovoltaic
RCP	reinforced concrete pipe
RCRA	Resources Conservation and Recovery Act
REC	recognized environmental condition
RFS	Renewable Fuel Standard
ROG	reactive organic compounds or gas
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SGV	San Gabriel Valley
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SO_4	sulfates
SRA	Source-Receptor Area
SUSMP	Standard Urban Stormwater Mitigation Plans
SVP	Society of Vertebrate Paleontology
SWPPP	stormwater pollution prevention plan
TAC	toxic air contaminant
T-BACT	best available control technology for toxics
TCE	trichloroethene
TIA	Transportation Impact Analysis
TIS	Traffic Impact Study
TMDL	total maximum daily loads
USA	Underground Service Alert
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
V/C	Volume-to-Capacity
VMT	Vehicle Miles Traveled
VOC	volatile organic compound
WB	Westbound
WDR	Waste Discharge Requirement
WRCC	Western Regional Climate Center
WRP	water reclamation plants

EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This Environmental Impact Report (EIR) has been prepared by the City of Irwindale (City) as lead agency pursuant to the California Environmental Quality Act (CEQA) Public Resources Code 21000 et seq., and the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.). This EIR has been prepared to evaluate the environmental effects of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project). The purpose of this EIR is to focus the discussion on those potential effects on the environment of the project which the lead agency has determined may be significant. In addition, feasible mitigation measures are recommended, when applicable, that could reduce significant environmental impacts or avoid significant environmental impacts.

The approximately 4.04-acre project site consists of an irregular-shaped parcel, located within the City of Irwindale, Los Angeles County, California. Specifically, the proposed project is located at 12761 Schabarum Avenue Irwindale, California 91706 (Assessor Parcel Number 8546-031-090), north of Ramona Boulevard and west of Durbin Street. The project site is generally bounded by the Vulcan Durbin Quarry to the north, industrial/business park uses to the east and south, and the Interstate 605 (I-605) freeway to the west. Project location is further discussed in Chapter 2, Project Description, of this EIR.

ES.2 PROJECT BACKGROUND AND DESCRIPTION

Kaiser Foundation Health Plan, Inc., is proposing the development of a three-story, approximately 59-foot high, outpatient medical office building (MOB) with a maximum building gross square footage of 90,000 square feet. An approximately 11,357-square-foot urban plaza will be located on the central portion of the project site along with a public amphitheater, east of the proposed MOB. Additionally, an approximately 1,200-square-foot native garden will be located on the northern portion of the project site, immediately north of the proposed MOB. Based on information provided by Kaiser Permanente representatives, the following four existing specialty care departments at the Baldwin Park Medical Center campus would be relocated to the proposed new MOB: (1) Podiatry, (2) Ophthalmology, (3) Gastroenterology, and (4) Outpatient Surgery.

Table ES-1 (Kaiser Permanente Medical Office Building Departments) outlines the various departments that would be included in the proposed MOB and the components within each department.

Table ES-1
Kaiser Permanente Medical Office Building Departments

Departments	Components
Ophthalmology Clinic	• 14 provider offices • 30 exam rooms • Up to 17 specialty testing rooms • Pretest area • Sub wait for dilation • 1 clinic minor procedure room • Associated clinic and administrative support spaces
Gastroenterology Clinic	• 16 provider offices • 12 exam rooms • 1 minor clinic procedure room • Offices and work station for clinic and administrative support staff • Module shared with Podiatry
Gastroenterology Procedure Lab	• 5 procedure suites • 18 pre- and post-op holding bays • Scope wash • Nurses stations • Work space for procedure suite clinical and administrative support staff
Podiatry Clinic	• 8 provider offices • 13 exam rooms • 1 minor clinic procedure room • 1 cast room with 4 casting bays • Mini C Arm • Associated clinic and administrative support spaces • Module shared with Gastroenterology (GI) clinic
Imaging Department	• 1 General Rad Digital X-ray room with portable foot machine and scoliosis unit • Dexa machine • Work area for technicians
Ambulatory Surgery Unit	• 5 main operating rooms • 1 Ophthalmology procedure room (total of 6 rooms) • PACU with 20 pre-op/post-op bays • 4 pre-op/post-op chairs • On-site sterile processing • Office for physician in charge • Associated clinic and administrative support spaces
Laboratory	• 2 phlebotomy draw stations • Work station for full-time equivalent (FTE) employees
Pathology	• 1 grossing and accession station • Work station for FTE(s)
Pharmacy	• Small size outpatient pharmacy

Table ES-1
Kaiser Permanente Medical Office Building Departments

Departments	Components
Support Services Departments	• Clinical technology • Environmental Services (EVS) • Materials management • Facilities and plant maintenance • Information technology • Supply chain • Security
Administrative Suite	• 1 office for building administrator

Source: Strategic Planning & Consulting, Delivery Systems Strategy 2016.

The proposed project would provide a total of approximately 450 parking spaces. Proposed parking will include the construction of a five-story, an approximately 115,339-square-foot, 339-space parking structure on the northeastern portion of the project site. The proposed parking structure would be 64 feet and 5 inches in height. Approximately 111 additional parking spaces will be provided in a surface parking lot to be located along the southern, western, and northern sides of the project site. A drop-off/pick-up zone will be provided just south of the new parking structure, along the northeastern portion of the MOB. The proposed project will also include associated landscaping and infrastructure improvements as well as ancillary uses including a "Thrive" bar (e.g., café), coffee cart, pharmacy, a small biweekly farmer's market, conference center, and other weekly healthcare-related events. The project site is already improved with street frontage, curbs, gutters, sidewalks, parkway landscaping, and utilities stubbed to the property line. Kaiser Permanente is proposing a conditional use permit to allow for development on the project site, as well as a site plan and design review permit for the proposed project. Additional detailed project description information is provided in Chapter 2, Project Description, of this EIR.

ES.3 REQUIRED PERMITS AND APPROVALS

Implementation of the proposed project may require permits or other forms of approval from public agencies or other entities prior to construction of the proposed project. These permits include, but are not limited to, the following:

City of Irwindale

Certification of this EIR; demolition permit to allow the existing structure and surface parking to be demolished as part of the proposed project; approval of a conditional use permit to allow a MOB on the project site; site plan and design review permit that addresses the configuration, design, location, and impact of the proposed use as compared to the established standards and

design guidelines; zone variance to exceed the maximum allowable floor area ratio on-site; and other discretionary actions shall be reviewed and/or approved by Planning Staff, the City's Planning Commission, and the City Council. Plan Check process and approval is required.

Los Angeles County Department of Public Works/Building Division

Issuance of all permits related to on-site construction (Building and Engineering plan check services are contracted by the City to Los Angeles County).

Regional Water Quality Control Board, Los Angeles Region

National Pollutant Discharge Elimination System (NPDES) Construction General Permits will be required for grading activities of one acre or larger. Since the proposed project would disturb more than one acre of soil, Kaiser Permanente must file a Notice of Intent with the Los Angeles Regional Water Quality Control Board (RWQCB) and obtain a General Construction Activity Stormwater Permit, pursuant to the NPDES regulations established under the Clean Water Act. This permit requires preparation and implementation of a stormwater pollution prevention plan, which is intended to prevent degradation of surface and groundwater during the grading and construction process. A report of waste discharge shall be submitted to the Los Angeles RWQCB to obtain either a waste discharge requirement or a waiver for any impacts to waters of the state.

South Coast Air Quality Management District

A fugitive dust control plan submitted to the South Coast Air Quality Management District (SCAQMD) for approval will be required prior to issuance of grading permits (SCAQMD Rule 403). Permits for stationary sources, such as the proposed generator, two boilers, and two water heaters will be required prior to project approval.

Office of Statewide Health Planning and Development

The Office of Statewide Health Planning and Development's Facilities Development Division will review and approve the plans and specifications of the proposed MOB to ensure compliance with the provisions of the CBC, Title 24, California Code of Regulations.

ES.4 IMPACTS DETERMINED TO BE SIGNIFICANT

Table ES-1 (Summary of Environmental Impacts and Mitigation Measures), provides a summary of the impact analysis related to the proposed project. The table identifies a summary of the significant environmental impacts resulting from implementation of the proposed project pursuant to the CEQA Guidelines, Section 15123(b)(1). For a more detailed discussion, please see Chapter 3 of this document. Table ES-1 also lists the applicable mitigation measures related to identified

significant impacts, as well as the level of significance after mitigation is identified. Impacts associated with air quality and traffic were identified as being significant and unavoidable.

ES.5 EFFECTS NOT FOUND TO BE SIGNIFICANT

The Initial Study for the proposed project concluded that the proposed project would not result in significant impacts to aesthetics, agriculture and forestry resources, population and housing, and recreation; therefore, these topics are not addressed in the EIR as separate environmental impact analysis sections and not summarized in Table ES-1. Although impacts in the categories of geology and soils, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources, noise, public services, and utilities and service systems were found to be less than significant with no mitigation required, each is addressed in Chapter 3 as a stand-alone section due to the lengthy discussion for each. Environmental topics that were not found to be significant with mitigation incorporated are biological resources, cultural resources, and hazards and hazardous materials.

ES.6 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Section 15123(b)(2) of the CEQA Guidelines requires that areas of controversy known to the lead agency must be stated in the EIR summary. Issues of interest to the public and public agencies were identified during the 30-day public comment period for the Initial Study and Notice of Preparation. Comments received during this scoping period were considered during the preparation of this EIR. Comment letters received during the scoping period expressed Native American concerns and traffic concerns. These concerns have been identified as areas of known controversy and are analyzed in Chapter 3 of this EIR. The Initial Study, Notice of Preparation, distribution list, and comments received during the scoping period are included in Appendix A of this EIR.

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Air Quality			
a. Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially significant	**MM-AQ-1** To ensure contribution to ozone formation during emergency generator testing is minimized, if a triennial 4-hour emergency generator testing is conducted by the applicant or its contractors, the testing period shall occur only between November and April. This testing schedule shall be identified specifically in the application for Authority to Construct submitted to the South Coast Air Quality Management District (SCAQMD). A copy of the Authority to Construct issued by the SCAQMD shall be submitted to the City of Irwindale Planning Department.	Significant and unavoidable
b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Potentially significant	**MM-AQ-1**	Less than significant during construction Significant and unavoidable during operations
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)?	Potentially significant	**MM-AQ-1**	Significant and unavoidable during operations
d. Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than significant	None required	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project result in cumulative air quality impacts?	Potentially significant	**MM-AQ-1**	Significant and unavoidable during operations
Biological Resources			
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 Game or U.S. Fish and Wildlife Service?	Potentially significant	**MM-BIO-1** In order to avoid potential impacts to nesting birds in conformance with the Migratory Bird Treaty Act and California Fish and Game Code during project construction, a qualified biologist will conduct a nesting bird survey within 1 week prior to ground-disturbing activities. Avoidance will involve the period from approximately February 1 to August 31, which covers the breeding season for most birds that may occur in the project area. The survey shall consist of full coverage of the proposed disturbance footprint as well a 300-foot buffer. If no active nests are found, no additional measures are required. If active nests are found, the nest locations shall be mapped by the biologist using GPS equipment. The nesting bird species and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging) will be documented. The biologist shall establish a no-disturbance buffer around each active nest. The buffer will be determined by the biologist based on the species present and surrounding habitat. No construction or ground-disturbing activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.	Less than significant
b. Would the project have cumulative biological resource impacts?	Less than significant	None required	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Cultural Resources			
a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	Less than significant	None required	Less than significant
b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially significant	**MM-CUL-1** **Archaeological Monitoring.** Prior to the commencement of any earth-moving activities on-site, the applicant shall retain a Native American Monitor and a qualified archaeologist, subject to the review and approval of the City's Building Official, or designee. The Native American monitor and qualified archaeologist shall attend the preconstruction meeting and be on-site during initial ground disturbance. Within each area of proposed ground disturbance, the archaeologist will assess the soil types, stratigraphy, level of soil disturbance, and will provide recommendations for subsequent monitoring based on the observed conditions. At least 30 days prior to issuance of grading permits, separate agreements between the applicant and the qualified archaeologist and the applicant and a Native American Monitor shall be developed regarding prehistoric cultural resources and shall identify any monitoring requirements and treatment of cultural resources so as to meet both the requirements of CEQA and those of the Tribe. The agreements shall also address roles and responsibilities of the Native American Monitor and the archaeologist. The Native American Monitor agreement shall also detail treatment and final disposition of any Native American cultural resources, sacred sites, and human remains discovered on the site. In compliance with **MM-CUL-2** and **MM-CUL-4**, discovery and treatment of human remains shall be in compliance with State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)		Level of Significance After Mitigation
		MM-CUL-2	**Inadvertent Discovery of Archaeological Resources.** In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.	
c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially significant	**MM-CUL-3**	**Paleontological Mitigation Program.** Prior to commencement of any grading activity on-site, the applicant shall retain a qualified paleontologist, subject to the review and approval of the City's Building Official, or designee. The qualified paleontologist shall attend the preconstruction meeting and be on-site during all rough grading and other significant ground-disturbing activities in previously undisturbed older Quaternary alluvial deposits, if encountered. These deposits may be encountered at depths as shallow as 10 feet below ground surface. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontology monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed project. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP) (2010).	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
d. Would the project cause a substantial adverse change in significance of a tribal cultural resource as defined in Public Resources Code Section 21074?	Potentially significant	See **MM-CUL-1** (a Native American monitor will be on site during initial ground disturbance).	Less than significant
e. Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially significant	**MM-CUL-4** **Inadvertent Discovery of Human Remains.** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be immediately notified of the discovery. No further excavation or disturbance of the project site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.	Less than significant
Would the project have cumulative cultural resource impacts?	Potentially significant	**MM-CUL-1** **MM-CUL-2** **MM-CUL-3** **MM-CUL-4**	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Geology and Soils			
a. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			
i. Seismic-related ground failure, including liquefaction?	Less than significant	None required	Less than significant
ii. Landslides?	Less than significant	None required	Less than significant
b. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than significant	None required	Less than significant
c. Would the project have cumulative geological impacts?	No impact	None required	No impact
Greenhouse Gas Emissions			
a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant	None required	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than significant	None required	Less than significant
Would the project have cumulative impacts on greenhouse gas emissions?	Less than significant	None required	Less than significant
Hazards and Hazardous Materials			
a. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?	Potentially significant	**MM-HAZ-1** Prior to demolition of the existing building, an asbestos and lead-based paint survey shall be conducted by a California Occupational Safety and Health Administration-certified asbestos and lead-based paint consultant and/or certified site surveillance technician. A report documenting material types, conditions, and general quantities will be provided, along with photos of positive materials and diagrams. Demolition plans and contract specifications shall incorporate any abatement procedures for the removal of material containing asbestos and/or lead-based paint. All abatement work shall be done in accordance with federal, state, and local regulations, and at the approval of the City of Irwindale Department of Planning.	Less than significant
Would the project have cumulative hazards or hazardous materials impacts?	Potentially significant	**MM-HAZ-1**	Less than significant
Hydrology/Water Quality			
a. Would the project violate any water quality standards or waste discharge requirements?	Less than significant	None required	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have cumulative hydrology or water quality impacts?	Less than significant	None required	Less than significant
Land Use and Planning			
a. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Less than significant	None required	Less than significant
Would the project have cumulative land use and/or planning impacts?	No impact	None required	No impact
Mineral Resources			
a. Would the project result in loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Less than significant	None required	Less than significant
b. Would the project result in loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	Less than significant	None required	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have cumulative impacts on mineral resources?	Less than significant	None required	Less than significant
Noise			
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	None required	Less than significant
b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Less than significant	None required	Less than significant
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	None required	Less than significant
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	None required	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have cumulative noise impacts?	Less than significant	None required	Less than significant
Public Services			
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: • Fire protection	Less than significant	None required	Less than significant
Would the project have cumulative impacts on public facilities?	Less than significant	None required	Less than significant
Transportation and Traffic			
a. Would the project 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	Potentially significant	**MM-TRAF-1 I-605 Freeway SB Ramps/Ramona Boulevard.** Prior to the issuance of the certificate of occupancy by the City of Irwindale (City), the project shall submit a fair-share contribution towards the conversion of the shared left-turn/through lane on the Interstate 605 (I-605) Freeway Southbound Off-Ramp to Ramona Boulevard to an exclusive left-turn lane and the conversion of the exterior off-ramp right-turn only lane to a shared left-turn/through/right-turn lane. To	Significant and unavoidable

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
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?		accommodate what in essence becomes dual left-turn lanes, the existing off-ramp shall be restriped and the existing raised median island on Ramona Boulevard (easterly of the off-ramp) may also require a minor modification. The resultant southbound lane configuration shall provide one left-turn lane and one shared left/through/right-turn lane. In addition, the I-605 Freeway Southbound On-Ramp shall be restriped to reflect the relocation of the High Occupancy vehicle (HOV) lane from the exterior on-ramp lane to the interior on-ramp lane (e.g., the lane closest to and adjacent to the freeway mainline, as is typical of many HOV on-ramp lanes). In addition, the ramp metering equipment shall be relocated to the west side of the on-ramp from its current location along the east side of the on-ramp. This measure would result in greater clarity associated with more typical designs in that HOV motorists would subsequently be passing any stopped motorist at the ramp meter on the left-hand side rather than on the right-hand side. The fair-share contribution will also include funds towards the associated Caltrans-required Permit Engineering and Evaluation Report (PEER) and subsequent traffic engineering design plan preparation. **MM-TRAF-2** **I-605 Freeway NB Ramps/Ramona Boulevard.** Prior to the issuance of the certificate of occupancy by the City, the project shall submit a fair-share contribution towards the conversion of the shared left-turn/though lane on the Interstate 605 (I-605) Freeway Northbound Off-Ramp to Ramona Boulevard to a shared left-turn/through/right-turn lane. To accommodate the proposed shared left-turn/through/right-turn lane (e.g., in essence the dual right-turn lane operation), the existing off-ramp shall be restriped. In addition, Ramona Boulevard may need to be widened (e.g., possible curb widening along the south side of Ramona Boulevard and/or a minor modification to the existing raised median island) due to the	

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		existence of the bike lanes on Ramona Boulevard and the likely opposition to any proposed removal of the bike lanes. The resultant northbound lane configuration would provide one shared left-turn/through/right-turn lane and one right-turn lane. The fair-share contribution will also include funds towards the associated Caltrans-required Permit Engineering and Evaluation Report (PEER) and subsequent traffic engineering design plan preparation. **MM-TRAF-3** **Baldwin Park Boulevard/Francisquito Avenue.** Prior to the issuance of the certificate of occupancy by the City, the northbound approach on Baldwin Park Boulevard at Francisquito Avenue shall be modified to accommodate the installation of a right-turn only lane. To accommodate the proposed right-turn only lane, the existing roadway striping shall be adjusted as needed. The resulting lane configuration at the northbound approach would provide one left-turn lane, two through lanes, and one right-turn lane. **MM-TRAF-4** In order to ensure sufficient intersection sight distance, the building plans shall reflect formal red curb to be installed along Schabarum Avenue (e.g., from the project driveway to a point 20 feet to the west and from the project driveway to the east property line); installation of double yellow striping in the middle of Schabarum Avenue to delineate motorist right-of-way; and installation of a formal stop sign and corresponding pavement legend facing the exiting driveway approach. These striping, pavement marking/s and signage shall be completed prior to the issuance of the certificate of occupancy by the City.	
b. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and	Potentially significant	**MM-TRAF-4** In order to ensure sufficient intersection sight distance, the building plans shall reflect formal red curb to be installed along Schabarum Avenue (e.g., from the project driveway to a point 20 feet to the west and from the project driveway to the east property line); installation of double yellow striping in the middle of Schabarum Avenue to delineate motorist right-of-way; and installation of a	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		formal stop sign and corresponding pavement legend facing the exiting driveway approach. These striping, pavement marking/s and signage shall be completed prior to the issuance of the certificate of occupancy by the City. .	
Would the project have cumulative impacts on transportation and traffic?	Potentially significant	**MM-TRAF-1** **I-605 Freeway SB Ramps/Ramona Boulevard.** Prior to the issuance of the certificate of occupancy by the City of Irwindale (City), the project shall submit a fair-share contribution towards the conversion of the shared left-turn/through lane on the Interstate 605 (I-605) Freeway Southbound Off-Ramp to Ramona Boulevard to an exclusive left-turn lane and the conversion of the exterior off-ramp right-turn only lane to a shared left-turn/through/right-turn lane. To accommodate what in essence becomes dual left-turn lanes, the existing off-ramp shall be restriped and the existing raised median island on Ramona Boulevard (easterly of the off-ramp) may also require a minor modification. The resultant southbound lane configuration shall provide one left-turn lane and one shared left/through/right-turn lane. In addition, the I-605 Freeway Southbound On-Ramp shall be restriped to reflect the relocation of the High Occupancy vehicle (HOV) lane from the exterior on-ramp lane to the interior on-ramp lane (e.g., the lane closest to and adjacent to the freeway mainline, as is typical of many HOV on-ramp lanes). In addition, the ramp metering equipment shall be relocated to the west side of the on-ramp from its current location along the east side of the on-ramp. This measure would result in greater clarity associated with more typical designs in that HOV motorists would subsequently be passing any stopped motorist at the ramp meter on the left-hand side rather than on the right-hand side. The fair-share contribution will also include funds towards the associated Caltrans-required Permit Engineering and Evaluation Report (PEER) and	Significant and unavoidable

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		subsequent traffic engineering design plan preparation. **MM-TRAF-2** **I-605 Freeway NB Ramps/Ramona Boulevard.** Prior to the issuance of the certificate of occupancy by the City, the project shall submit a fair-share contribution towards the conversion of the shared left-turn/though lane on the Interstate 605 (I-605) Freeway Northbound Off-Ramp to Ramona Boulevard to a shared left-turn/through/right-turn lane. To accommodate the proposed shared left-turn/through/right-turn lane (e.g., in essence the dual right-turn lane operation), the existing off-ramp shall be restriped. In addition, Ramona Boulevard may need to be widened (e.g., possible curb widening along the south side of Ramona Boulevard and/or a minor modification to the existing raised median island) due to the existence of the bike lanes on Ramona Boulevard and the likely opposition to any proposed removal of the bike lanes. The resultant northbound lane configuration would provide one shared left-turn/through/right-turn lane and one right-turn lane. The fair-share contribution will also include funds towards the associated Caltrans-required Permit Engineering and Evaluation Report (PEER) and subsequent traffic engineering design plan preparation.	
Utilities and Service Systems			
a. 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 effects?	Less than significant	None required	Less than significant

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Topic	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
b. 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	None required	Less than significant
c. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Less than significant	None required	Less than significant
Would the project have cumulative utilities impacts?	Less than significant	None required	Less than significant

ES.7 SUMMARY OF PROJECT ALTERNATIVES

The CEQA Guidelines Section 15126.6 requires consideration and discussion of alternatives to the proposed project in an EIR. Several alternatives, including alternate sites, were considered but rejected from consideration in this EIR. Three alternatives, including the No Project Alternative, are reviewed in Chapter 4.0 of this document. This section summarizes alternatives to the proposed project that were developed, as well as the No Project Alternative, as required under CEQA. Table ES-2 provides a summary of the alternatives impact analysis considered in the EIR and compares each impact of the areas of potential environmental effects to the proposed project per CEQA.

Alternative 1 – No Project (Vacant Site) Alternative

Alternative 1 assumes existing, baseline conditions on the project site as of July 2016. Under Alternative 1, the existing environment on the project site, consisting of a warehouse, surface parking lot, truck loading area, cooler, freezer, office building, and landscaping, would remain in place. While the project site was previously occupied by Jacmar Foods Distribution, it was vacated by that business in summer 2015. Alternative 1 assumes that the project site remains vacant. The proposed MOB, parking structure, urban plaza, and native garden would not be constructed on the project site and no food distribution operation would use the existing on-site facilities.

Alternative 2 – No Project (Planned Development) Alternative

The exiting industrial structures on the project site were previously occupied and used by Jacmar Foods Distribution, until the summer of 2015. Alternative 2 assumes that a similar industrial tenant (i.e., a food distribution company) would occupy the project site and would use the project site and the existing structures as a typical food distribution center. As such, Alternative 2 assumes existing, baseline conditions on the project site as of 2015. Because the project site operated as a foods distribution center until 2015, it is assumed that minimal improvements would be required at the project site to resume operation. Therefore, construction activities would be limited to internal renovations of the existing facilities. The appearance and function of the existing structures would remain the same or similar, and the exiting landscaping and surface parking would remain in place. The proposed MOB, parking structure, urban plaza, and native garden would not be constructed on the project site.

Alternative 3 – Reduced Program Alternative

Under Alternative 3, a smaller MOB would be constructed. The existing on-site industrial facilities would still be demolished and replaced with an MOB and parking structure with similar landscaping and community amenities as the proposed project. The size of the MOB would be 60,000 square feet. Alternative 3 would also include construction of a parking structure, urban

plaza, and native garden on the project site. The parking structure, however, would be smaller than the parking structure that is planned under the proposed project, since an MOB of a lesser size would require fewer parking spaces.

Environmentally Superior Alternative

Table ES-2 provides a summary of the alternatives impact analysis considered in the EIR and compares each impact of the areas of potential environmental effects to the proposed project per CEQA.

Table ES-2
Comparison of Impacts

Impact Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3
Air Quality	Significant and unavoidable	Impacts avoided	Impacts reduced; the significant and unavoidable impact associated with routine emergency generator testing would be avoided	Impacts reduced; impact associated with the emergency generator would remain significant and unavoidable
Biological Resources	Less than significant with incorporation of mitigation measures	Impacts avoided	Impacts avoided	Similar impacts
Cultural Resources	Less than significant with incorporation of mitigation measures	Impacts avoided	Impacts reduced	Similar impacts
Geology and Soils	Less than significant	Impacts avoided	Impacts reduced	Impacts reduced
Greenhouse Gas Emissions	Less than significant	Impacts avoided	Impacts reduced	Impacts reduced
Hazards and Hazardous Materials	Less than significant with incorporation of mitigation measures	Impacts avoided	Similar impacts	Similar impacts
Hydrology and Water Quality	Less than significant	Impacts avoided	Construction impacts reduced Operational impacts slightly greater	Similar Impacts
Land Use and Planning	Less than significant	Slightly greater impacts	Similar Impacts	Similar Impacts
Mineral Resources	Less than significant	Similar Impacts	Similar Impacts	Similar Impacts
Noise	Less than significant	Impacts avoided	Impacts reduced during construction Similar impacts during operation	Impacts reduced
Public Services	Less than significant	Impacts avoided	Impacts reduced	Impacts reduced

Table ES-2
Comparison of Impacts

Impact Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3
Traffic	Significant and unavoidable	Impacts avoided	Impacts reduced; significant and unavoidable impacts avoided	Impacts reduced but would remain significant and unavoidable
Utilities and Service Systems	Less than significant	Impacts avoided	Impacts reduced	Impacts reduced
Meets Most of the Basic Project Objectives?	Yes	No	No	Yes

As shown in Table ES-2, implementation of the No Project (Vacant Site) Alternative would result in the greatest reduction in significant impacts when compared to the proposed project. Because the No Project (Vacant Site) Alternative would result in the least amount of impacts to the environment, it would be the environmentally superior alternative. While the No Project (Planning Development) Alternative would result in slightly greater impacts as compared to the No Project (Vacant Site) Alternative, it would also eliminate the significant and unavoidable effects of the proposed project. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Alternative 3, Reduced Project (MOB of 60,000 SF) is, therefore, the environmentally superior alternative to the proposed project. This alternative would reduce many of the proposed project's impacts and would meet the basic project objectives, although to a lesser degree when compared with the proposed project.

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CHAPTER 1
INTRODUCTION

This project-level Environmental Impact Report (EIR) has been prepared to evaluate the environmental impacts associated with the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project) in the City of Irwindale (City), and to identify mitigation measures and project alternatives that would avoid or minimize significant environmental impacts. The City is the "public agency which has the principal responsibility for carrying out or approving the project" and, as such, is the "lead agency" for this project under the California Environmental Quality Act (CEQA) of 1970. CEQA requires the lead agency to consider the information contained in the EIR and certify the EIR prior to taking any discretionary action. The EIR is also a public disclosure document available to agencies and the public for review and comment prior to the consideration of the proposed project by the City, and is intended to serve as an informational document to be considered by the City, Responsible Agencies, and Trustee Agencies during deliberations on the proposed project. A detailed project description and the approvals required for the proposed project are discussed in Chapter 2 of this EIR.

1.1 SUMMARY OF THE PROPOSED PROJECT

Kaiser Foundation Health Plan, Inc., a California nonprofit public benefit corporation, is proposing the development of a three-story, approximately 59-foot tall, outpatient medical office building (MOB) with a maximum building gross square footage of 90,000 square feet (sf) on an approximately 4.04-acre site located at 12761 Schabarum Avenue, Irwindale, California 91706. The project site is generally bound by the Vulcan Durbin Quarry to the north, industrial/business park uses to the east and south, and the Interstate 605 (I-605) freeway to the west. The project site is currently developed with a vacant, cold storage warehouse with associated surface parking. In addition to the proposed MOB, an approximately 11,357-sf urban plaza will be located on the central portion of the project site along with a public amphitheater, east of the proposed MOB. Additionally, an approximately 1,200-sf native garden will be located on the northern portion of the project site, immediately north of the proposed MOB. Based on information provided by Kaiser Permanente representatives, the following four existing specialty care departments at Kaiser Permanente's Baldwin Park Medical Center campus would be relocated to the proposed MOB: podiatry, ophthalmology, gastroenterology, and outpatient surgery. In addition to the relocated departments, the proposed MOB would also house the following services: an imaging department, an ambulatory surgery unit, a laboratory, a pathology department, a pharmacy, and support services. The project would also include a five-story, approximately 115,339-sf, 339-space parking structure on the northeastern portion of the project site. The proposed parking structure would be approximately 64 feet in height. Approximately 111 additional parking spaces will be provided in a surface parking lot to be located along the southern, western, and northern sides of the project site.

1.2 CEQA REQUIREMENTS

CEQA (California Public Resources Code, Section 21000 et seq.) requires the preparation of an EIR for any project that a lead agency determines may have a significant impact on the environment. According to Section 21002.1(a) of the CEQA statutes, "The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided." CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the project being proposed, and the extent and types of impacts that the project and its alternatives would have on the environment if they were to be implemented. This EIR has been prepared to comply with all criteria, standards, and procedures of the CEQA Guidelines (14 CCR 15000 et seq.). This document has been prepared as a project EIR pursuant to Section 15161 of the CEQA Guidelines, and represents the independent judgment of the City as lead agency.

Notice of Preparation and Initial Study

In accordance with the CEQA Guidelines, an Initial Study was prepared and a Notice of Preparation distributed on July 5, 2016, to interested agencies, groups, and individuals. The purpose of the Notice of Preparation was to provide notification that the City plans to prepare an EIR and to solicit input on the scope and content of the EIR. The 30-day public scoping period ended August 3, 2016. Comments received during the public scoping period were considered during the preparation of this EIR. The Initial Study, Notice of Preparation, distribution list, and comments received during the scoping period are included in Appendix A of this EIR. Based on the Initial Study, the following issues were determined to be potentially significant and are therefore addressed in Chapter 3, Environmental Analysis, in this EIR: air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, public services, traffic, and utilities and service systems.

Comment letters received during the public scoping period expressed Native American concerns and traffic concerns. These concerns have been identified as areas of known controversy and are analyzed in Chapter 3 of this EIR.

The CEQA-mandated environmental topics of aesthetics, agriculture and forestry resources, population and housing, and recreation were not found to be significant based on the analysis in the Initial Study. Discussions of these issues are contained in the Initial Study, which is included as part of Appendix A in this EIR.

1.3 PURPOSE AND USES OF THIS EIR

This project EIR evaluates the potentially significant environmental effects that would result with implementation of the proposed project. The purpose of an EIR is to disclose the significant environmental effects of the project, alternatives to the project, and possible ways to reduce or avoid potential environmental damage (14 CCR 15002).

Public Review of the Draft EIR

This EIR will be made available for review by members of the public and public agencies for 45 days to provide comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (14 CCR 15204). Comments may submitted to the lead agency at the following address:

Brandi Jones, Associate Planner
City of Irwindale, Planning Division
Community Development Department
5050 North Irwindale Avenue
Irwindale, California 91706
Email: bjones@irwindaleca.gov

Use of the EIR

As the designated lead agency, the City has assumed responsibility for preparing this document. The decision to approve the proposed project is within the purview of the City Council. When deciding whether to approve the proposed project, the City will use the information included in this EIR to consider potential impacts on the physical environment associated with the proposed project. The City will also consider written comments received on the EIR in making its decision to certify that the EIR is complete and in compliance with CEQA and also whether to approve or deny the proposed project. In the final review, environmental considerations and economic and social factors will be weighed to determine the most appropriate course of action. Subsequent to certification of the EIR, agencies with permitting authority over all or portions of the proposed project would use the EIR as the basis for their evaluation of environmental effects of the project and approval or denial of applicable permits. The City will use the EIR and supporting documentation in its decision to issue discretionary permits, including a conditional use permit, zone variance to exceed the maximum allowable floor area ratio on-site, and site plan and design review. Additional information regarding City and agency permits and approvals is detailed in Chapter 2 of this EIR.

Required CEQA Findings

Prior to approval of the proposed project, the City, as the lead agency and decision-making entity, is required to certify that this EIR has been completed in accordance with CEQA, that the proposed project has been reviewed and the information in this EIR has been considered, and that this EIR reflects the independent judgment of the City. CEQA also requires the City to adopt "findings" with respect to each significant environmental effect identified in the EIR) (14 CCR 15091). For each significant effect, CEQA requires the approving agency to make one or more of the following findings:

- The proposed project has been altered to avoid or substantially lessen significant impacts identified in the Final EIR.
- The responsibility to carry out such changes or alterations is under the jurisdiction of another agency.
- Specific economic, legal, social, technological, or other considerations, which make infeasible the mitigation measures or alternatives identified in the Final EIR.

If the City concludes that the proposed project will result in significant effects that cannot be substantially lessened or avoided by feasible mitigation measures and alternatives, the City must adopt a "statement of overriding considerations" prior to approval of the proposed project (Pub. Res. Code Section 21081 (b)). Such statements are intended under CEQA to provide a written means by which the lead agency balances in writing the benefits of the proposed project and the significant and unavoidable environmental impacts. Where the lead agency concludes that the economic, legal, social, technological, or other benefits outweigh the unavoidable environmental impacts, the lead agency may find such impacts "acceptable" and approve the proposed project.

Mitigation Monitoring and Reporting Program

In addition, public agencies, when approving a project, must also adopt a Mitigation Monitoring and Reporting Program describing the changes that were incorporated into the proposed project or made a condition of project approval in order to mitigate or avoid significant effects on the environment (Pub. Res. Code Section 21081.6). The Mitigation Monitoring and Reporting Program is adopted at the time of project approval and is designed to ensure compliance during project implementation. Upon approval of the proposed project, the City will be responsible for implementation of the proposed project's Mitigation Monitoring and Reporting Program. This document will be attached to the Final EIR.

1.4 EIR FORMAT

This EIR is organized as follows:

- An **Executive Summary** of the EIR is provided at the beginning of this document. This summary outlines the conclusions of the environmental analysis and provides a summary of the proposed project and the project alternatives analyzed in the EIR. This section also includes a table summarizing all environmental impacts identified in this EIR along with the associated mitigation measures proposed to reduce or avoid each impact.
- **Chapter 1, Introduction**, serves as a forward to this EIR, introducing the project, the applicable environmental procedures, and the organization of the EIR.
- **Chapter 2, Project Description**, provides a thorough description of the proposed project elements, project objectives, and required discretionary actions.
- **Chapter 3, Environmental Analysis**, describes the potential environmental effects of the proposed project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 3.0 is organized by 13 environmental issue areas (air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, public services, traffic, and utilities and service systems). For each environmental issue area, the analysis and discussion are organized into eight subsections as described below.
    - ***Environmental Conditions:*** This subsection describes the physical environmental conditions in the vicinity of the proposed project at the time of publication of the Notice of Preparation. This subsection establishes the baseline conditions by which the City will determine whether specific project-related impacts are significant.
    - ***Relevant Plans, Policies, and Ordinances:*** This subsection describes the regulatory setting applicable to the environmental issue area and the proposed project at the time of publication of the Notice of Preparation.
    - ***Thresholds of Significance:*** This subsection identifies a set of thresholds by which the level of impact is determined.
    - ***Project Elements That Can Reduce Impacts:*** This subsection identifies specific portions of the project that would reduce impacts in that particular environmental category. A comprehensive list of these project design features and construction measures are provided in Table 2-2 (Summary of Project Design Features and Construction Measures) in this EIR.

- ***Impact Analysis:*** This subsection provides a detailed analysis regarding the environmental effects of the proposed project and whether the impacts of the proposed project would meet or exceed the established significance criteria.
- ***Mitigation Measures:*** This subsection identifies mitigation measures that would avoid or substantially reduce significant adverse project impacts.
- ***Cumulative Impacts:*** This subsection identifies whether the impacts of the proposed project would be potentially significant, taken together with other past, present, and probable future projects producing related impacts.
- ***Level of Significance After Mitigation:*** This subsection discusses whether project-related impacts and cumulative impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed project that would result even with implementation of mitigation measures.

  In addition to the eight subsections listed above, full citations for all documents referred to in each environmental issue area discussion are included at the end of each section or chapter. Additionally, a ninth subsection discusses growth inducing impacts.

- **Chapter 4, Alternatives**, discusses alternatives to the proposed project, including a No Project Alternative. This subsection describes the rationale for selecting the range of alternatives discussed in the EIR and identifies the alternatives considered by the City that were rejected from further discussion as infeasible during the scoping process. Chapter 4.0 also includes a discussion of the environmental effects of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.
- **Chapter 5, Other CEQA Requirements**, addresses significant environmental effects that cannot be avoided, the significant irreversible environmental changes that would result from implementation of the proposed project, and growth-inducing impacts associated with the proposed project.
- **Chapter 6, List of Preparers**, gives names and contact information of those responsible for writing this EIR.
- Appendices include various technical studies prepared for the proposed project, as listed in the Table of Contents.

The City, as the designated lead agency for the proposed project, is responsible for enforcing and verifying that each mitigation measure is implemented as required; however, Kaiser Permanente shall be responsible for implementing the mitigation measures as required by the proposed project. As part of the Final EIR process, a mitigation monitoring and reporting program will be prepared.

CHAPTER 2
PROJECT DESCRIPTION

This chapter describes the location, environmental setting, background, objectives, characteristics, design features, and discretionary actions for the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project).

2.1 PROJECT LOCATION

The approximately 4.04-acre project site consists of an irregular-shaped parcel, located within the City of Irwindale, Los Angeles County, California (see Figure 2-1, Regional Map and Figure 2-2, Vicinity Map). Specifically, the proposed project is located at 12761 Schabarum Avenue Irwindale, California 91706 (Assessor Parcel Number 8546-031-090), north of Ramona Boulevard and west of Durbin Street (see Figure 2-3, Aerial Map). The project site is generally bounded by the Vulcan Durbin Quarry to the north, industrial/business park uses to the east and south, and the Interstate 605 (I-605) freeway to the west.

As shown in Figure 2-1 (Regional Map), regional access to the project site is provided by the I-605 freeway, located adjacent to the project site to the west; the Interstate 210 (I-210) freeway, located approximately 3.7 miles north of the project site; and the Interstate 10 (I-10) freeway, located approximately one mile south of the project site. Immediate access to the project site is provided via Schabarum Avenue.

The latitude and longitude of the approximate center of the project site is -117°59'17.7168" W and 34°4'52.6692" N. The project site includes parts of Section 14 of Township 1 South, Range 11 West within the Baldwin Park 7.5-minute quadrangle, as mapped by the U.S. Geological Survey.

2.2 ENVIRONMENTAL SETTING

General Plan and Zoning Designations

The project site is currently zoned M-2 (Heavy Manufacturing) with a general plan land use designation of Industrial/Business Park. In general, permitted uses within the M-2 (Heavy Manufacturing) zone include horn products, manufacture; lamp black, manufacture; oil cloth or linoleum manufacture; plumbing supply, outside storage screened; roofing material manufacture; statuary, manufacturing of clay, papier mache, stone statuary and monuments; stone monuments and tombstone works; wood products, manufacture (excluding planning mill); and accessory buildings and uses customarily incidental to any of the above uses. M-1 (Light Manufacturing) zoned uses, C-M (Commercial Manufacturing) zoned uses, C-3 (Heavy Commercial-Residential) zoned uses, C-2 (Heavy Commercial) zoned uses, C-1 (Commercial) zoned uses, and C-P (Commercial Professional) zoned uses are also permitted within the M-2 (Heavy Manufacturing)

zone subject to Chapters 17.52, 17.48, 17.44, 17.40, 17.36, 17.32, respectively, of the City's Municipal Code. Medical doctors are permitted in the C-P (Commercial Professional) zone; medical clinics are conditionally permitted in the C-1 (Commercial) zone. Therefore, the proposed medical office building facility would be a conditionally permitted use. Kaiser Permanente is applying for a conditional use permit for the proposed project.

Adjacent and Surrounding Land Uses

As shown in Figure 2-4 (Surrounding Land Uses), the project area is situated in a predominantly urban environment, generally surrounded by industrial/business park uses. The Vulcan Durbin Quarry is located immediately north of the project site at a lower elevation. The Mission Paving & Sealing building with associated trucks, scraps, surface parking, and landscaping is located immediately south of the project site, followed by other industrial/business park uses and a commercial use. A mix of single-family residential and commercial development is located further south of the project site, south of Ramona Boulevard. The Grainger Industrial Supply building, along with other industrial/business park uses, with associated surface parking areas and landscaping are located southeast of the project site. Opportunities for Learning (a charter school) and Premiere Career College are also located southeast of the project site. The Public Health Foundation Enterprises building and associated surface parking and landscaping is located immediately east of the project site followed by other industrial/business park uses. As shown in Figure 2-4 (Surrounding Land Uses), the I-605 freeway is located immediately west of the project site.

Existing Site Facilities

The project site is currently occupied by a vacant, cold storage warehouse with associated surface parking. The on-site structure is comprised of the following areas: an approximately 52,800-square-foot (sf) dry warehouse with 12 truck loading areas; an approximately 7,889-sf cooler; an approximately 11,291-sf freezer; and a two-story 11,522-sf office building with associated surface parking and landscaping. There is also an existing static billboard on the southwest corner of the property, which will remain.

Existing Site Access Points

Vehicular access to the project site is currently provided via one driveway off of Schabarum Avenue. Currently, there is no direct pedestrian access via sidewalks along Schabarum Avenue to the project site. Only a portion of Schabarum Avenue further from the project site entrance includes sidewalks. Existing bicycle lanes are provided along Ramona Boulevard. Bicycle access along Schabarum Avenue is provided by the existing street network; however, no formal, designated on-street or off-street bicycle facilities are currently provided directly along the project frontage.

Existing Views Of and Through the Project Site

Photos were taken from six locations around the perimeters of, and within, the project site to show representative viewpoints of the project site and its surroundings. Each viewpoint corresponds to one of the photos shown in Figures 2-5 through 2-7 (Viewpoints A through F).

Viewpoint A – Project Site Facing Northwest From Driveway Entrance (Figure 2-5)

Viewpoint A consists of the view looking northwest toward the project site along Schabarum Avenue. Schabarum Avenue, the project site driveway, on-site landscaping, and impervious material are in the foreground. Utility poles, a vacant, multi-story industrial building (that formerly operated as Jacmar Foods Distribution), and ornamental landscaping are in the middleground. Views of the sky and clouds are available in the background.

Viewpoint B – Eastern Side of the Project Site (Parking Lot) Facing North (Figure 2-5)

Viewpoint B consists of views looking north from the eastern side of the project site, close to the entrance driveway. Impervious material is in the foreground. Utility poles, a partial view of the vacant, multi-story industrial building (that formerly operated as Jacmar Foods Distribution), ornamental landscaping, and wrought-iron fencing are in the middleground. Glimpses of the sky, clouds, transmission line, and billboard sign are visible in the far off background to the north.

Viewpoint C – South-Southwestern Side of the Project Site Facing South (Figure 2-6)

Viewpoint C consist of views looking south from the south-southwestern side of the project site. Impervious material (loading dock area and surface parking area) are in the foreground. Utility poles, accessory structures from the former Jacmar Foods Distribution operation, a partial view of the adjacent Mission Paving & Sealing building, ornamental landscaping, and wrought-iron fencing are in the middleground. Glimpses of the sky and clouds are visible in the background.

Viewpoint D – South-Southwestern Side of the Project Site Facing West Towards I-605 Freeway (Figure 2-6)

Viewpoint D consists of views looking west from the south-southwestern side of the project site. Impervious material, ornamental landscaping, wrought iron fencing, and a partial view of the vacant, multi-story industrial building (that formerly operated as Jacmar Foods Distribution) are in the foreground. The truck loading dock area, accessory structures from the former Jacmar Foods Distribution operation, and impervious material are in the middleground. Utility poles, transmission lines, a billboard sign structure, trucks and vehicles along the I-605 freeway, and ornamental landscaping are visible in the background. Glimpses of the sky, and clouds are visible in the far off background to the west.

Viewpoint E – Western Side of the Project Site (Parking Lot) Along the I-605 Freeway Facing North (Figure 2-7)

Viewpoint E consists of views looking north along the western side of the project site. Impervious materials are visible in the foreground. This view primarily consists of partial views of the vacant, multi-story industrial building (that formerly operated as Jacmar Foods Distribution) in the middleground. Utility poles, transmission lines, ornamental landscaping, and wrought-iron fencing are visible in the middleground and background. A billboard is also visible in the background. Glimpses of the sky and clouds are visible in the far off background.

Viewpoint F – Western Side of the Project Site (Parking Lot) Along the I-605 Freeway Facing South (Figure 2-7)

Viewpoint F consists of views looking south along the western side of the project site. Impervious materials are visible in the foreground. This view primarily consists of partial views of the vacant, multi-story industrial building (that formerly operated as Jacmar Foods Distribution) in the middleground. Utility poles, transmission lines, the I-605 freeway, ornamental landscaping, yellow poles, a fire hydrant, and wrought-iron fencing are visible in the middleground and background. A billboard is also visible in the background. Glimpses of the sky, clouds, and distant Workman Hills are visible in the far off background.

2.3 PROJECT BACKGROUND

The project site was previously operated by Jacmar Foods Distribution from 1999 until 2014. Jacmar Foods Distribution vacated the project site in the summer of 2015 and relocated to the City of Industry. The project site is currently occupied by a vacant cold storage warehouse with associated surface parking.

2.4 PROJECT OBJECTIVES

Kaiser Foundation Health Plan, Inc., a California nonprofit public benefit corporation, is proposing to develop a state-of-the-art specialty MOB on the project site. Kaiser Foundation Health Plan, Inc. intends to provide a range of health care services to Kaiser Permanente members in the City and surrounding communities. Kaiser Permanente is applying for a conditional use permit to allow a specialty MOB on the project site.

The project objectives are as follows:

- Meet all projected Kaiser Permanente member demands.
- Provide high quality health care in seismically safe, state-of-the-art, advanced-care medical center facility for Kaiser Permanente members throughout the City of Irwindale area and surrounding communities.

- Supplement and support Kaiser's existing clinics and medical facilities in Baldwin Park, El Monte, Arcadia, Duarte, Azusa, and Covina, and provide needed advanced-care medical facilities to the community.
- Create a comprehensively planned, advanced-care medical center that provides community vitality, economic growth, and a wide range of employment opportunities in Irwindale and the surrounding region.
- Implement many green building features using the standards of the Green Guide for Healthcare, as such standards evolve over time, and Leadership in Energy and Environmental Design (LEED®) Gold certification or equivalent, as well as Kaiser's existing sustainable building strategies.

2.5 PROJECT CHARACTERISTICS

2.5.1 California Environmental Quality Act Baseline

The baseline for a project is normally the physical condition that exists when the Notice of Preparation (NOP) is published. The NOP for the project was published on July 5, 2016. The project site is currently occupied by a vacant industrial building and is the physical baseline condition. However, the State California Environmental Quality Act (CEQA) Guidelines and applicable case law recognize that the date for establishing an environmental baseline can vary depending on the circumstances of a project. Physical environmental conditions vary over time; thus, the use of environmental baselines that differ from the date of the NOP may be appropriate when conducting the environmental analysis.

As mentioned in Section 2.3, the project site was previously operated by Jacmar Foods Distribution from 1999 until 2014. Jacmar Foods Distribution vacated the project site in the summer of 2015 and relocated to the City of Industry. The project site is currently occupied by a vacant cold storage warehouse with associated surface parking. However, another similar warehouse tenant would likely occupy the subject site at any time in the future as it would be a permitted use in the City's zoning and land use. As such, given that the project site has historically been a warehouse (Jacmar Foods Distribution was in operation for 15 years at the project site) and given that absent the proposed project, another similar warehouse tenant would likely occupy the project site in the future, using an occupied warehouse as the future existing baseline for the traffic analysis allows for a more realistic and informative environmental analysis of future traffic conditions at and around the project site.

For the purposes of this EIR, the baseline traffic counts for the traffic, transportation, and parking analysis is 2015, based upon the approved traffic study for the proposed project by the City. At the time of the commencement of the traffic analysis, the construction of the Caltrans I-10 Freeway/I-605 Freeway Direct Connector Project was underway and included nearby roadway and ramp

closures. Therefore, updated traffic counts at many of the study intersections were not able to be conducted since conditions were atypical. As such, available traffic count data was researched from the City of Irwindale, City of Baldwin Park, and traffic engineer files. The researched manual counts of vehicular turning movements were conducted at the study intersections prior to the construction of the I-10 Freeway/I-605 Freeway Direct Connector Project and some counts were from prior to the economic recession. For those locations not impacted by on-going construction, and where no data was available, new manual counts of vehicular turning movements were conducted at the study intersections during the weekday AM and PM commute periods to determine the peak hour traffic volumes. All of the manual counts were conducted by independent traffic count firms from 7:00 a.m. to 9:00 a.m. to determine the AM peak commute hour, and from 4:00 p.m. to 6:00 p.m. to determine the PM peak commute hour. Additionally, the available manual traffic count data were adjusted by 1% per year to reflect Year 2015 existing conditions, and where necessary, manually adjusted to provide balance between study locations.

For the analysis of all other CEQA topics that would be addressed in the EIR, the baseline is defined as July 2016, which corresponds to when the NOP was published.

2.5.2 Proposed Project

Kaiser Permanente is proposing the development of a three-story, approximately 59-foot tall, outpatient MOB with a maximum building gross square footage of 90,000 sf. An approximately 11,357-sf urban plaza will be located on the central portion of the project site along with a public amphitheater, east of the proposed MOB. Additionally, an approximately 1,200-sf native garden will be located on the northern portion of the project site, immediately north of the proposed MOB. Based on information provided by Kaiser Permanente representatives, the following four existing specialty care departments at the Baldwin Park Medical Center campus would be relocated to the proposed new MOB: 1) Podiatry, 2) Ophthalmology, 3) Gastroenterology, and 4) Outpatient Surgery.

Table 2-1 (Kaiser Permanente Medical Office Building Departments) outlines the various departments that would be included in the proposed MOB and the components within each department.

Table 2-1
Kaiser Permanente Medical Office Building Departments

Departments	Components
Ophthalmology Clinic	• 14 provider offices • 30 exam rooms • Up to 17 specialty testing rooms • Pretest area • Sub wait for dilation • 1 clinic minor procedure room • Associated clinic and administrative support spaces

Table 2-1
Kaiser Permanente Medical Office Building Departments

Departments	Components
Gastroenterology Clinic	• 16 provider offices • 12 exam rooms • 1 minor clinic procedure room • Offices and work station for clinic and administrative support staff • Module shared with Podiatry
Gastroenterology Procedure Lab	• 5 procedure suites • 18 pre- and post-op holding bays • Scope wash • Nurses stations • Work space for procedure suite clinical and administrative support staff
Podiatry Clinic	• 8 provider offices • 13 exam rooms • 1 minor clinic procedure room • 1 cast room with 4 casting bays • Mini C Arm • Associated clinic and administrative support spaces • Module shared with Gastroenterology (GI) clinic
Imaging Department	• 1 General Rad Digital X-ray room with portable foot machine and scoliosis unit • Dexa machine • Work area for technicians
Ambulatory Surgery Unit	• 5 main operating rooms • 1 Ophthalmology procedure room (total of 6 rooms) • PACU with 20 pre-op/post-op bays • 4 pre-op/post-op chairs • On-site sterile processing • Office for physician in charge • Associated clinic and administrative support spaces
Laboratory	• 2 phlebotomy draw stations • Work station for full-time equivalent (FTE) employees
Pathology	• 1 grossing and accession station • Work station for FTE(s)
Pharmacy	• Small size outpatient pharmacy
Support Services Departments	• Clinical technology • Environmental Services (EVS) • Materials management • Facilities and plant maintenance • Information technology • Supply chain • Security
Administrative Suite	• 1 office for building administrator

Source: Strategic Planning & Consulting, Delivery Systems Strategy 2016.

The proposed project would provide a total of approximately 450 parking spaces. Proposed parking will include the construction of a five-story, approximately 115,339-square-foot, 339-space parking structure on the northeastern portion of the project site (see Figure 2-8, Proposed Site Plan). The proposed parking structure would be 64 feet 5 inches in height. As shown in Figure 2-8, approximately 111 additional parking spaces will be provided in a surface parking lot to be located along the southern, western, and northern sides of the project site. A drop-off/pick-up zone will be provided just south of the new parking structure, along the northeastern portion of the MOB (see Figure 2-8, Proposed Site Plan). The proposed project will also include associated landscaping and infrastructure improvements, as well as ancillary uses including a "Thrive" bar (e.g., café), coffee cart, pharmacy, a small biweekly farmer's market, conference center, and other weekly healthcare-related events.

The project site is already improved with street frontage, curbs, gutters, sidewalks, parkway landscaping, and utilities stubbed to the property line

Kaiser Permanente is proposing a conditional use permit to allow for medical use, a site plan and design review permit for development on the project site, and a variance to exceed the maximum allowable floor area ratio on-site.

Project Construction

It is anticipated that construction of the proposed project would commence in 2017, with completion by 2018. Based on information provided by Kaiser Permanente, the anticipated construction phasing includes the following assumptions (duration of phases is approximate):

- Demolition: May 5, 2017 – June 1, 2017
- Site Preparation: June 2, 2017 – June 5, 2017
- Grading: June 6, 2017 – June 12, 2017
- Building construction: June 13, 2017 – October 3, 2017
- Architectural coating: November 22, 2017 – March 15, 2018
- Paving: May 30, 2018 – September 15, 2018

2.5.3 Project Design Features and Construction Measures, and Standard Conditions

Kaiser Permanente has incorporated project design features and construction measures into the proposed project to reduce the potential for environmental effects. Construction will be performed by qualified contractors, and contract documents, plans, and specifications will incorporate stipulations regarding standard legal requirements and acceptable construction practices, including traffic control during construction activities, noise, geologic conditions,

drainage and water quality improvements, water quality protection and erosion and sedimentation control, construction-related solid waste, hazardous waste, hazardous materials during construction, control of petroleum products in storage tanks, and cultural resources. The project will be designed in accordance with the State of Los Angeles County Building Codes, California Building Code (CBC), California Office of Statewide Health Planning and Development (OSHPD) and Municipal Code requirements. Additionally, the proposed project will be certified LEED® Gold or equivalent. These measures are included in Table 2-2 (Summary of Project Design Features and Construction Measures) and referenced throughout the impact discussions throughout Chapter 4 of the EIR. The project design features and construction measures listed in Table 2-2 (Summary of Project Design Features and Construction Measures) would be incorporated into the EIR as design features of the project. Where applicable, some of these items may be included as mitigation measures.

Table 2-2
Summary of Project Design Features and Construction Measures

Subject Area	Design Feature or Construction Measure
Traffic control during construction activities	The applicant will prepare a traffic control plan that will specifically address construction traffic and possible lane closures within the City's public rights-of-way to be prepared and approved by the City prior to project grading permit issuance. The traffic control plan will include provisions for construction times and control plans for allowance of motorists, bicyclists, pedestrians, and bus access throughout construction. This traffic control plan will also include provisions to ensure emergency vehicle passage at all times, and will include signage and flagmen when necessary. The traffic control plan will include provisions for coordinating with local school hours and emergency service providers regarding construction times.
Geologic conditions	Appropriate engineering design and construction measures that meet current Los Angeles County Building Codes, California Building Code (CBC) and OSHPD design parameters shall be incorporated into the project designs.
Drainage and water quality improvements	The project design includes the following water quality improvements/best management practices (BMPs) in accordance with Los Angeles County Flood Control criteria to improve overall site permeability and reduce off-site drainage flow: • Curbs and gutters will collect runoff and convey to bioretention units and/or detention basins. • Parking lots will be designed to minimum required pavement width, according to City guidelines. • Vegetated bioswales will be used to the maximum extent possible to achieve filtration and natural treatment of the stormwater runoff from rooftops. • Where bioswales cannot be used to treat runoff, stormwater runoff from proposed structure roofs and paved areas will be conveyed to bioretention units and/or detention basins to provide treatment before being discharged into the underground storm drain system. • Stormwater drainage from loading dock areas will be collected and treated prior to discharge off site. • On-site soils within landscaped areas will be scarified. • The City's Landscape Regulations will be adhered to for landscaped areas. Additional native trees and large shrubs will be planted where needed. • Drought-tolerant landscaping will also be required to ensure minimal irrigation water use, thus helping to conserve water resources. • Rain shutoff devices to prevent irrigation during and after precipitation will be included in the design. The irrigation system will include control mechanisms to allow staff to adjust water supplies

Table 2-2
Summary of Project Design Features and Construction Measures

Subject Area	Design Feature or Construction Measure
	to areas based on need. • Stormwater conveyance system inlets will include language indicating that water flows to the local water resource. • Trash receptacles will be provided on site with signage. • A fire sprinkler will be designed to discharge into the sanitary sewer. • Bioswales, bioretention units and/or detention basins, parking lots, and trash pickup will be maintained as part of the ongoing landscaping maintenance costs.
Water quality protection and erosion and sedimentation control	In compliance with the National Pollution Discharge Elimination System (NPDES), the applicant will prepare a stormwater pollution prevention plan (SWPPP) that specifies BMPs to be implemented during project construction to prevent pollutants from contacting stormwater and control erosion and sedimentation. The SWPPP will be prepared and submitted to the Regional Water Quality Control Board (RWQCB) for review and approval prior to the start of construction.
Construction-related solid waste	Kaiser Permanente will designate a solid waste management coordinator who will execute the project's City-approved waste management plan. The solid waste management coordinator will work with contractors to estimate quantities of each type of material that is to be salvaged, recycled, or disposed of as waste; oversee plans for separation of materials; and review procedures for periodic collection and transportation of materials.
Hazardous materials prior to demolition activities	Prior to demolition of the existing building, an abatement of the existing on-site hazardous materials from the historic storage and use of petroleum hydrocarbon and other chemicals at the project site by the former Jacmar Foods Distribution will occur to ensure hazardous materials are safely removed, in accordance with the Los Angeles County Department of Environmental Health Hazardous Materials Management Division and Los Angeles County's Fire Department standards, from the project site.
Hazardous materials during construction	A hazardous materials spill kit should be maintained on site for small spills. Additionally, Kaiser Permanente shall monitor all contractors for compliance with applicable regulations, including regulations regarding hazardous materials and hazardous wastes, including disposal. Hazardous materials should not be disposed of or released on the ground, in the underlying groundwater, or any surface water. Totally enclosed containment should be provided for all trash. All construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, should be removed to a waste facility permitted to treat, store, or dispose of such materials.
Hazardous waste	Prior to receiving certificate of occupancy, a medical waste management plan will be prepared, submitted, reviewed, and approved by the Los Angeles County Department of Environmental Health Hazardous Materials Management Division. The medical waste management plan would describe the types and amounts of medical waste generated and how the waste will be disposed.
	Prior to receiving certificate of occupancy, a hazardous materials business plan will be prepared and submitted to the Los Angeles County Department of Environmental Health Hazardous Materials Management Division and Los Angeles County's Fire Department. The hazardous materials business plan would contain information on the location, type, quantity, and health risks of hazardous materials stored and used on the site. Within the hazardous materials business plan, the applicant would prepare a chemical inventory for all hazardous materials or waste stored in quantities greater than or equal to 500 pounds of a solid, 55 gallons of a liquid, 200 cubic feet of a compressed gas, highly toxic gases of any amount, and extremely hazardous substances stored in quantities greater than threshold amounts.
	Prior to receiving certificate of occupancy, Kaiser Permanente will be required to comply with the provisions of the county's Fire Code, the Los Angeles County Department of Environmental Health Hazardous Materials Management Division, and any additional element as required in the California Health and Safety Code, Article 1, Chapter 6.95 for the business emergency plan.
	Transportation of hazardous materials will comply with all U.S. Department of Transportation, California Department of Transportation, U.S. Environmental Protection Agency, Department of Toxic

Table 2-2
Summary of Project Design Features and Construction Measures

Subject Area	Design Feature or Construction Measure
	Substances Control, California Highway Patrol, and California State Fire Marshal regulations.
Control of petroleum products in storage tanks	In accordance with the Code of Federal Regulations, Title 40, Part 112 (40 CFR, Part 112), prior to certificate of occupancy issuance, the Kaiser Permanente will prepare a Spill Prevention Control and Countermeasures plan.
Cultural resources	During construction, the project proponent shall comply with Health and Safety Code Section 7050.5, 7051, 5052, and 7054 addressing requirements should human remains or the disposition of Native American burials in archaeological sites be accidentally discovered during ground-disturbing activities. Additionally, the proposed project shall comply with Public Resource Code (PRC) 5097.98 should any unknown human remains be discovered during site disturbance.
Light and glare	The design of the photovoltaic panels will incorporate anti-reflective coatings.

2.6 DISCRETIONARY ACTIONS

Implementation of the proposed project may require permits or other forms of approval from public agencies or other entities prior to construction of the project. They include, but are not limited to, the following:

City of Irwindale

Certification of this EIR; demolition permit to allow the existing structure and surface parking to be demolished as part of the proposed project; approval of a conditional use permit to allow a MOB on the project site; site plan and design review that addresses the configuration, design, location, and impact of the proposed use as compared to the established standards and design guidelines; zone variance to exceed the maximum allowable floor area ratio on-site; and other discretionary actions shall be reviewed and/or approved by Planning Staff, the City Planning Commission, and/or the City Council. Plan Check process and approval is required.

Los Angeles County Department of Public Works/Building Division

Issuance of all permits related to on-site construction.

Regional Water Quality Control Board, Los Angeles Region

National Pollutant Discharge Elimination System (NPDES) Construction General Permits will be required for grading activities of one acre or more. Since the project would disturb more than one acre of soil, the applicant must file a Notice of Intent with the Los Angeles Regional Water Quality Control Board (RWQCB) and obtain a General Construction Activity Stormwater Permit, pursuant to the NPDES regulations established under the Clean Water Act. This permit requires preparation and implementation of a stormwater pollution prevention plan, which is

intended to prevent degradation of surface and groundwater during the grading and construction process. A report of waste discharge shall be submitted to the Los Angeles RWQCB to obtain either a waste discharge requirement or a waiver for any impacts to waters of the state.

South Coast Air Quality Management District

A fugitive dust control plan submitted to the South Coast Air Quality Management District (SCAQMD) for approval will be required prior to issuance of grading permits (SCAQMD Rule 403). Permits for stationary sources, such as the proposed generator, two boilers, and two water heaters will be required prior to project approval.

Office of Statewide Health Planning and Development

The Office of Statewide Health Planning and Development's Facilities Development Division will review and approve the plans and specifications of the proposed MOB to ensure compliance with the provisions of the CBC, Title 24, California Code of Regulations.

DUDEK

FIGURE 2-1

Regional Map

Kaiser Permanente Specialty Medical Office Facility

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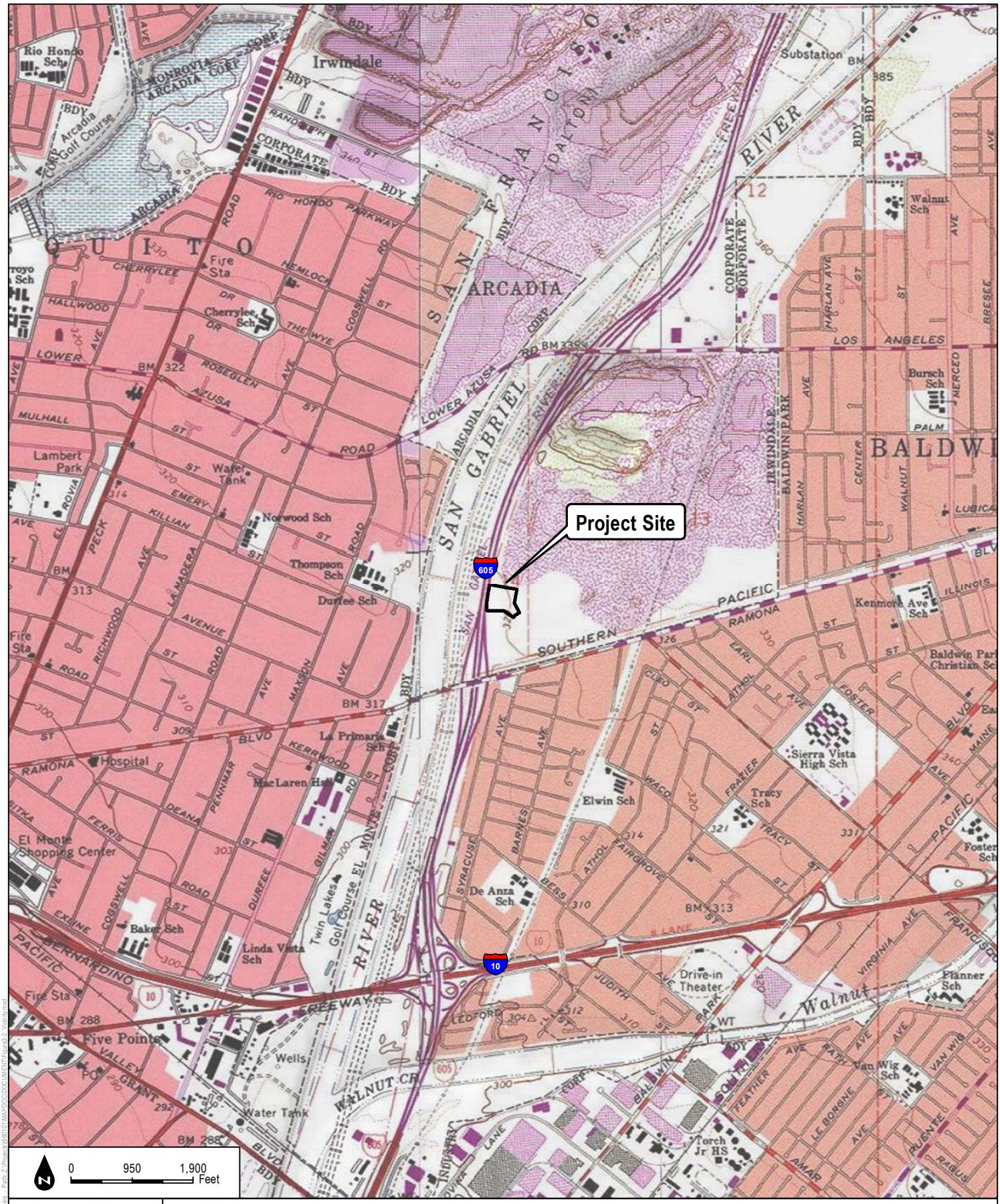

SOURCE: USGS 7.5-Minute Series Baldwin Park Quadrangle

FIGURE 2-2

Vicinity Map

DUDEK

Kaiser Permanente Specialty Medical Office Facility

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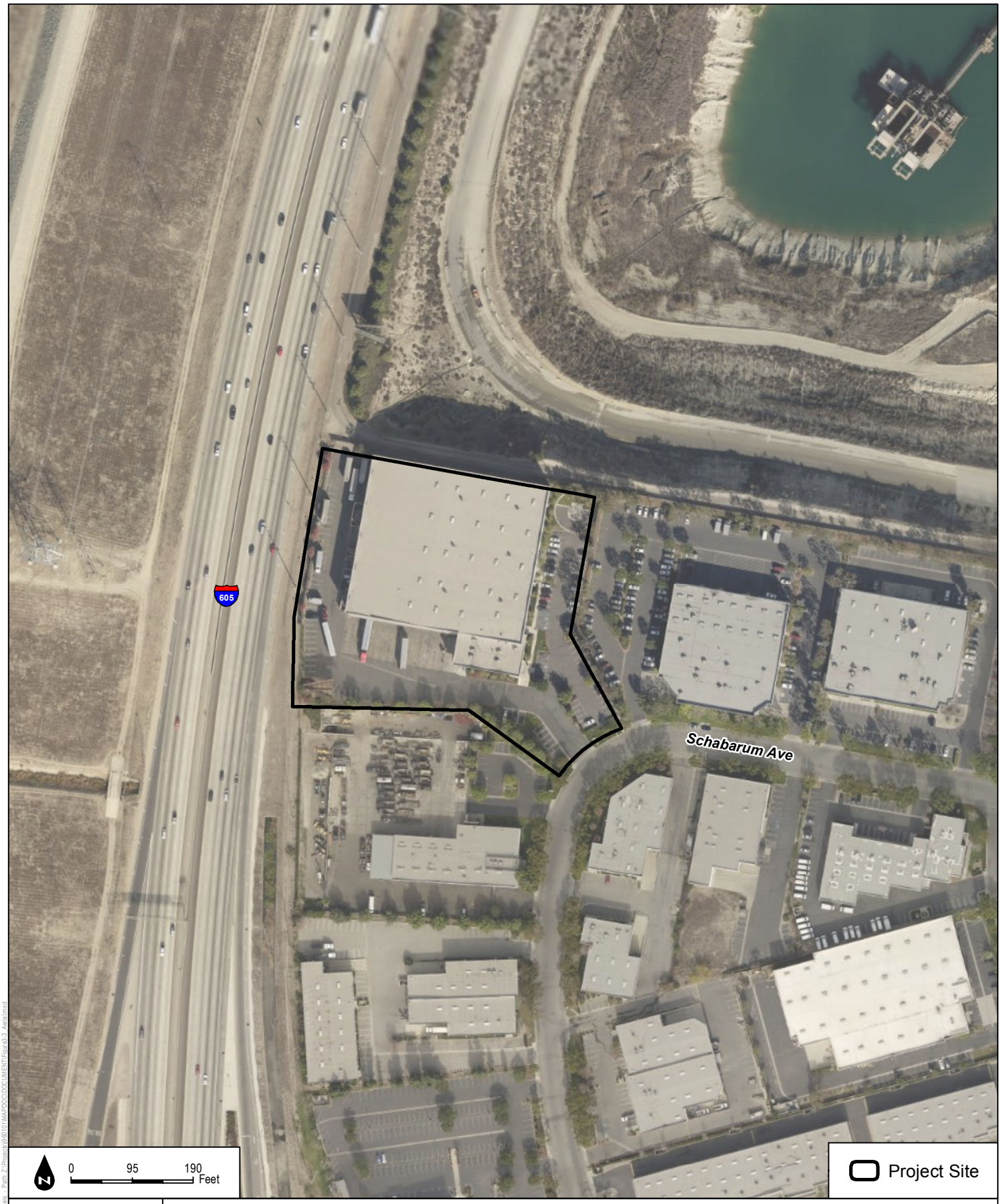

SOURCE: Los Angeles County 2014

FIGURE 2-3
Aerial Map

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Kaiser Permanente Specialty Medical Office Facility

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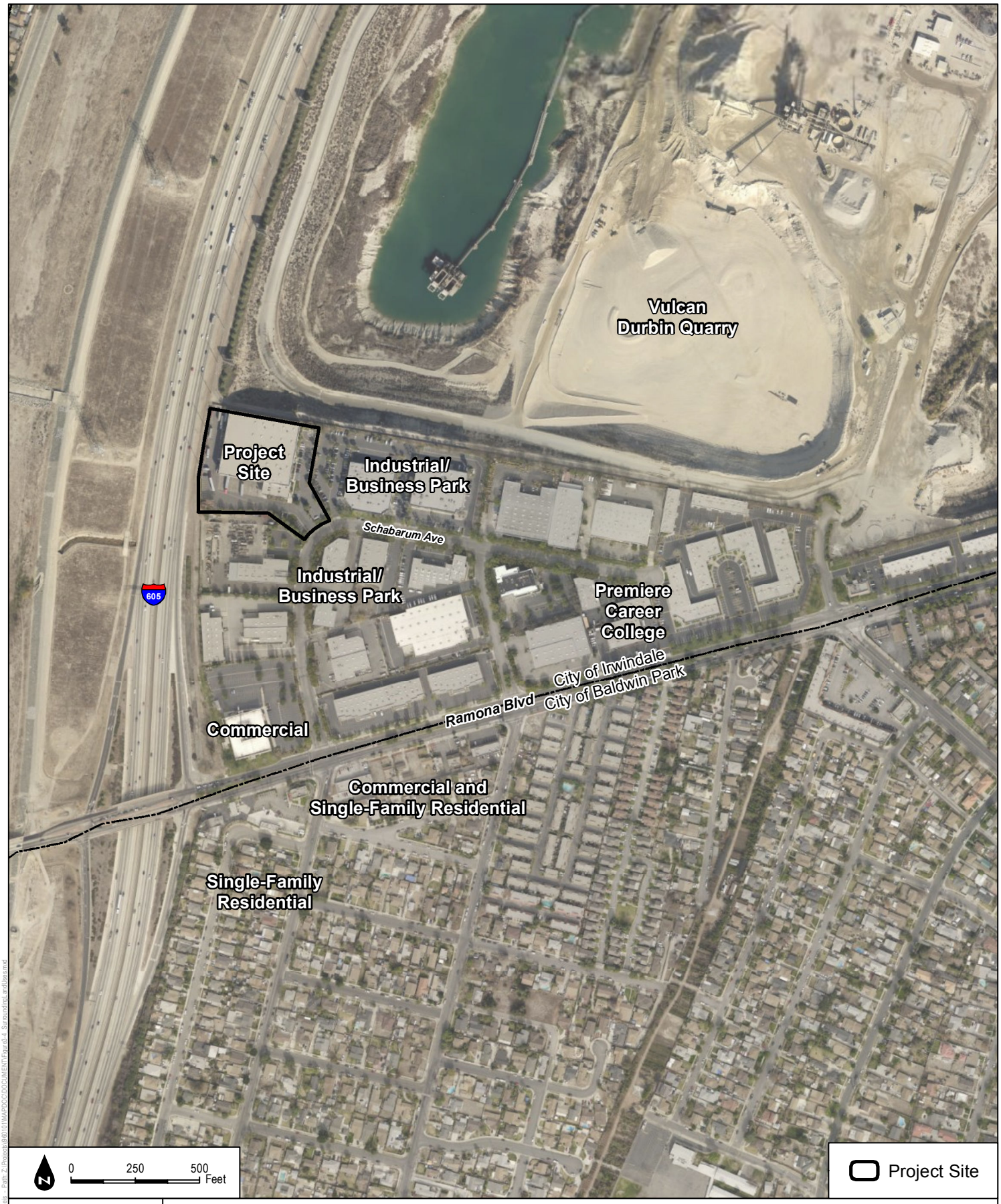

SOURCE: Los Angeles County 2014

FIGURE 2-4

Surrounding Land Uses

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Kaiser Permanente Specialty Medical Office Facility

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ABOVE: Viewpoint A – Project Site Facing Northwest From Driveway Entrance
BELOW: Viewpoint B - Eastern Side of the Project Site (Parking Lot) Facing North

DUDEK

SOURCE: Dudek 2016.

FIGURE 2-5
Viewpoints A and B

Kaiser Permanente Specialty Medical Office Facility

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ABOVE: Viewpoint C – South-Southwestern Side of the Project Site Facing South

BELOW: Viewpoint D – South-Southwestern Side of the Project Site Facing West Towards I-605 Freeway

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SOURCE: Dudek 2016.

FIGURE 2-6

Viewpoints C and D

Kaiser Permanente Specialty Medical Office Facility

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ABOVE: Viewpoint E – Western Side of the Project Site (Parking Lot) Along the I-605 Freeway Facing North
BELOW: Viewpoint F – Western Side of the Project Site (Parking Lot) Along the I-605 Freeway Facing South

DUDEK

SOURCE: Dudek 2016.

FIGURE 2-7
Viewpoints E and F

Kaiser Permanente Specialty Medical Office Facility

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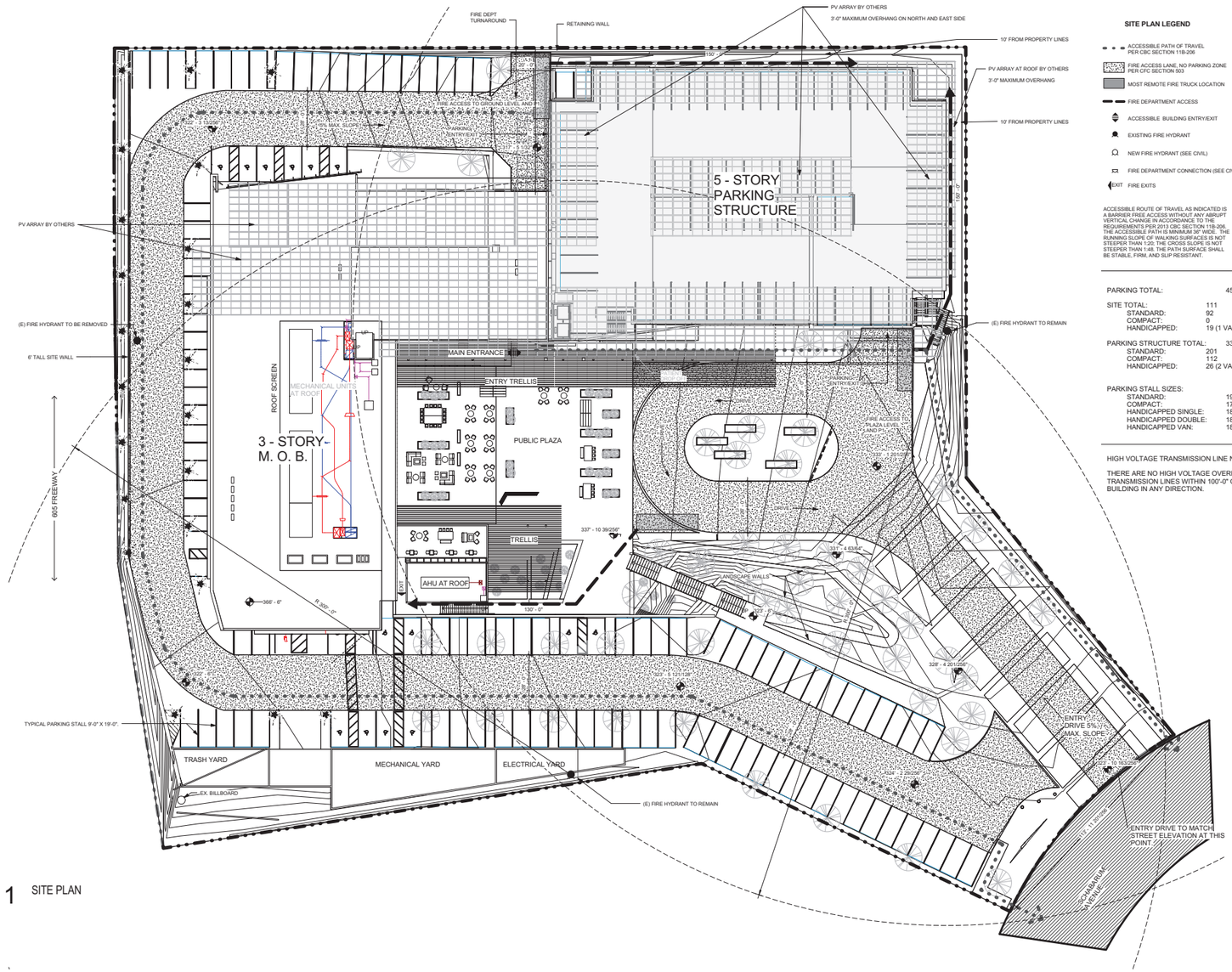


1 SITE PLAN

CO ARCHITECTS

5055 Wilshire Boulevard, 9th Floor
Los Angeles, California 90036
323.525.0500 phone, 323.525.0955 fax

SITE PLAN LEGEND

- ACCESSIBLE PATH OF TRAVEL PER CBC SECTION 11B-206
- FIRE ACCESS LANE, NO PARKING ZONE PER CFC SECTION 503
- MOST REMOTE FIRE TRUCK LOCATION
- FIRE DEPARTMENT ACCESS
- ACCESSIBLE BUILDING ENTRY/EXIT
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT (SEE CIVIL)
- FIRE DEPARTMENT CONNECTION (SEE CIVIL)
- EXIT FIRE EXITS

ACCESSIBLE ROUTE OF TRAVEL AS INDICATED IS A BARRIER FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGE IN ACCORDANCE TO THE REQUIREMENTS PER 2013 CBC SECTION 11B-206. THE ACCESSIBLE PATH IS MINIMUM 36" WIDE. THE RUNNING SLOPE OF WALKING SURFACES IS NOT STEEPER THAN 1:20; THE CROSS SLOPE IS NOT STEEPER THAN 1:48. THE PATH SURFACE SHALL BE STABLE, FIRM, AND SLIP RESISTANT.

PARKING TOTAL:	450
SITE TOTAL:	111
STANDARD:	92
COMPACT:	0
HANDICAPPED:	19 (1 VAN ACCESSIBLE)
PARKING STRUCTURE TOTAL:	339
STANDARD:	201
COMPACT:	112
HANDICAPPED:	26 (2 VAN ACCESSIBLE)
PARKING STALL SIZES:	
STANDARD:	19'-0"D X 9'-0"W
COMPACT:	17'-0"D X 9'-0"W
HANDICAPPED SINGLE:	18'-0"D X 14'-0"W
HANDICAPPED DOUBLE:	18'-0"D X 22'-9"W
HANDICAPPED VAN:	18'-0"D X 16'-0"W

HIGH VOLTAGE TRANSMISSION LINE NOTE:

THERE ARE NO HIGH VOLTAGE OVERHEAD TRANSMISSION LINES WITHIN 100'-0" OF THE BUILDING IN ANY DIRECTION.

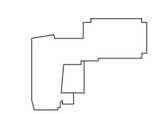
THE CLIENT / UNIVERSITY / HOSPITAL NAME

IRWINDALE SPECIALTY MEDICAL OFFICE BUILDING

12761 SCHABARUM AVENUE
IRWINDALE, CA 91706

FACILITY# xxxx PC# xxxx

KEY PLAN



SITE PLAN

SCALE: As indicated
DATE OF FIRST ISSUE: 29 JANUARY 2016

EXTERIOR ENVELOPE DESIGN
CO PROJECT NO.: 15018.00

A1.01

Copyright © 2014 CO Architects. If drawing is not 30" x42", it is a reduced print.

SOURCE: CO Architects, 01/29/216.

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FIGURE 2-8
Proposed Site Plan

Kaiser Permanente Specialty Medical Office Building

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CHAPTER 3
ENVIRONMENTAL ANALYSIS

The following sections contain an analysis, by issue area, of the potentially significant environmental effects of the proposed project. The environmental issue areas analyzed in this section are as follows:

- Air Quality (Section 3.1)
- Biological Resources (Section 3.2)
- Cultural Resources (Section 3.3)
- Geology and Soils (Section 3.4)
- Greenhouse Gas Emissions (Section 3.5)
- Hazards and Hazardous Materials (Section 3.6)
- Hydrology and Water Quality (Section 3.7)
- Land Use and Planning (Section 3.8)
- Mineral Resources (Section 3.9)
- Noise (Section 3.10)
- Public Services (Section 3.11)
- Transportation and Traffic (Section 3.12)
- Utilities and Service Systems (Section 3.13)

The discussions of each environmental issue area include the following subsections:

- Environmental Setting
- Regulatory Setting
- Thresholds of Significance
- Methodology
- Impact Analysis
- Cumulative Impacts
- Mitigation Measures
- Significance after Mitigation

As stated in the Initial Study (see Appendix A), it was found that the proposed project would have no impact or a less than significant impact relative to the following environmental issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Population and Housing
- Recreation

3.1 AIR QUALITY

This section identifies air quality regulatory requirements, describes the existing air quality setting of the project area, and evaluates potentially adverse air quality impacts associated with construction and operation of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project). Modeling data and information related to the air quality analysis have been provided in Appendix B.

The Initial Study and Notice of Preparation (IS/NOP) found that the proposed project would have a less than significant impact as it relates to creating objectionable odors affecting a substantial number of people (Appendix A). As such, these impacts will not be addressed further in this Draft Environmental Impact Report (EIR).

3.1.1 Relevant Plans, Policies, and Ordinances

Federal

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emissions standards; issuing stationary source emissions standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. NAAQS are established for criteria pollutants under the Clean Air Act, which are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns in diameter (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in diameter ($PM_{2.5}$), and lead (Pb).

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated time frames.

State

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to the California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 3.1-1, Ambient Air Quality Standards.

Table 3.1-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary[c,d]*	*Secondary[c,e]*
O_3	1 hour	0.09 ppm (180 μg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 μg/m³)
	24 hours	0.04 ppm (105 μg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 μg/m³	150 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 μg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m³	12.0 μg/m³	15.0 μg/m³

Table 3.1-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary[c,d]*	*Secondary[c,e]*
Lead[j,k]	30-day Average	1.5 μg/m³	—	—
	Calendar Quarter	—	1.5 μg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 μg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 μg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 μg/m³)	—	—
Sulfates	24- hours	25 μg/m³	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2016a.

Notes: ppm = parts per million by volume; μg/m³ = micrograms per cubic meter; mg/m³= milligrams per cubic meter.

a California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter (μg/m³) is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

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

d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

e National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f On October 1, 2015, the primary and secondary NAAQS for O_3 were lowered from 0.075 ppm to 0.070 ppm

g To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

h On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

i On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

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

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 μg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

As part of its diesel risk reduction program, CARB adopted an Airborne Toxic Control Measure (ATCM) that applies to new and in-use stationary compression-ignition (i.e., diesel) engines. The ATCM was adopted in 2004 and revised in November 2010 with an effective date of May 19, 2011. After December 31, 2008, the ATCM requires that new emergency standby engines must comply with EPA emissions standards applicable to a 2007-model-year off-road engine of the same horsepower rating. The ATCM further limits the particulate matter emissions from an emergency standby engine operated less than 50 hours per year for maintenance and testing to 0.15 gram per brake-horsepower-hour.

Local

While CARB is responsible for the regulation of mobile emissions sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The South Coast Air Quality Management District (SCAQMD) is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the South Coast Air Basin (SCAB), where the project is located. The SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain the CAAQS and NAAQS in the SCAB. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The SCAQMD's governing board adopted the 2003 AQMP on August 1, 2003. The 2003 AQMP updates the attainment demonstration for the federal standards for O_3 and PM_{10}, replaces the 1997 attainment demonstration for the federal CO standard, provides a basis for a maintenance plan for CO for the future, and updates the maintenance plan for the federal NO_2 standard that the SCAB has met since 1992 (SCAQMD 2003). On March 10, 2009, the EPA issued a final rule partially approving and partially disapproving the 2003 AQMP. On February 2, 2011, the U.S. Court of Appeals for the Ninth Circuit ruled that EPA's partial approval was arbitrary and capricious. The court further ruled that the EPA should have ordered California to submit a revised attainment plan for the SCAB after it disapproved the 2003 AQMP and that the EPA should have required transportation control measures.

The SCAQMD's governing board adopted the 2007 AQMP on June 1, 2007. The 2007 AQMP includes the same updates as the 2003 AQMP and incorporates significant new scientific data,

primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. As part of the 2007 AQMP, the SCAQMD requested that the EPA "bump up" the O_3 nonattainment status from severe to extreme to allow additional time for the SCAB to achieve attainment with the federal standard. The additional time would provide for implementation of state and federal measures that apply to sources over which the SCAQMD does not have control. The 2007 AQMP has been approved by CARB; however, on November 22, 2010, the EPA issued a proposed rule to approve in part and disapprove in part the portions related to attainment of the federal $PM_{2.5}$ standard. The EPA, however, approved the redesignation of the SCAB to an extreme O_3 nonattainment area, effective June 4, 2010.

On December 7, 2012, the SCAQMD's governing board adopted the Final 2012 AQMP (SCAQMD 2013), which is designed to meet applicable federal and state requirements for O_3 and particulate matter. The Final 2012 AQMP demonstrates attainment of the federal 24-hour $PM_{2.5}$ standard by 2014 in the SCAB through adoption of all feasible measures. The 2012 AQMP also updates the EPA-approved 8-hour O_3 control plan with new measures designed to reduce reliance on the Clean Air Act Section 182(e)(5) long-term measures for NO_x and volatile organic compound (VOC) reductions. Based on general plans for cities and counties in the SCAB, demographic growth forecasts for various socioeconomic categories (i.e., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) for their 2012 Regional Transportation Plan were used in the 2012 AQMP. In addition, emissions reductions resulting from SCAQMD regulations adopted by June 2012 and CARB regulations adopted by August 2011 are included in the baseline. The 2012 AQMP reduction and control measures, which are outlined to mitigate emissions, are based on existing and projected land use and development. The Final 2012 AQMP was approved by CARB on January 25, 2013, and was reviewed by the EPA with a final ruling on April 14, 2016.

Applicable Rules

Emissions that would result from stationary and area sources during operation under the proposed project may be subject to SCAQMD rules and regulations, which may include the following:

Rule 201 – Permit to Construct: This rule establishes an orderly procedure for the review of new and modified sources of air pollution through the issuance of permits. Rule 201 specifies that any facility installing nonexempt equipment that causes or controls the emissions of air pollutants must first obtain a permit to construct from the SCAQMD.

Rule 401 – Visible Emissions: This rule establishes the limit for visible emissions from stationary sources for a period or periods aggregating more than three minutes in any hour. This rule prohibits visible emissions dark or darker than Ringelmann No. 1 for periods greater than

three minutes in any hour or such opacity which could obscure an observer's view to a degree equal or greater than does smoke.

Rule 402 – Nuisance: This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property.

Rule 403 – Fugitive Dust: This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

Rule 431.2 – Sulfur Content of Liquid Fuels: The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose both of reducing the formation of SO_x and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile source applications.

Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines: This rule applies to stationary and portable engines rated at greater than 50 horsepower. The purpose of Rule 1110.2 is to reduce NO_x, VOC, and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule as they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.

Rule 1113 – Architectural Coatings: This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters: This rule applies to boilers, steam generators, and process heaters of equal to or greater than 5 million British thermal units (Btu) per hour rated heat input capacity used in all industrial, institutional, and commercial operations with the exception of boilers used by electric utilities to generate electricity, boilers and process heaters with a rated heat input capacity greater than 40 million Btu per hour that are used in petroleum refineries, and sulfur plant reaction boilers. Under this rule, the NO_x and CO exhaust concentration for Group III boilers (rated from 5 to less than 20 million Btu per hour) are limited to 9 ppm and 400 ppm, respectively, by volume referenced at 3% oxygen on a dry basis.

Regulation XIII – New Source Review: This regulation sets preconstruction review requirements for new, modified, or relocated facilities to ensure that the operation of such facilities does not interfere with progress in attainment of the NAAQS and that future economic growth within SCAQMD is not unnecessarily restricted. The specific air quality goal of this regulation is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. In addition to nonattainment air contaminants, this regulation will also limit emissions increases of ammonia and O_3-depleting compounds from new, modified, or relocated facilities by requiring the use of best available control technology.

Regulation XIV – Toxics and Other Non-Criteria Pollutants: This regulation includes rules that regulate toxics and other non-criteria pollutants. It provides specifications for maximum individual cancer risk, cancer burden, and noncancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units that emit TACs. The rules establish allowable risks for permit units requiring new permits pursuant to Rules 201 or 203. Under this regulation, Rule 1401 (New Source Review of Toxic Air Contaminants) specifies limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard indices from new permit units, relocations, or modifications to existing permit units that emit TACs listed in the rule.

Local Air Quality

SCAB Attainment Designation

An area is designated "in attainment" when it is in compliance with the NAAQS and/or CAAQS. These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare with a margin of safety.

The criteria pollutants of primary concern considered in this air quality assessment include O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and lead. Although there are no ambient standards for VOCs—also referred to as reactive organic compounds or gases (ROGs), or NO_x—they are important because they are precursors to O_3.

The entire SCAB is designated as a nonattainment area for both federal and state O_3 standards. The EPA has classified the SCAB as an "extreme" nonattainment area and has mandated that it achieve attainment no later than June 15, 2024. The federal NO_2 standard was revised in 2010, and all areas of California have been designated unclassifiable/attainment for the revised standard; the SCAB was designated attainment (maintenance) under the previous (1971) NO_2 standard. The SCAB is designated as an attainment area for the state NO_2 standards. The SCAB is designated as an attainment area for federal and state CO and SO_2 standards, as an attainment area for the federal PM_{10} standard, and as a nonattainment area for the state PM_{10} standards. Los Angele County is designated unclassifiable/attainment for state and federal lead standards.

The attainment classifications for these criteria pollutants are outlined in Table 3.1-2, SCAB Attainment Classification.

Table 3.1-2
South Coast Air Basin Attainment Classification

Pollutant	Averaging Time	Designation/Classification
Federal Standards		
O_3	8 hours	Nonattainment/Extreme
NO_2	1 hour	Unclassifiable/attainment
	Annual arithmetic mean	Attainment (maintenance)
CO	1 hour; 8 hours	Attainment (maintenance)
SO_2	24 hours; annual arithmetic mean	Unclassifiable/attainment
PM_{10}	24 hours	Attainment (maintenance)
$PM_{2.5}$	24 hours; annual arithmetic mean	Nonattainment (serious)
Pb	Quarter	Unclassifiable/attainment
	3-month average	Nonattainment (partial)
State Standards		
O_3	1 hour; 8 hours	Nonattainment
NO_2	1 hour; annual arithmetic mean	Attainment
CO	1 hour; 8 hours	Attainment
SO_2	1 hour; 24 hours	Attainment
PM_{10}	24 hours; annual arithmetic mean	Nonattainment
$PM_{2.5}$	Annual arithmetic mean	Nonattainment
Pb[a]	30-day average	Attainment
Sulfates (SO_4)	24 hours	Attainment
Hydrogen sulfide (H_2S)	1 hour	Unclassified
Vinyl chloride[a]	24 hours	No designation
Visibility-reducing particles	8 hours (10:00 a.m.–6:00 p.m.)	Unclassified

Sources: EPA 2016b (federal); CARB 2016c (state).
Notes: O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; Pb = lead.
[a] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined.

Air Quality Monitoring Data

The project area's local ambient air quality is monitored by SCAQMD and CARB. CARB monitors ambient air quality at approximately 250 air quality monitoring stations across the state. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The Pico Rivera monitoring station, located at 4144 San Gabriel River Parkway, California 90660, is the nearest air quality monitoring station to the project site, approximately 6.36 miles southwest from the project site. The data collected at this station are considered representative of the air quality experienced in the project vicinity. Air quality data from 2013 through 2015 for the Pico Rivera

monitoring station are provided in Table 3.1-3, Ambient Air Quality Data. Because PM_{10} is not monitored at the Pico Rivera monitoring station, PM_{10} measurements were taken from the Azusa monitoring station (803 North Loren Avenue, California 91702, approximately 5.6 miles northeast from the project site). Because SO_2 is not monitored at the Pico Rivera or Azusa monitoring stations, SO_2 measurements were taken from the Los Angeles-North Main Street monitoring station (1630 North Main Street, California, 90012, approximately 13.3 miles west from the project site). The number of days exceeding the ambient air quality standards is shown in Table 3.1-4, Frequency of Air Quality Standard Violations.

Table 3.1-3
Ambient Air Quality Data

Pollutant	Averaging Time	2013	2014	2015	Most Stringent Ambient Air Quality Standard	Monitoring Station
O_3	1-hour	0.101 ppm	0.121 ppm	0.107 ppm	0.09 ppm (State)	Pico Rivera[a]
	8-hour	0.072 ppm	0.092 ppm	0.081 ppm	0.070 ppm (State/National)	
NO_2	1-hour	0.105 ppm	0.087 ppm	0.070 ppm	0.100 ppm (National)	Pico Rivera[a]
	Annual	N/A	0.019 ppm	N/A	0.030 ppm (State)	
CO	1-hour	3.6 ppm	3.9 ppm	2.8 ppm	20 ppm (State)	Pico Rivera[a]
	8-hour	2.0 ppm	2.5 ppm	1.7 ppm	9.0 ppm (State)	
SO_2	24-hour	0.001 ppm	0.001 ppm	0.001 ppm	0.04 ppm (State)	Los Angeles-North Main Street[c]
	Annual	0.001 ppm	0.001 ppm	0.001 ppm	0.030 ppm (National)	
PM_{10}	24-hour	76.0 µg/m^3	96.0 µg/m^3	76.0 µg/m^3	50 µg/m^3 (State)	Azusa[b]
	Annual	32.0 µg/m^3	43.0 µg/m^3	43.0 µg/m^3	20 µg/m^3 (State)	
$PM_{2.5}$	24-hour	29.1 µg/m^3	35.1 µg/m^3	52.7 µg/m^3	35 µg/m^3 (National)	Pico Rivera[a]
	Annual	11.7 µg/m^3	12.0 µg/m^3	11.5 µg/m^3	12 µg/m^3 (National)	

Sources: CARB 2015; EPA 2016c.

Notes: ppm = parts per million; µg/m3 = micrograms per cubic meter; O_3 = ozone; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; NO_2 = nitrogen dioxide; N/A = not available; CO = carbon monoxide; SO_2 = sulfur dioxide.

Data were taken from CARB iADAM (2015; http://www.arb.ca.gov/adam) or EPA AirData (2015; http://www.epa.gov/airdata/) and represent the highest concentrations experienced over a given year. Exceedances of federal and state standards are only shown for ozone and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed either federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour $S0_2$, nor is there a state 24-hour standard for $PM_{2.5}$.

[a] Pico Rivera Monitoring Station is located at 4144 San Gabriel River Parkway, Pico Rivera, California.

[b] Azusa Monitoring Station is located at 803 North Loren Avenue, Azusa, California.

[c] Los Angeles-North Main Street Monitoring Station is located at 1630 North Main Street, Los Angeles, California.

Table 3.1-4
Frequency of Air Quality Standard Violations

Year	Number of Days Exceeding Standard				
	State 1-Hour O_3 (Pico Rivera Monitoring Station)	*State 8-Hour O_3 (Pico Rivera Monitoring Station)*	*National 8-Hour O_3 (Pico Rivera Monitoring Station)*	*State 24-Hour PM_{10} [a] (Azusa Monitoring Station)*	*National 24-Hour $PM_{2.5}$[a] (Pico Rivera Monitoring Station)*
2013	2	3	0	35.6 (6)	0.0 (0)
2014	7	7	5	128.5 (21)	0.0 (0)
2015	6	11	2	N/A (2)	9.4 (3)

Source: CARB 2015.
Notes:
O_3 = ozone; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; N/A = insufficient data available to determine the value.
Exceedances of national and state standards are only shown for O_3 and particulate matter. All other criteria pollutants did not exceed either national or state standards during the years shown.
An exceedance of a standard is not necessarily related to a violation of the standard.
[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

City of Irwindale 2020 General Plan

The City's General Plan (City of Irwindale 2008) includes various goals and policies designed to help improve air quality within the City. As discussed in the General Plan, policies pertaining to improving air quality and climate change are addressed in the Resource Management Element of the General Plan.

Resource Management Element

- The City of Irwindale will facilitate communications among residents, businesses, and the SCAQMD to quickly resolve air pollution nuisance complaints. The City will distribute information to advise residents on how to register a complaint with SCAQMD.
- The City of Irwindale will actively participate in decisions on the site or expansion of facilities of land uses (e.g., freeway expansions), to ensure the inclusion of air quality mitigation measures.
- The City of Irwindale will encourage vegetative thinning or mowing for weed abatement activities to minimize windblown dust.
- The City of Irwindale will encourage vegetation or chemical stabilization for disturbed land as well as construction screening on fencing for phased construction projects.
- The City of Irwindale will provide regional and local air quality information on the City's website, including the SCAQMD's 1-800-CUT-SMOG number for the public to report air pollution complaints to the SCAQMD.

3.1.2 Existing Conditions

Climate and Topography

The project site is located within the SCAB, which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. Air quality in the project area is affected not only by various emissions sources (e.g., mobile, industry), but also by atmospheric conditions, such as wind speed, wind direction, temperature, and rainfall. The SCAB's combination of topography, low mean mixing height, abundant sunshine, and emissions from one of the largest urban areas in the United States has historically resulted in some of the worst air pollution in the nation.

Although the SCAB has a semiarid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The dominant daily wind pattern is an onshore daytime breeze of 8–12 miles per hour (mph) and an offshore nighttime breeze of 3–5 mph. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly Santa Ana winds from the mountains and deserts northeast of the SCAB. Summer wind flow patterns represent worst-case conditions because this is the period of higher temperatures and more sunlight, which results in more O_3 formation.

The City of Irwindale's climate is characterized by relatively low rainfall, with warm summers and mild winters. Average temperatures range from a high of 83 degrees Fahrenheit (°F) in August to a low of 48°F in January. Annual precipitation averages about 0.5 to 3 inches, falling mostly from December through March (WRCC 2015).

During spring and early summer, pollution produced during any one day is typically blown out of the SCAB through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. The vertical dispersion of air pollutants in the SCAB is limited by temperature inversions in the atmosphere close to the Earth's surface. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino counties. In the winter, the greatest pollution problems are CO, $PM_{2.5}$, PM_{10}, and NO_2 because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_x to form photochemical smog.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). The closest off-site sensitive receptor locations to the project site are Opportunities for Learning, located approximately 720 feet from the project site boundary; residential land uses to the southeast, approximately 1,005feet from the project site boundary; and Premiere Career College, located approximately 1,326 feet from the project site boundary.

Pollutants and Effects

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and lead. These pollutants, as well as toxic air contaminants (TACs), are discussed below.[1] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors, such as hydrocarbons and NO_x. These precursors are mainly NO_x and VOCs. The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere ozone layer (stratospheric ozone) as well as at the Earth's surface in the troposphere (ozone). O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

[1] The descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the U.S. Environmental Protection Agency's *Criteria Air Pollutants* (EPA 2016b) and CARB's *Glossary of Air Pollution Terms* (CARB 2016a).

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections.

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil, fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily, wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished lung function in children. When combined with particulate matter, SO_2 can injure lung tissue and reduce visibility and the level of sunlight. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter ($PM_{2.5}$) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel

combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs. Respirable particulate matter, or coarse particulate matter (PM_{10}), is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle, as well as producing haze and reducing regional visibility.

People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. People with bronchitis can expect aggravated symptoms from breathing in particulate matter. Children may experience a decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers, people who cannot breathe well through their noses, and exercising athletes (because many breathe through their mouths).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in

neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

CARB classified "particulate emissions from diesel-fueled engines" (i.e., diesel particulate matter) as a TAC in August 1998. Diesel particulate matter is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of

which contribute to health risks. Diesel particulate matter is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars, and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with diesel particulate matter (CARB 2000). To reduce the cancer risk associated with diesel particulate matter, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000).

3.1.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to air quality are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to air quality would occur if the project would:

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

b) ***Violate any air quality standard or contribute substantially to an existing or projected air quality violation***

c) ***Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O_3 precursors)***

d) ***Expose sensitive receptors to substantial pollutant concentrations***

In addition, Appendix G of the CEQA Guidelines indicates that where available, the significance criteria established by the applicable AQMD or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. The most recent version of the SCAQMD *CEQA Air Quality Handbook* (SCAQMD 1993, 2015a) sets forth quantitative emissions significance thresholds, below, for which a project would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 3.1-5, SCAQMD Air Quality Significance Thresholds, are exceeded.

A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O_3, which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 3.1-5. These emissions-based thresholds for O_3 precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly (see discussion of O_3 and its sources in Section 3.1.2), and the effects

of an individual project's emissions of O_3 precursors (VOC and NO_x) on O_3 levels in ambient air cannot be determined through air quality models or other quantitative methods.

Table 3.1-5
SCAQMD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	*Construction*	*Operation*
NO_x	100 lb/day	55 lb/day
VOC	75 lb/day	55 lb/day
PM_{10}	150 lb/day	150 lb/day
$PM_{2.5}$	55 lb/day	55 lb/day
SO_x	150 lb/day	150 lb/day
CO	550 lb/day	550 lb/day
Lead[a]	3 lb/day	3 lb/day
Toxic Air Contaminants[b] and Odor Thresholds		
TACs (including carcinogens and noncarcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants[c]		
NO_2 1-hour average NO_2 annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average PM_{10} annual arithmetic mean	10.4 μg/m³ (construction)[d] and 2.5 μg/m³ (operation) 1.0 μg/m³	
$PM_{2.5}$ 24-hour average	10.4 μg/m³ (construction)[d] and 2.5 μg/m³ (operation)	
SO_2 1-hour average SO_2 24-hour average	0.25 ppm (state) and 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfates (SO_4) 24-hour average	25 μg/m³ (state)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average[a] Lead rolling 3-month average[a] Lead quarterly average[a]	1.5 μg/m³ (state) 0.15 μg/m³ (federal) 1.5 μg/m³ (federal)	

Source: SCAQMD 2015a.
Notes: Greenhouse gas thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not include included in this table as they will be addressed within the greenhouse gas emissions analysis and not the air quality study.
SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compounds; lb/day = pounds per day; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; TAC = toxic air contaminant; NO_2 = nitrogen dioxide; ppm = parts per million; μg/m³ = micrograms per cubic meter.

[a] The phase-out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the proposed project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
[b] TACs include carcinogens and non-carcinogens.
[c] Ambient air quality standards for criteria pollutants based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
[d] Ambient air quality threshold based on SCAQMD Rule 403.

The phasing out of leaded gasoline started in 1976. As gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

The SCAQMD *CEQA Air Quality Handbook* also sets forth additional indicators of potential air quality impacts that should be used as screening criteria indicating the need for further analysis. The additional indicators are as follows:

- The project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.
- The project could result in population increases within the regional statistical area that would be in excess of that projected in the AQMP and in other than planned locations for the project's buildout year.
- The project would have the potential to create or be subjected to an objectionable odor over 10 dilutions to thresholds (D/T) that could impact sensitive receptors.
- The project would have hazardous materials on site and could result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.
- The project could emit an air toxic contaminant regulated by SCAQMD rules or that is on a federal or state air toxic list.
- The project could involve burning of hazardous, medical, or municipal waste as waste-to-energy facility.
- The project could be occupied by sensitive receptors within a quarter mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401 or near CO hotspots.
- The project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in 1 million (SCAQMD 1993).

In addition to the above-listed emission-based thresholds, the SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the project as a result of construction activities. Such an evaluation is referred to as a localized significance threshold (LST) analysis. For project sites of five acres or less, SCAQMD LST Methodology (SCAQMD 2008) includes lookup tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., the emissions would not cause an exceedance of the applicable concentration limits for NO_2, CO, PM_{10}, and $PM_{2.5}$) without performing project-specific dispersion modeling.

The LST significance thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for

PM_{10} represents compliance with Rule 403 (Fugitive Dust). The LST significance threshold for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

a. Source-Receptor Area (SRA) in which the project is located;

b. Size of the project site; and

c. Distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals).

The project site is located in SRA 9 (East San Gabriel Valley). The SCAQMD provides guidance for applying CalEEMod to the LSTs. LST pollutant screening level concentration data is currently published for 1-, 2-, and 5-acre sites for varying distances. The maximum number of acres disturbed on the peak day was estimated using the Fact Sheet for Applying CalEEMod to Localized Significance Thresholds (SCAQMD 2014), which provides estimated acres per 8-hour/day for crawler tractors, graders, rubber tired dozers, and scrapers. Based on the SCAQMD guidance, it was estimated that the maximum acres on the project site that would be disturbed by off-road equipment would be 2.5 acres/day. Because the SCAQMD does not provide lookup table values for 2.5 acres, the LST values for 2 and 5 acres within SRA 9 were interpolated to generate LSTs for 2.5 acres.

The closest sensitive receptor to the project site is Opportunities for Learning (a charter school), located approximately 720 feet (219 meters) from the project site boundary. Because the SCAQMD does not provide lookup table values for 219 meters, the LST values for a distance of 200 meters and 500 meters were interpolated to generate LSTs for a distance of 219 meters. The LST values from the SCAQMD lookup tables for SRA 9 (East San Gabriel Valley) for a disturbed acreage of 2.5 acres and a receptor distance of 219 meters are shown in Table 3.1-6.

Table 3.1-6
Localized Significance Thresholds for Source Receptor Area 9
(East San Gabriel Valley)

Pollutant	Threshold (pounds/day)
NO_2	312
CO	7,039
PM_{10}	95
$PM_{2.5}$	32

Source: SCAQMD 2008.

Yorke Engineering prepared a stationary source emissions inventory to estimate impacts from operational activities associated with the proposed project, which is included as Appendix B. For

modeling operational emissions, Table 3.1-7 shows the modeled release characteristics for each operational source that is planned for the proposed project.

Table 3.1-7
Operational Source Modeling Characteristics

Emissions Source	Source Temperature (°F)	Stack Height (ft)	Stack Diameter (ft)	Stack Flow Rate (acfm)
Emergency generator	800	10	1.2	10,616
Hot water heaters	400	40	1.2	1,212
Steam boilers	400	40	1.2	1,212

Source: Yorke Engineering (Appendix B)

3.1.4 Impact Analysis

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus, if it would interfere with the region's ability to comply with federal and state air quality standards. Specifically, the SCAQMD recommends that environmental documents discuss the project's consistency with the current AQMP (2012 AQMP), including several of the underlying key assumptions for the air quality plans, such as the number and location of population, housing units, and employment from the SCAG growth projections and plans, as well as consistency with a local government's air quality element or air quality-related policies in other general plan elements, if the local government has adopted such policies.

In general, projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP. The 2012 AQMP reduction and control measures, which are outlined to mitigate emissions, are based on existing and projected land use and development. Demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) were developed by the SCAG for its 2012 Regional Transportation Plan based on general plans for cities and counties in the SCAB. The 2012 AQMP relies on the land use and population projections provided in SCAG 2012 Regional Growth Forecast, which is generally consistent with the local plans; therefore, the 2012 AQMP is generally consistent with local government plans.

If the project is inconsistent, the SCAQMD recommends that local governments should consider project modifications or inclusion of mitigation to eliminate the

inconsistency. The SCAQMD CEQA Air Quality Handbook states, "It is important to note that even if a project is found consistent it could still have a significant impact on air quality under CEQA. For example, if the analysis demonstrates a project is consistent with the regional air plans and local Air Quality Element that does not mean that the project could not also have a significant effect on air quality by exceeding the significance thresholds" (SCAQMD 2015). There are two key indicators of consistency with the AQMP:

- Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP; and
- Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

The proposed project would not conflict with SCAG's growth projections anticipated in the 2012 AQMP because the proposed project would not introduce a land use or zoning conflict with the City's designations for the project site. The City of Irwindale General Plan (City of Irwindale 2008) land use designation for the project site is Industrial/Business Park and is currently zoned Heavy Manufacturing, which would allow for the development of the proposed project. Additionally, since many current staff from Kaiser's Baldwin Hills MOB would relocate to the new MOB proposed at the project site, the proposed project would result in a minor, incremental increase in the number of employment opportunities within the community. However, with the development of the proposed project, there may be a potential to result in population growth in the event that new employees move to the area. Because the proposed project would be located in an infill area and more generally, the densely populated Los Angeles metropolitan area, it is anticipated that most of the jobs associated with the proposed project would be filled by residents immediately within the vicinity of the project site or from neighboring communities and cities. Since the proposed project would result in minimal growth in population and employment, it would not conflict with the 2012 AQMP or exceed the assumptions in the 2012 AQMP.

To address the criterion regarding the proposed project's potential to result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP, an air quality modeling analysis that identified the proposed project's impact on air quality was performed. Detailed results of the modeling conducted for the proposed project are included in Appendix B. The California Emissions Estimator Model (CalEEMod) Version 2013.2.2, available

online (http://www.caleemod.com), was used to model emissions for the proposed project and analyzed for significance in impact criterion (b) below.

The SCAB is a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$ under the NAAQS and/or CAAQS. As discussed for impact criterion (b), the proposed project would not result in a net increase of VOC, PM_{10}, or $PM_{2.5}$ emissions; however, operating the emergency generator over a 24-hour period which represents a worst-case scenario would exceed the SCAQMD significance threshold for NO_x emissions after incorporation of mitigation measure **MM-AQ-1** (see Section 3.1.6, Mitigation Measures, for full text of **MM-AQ-1**). Therefore, the proposed project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the 2012 AQMP.

Because the proposed project would contribute to air quality violations after implementing **MM-AQ-1**, impacts would be **significant and unavoidable** during operation.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction and operation of the proposed project may result in emissions of criteria air pollutants from mobile, area, and/or stationary sources, which may cause exceedances of federal and state ambient air quality standards or contribute to existing nonattainment of ambient air quality standards. The following discussion identifies potential short-term construction and long-term operational impacts that would result from implementation of the proposed project. Feasible mitigation measures to reduce or avoid any potential significant impacts, as appropriate, are proposed.

Construction Emissions

Construction of the proposed project would result in the addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts. Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would primarily result from grading and site preparation activities. NO_x and CO emissions would primarily result from the use of construction equipment and motor vehicles.

Construction emissions were calculated using CalEEMod for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2017 and 2018). Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the applicant and is intended to represent a reasonable scenario based on the best information available. Default values provided by the program were used where detailed project information was not available.

Project development would include the demolition of the existing 82,500-square-foot warehouse and parking lot, and the subsequent construction of a three-story, approximately 90,000-square-foot medical office building and a five-story 115,339-square-foot parking structure on a 4-acre parcel. Implementation of the proposed project would generate construction-related air pollutant emissions from three general activity categories: entrained dust, equipment and vehicle exhaust emissions, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. To account for dust control measures to comply with SCAQMD Rule 403 in the calculations, it was assumed that the active sites would be watered at least three times daily, as necessary depending on weather conditions, resulting in a 61% reduction in fugitive dust as implemented by CalEEMod. Exhaust from internal combustion engines used by construction equipment and vendor trucks (delivery trucks) and worker vehicles would result in emissions of NO_x, VOCs, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior/interior paint and other finishes, would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 (Architectural Coatings).

It is anticipated that construction of the proposed project would commence in 2017, with completion by 2018. For purposes of estimating proposed project emissions and based on information provided by Kaiser Permanente, the analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Demolition: May 5, 2017 – June 1, 2017
- Site Preparation: June 2, 2017 – June 5, 2017
- Grading: June 6, 2017 – June 12, 2017
- Building construction: June 13, 2017 – October 3, 2017
- Architectural coating: November 22, 2017 – March 15, 2018
- Paving: May 30, 2018 – September 15, 2018

The construction equipment mix and estimated hours of operation per day used for the air emissions modeling of the proposed project are shown in Table 3.1-8, Construction Scenario Assumptions. For this analysis, it was assumed that heavy construction equipment would operate five days a week (22 days per month) during proposed project construction. Table 3.1-8 also presents the estimated number of worker, vendor (delivery trucks), and haul trips anticipated for each construction phase. To estimate motor vehicle emissions generated by worker vehicles (i.e., light-duty trucks and automobiles), it was assumed that each worker would generate two one-way trips per day and were estimated using CalEEMod defaults. Per information provided by Kaiser Permanente, there would be 500 vendor trips over the entire construction duration. Haul trips, estimated using CalEEMod defaults, were assumed to be required for demolition of the existing 82,500-square-foot warehouse and parking lot.

Per SCAQMD's Rule 1113, the VOC content of most non-specialty architectural coatings would be limited to 50 grams of VOC per liter of coating for interior usage and 100 grams of VOC per liter of coating for exterior usage, less water and exempt compounds, (g/L VOC) which is therefore reflected in CalEEMod. Detailed model assumptions and outputs are provided in Appendix B.

Table 3.1-8
Construction Scenario Assumptions

Construction Phase	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment	Quantity	Usage Hours
Demolition	16	0	376	Concrete/Industrial Saws	1	8
				Excavators	3	8
				Rubber Tired Dozers	2	8
Site Preparation	14	0	0	Tractors/Loaders/Backhoes	2	8
Grading	16	0	0	Excavators	1	8
				Graders	1	8
				Rubber Tired Dozers	1	8
				Tractors/Loaders/Backhoes	3	8
Building construction	130	500	0	Crawler Tractors	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	8
				Welders	1	8
Architectural coating	26	0	0	Aerial Lifts	1	6
				Air Compressors	1	6
				Forklifts	1	6
Paving	26	0	0	Pavers	1	8
				Paving Equipment	2	6
				Plate Compactors	2	6
				Rollers	2	6

Notes: See Appendix B for details.

Table 3.1-9, Estimated Maximum Daily Construction Emissions, presents the estimated maximum unmitigated daily construction emissions generated during construction of the proposed project in each year. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emissions calculations are provided in Appendix B.

Table 3.1-9
Estimated Maximum Daily Construction Emissions (pounds/day unmitigated)

	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Year 2017	15.77	73.52	89.61	0.16	7.66	4.34
Year 2018	14.98	74.59	92.18	0.17	7.61	3.91
Maximum daily emissions	**15.77**	**74.59**	**92.18**	**0.17**	**7.66**	**4.34**
Pollutant threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: See Appendix B for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These estimates reflect control of fugitive dust required by SCAQMD Rule 403.
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

Maximum daily emissions of NO_x would occur during the building construction phase in 2017 as a result of operating construction equipment on-site. Fugitive dust and off-road equipment emissions during the site preparation phase in 2017 would generate the maximum daily PM_{10} and $PM_{2.5}$ emissions. The application of architectural coatings in 2017 would produce the maximum daily VOC emissions.

As shown in Table 3.1-9, the proposed project's daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, $NO_{x.}$ CO, SO_x, PM_{10}, or $PM_{2.5}$. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, construction impacts would be **less than significant**. No mitigation is required during construction.

Operational Emissions

Following the completion of construction activities, the proposed project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile and stationary sources including vehicular traffic generated by patients, visitors, physicians/staff, area sources (space heating, water heating, landscaping), and an emergency diesel generator.

Vehicular Traffic

CalEEMod was utilized to estimate daily emissions from proposed vehicular sources based on trip generation information provided in the traffic study (LLG 2016).

CalEEMod default data, including temperature, trip characteristics, variable start information, and trip distances, were conservatively used for the model inputs.

Project-related traffic was assumed to be composed of a mixture of vehicles in accordance with the model outputs for traffic. Emissions factors representing the vehicle mix and emissions for 2019 (first full year of operations) were used to estimate emissions associated with operations.

The emissions analysis also includes emissions associated with the existing food distribution warehouse. The default trip rate and fleet mix from CalEEMod was adjusted based on information presented in the traffic study (LLG 2016). The total passenger car trips and truck trips (2-axle, 3-axle, and 4-axle) were converted to a trip rate for each vehicle type identified and was added together for the revised trip rate. Finally a fleet fraction for the four vehicle categories was determined for input into CalEEMod.

Area Sources

In addition to estimating mobile source emissions, CalEEMod was also used to estimate emissions from the project area sources, which include other natural gas combustion, landscaping, and architectural coatings for maintenance of buildings. Refer to Appendix B for additional information.

Stationary Sources

Emergency Generator

Operational emissions under the proposed project would result from intermittent use of one 700 kW diesel-powered emergency generator for maintenance and testing purposes. The generator would be run for testing and maintenance approximately 30 minutes each week with a 4-hour, full load test once per three years for a total of 30 hours per year, assuming the triennial test is run in a given year. The generator engine would meet the EPA standards for Tier 3 or 4 interim engines and 0.15 gram PM per horsepower-hour, as required by the CARB ATCM for new and in-use stationary diesel engines. The SCAQMD requires, as a best available control technology (BACT), the use of diesel fuels which have a maximum sulfur content of 15 ppm to further reduce SO_x and particulate emissions generated by internal combustion engines. The estimated worst-case emissions from the emergency generator engine are shown in Table 3.1-10, Estimated Daily Maximum Stationary Source Emissions. The daily emissions assume that the generator engine would be tested for 30 minutes on a given day with a maximum Potential to Emit (PTE) of up to 24 hours per day but limited to 200 hours per year. Refer to Appendix B for additional information and detailed emissions calculations.

Steam Boilers

Two natural gas-fired commercial boilers are planned as part of the proposed project's central energy plant components to produce steam. These boilers would have an input of approximately 1.5 MMBTU/hour. The boilers would be operated as required to provide the needs of the proposed project. Maximum daily fuel usage for the boilers would be approximately 72 MMBTU per day. Concentrations were converted to emissions factors, expressed in units of pounds per MMBTU of natural gas combusted. The emission factors for other pollutants were obtained from Section 1.4 (Natural Gas Combustion) of EPA's Compilation of Air Pollutant Emission Factors (EPA 1998).

The estimated emissions from the steam boilers are shown in Table 3.1-10. Refer to Appendix B for additional information and detailed emissions calculations.

Hot Water Heaters

Two domestic natural gas-fired hot water heaters would be included as part of the proposed project. These heaters would have an input of approximately 0.8 MMBTU/hour. The hot water boilers would be operated as required to provide the needs of the proposed project. Maximum daily fuel usage for the hot water heaters would be approximately 72 MMBTU per day. Concentrations were converted to emissions factors, expressed in units of pounds per MMBTU of natural gas combusted. The emissions factors for other pollutants were obtained from Section 1.4 (Natural Gas Combustion) of EPA's Compilation of Air Pollutant Emission Factors (EPA 1998).

The estimated emissions from the hot water heaters are shown in Table 3.1-10. Refer to Appendix B for additional information and detailed emissions calculations.

Table 3.1-10
Estimated Daily Maximum Stationary Source Emissions (pounds/day)

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Steam Boilers	0.39	2.62	21.28	0.05	0.53	0.53
Hot Water Heaters	0.21	1.40	11.35	0.03	0.28	0.28
Emergency Generator	7.73	144.05	144.05	0.264	1.66	1.63
Total	**8.32**	**148.07**	**176.68**	**0.34**	**2.47**	**2.44**

Source: See Appendix B for complete results.
Note: Total emissions include worst-case emergency generator emissions resulting from operations of up to 24 hours per day.

Table 3.1-11, Estimated Maximum Daily Net Operational Criteria Air Pollutant Emissions, presents the difference in the maximum daily emissions associated with operation of the proposed project and from operation of the food distribution warehouse. The values shown for motor vehicles, area, and energy sources are the maximum summer

or winter daily emissions results from CalEEMod. Complete details of the emissions calculations are provided in Appendix B of this EIR.

Table 3.1-11
Estimated Maximum Daily Net Operational Criteria Air Pollutant Emissions (pounds/day)

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Proposed Project						
Area Sources	6.72	<0.01	0.06	0.00	<0.01	<0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources	9.84	25.38	100.10	0.26	18.30	5.15
Stationary Sources	8.32	148.07	176.68	0.34	1.66	1.63
Total	**24.88**	**173.45**	**276.84**	**0.60**	**19.96**	**6.78**
Existing Land Use						
Area Sources	4.56	<0.01	<0.01	0.00	<0.01	<0.01
Energy	<0.01	0.02	0.02	<0.01	<0.01	<0.01
Mobile Sources	1.44	14.95	20.93	0.06	2.27	0.77
Total	**6.00**	**14.97**	**20.95**	**0.06**	**2.27**	**0.77**
Net Change (Proposed Project minus Existing)	*18.88*	*158.48*	*255.89*	*0.54*	*17.69*	*1.38*
SCAQMD Emissions Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**Yes**	**No**	**No**	**No**	**No**

Source: SCAQMD 2015a (significance thresholds)
Notes: See Appendix B for detailed results.
The values shown for mobile, energy and area sources are the maximum summer or winter daily emissions results from CalEEMod.
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter
Emissions presented for the proposed project are provided in the "mitigated" CalEEMod output. These estimates reflect the proposed project's meeting net zero energy, producing approximately 2,010,000 kWh of electricity onsite through PVs, compliance with 2013 Title 24 energy efficiency requirements resulting in a minor decrease in energy (natural gas) emissions compared to the model default assumption of compliance with 2008 Title 24 standards. Although these assumptions are not considered mitigation measures for the analysis presented herein, the emission estimates are presented as "mitigated" emissions in the CalEEMod output as these assumptions are inputted in the mitigation option of the model.

As shown in Table 3.1-11, the combined mobile, area, energy, and stationary source emissions of the proposed project would not exceed the SCAQMD operational thresholds for VOC, CO, SO_x, PM_{10}, and $PM_{2.5}$ but would exceed the SCAQMD operational thresholds for NO_x. The exceedance of NO_x by the proposed project is primarily attributed to stationary source emissions, specifically from the possibility that the emergency generator would operate for a "worst-case" 24 hours per day. The emergency generator would be required to conduct the 3-year, 4-hour load test to verify optimal function and performance of the engine; all other testing periods would be approximately 30 minutes in duration. During normal testing periods, NO_x impacts would be less than significant. Additionally, "worst-case" emissions conservatively assume diesel generator engines would meet the Tier 3 or 4 interim engine standards for NO_x. The actual NO_x emissions

may be better than the standards; thus, using the Tier 3 or 4 interim standards as the basis would produce higher estimated emissions than what would likely occur when emergency generators are operating.

In the SCAB, which includes the City, the "smog season" generally runs from May to October (SCAQMD 2014). To reduce potential ozone impacts during triennial emergency generator testing periods, mitigation measure **MM-AQ-1** has been identified. Implementation of mitigation measure **MM-AQ-1** would require the triennial 4-hour emergency generator testing period to occur outside of the smog season to ensure that the proposed project's contribution to ozone formation (due to diesel engine NO_x emissions) is minimized. Following implementation of mitigation measure **MM-AQ-1**, however, impacts would remain **significant and unavoidable** during proposed project operation due to stationary source emissions during project operations.

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

In considering cumulative impacts from the proposed project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SCAB is designated as nonattainment for the CAAQS and NAAQS. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution to nonattainment status in the SCAB. If a project does not exceed thresholds and is determined to have less than significant project-specific impacts, the project may still contribute to a significant cumulative impact on air quality. The basis for analyzing the project's cumulative considerable contribution is to determine whether the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact), as well as determining the project's consistency with the SCAQMD 2012 AQMP, which addresses the cumulative emissions in the SCAB.

The SCAB has been designated as a federal nonattainment area for O_3 and $PM_{2.5}$ and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, commercial and industrial facilities. Construction and operation of the proposed project would generate VOC and NOx emissions (which are precursors to O_3), as well as emissions of PM_{10} and $PM_{2.5}$. However, as indicated in Tables 3.1-10 and 3.1-11, proposed project-generated

operational emissions, specifically from operating the emergency generator over a 24-hour period, would cause an exceedance in the SCAQMD emission-based significance thresholds for NO_x emissions even after incorporation of mitigation measure **MM-AQ-1**. As discussed in the analysis of the proposed project's potential to conflict with or obstruct implementation of the applicable air quality plan, the proposed project would conflict with the SCAQMD 2012 AQMP.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. Construction schedules for potential future projects near the project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be considered speculative. However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the project would exceed SCAQMD thresholds. The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). This analysis is nonetheless provided in an effort to show good faith analysis and comply with CEQA's information disclosure requirements. Air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD.

Accordingly, the proposed project would result in a cumulatively considerable increase in emissions of nonattainment pollutants with regard to project operations. Impacts are considered to be **significant and unavoidable**.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized Significance Thresholds Analysis

Sensitive receptors are those more susceptible to the effects of air pollution than are the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The closest off-site sensitive receptor locations to the project site are Opportunities for Learning, located approximately 720 feet from the project site boundary; residential land uses to the southeast in the City of Baldwin Park, approximately 1,005 feet from the

project site boundary; and Premiere Career College, located approximately 1,326 feet from the project site boundary. Much of the neighboring area consists of commercial and other nonresidential land uses.

An LST analysis has been prepared to determine potential impacts to nearby sensitive receptors during construction of the proposed project. As indicated in the discussion of the thresholds of significance, the SCAQMD also recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the project site. The impacts were analyzed using methods consistent with those in the SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008). According to the LST Methodology, "off-site mobile emissions from the Project should not be included in the emissions compared to the LSTs" (SCAQMD 2008). Hauling materials associated with proposed project construction is not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways. Emissions from the trucks would be relatively brief in nature and would cease once the trucks pass through the main streets.

Construction activities associated with the proposed project would result in temporary sources of on-site fugitive dust and construction equipment emissions. The maximum allowable daily emissions that would satisfy the SCAQMD localized significance criteria for SRA 9 are presented in Table 3.1-12, Localized Significance Thresholds Analysis for Project Construction, and compared to the maximum daily on-site construction emissions generated during implementation of the proposed project, which are rounded up to the nearest whole number.

Table 3.1-12
Localized Significance Thresholds Analysis for Project Construction

Pollutant	Project Construction Emissions (pound/day)	LST Criteria (pounds/day)	Exceeds LST?
NO_2	35.98	312	No
CO	25.38	7,039	No
PM_{10}	4.59	95	No
$PM_{2.5}$	3.19	32	No

Source: SCAQMD 2008.
Notes: See Appendix B for detailed results.
Localized significance thresholds are shown for 2.5-acre project sites corresponding to a distance to a sensitive receptor of 219 meters.
These estimates reflect control of fugitive dust required by Rule 403.
LST = localized significance threshold; NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 3.1-12, construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific construction impacts during construction of the

proposed project would be **less than significant**. In addition, diesel equipment would also be subject to the CARB ATCM for in-use off-road diesel fleets, which would minimize diesel particulate matter emissions. No mitigation is required during construction.

Carbon Monoxide Hotspots

Mobile source impacts occur basically on two scales of motion. Regionally, project-related travel will add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SCAB. Locally, proposed project traffic will be added to the City of Irwindale and other neighboring city roadways within the proposed project area. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing.

CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors such as residents, school children, hospital patients, and older adults. Typically, high CO concentrations are associated with roadways or intersections operating at an unacceptable level of service (LOS). Projects contributing to adverse traffic impacts may result in the formation of such CO hotspots.

To verify that the proposed project would not cause or contribute to a violation of the CO standards, a screening evaluation of the potential for CO hotspots was conducted. The California Department of Transportation (Caltrans) and the U.C. Davis Institute of Transportation Studies *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) (Caltrans 1997), and the SCAQMD *CEQA Air Quality Handbook* (SCAQMD 1993) were followed. CO hotspots are typically evaluated when (1) the LOS of an intersection or roadway decreases to LOS E or worse; (2) signalization and/or channelization is added to an intersection; and (3) sensitive receptors such as residences, schools, and hospitals are located in the vicinity of the affected intersection or roadway segment. According to the CO Protocol, if project traffic volume worsens an intersection's LOS to E or F from a LOS D or above, this intersection represents a potential for a CO violation and would be required to be further analyzed.

The proposed project's Traffic Impact Study (TIS) evaluated whether there would be a decrease in the LOS (e.g., congestion) at the intersections affected by the proposed project. The TIS evaluated 19 intersections for two different scenarios which included Existing (Year 2016) with Project Traffic Volumes and Future (Year 2019) with Project Traffic Volumes. According to the CO Protocol, there is a cap on the number of intersections that need to be analyzed for any one project. For a single project with multiple intersections, only the three intersections representing the worst LOS ratings of the project, and, to the extent they are different intersections, the three intersections representing the highest traffic volumes, need be analyzed. For each intersection failing a screening test as described in this protocol, an additional intersection should be analyzed (Caltrans 1997).

The following study area intersections would operate at an unacceptable LOS and were determined to be the most impacted for each respective scenario. The potential impact of the project on local CO levels was assessed at these intersections with the Caltrans CL4 interface based on the California LINE Source Dispersion Model (CALINE4), which allows microscale CO concentrations to be estimated along each roadway corridor or near intersections (Caltrans 1998a).

1. (Year 2016) Intersection No. 6 – Interstate 605 (I-605) northbound ramp and Ramona Boulevard for PM peak hour
2. (Year 2019) Intersection No. 6 – Interstate 605 (I-605) northbound ramp and Ramona Boulevard for PM peak hour

The modeling analysis was performed for worst-case wind angle, in which the model selects the wind angles that produce the highest CO concentrations at each of the receptors. The suburban land classification of 40 inches (100 centimeters) was used for the aerodynamic roughness coefficient, which determines the amount of local air turbulence that affects plume spreading. The at-grade option was used in the analysis; for at-grade sections, CALINE4 does not permit the plume to mix below ground level. The mixing zone, which is defined as the width of the roadway plus 10 feet (3 meters) on either side, was estimated for each roadway using Google Earth (2016). The calculations assume a mixing height of 3,280 feet (1,000 meters), a flat topographical condition between the source and the receptor (link height of 0 meters), and a meteorological condition of little to almost no wind (3.3 feet (1 meter) per second), consistent with Caltrans guidance (Caltrans 1998b).

The vehicle emission factor was predicted using CARB's mobile source emissions inventory model, EMFAC2014, and represents the weighted average emission rate of the local Los Angeles County vehicle fleet expressed in grams per mile per vehicle. Consistent with the traffic report, emission factors for 2016 and 2019, were used in the

CALINE4 model. Emission factors were based on a 10-mile-per-hour (mph) average speed for all of the intersections, a temperature of 53.3°F,[2] and an average humidity of 55%. The hourly traffic volume anticipated to travel on each link, in units of vehicles per hour, was based on the TIS. Modeling assumptions are outlined in Appendix B.

Four receptor locations at each intersection were modeled to determine CO ambient concentrations. A receptor was assumed on the sidewalk at each corner of the modeled intersections, for a total of four receptors adjacent to the intersection, to represent the possibility of extended outdoor exposure. CO concentrations were modeled at these locations to assess the maximum potential CO exposure that could occur in 2016 and 2019. A receptor height of 5.9 feet (1.8 meters) was used in accordance with Caltrans recommendations for all receptor locations (Caltrans 1998b).

The SCAQMD provides projected future concentrations of CO emissions in order to assist the CEQA practitioner with a CO Hotspots Analysis. The projected future 1-hour CO background concentration of 6.6 parts per million for 2015 and 2020 for the closest monitoring station to the proposed project site in Pasadena was assumed for 2016 and 2019 (SCAQMD 2015b). To estimate an 8-hour average CO concentration, a persistence factor of 0.6, as is recommended for suburban locations, was applied to the output values of predicted concentrations in parts per million at each of the receptor locations.

The results of the model are shown in Table 3.1-13 CALINE4 Predicted Carbon Monoxide Concentrations. Model input and output data are provided in Appendix B.

Table 3.1-13
CALINE4 Predicted Carbon Monoxide Concentrations

Intersection	Maximum Modeled Impact Long-Term 2035 (ppm)	
	1-hour	*8-hour*
(Year 2016) I-605 NB Ramp and Ramona Boulevard (PM peak hour)	7.1	4.3
(Year 2019) I-605 NB Ramp and Ramona Boulevard (PM peak hour)	7.1	4.3

Source: Caltrans 1998a (CALINE4).
Notes: CO = carbon monoxide; ppm = parts per million.
Modeled concentrations reflect background 1-hour concentration of 5.1 ppm.
8-hour concentrations were obtained by multiplying the 1-hour concentration by a factor of 0.7, as referenced in Caltrans 1997, Table B.15.

[2] The Caltrans Institute of Transportation Studies *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) (Caltrans 1997) guidance is to use the smallest mean minimum temperature observed in January over the past 3 years plus the temperature adjustment for the geographic location and time period. The smallest mean minimum at the Los Angeles downtown USC Campus station was 48.3°F in January 2016 (WRCC 2015). Assuming a 5°F correction factor for both AM and PM traffic conditions, average morning and evening temperature would be approximately 53.3°F (Caltrans 1997).

As shown in Table 3.1-13, maximum CO concentration predicted for the 1-hour averaging period would be 7.1 ppm, which is below the state 1-hour CO standard of 20 ppm (see Table 3.1-1 for state standards). Maximum predicted 8-hour CO concentrations 4.3 ppm would be below the state CO standard of 9 ppm. Neither the 1-hour nor 8-hour state standard would be equaled or exceeded at any of the intersections studied. Accordingly, CO hotspot impacts would be **less than significant**. No mitigation is required.

Toxic Air Contaminants

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as TACs or hazardous air pollutants. The greatest potential for TAC emissions during construction would be diesel particulate emissions from heavy equipment operations and heavy-duty trucks during construction of the proposed project. As shown in Table 3.1-9, maximum daily particulate matter (PM_{10} or $PM_{2.5}$) emissions generated by construction equipment operation and from hauling of soil during grading (exhaust particulate matter, or DPM), combined with fugitive dust generated by equipment operation and vehicle travel, would be well below the SCAQMD significance thresholds. Moreover, total construction of the proposed project would last approximately 17 months and existing residences are located a substantial distance from the project site (approximately 720 feet). No residual TAC emissions and corresponding cancer risk are anticipated after construction. Therefore, the exposure of construction-related TAC emission impacts to sensitive receptors would be **less than significant**. No mitigation is required during construction.

With regards to long-term operations, the steam boilers, hot water heaters, and the emergency generator would be subject to permitting by the SCAQMD. As part of the permit process, the SCAQMD will evaluate compliance with Rule 1401, New Source Review of Toxic Air Contaminants. Rule 1401 identifies acceptable risk levels and emissions control requirements for new and modified facilities that may emit additional TACs. Under Rule 1401, permits to operate may not be issued when emissions of TACs result in a maximum incremental cancer risk greater than 1 in 1 million without application of best available control technology for toxics (T-BACT), or a maximum incremental cancer risk greater than 10 in 1 million with application of T-BACT, or a health hazard index (chronic and acute) greater than 1.0 (SCAQMD 2015c). The human health risk analysis is based on the time, duration, and exposures expected. T-BACT will be determined on a case-by-case basis; however, examples of T-BACT include diesel particulate filters for stationary engines and oxidation catalysts for natural gas-fired boilers. The emergency generator would be operated for a limited time, would meet the required emissions rates for diesel particulate matter at the time of installation, and must be demonstrated to meet the requirements of Rule 1401 before the SCAQMD can issue

the permits to construct. The boilers, fueled with natural gas, generally results in low TAC emissions and associated health effects, which must be demonstrated before the SCAQMD can issue the permits to construct. As such, the exposure of sensitive receptors to project-related TAC emissions impacts during operation of the project would be **less than significant**. No mitigation is required.

3.1.5 Cumulative Impacts

Air pollution by nature is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. The potential for the proposed project to result in a cumulatively considerable impact, specifically a cumulatively considerable new increase of any criteria pollutant for which the project region is nonattainment under an applicable NAAQS and/or CAAQS, is addressed in Section 3.1.4. As previously discussed, operational emissions generated specifically from the emergency generator, would cause an exceedance in the SCAQMD emission-based significance thresholds for NO_x emissions even after incorporation of mitigation measure **MM-AQ-1**. Therefore, operational cumulative air quality impacts would be **significant and unavoidable**.

3.1.6 Mitigation Measures

CEQA Guidelines Section 15126.4 requires EIRs to describe feasible measures that can minimize significant adverse impacts. The following mitigation measures have been evaluated for feasibility and are incorporated in order to reduce potentially significant impacts related to air quality emissions during operation of the proposed project.

MM-AQ-1 To ensure contribution to ozone formation during emergency generator testing is minimized, if a triennial 4-hour emergency generator testing is conducted by the applicant or its contractors, the testing period shall occur only between November and April. This testing schedule shall be identified specifically in the application for Authority to Construct submitted to the South Coast Air Quality Management District (SCAQMD). A copy of the Authority to Construct issued by the SCAQMD shall be submitted to the City of Irwindale Planning Department.

3.1.7 Level of Significance After Mitigation

Impact criterions (a), (b), and (c) resulted in significant and unavoidable impacts due to operational emissions exceeding the SCAQMD threshold of significance for NO_x emissions. Due

to the exceedance of operational NO_x emissions, resulting from operation of the emergency generator, the proposed project was determined to conflict with the 2012 AQMP because the proposed project would increase the frequency or severity of existing air quality violations within the region. To reduce potential ozone impacts from operation of the emergency generator, mitigation measure **MM-AQ-1** is provided. Upon implementation of mitigation measure **MM-AQ-1**, however, impacts would remain significant and unavoidable because NO_x emissions would remain above the SCAQMD threshold of significance. No additional feasible mitigation is available to reduce anticipated vehicle trips and stationary source emissions during project operations; therefore, impacts would be **significant and unavoidable** during operation.

3.1.8 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

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3.2 BIOLOGICAL RESOURCES

This section describes the existing biological setting; identifies associated regulatory requirements; evaluates potential biological impacts; and identifies mitigation measures related to implementation of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project). Based on the IS/NOP, this section evaluates whether the proposed project would have potentially adverse impacts to candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS).

The Initial Study and Notice of Preparation (IS/NOP) found that the proposed project would have a less than significant impact or no impact as it relates to riparian habitat; wetlands; movement of any native resident or migratory fish or wildlife species; conflict with a tree preservation policy or ordinance; and conflicts with an adopted or approved local, regional or state conservation plan (Appendix A). As such, these impacts will not be addressed further in this Draft Environmental Impact Report (EIR).

3.2.1 Environmental Conditions

The project site is currently developed with a vacant, cold storage warehouse. Specifically, the on-site structure is composed of the following areas: an approximately 52,800-square-foot (sf) dry warehouse with 12 truck loading areas; an approximately 7,889-sf cooler; an approximately 11,291-sf freezer; and a two-story 11,522-sf office building with associated surface parking and landscaping. The project site is located in an urban environment, generally bounded by the Vulcan Durbin Quarry to the north, industrial/business park uses to the east and south, and the Interstate 605 (I-605) freeway immediately to the west. The San Gabriel River is located approximately 580 feet west of the project site. The project site is located at an elevation of approximately 321 feet above mean sea level. The general topography of the project site generally slopes towards the west and southwest. Based on the topography and existing surface conditions, surface water on the project site flows overland and through drainage conduits off-site towards Schabarum Avenue (Appendix E). The project site is located in an area dominated by Quaternary alluvium reaching 100 feet in thickness, consisting of gravels, sands, and silts.

The latitude and longitude of the approximate center of the project site is -117°59'17.7168" W and 34°4'52.6692" N. The Kaiser Permanente Specialty Medical Office Building Project site includes parts of Section 14 of Township 1 South, Range 11 West within the Baldwin Park 7.5-minute quadrangle, as mapped by the U.S. Geological Survey.

Threatened and Endangered Species

As previously mentioned, the project site is located within the Baldwin Park 7.5 Minute topographic quadrangle. Table 3.2-1 provides a list of California Natural Diversity Database (CNDDB) species within the Baldwin Park 7.5 Minute topographic quadrangle.

Table 3.2-1
California Natural Diversity Database Listing

Scientific Name	Common Name	California Status	Federal Status	California Department of Fish and Wildlife Status
Accipiter cooperii	Cooper's hawk	None	None	WL
Aquila chrysaetos	golden eagle	None	None	FP, WL
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Threatened	Endangered	–
Riparia riparia	bank swallow	None	Threatened	–
Lanius ludovicianus	loggerhead shrike	None	None	SSC
Icteria virens	yellow-breasted chat	None	None	SSC
Setophaga petechia	yellow warbler	None	None	SSC
Polioptila californica californica	coastal California gnatcatcher	Threatened	None	SSC
Vireo bellii pusillus	Least Bell's vireo	Endangered	Endangered	–
Catostomus santaanae	Santa Ana sucker	Threatened	None	SSC
Gila orcuttii	Arroyo chub	None	None	SSC
Rhinichthys osculus ssp. *3*	Santa Ana speckled dace	None	None	SSC
Bombus crotchii	Crotch bumble bee	None	None	–
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None	None	SSC
Eumops perotis californicus	western mastiff bat	None	None	SSC
Nyctinomops femorosaccus	pocketed free-tailed bat	None	None	SSC
Nyctinomops macrotis	big free-tailed bat	None	None	SSC
Neotoma lepida intermedia	San Diego desert woodrat	None	None	SSC
Taxidea taxus	American badger	None	None	SSC
Antrozous pallidus	pallid bat	None	None	SSC
Lasiurus cinereus	hoary bat	None	None	–
Lasiurus xanthinus	western yellow bat	None	None	SSC
Diadophis punctatus modestus	San Bernardino ringneck snake	None	None	–
Phrynosoma blainvillii	coast horned lizard	None	None	SSC

Table 3.2-1
California Natural Diversity Database Listing

Scientific Name	Common Name	California Status	Federal Status	California Department of Fish and Wildlife Status
Aspidoscelis tigris stejnegeri	coastal whiptail	None	None	SSC
California walnut Woodland	California walnut Woodland	None	None	–
Riversidean Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	None	None	–
Walnut Forest	Walnut Forest	None	None	–
Centromadia parryi ssp. *australis*	southern tarplant	None	None	–
Pseudognaphalium leucocephalum	white rabbit-tobacco	None	None	–
Symphyotrichum defoliatum	San Bernardino aster	None	None	–
Phacelia stellaris	Brand's star phacelia	None	None	–
Dudleya multicaulis	many-stemmed dudleya	None	None	–
Juglans californica	southern California black walnut	None	None	–
Calochortus plummerae	Plummer's mariposa-lily	None	None	–
Horkelia cuneate var. *puberula*	Mesa horkelia	None	None	–

Source: CNDDB 2016.
Note: FP: Fully Protected; SSC: Species of Special Concern; WL: Watch List

3.2.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Endangered Species Act

The federal Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) and subsequent amendments, provide for the conservation of endangered and threatened species and the habitats on which they depend. A federally endangered species is one facing extinction throughout all or a significant portion of its geographical range. A federally threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a site generally imposes severe constraints on development; particularly if development would result in a take of the species or its habitat. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include

any disturbance to habitats used by the species during any portion of its life history. The proposed project will avoid known occurrences of listed plants and habitat for listed wildlife species or otherwise mitigate potential impacts to these species.

Migratory Bird Treaty Act

According to the Migratory Bird Treaty Act (MBTA) administered by the USFWS, the removal of active nests, eggs, or nestlings is unlawful. A violation of the MBTA may occur on, but is not limited to, projects that involve clearing or grubbing of migratory bird nest habitat during the nesting season, and demolition or reconstruction where bird nests are present. This time period is especially important due to the heightened presence of eggs or young that are essential to the survival of the species. The proposed project will comply with the MBTA and Fish and Game Code by limiting the period in which construction will take place and recommending that a nesting bird survey be completed if habitat removal is proposed during the nesting season.

State

California Endangered Species Act

California (Fish and Game Code Section 2050 et seq.) establishes that it is the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The California Endangered Species Act (CESA) mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. CESA requires state lead agencies to consult with the CDFW during the California Environmental Quality Act (CEQA) process to avoid jeopardy to threatened or endangered species. CESA prohibits any person from taking or attempting to take a species listed as endangered or threatened (Fish and Game Code Section 2080). Section 2080 of the Fish and Game Code provides the permitting structure for CESA. The take of a state-listed endangered or threatened species or candidate species will require incidental take permits as authorized by the CDFW.

The proposed project, however, is not expected to require such authorizations since it is not expected to result in take of a listed species. The proposed project will avoid known occurrences of listed plants and habitat for listed wildlife species or otherwise mitigate potential impacts to these species.

Local

City of Irwindale General Plan Update Resource Management Element

The City's General Plan Update Resource Management Element describes the vegetation, wildlife, and open space area in the City. There are no City General Plan policies related to biological resources applicable to the project.

3.2.3 Thresholds of Significance

The following significance criteria, included in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), will determine the significance of a biological impact. Impacts related to biological resources would be significant if the proposed project would:

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 Game or U.S. Fish and Wildlife Service?

3.2.4 Project Elements That Can Reduce Impacts

There are no project design features or elements that will reduce impacts to biological resources.

3.2.5 Impact Analysis

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 Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated. Under existing conditions, the project site and vicinity are developed with industrial/business park uses, commercial uses, and a quarry (Vulcan Durbin Quarry). The presence or absence of threatened and endangered species in the project vicinity was researched using the online searchable CNDDB. A search of this database concluded that, based on the development of the project site and surrounding areas, threatened and endangered species are not anticipated to occur on the project site (Appendix E). As such, the project site is not likely to provide any suitable habitat for candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS due to the disturbed nature of the project site. The project site is developed with an existing vacant warehouse building with surface parking areas. Although highly unlikely, there is the possibility that the existing ornamental landscaping on the project site and in the public

right-of-way may provide nesting for some species; therefore, in order to comply with the MBTA, preconstruction nesting bird surveys should be conducted prior to any construction activities, as directed in mitigation measure **MM-BIO-1**. Implementation of mitigation measure **MM-BIO-1** would ensure that impacts to nesting birds are **less than significant with mitigation incorporated.**

3.2.6 Cumulative Impacts

The project area contains industrial/business park uses, commercial uses, the Vulcan Durbin Quarry, and the I-605 freeway. Developed areas dominate the project area and include roadways, sidewalks, driveways, parking areas, loading docks, industrial/business park facilities, commercial facilities, and ornamental landscaping. Overall wildlife in the project area appears to be low because of the urbanized nature of the project area. A search of the CNDDB database concluded that, based on the development of the project site and surrounding areas, threatened and endangered species are not anticipated to occur on the project site (Appendix E). As such, the project site is not likely to provide any suitable habitat for candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS due to the disturbed nature of the project site. However, because nesting birds are protected by the MBTA, and since no nesting bird survey was conducted to date, there is the potential for nesting birds to be present in the ornamental landscaping and public right-of-way at the time of project construction. The mitigation proposed to minimize adverse impacts to these species requires that a qualified biologist conduct a nesting bird survey within one week of ground-disturbing activities, as mentioned in Section 3.2.7.

Although the surrounding project area is also mostly developed and within an urbanized setting, projects surrounding the project area could also provide habitat for the same nesting bird species, such as within the ornamental landscaped areas. The combined construction of projects within the vicinity could deprive the affected species of a significant amount of habitable space. However, it is anticipated that species that are potentially affected by related projects would also be subject to the same requirements of CEQA (e.g., compliance with MBTA) as the proposed project. These determinations would be made on a case-by-case basis and the effects of cumulative development on nesting birds would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, cumulative adverse effects on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS would be **less than significant**.

3.2.7 Mitigation Measures

CEQA Guidelines Section 15126.4 requires EIRs to describe feasible measures that can minimize significant adverse impacts. The following mitigation measure has been evaluated for feasibility and is incorporated in order to reduce potentially significant impacts related to nesting birds on-site.

MM-BIO-1 In order to avoid potential impacts to nesting birds in conformance with the Migratory Bird Treaty Act and California Fish and Game Code during project construction, a qualified biologist shall conduct a nesting bird survey within one week prior to any ground-disturbing activities. Avoidance will involve the period from approximately February 1 to August 31, which covers the breeding season for most birds that may occur in the project area. The survey shall consist of full coverage of the proposed disturbance footprint as well a 300-foot buffer. If no active nests are found, no additional measures are required. If active nests are found, the nest locations shall be mapped by the biologist using GPS equipment. The nesting bird species and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging) shall be documented. The biologist shall establish a no-disturbance buffer around each active nest. The buffer shall be determined by the biologist based on the species present and surrounding habitat. No construction or ground-disturbing activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume. All work shall be conducted under the guidance and approval of the City of Irwindale Planning Department.

3.2.8 Level of Significance After Mitigation

Following implementation of mitigation measure **MM-BIO-1**, listed in Section 3.2.6, project impacts related to biological resources would be **less than significant**.

3.2.9 References

California Natural Diversity Database. 2016. CNDDB QuickView Tool in BIOS – List CNDDB Species for a Quad. Accessed August 8, 2016: https://map.dfg.ca.gov/bios/?tool=cnddbQuick.

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3.3 CULTURAL RESOURCES

This section describes existing cultural resources conditions on the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project) site and within the proposed project's general vicinity. Analysis in this section identifies associated regulatory requirements and identifies potential impacts related to implementation of the proposed project.

The Initial Study and Notice of Preparation (IS/NOP) found that the proposed project would have a less than significant impact as it relates to the potential for the proposed project to disturb any human remains, including those interred outside of formal cemeteries (Appendix A). However, due to the results of the Native American consultation, this issue has been addressed in this Draft Environmental Impact Report (EIR).

3.3.1 Existing Conditions

California Historical Resources Information System (CHRIS) Records Search

As part of the cultural resources study prepared for the proposed project, staff at the South Central Coastal Information Center (SCCIC) conducted a CHRIS records search on April 29, 2016, for the proposed project site and surrounding one-quarter-mile radius. This search included a review of their collection of mapped prehistoric, historic, and built-environment resources, Department of Parks and Recreation Site Records, technical reports, and ethnographic references. Additional consulted sources included historical maps of the project site, the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. The confidential results of the records search and a bibliography of prior cultural resources studies are on record at the City of Irwindale.

Previously Conducted Cultural Resources Studies

The SCCIC records indicate that eight cultural resources investigations have been conducted within one-quarter-mile of the proposed project site (see Table 3.3-1). All of these studies focused on the area immediately west of the project site within the San Gabriel River channel and the Interstate 605 (I-605) freeway corridor. While two of these studies are mapped as having overlapped a portion of the project site (LA-04880 and LA-11989), neither study surveyed the project site as part of their investigations. The following paragraphs provide a brief summary of findings of both reports.

LA-04880

In 2000, Smith and Sriro prepared a Negative Archaeological Survey Report for the California Department of Transportation (Caltrans) in which a large stretch of the I-605 was studied in support of a pavement rehabilitation project. The investigation, which spanned multiple cities, included a literature review and windshield survey of the Caltrans right-of-way. No cultural resources were identified within the Caltrans study area as a result of the investigation. Although a small portion of the study paralleled the project site, the investigation was conducted entirely within the paved travel way and did not overlap the project site.

LA-11989

Panich and Holson prepared this survey report in 2010 in support of a Southern California Edison Company project that proposed to construct 66kV transmission lines for Segments 7 and 8 of the Tehachapi Renewable Transmission line that runs through Los Angeles and San Bernardino Counties. The investigation consisted of a literature review and survey of approximately 49 acres of existing access roads. One of these surveyed roads is outside but adjacent to the northern boundary of the project site. No cultural resources were identified on this access road as a result of the investigation.

Table 3.3-1
Previous Cultural Resources Studies Within One-Quarter-Mile of the Project Site

SCCIC Report Number	Title	Author	Year	Proximity to APE
LA-02412	UCLA Archaeological Survey Field Project Number UCAS-086	Singer, Clay A.	1968	Outside
LA-04880	Pavement Rehabilitation Along Route 605 Within the Cities of Long Beach, Lakewood, Cerritos, Downey, Pico Rivera, Santa Fe Springs, Whittier, City of Industry, Baldwin Park and Irwindale	Smith, Philomene and Adam Sriro	2000	Within
LA-06281	Highway Project Construction of Wheelchair Ramps at Ramona Blvd., Lower Azusa Road, Live Oak Avenue and Arrow Highway Along Route 605 in the City of Irwindale, Los Angeles County	Storey, Noelle	2001	Outside
LA-09705	Cultural Resources Inventory of the Southern California Edison Company Tehachapi Renewable Transmission Project, Kern, Los Angeles and San Bernardino Counties, California	Pacific Legacy, Inc.	2007	Outside
LA-10175	Confidential Cultural Resources Specialist Report for the Tehachapi Transmission Project	Applied Earthworks, Aspen Environmental Group	2009	Outside

Table 3.3-1
Previously Cultural Resources Studies Within One-Quarter-Mile of the Project Site

SCCIC Report Number	Title	Author	Year	Proximity to APE
LA-11851	Archaeological Survey and National Register of Historic Places and California Register of Historical Resources Evaluation of 07-H-002 and 07-H-003, Strawberry Contractor Yard, for the Southern California Edison Company Tehachapi Renewable Transmission Project	Long, Michelle and John Holson	2010	Outside
LA-11989	Supplemental Archaeological Survey Report, 66KV Transmission Lines Access Roads, Tehachapi Renewable Transmission Project Segments 7 and 8, Los Angeles and San Bernardino Counties, California	Panich, Lee and John Holson	2010	Within
LA-11990	Supplemental Cultural Resources Survey Report for the Southern California Edison Tehachapi Renewable Transmission Project Segment 7 Rio Hondo-Amamdor-Jose-Mesa 66kv Line Relocation, Los Angeles County, California	Wetherbee, Matthew, Thomas Jackson, and Wendy Tinsley-Becker	2010	Outside

Previously Recorded Cultural Resources

According to the SCCIC records, there are no previously recorded cultural resources within the project site. There are six previously recorded cultural resources within the surrounding one-quarter-mile search radius (see Table 3.3-2). These resources include one multi-component site (P-19-187085), three built environment resources (P-19-186876, P-19-190504 and P-19-190510), and two historic archaeological sites (CA-LAN-3117H and CA-LAN-3118H). The CRHR-listed multi-component site consists of a plaque noting the Mojave Road State Historical Landmark and the prehistoric pathway itself. For centuries, the Mojave Road provided access for Native Americans to travel from the Mojave Desert to present day Los Angeles. By the early nineteenth century, the path was worked into a military wagon road. While the plaque is located on Bureau of Land Management (BLM) land in San Bernardino County, a segment of the original route of the Mojave Road traverses the City of Irwindale. The historic-era built environment resources include two engineered transmission lines: the Antelope-Mesa 220kV Transmission Line (P-19-186876) and the SCE Rio Hondo-Amador-Jose-Mesa-Narrows 66kV Transmission Line (P-19-190504); and the San Gabriel River levee flood control system (P-19-190510). The transmission lines were found not eligible for the NRHP. The levee has yet to be evaluated for historical significance. The two historic archaeological sites (CA-LAN-3317H and CA-LAN-3118H) consist of heavily disturbed mid-twentieth century refuse scatters. The eligibility status of the scatters is unknown. There are no built environment resources included in the California Historic Property Data File within one-quarter-mile of the project site.

Table 3.3-2
Previously Recorded Cultural Resources within One-Quarter-Mile of the Project Site

Primary Number	Trinomial	Resource Description	NRHP Eligibility Status	Recorded By and Year	Proximity to APE
19-003117	CA-LAN-3117H	Historic: Trash Scatter	Unknown	Schrader, L. and W. Bischoff 2010	Outside
19-003118	CA-LAN-3118H	Historic: Trash Scatter	Unknown	Schrader, L. and W. Bischoff 2010	Outside
19-186876	—	Historic: Antelope-Mesa 220kV Transmission Line	6Y (Ineligible for NRHP)	Schmidt, J. 2003; Ahmet, K. and S. Bholat 2006; Tinsley Becker, W. 2010, 2011, 2012; Stanton, P. 2011; Leonard, D. 2014	Outside
19-187085	—	Prehistoric: Segment of the Mojave Road Historic: State Historical Landmark No. 963: The Mojave Road	Listed on CRHR	Elder, Sandra J. 1989	Outside
19-190504	—	Historic: SCE Rio Hondo-Amador-Jose-Mesa-Narrows 66kV Transmission Line	6Z (Ineligible for NRHP and CRHR)	Tinsley Becker, W. 2010	Outside
19-190510	—	Historic: San Gabriel River Levee	Unknown	Tinsley Becker, W. 2010	Outside

Historic Map Review

In addition to research conducted through the SCCIC, historic maps and aerial photographs were also consulted to further understand the development of the project site and surrounding neighborhood. Historic topographic maps of the project site were reviewed from the following years: 1897, 1955, and 1983 (NETR 2016). Historic aerial photographs were reviewed from the following years 1948, 1964, 1972, 1994, 2003, and 2012 (NETR 2012). The 1897 15-minute quadrangle map depicts the project site and surrounding area as entirely within the San Gabriel Wash and largely undeveloped. By 1948, the grid for the City of Irwindale was established and heavily populated. While the project site remained undeveloped, the areas to the south and west were completely occupied by the grid; portions of the wash to the west of the project site were leveed; the Pacific Electric rail transit system cut a path through the City south of the project site; and a quarry was in operation to the north of the site. By 1955, areas immediately west of the project site within the wash were showing signs of modern improvements. Rivergrade Road (a precursor to the I-605) was under construction and a transmission line paralleled the road. The quarry continued to expand through 1964 as did the leveeing of the wash. The project site

remained undeveloped aside from a network of low duty roads originating from the gravel pit and running south to the rail transit system. The I-605 was fully constructed by 1972, as was the San Gabriel River Levee system. The Pacific Electric rail transit system gave way to Ramona Boulevard. The project site was under construction by 1994. By then, several buildings and roadways within the business park had been constructed. Only a few parcels remained vacant, the project site being one. By 1999, the project site was fully developed with the construction of the property at 12761 Schabarum Avenue. The remaining historic aerial photographs through 2012 depict the project site as relatively unchanged since 2003.

Native American Coordination

As part of the process of identifying cultural resources within or near the project site, the California Native American Heritage Commission (NAHC) was contacted on April 22, 2016 to request a review of the Sacred Lands File (SLF). The NAHC emailed a response on April 25, 2016, which stated that the SLF search was completed with negative results. Because the SLF search does not include an exhaustive list of Native American cultural resources, the NAHC suggested contacting Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the project site. The NAHC provided the contact list along with the SLF search results. Documents related to the NAHC SLF search are included in Appendix C.

Letters were prepared and sent to each of the six persons and entities on the contact list requesting information about cultural sites and resources in or near the project site. These letters, mailed on May 5, 2016, contained a brief description of the proposed project, a summary of the SLF search results, and a reference map. Recipients were asked to reply within 30 days of receipt of the letter should they have any knowledge of cultural resources in the area. One response to the initial inquiry letters was received. Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians–Kizh Nation, requested that a certified Native American monitor and archaeological monitor be present during all ground-disturbing activities related to project construction. Native American correspondence documents are included in Appendix C.

The proposed project is subject to compliance with Assembly Bill (AB) 52 (PRC 21074) which requires consideration of impacts to “tribal cultural resources” as part of the CEQA process, and requires the City of Irwindale (City) to notify any groups (who have requested notification) of the proposed project who are traditionally or culturally affiliated with the geographic area of the project. The City mailed letters on May 2, 2016 to each of the contacts on the NAHC provided Tribal Consultation List with regard to AB 52 notification. Two individuals responded to the notification letters. Because AB 52 is a government-to-government processes, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City.

The City received a response from Mr. Salas on May 26, 2016 requesting Native American monitoring on the proposed project. Mr. Salas indicated that the proposed project is located within the highly sensitive ancestral territories of the Kizh (Kitc) Gabrieleño villages and that there is a possibility of encountering cultural resources during any future construction/excavation phases despite the developed nature of the project site. For this reason, the Gabrieleño Band of Mission Indians–Kizh Nation requested that approved Native American Monitor(s) be present during any and all future ground disturbance.

The City received a response from Joseph Ontiveros, Cultural Resource Director for the Soboba Band of Luiseño Indians, on June 14, 2016. Mr. Ontiveros did not have any specific concerns regarding known cultural resources within the project site and deferred consultation to Gabrieleño tribal consultants who are in closer proximity to the project area.

Pedestrian Survey

A pedestrian survey of the project site was conducted on July 25, 2016, using a methodology consistent with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716). The purpose of the survey was to identify and record any potential historic built environment resources (i.e., buildings, structures, and objects) located within the project site. Because the entire project site is currently developed, an intensive archaeological survey was not warranted; rather a reconnaissance-level pedestrian survey was conducted. This method focused the survey effort on identifying all built environment resources constructed more than 45 years ago and opportunistically surveying areas of exposed ground surface for any evidence of prehistoric or historic cultural material. All fieldwork was documented using field notes, digital photography, iPad technology with close-scale field maps, and aerial photographs. Location-specific photographs were taken using an Apple 3rd Generation iPad equipped with 8-megapixel resolution and georeferenced PDF maps of the project parcel. Accuracy of this device ranged between 3 meters and 10 meters.

No surface evidence of archaeological and/or built environment resources was encountered during the survey. Ground surface visibility was poor (<10%) with approximately 90 percent of the project site occupied by building/structures and hardscape. The remaining areas consisted of ornamental landscaping. No native soils were observed; all exposed surface soil was composed of fill material.

The project site is flat with existing ground surface at an elevation of approximately 321 feet above mean sea level. Los Angeles County Assessor online property records indicate that the existing building at 12761 Schabarum Avenue (AIN 8546-031-090) was built in 1999. The project site is bordered to the north by a gravel pit, to the west by I-605, and to the southeast by the modern business park. The project site is effectively entirely disturbed.

3.3.2 Regulatory Setting

State

California Register of Historical Resources (CRHR)

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." (PRC section 5020.1(j).) In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." (PRC section 5024.1(a).) The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

(2) Is associated with the lives of persons important in our past.

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than fifty years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see Cal. Code Regs., tit. 14, section 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC section 21083.2(g) defines "unique archaeological resource."
- PRC section 21084.1 and CEQA Guidelines section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of an historical resource.
- PRC section 21074(a) defines "tribal cultural resources."
- PRC section 5097.98 and CEQA Guidelines section 15064.5(e): Set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC sections 21083.2(b)-(c) and CEQA Guidelines section 15126.4: Provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource." (PRC section 21084.1; CEQA Guidelines section 15064.5(b).) If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA. (PRC section 21084.1; CEQA Guidelines section 15064.5(a).) The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption. (PRC section 21084.1; CEQA Guidelines section 15064.5(a).)

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." (CEQA Guidelines section 15064.5(b)(1); PR Code section 5020.1(q).)

In turn, the significance of an historical resource is materially impaired when a project:

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

(CEQA Guidelines section 15064.5(b)(2).) Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC section 21083.2(a); CEQA Guidelines section 15064.5(c)(4).)

However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC 21074(c); 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC section 5097.98.

California Health and Safety Code

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (section 7050.5b). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the California Native American Heritage Commission (NAHC) within 24 hours (section 7050.5c). The NAHC will notify the Most Likely Descendant. With the permission of the landowner, the Most Likely Descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Local

City of Irwindale General Plan 2020

<u>Resources Management Element</u>

The Resource Management Element of the City of Irwindale General Plan 2020 identifies those resource issues (man-made and natural) that need to be considered in future planning and development in the City. Key issues that are addressed in this Element include soil resources, mineral resources, groundwater resources, vegetation and wildlife, air quality, aesthetics, cultural resources (historical, archaeological, and paleontological), open space, and recreational facilities. The policies included in the Resource Management Element focus on three primary issues:

- The City's commitment to the maintenance and management of natural resources;
- The City's commitment in maintaining and enhancing open space in the City that may be used for resource preservation and/or recreation; and,

- The City‘s continued commitment in maintaining those amenities, both natural and man-made, that contributes to the livability of the site.

Programs within the Resources Management Element relevant to cultural/historic resources include the following:

- **Cultural Awareness.** A cornerstone of this program will be the identification of a site/location that may be used for the storage and collection of artifacts, photographs, books, and displays. The City will cooperate with local organizations (such as the local historical society, Chamber of Commerce, etc.) and individuals to acquire resource materials concerning local history and culture. These materials include books, photographs, artifacts, furniture, etc., that may be displayed in a future City museum. The City will continue to support cultural resource conservation and preservation efforts in Irwindale.
- **Cultural Resource Management.** Should archaeological or paleontological resources be encountered during excavation and grading activities, all work would cease until appropriate salvage measures are established. Appendix K of the CEQA Guidelines shall be followed for excavation monitoring and salvage work that may be necessary. Salvage and preservation efforts will be undertaken pursuant to Appendix K requirements outlined in CEQA.
- **Design Guidelines and Review.** The City shall continue to implement its current design review procedures. The purpose of the design review process is to ensure that building design, architecture, and site layouts are compatible with surrounding development and consistent with the Commercial and Industrial Development Design Guidelines. The design review process is an important component of development review. This process may be used to consider a potential development’s impact on the architectural integrity of historically significant structures and sites.
- **Environmental Review.** The City shall continue to evaluate the environmental impacts of new development and identify applicable mitigation measures prior to development approval, as required by the CEQA. Environmental review shall be provided for those projects that will have a potential to adversely affect the environment. Issue areas that will be addressed in the environmental analysis related to resource issues include: air quality, water and hydrology, plant life, animal life, natural resources, energy, aesthetics, recreation, and cultural resources. In compliance with CEQA, the City shall also assign responsibilities for the verification of the implementation of any mitigation measures.
- **Historic Building Code.** The City will investigate the feasibility of adopting alternate building code standards for historic structures, as authorized by the State Historical Building Code. The initial step will require City staff to amend the development code to

include provisions for the maintenance, rehabilitation, and preservation of historic structures. Potential candidates include those historic resources described herein.

3.3.3 Thresholds of Significance

The following significance criteria are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), and will be used to determine the significance of potential cultural resource impacts. Although the IS/NOP (Appendix A) found the proposed project to have a less than significant impact related to the potential for the proposed project to disturb any human remains, including those interred outside of formal cemeteries, this issue has been addressed in this Draft EIR due to the results of the Native American consultation. Impacts related to cultural resources would be significant if the proposed project would:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines.

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

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

d) Cause a substantial adverse change in significance of a tribal cultural resource as defined in Public Resources Code Section 21074.

e) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

3.3.4 Project Elements That Can Reduce Impacts

There are no project design features or elements that would reduce impacts to cultural resources.

3.5.5 Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?

No previously recorded historical resources were identified within the project area as a result of the records search. Further, the existing building within the project area was constructed in 1999 and is not considered a historical resource. Therefore, construction and operation of the proposed project would not cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5, and impacts are considered **less than significant**. No mitigation is required.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?

No previously recorded archaeological resources were identified within the project area as a result of the records search. Furthermore, no archaeological resources were identified within the project area as a result of the pedestrian survey (the entire project area is developed and contains almost no exposed ground surface). Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians–Kizh Nation, requested that a certified Native American monitor and archaeological monitor be present during all ground-disturbing activities related to project construction. Mr. Salas did not identify any specific cultural resources concerns within the project area. The project area is situated within a wash and is unlikely to contain intact cultural deposits. Furthermore, the proposed project area has been heavily disturbed by past development and related construction activities. However, the potential exists for unknown archaeological resources to be inadvertently unearthed during earth-moving activities associated with construction of the proposed project. Therefore, archaeological and Native American monitoring should occur at least during initial ground disturbance in order to assess the soil types, stratigraphy, and level of soil disturbance within the project area **(MM-CUL-1)**. In the unexpected event that construction activities unearth intact cultural or archaeological materials, a potentially significant impact could result, and as such, additional mitigation would be required **(MM-CUL-2)**. Impacts to archaeological resources would be **less than significant with mitigation incorporated**.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is located in the San Gabriel Valley, which is filled with sediments derived as alluvial fan deposits from the San Gabriel Mountains to the north, and as fluvial deposits transported by the San Gabriel River to the west (Dibblee and Ehrenspeck 1999; McLeod 2016). The entire project site is mapped as surficial Quaternary alluvium, consisting of alluvial gravel, according to published mapping by Dibblee and Ehrenspeck (1999). These Holocene, or Recent, deposits presumably overlie older, Pleistocene, or “Ice-Age” deposits at an unknown depth (Dibblee and Ehrenspeck 1999; McLeod 2016). The coarse-grained, younger, alluvial deposits have a low paleontological resource sensitivity. However, older, finer-grained Pleistocene age deposits in this area have produced scientifically significant vertebrates and have a moderate to high paleontological resource sensitivity (McLeod 2016).

Past excavation and trenching activities in the area surrounding the project site have encountered paleontological resources in older Quaternary alluvial deposits. According to

the records search results received from the Natural History Museum of Los Angeles County (LACM), the closest fossil locality to the project site within Quaternary alluvial deposits is located in English Canyon, southwest of the City of Chino (LACM 1728; McLeod 2016). This locality yielded Pleistocene age mammals, including extinct horse (Equus) and camel (Camelops) remains at depths between 15 and 20 feet below the ground surface (McLeod, 2016).

However, no paleontological resources were identified within the project site as a result of the institutional records search or desktop geological review. Furthermore, the project site is located within an area that has been previously developed and is likely underlain by fill materials, at least in part. As such, the project site is not anticipated to be underlain by unique geologic features. While the project area has been heavily disturbed by urban development over the years, intact paleontological resources may be present below the original layer of fill material. Given the proximity of past fossil discoveries in the surrounding area and the underlying alluvial fan deposits, the project site is moderately to highly sensitive for supporting paleontological resources. In the event that intact paleontological resources are located on the project site, ground-disturbing activities associated with construction of the proposed project, such as grading during site preparation, have the potential to destroy a unique paleontological resource or site. Without mitigation, the potential damage to paleontological resources during construction would be a potentially significant impact. However, upon implementation of mitigation measure **MM-CUL-3**, impacts would be reduced to below a level of significance. Impacts of the proposed project are considered **less than significant with mitigation incorporated** during construction. No further mitigation is required.

d) Would the project cause a substantial adverse change in significance of a tribal cultural resource as defined in Public Resources Code Section 21074?

No tribal cultural resources were identified within, or in close proximity to, the project area as a result of AB 52 government-to-government coordination between the City and California Native American Tribes. All records related to the AB 52 notification/consultation process are on file with the City of Irwindale. As part of **MM-CUL-1**, a qualified Native American monitor will be on-site during initial ground disturbance. As such, impacts to tribal cultural resources are considered **less than significant with mitigation incorporated** during construction.

e) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No prehistoric or historic burials were identified within the project area as a result of the records search. However, the possibility of encountering human remains within the proposed project area exists. The discovery of human remains would require handling in accordance with PRC 5097.98, which states that in the event that human remains are discovered during construction, construction activity shall be halted and the area shall be protected until consultation and treatment can occur as prescribed by law. In the unexpected event that human remains are unearthed during construction activities, impacts would be potentially significant, and as such, implementation of mitigation measure **MM-CUL-4** is required. Impacts are considered **less than significant with mitigation incorporated**.

3.3.6 Cumulative Impacts

Cumulative impacts on cultural resources consider whether impacts of the proposed project together with other related projects, when taken as a whole, substantially diminish the number of historic or archeological resources within the same or similar context or property type. However, impacts to cultural resources, if any exist, tend to be site-specific. There are no known historic resources on the project site, and as such, the project site is not part of an existing or known grouping or district of historic resources that would be impacted as part of the cumulative impacts of other projects. It is anticipated that cultural resources that are potentially affected by related projects would also be subject to the same requirements of CEQA as the proposed project and any impacts would be mitigated, as applicable. These determinations would be made on a case-by-case basis, and the effects of cumulative development on historical resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, the proposed project would not contribute to any potential cumulative impacts, and cumulative impacts on cultural resources after mitigation is implemented are considered **less than significant**. No further mitigation is required.

3.3.7 Mitigation Measures

The following mitigation measures would reduce potentially significant impacts to archaeological resources, paleontological resources, and human remains to a less-than-significant level.

MM-CUL-1 **Archaeological Monitoring.** Prior to the commencement of any earth-moving activities on-site, the applicant shall retain a Native American Monitor and a qualified archaeologist, subject to the review and approval of the City's Building Official, or designee. The Native American monitor and qualified archaeologist shall attend the preconstruction meeting and be on-site during initial ground disturbance. Within each area of proposed ground disturbance, the archaeologist will assess the soil types,

stratigraphy, level of soil disturbance, and will provide recommendations for subsequent monitoring based on the observed conditions. At least 30 days prior to issuance of grading permits, separate agreements between the applicant and the qualified archaeologist and the applicant and a Native American Monitor shall be developed regarding prehistoric cultural resources and shall identify any monitoring requirements and treatment of cultural resources so as to meet both the requirements of CEQA and those of the Tribe. The agreements shall also address roles and responsibilities of the Native American Monitor and the archaeologist. The Native American Monitor agreement shall also detail treatment and final disposition of any Native American cultural resources, sacred sites, and human remains discovered on the site. In compliance with **MM-CUL-2** and **MM-CUL-4**, discovery and treatment of human remains shall be in compliance with State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

MM-CUL-2 **Inadvertent Discovery of Archaeological Resources.** In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

MM-CUL-3 **Paleontological Mitigation Program.** Prior to commencement of any grading activity on-site, the applicant shall retain a qualified paleontologist, subject to the review and approval of the City's Building Official, or designee. The qualified paleontologist shall attend the preconstruction meeting and be on-site during all rough grading and other significant ground-disturbing activities in previously undisturbed older Quaternary alluvial deposits, if encountered. These deposits may be encountered at depths as shallow as 10 feet below ground surface. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontology monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find. The paleontologist shall prepare a Paleontological Resources Impact Mitigation

Program (PRIMP) for the proposed project. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP) (2010).

MM-CUL-4 **Inadvertent Discovery of Human Remains.** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be immediately notified of the discovery. No further excavation or disturbance of the project site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

3.3.8 Environmental Impacts After Mitigation Is Incorporated

Implementation of mitigation measures **MM-CUL-1** through **MM-CUL-4** would ensure impacts after mitigation are **less than significant**.

3.3.9 References

Dibblee, T.W. and H.E., Ehrenspeck, 1999, Geologic map of the El Monte and Baldwin Park quadrangles, Los Angeles County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-69, scale 1:24,000.

McLeod, S.A., 2016. Vertebrate Paleontology Records Check for Paleontological Resources for the Proposed Kaiser Permanente Specialty Medical Office Facility, Dudek Project Number 9601, in the City of Irwindale, Los Angeles County, Project Area. Unpublished Records Search Results Letter from the Natural History Museum of Los Angeles County, Los Angeles, California.

National Environmental Title Research (NETR). 2012. “Historic Aerials” by NETR Online. Accessed on August 5, 2016: http://www.historicaerials.com/.

Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. 11 p. Available; http://vertpaleo.org/PDFS/68/68c554bb-86f1-442f-a0dc-25299762d36c.pdf.

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3.4 GEOLOGY AND SOILS

This section describes the existing geology and soils within the vicinity of the project site; identifies associated regulatory requirements; and evaluates potential impacts related to being located on a site that may be subject to earthquake-induced liquefaction related to implementation of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project). The analysis in this section is based, in part, on the information contained within the Geotechnical Report prepared in April 2016 (see Appendix D).

The Initial Study/Notice of Preparation (IS/NOP) prepared for the proposed project found that the proposed project would have a less than significant impact or no impact as it relates to all of the Geology and Soils significance criteria identified in the California Environmental Quality Act (CEQA) Guidelines Appendix G (14 CCR 15000 et seq.), with the exception of unstable soils and liquefaction (Appendix A). As such, this section focuses only on the potential impacts of the proposed project to result in unstable soils or geology, as well as earthquake-induced liquefaction.

3.4.1 Environmental Conditions

Topography

The project site has an average elevation of 321 feet above mean sea level (amsl) and is occupied by a warehouse building and other supporting facilities such as paved parking, driveways, and walkways that consist of asphaltic concrete and concrete slabs (GoogleEarth 2016). The site is nearly flat-lying, with drainage directed in a southerly and easterly direction (Geobase Inc. 2016). The Vulcan Durbin Quarry is located north of the northern property boundary, where a level area 30 feet wide is followed by a descending slope up to 40 feet high (Geobase Inc. 2016). The slope gradient is estimated to be 2H:1V (horizontal:vertical), and is followed by another flat area 60 feet wide; north of the aforementioned is the quarry excavation (Geobase Inc. 2016).

Surface Geology and Soils

The mapped geology of the site consists of “gravel and sand of major streams and alluvial detritus from San Gabriel Mountains” and is late Holocene in age (Dibblee and Ehrenspeck 1999). The numerous gravel mining operations in the area is consistent with this mapped geologic unit. Pre-existing soils underlying the site have been removed and replaced with engineered fills associated with the previous development. Therefore, the mapped soil series, as determined by the U.S. Department of Agriculture soil survey data is not representative of soils found on-site.

Subsurface Geology and Groundwater

Based on review of previous geotechnical reports; completion of 4 cone penetration tests and 2 geophysical survey lines; and the results of laboratory tests and engineering analysis; Geobase Inc. (2016) characterized the subsurface materials on the site. Beneath the asphaltic concrete and aggregate base is an approximately four foot layer of silty sands with gravels (artificial fill), underlain by sands and silty sands with varying amounts of gravel. These soils were considered to be in a "medium dense" to "very dense" state.

Neither the current nor the previous geotechnical investigations have encountered groundwater in their subsurface explorations, completed to 25 and 42 feet below the ground surface, respectively (Geobase Inc. 2016). Excavations and groundwater dewatering associated with the Vulcan Durbin Quarry excavation has resulted in a groundwater level drawdown in excess of 100 feet below the adjacent ground surface (Geobase Inc. 2016). Though the seismic hazard zone report for the project area indicates a historic high groundwater level of 25 feet below the ground surface, it is unlikely to be that shallow given the presence of the quarry and the lack of groundwater found within subsurface explorations (Geobase Inc. 2016).

Liquefaction Susceptibility

Liquefaction occurs when the pore pressures generated within a soil mass equals the overburden pressure. This results in a loss of strength and the soil then possesses a certain degree of mobility. Factors considered to evaluate liquefaction potential include groundwater conditions, soil type, particle size distribution, earthquake magnitude and acceleration, and soil density obtained through standard penetration tests and cone penetration tests. Soils subject to liquefaction comprise saturated fine grained sands to coarse silts. Coarser-grained soils are considered free-draining and therefore dissipate excess pore pressures, while fine-grained soils possess undrained shear strength.

The California Geological Survey has determined the site to be within a seismic hazard zone for liquefaction based on the general character of soils in the region, anticipated earthquake ground shaking, and an estimate of the historic high groundwater level (Geobase Inc. 2016). It should be noted that these maps are based on regional data and conservative assumptions, and are intended as "zones of required investigation" that prompt site-specific liquefaction hazard study. Geobase Inc. (2016) found very dense soils beneath the historic high groundwater level of 25 feet below the ground surface determined by CGS. Field exploration tests and associated liquefaction analyses indicate that the subsoils are not liquefiable with a factor of safety greater than 1.3 (Geobase Inc. 2016). The geotechnical report associated with the previous warehouse development also determined the liquefaction potential to be very low, a conclusion that was accepted by the Los Angeles County Department of Public Works (Geobase Inc. 2016).

Although the site is within a seismic hazard zone for liquefaction, site specific data and analysis shows the potential for liquefaction to be very low.

Other Geotechnical Issues

The project site is not mapped within an area susceptible to landslides, flood zones, lateral spreading, subsidence or current State of California earthquake fault zones (Appendix A, Geobase Inc. 2016). Geobase Inc. (2016) judged the Vulcan Durbin Quarry, located more than 200 feet away, to be a sufficient distance away such that the hazard of earthquake-induced landsliding is considered low. Furthermore, hazards associated with tsunamis, inundation, seiche, and flooding were determined to be absent or very low (Geobase Inc. 2016).

3.4.2 Relevant Plans, Policies, and Ordinances

Federal

Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction activities. The Occupational Safety and Health Administration's (OSHA) Excavation and Trenching standard, Title 29 of the Code of Federal Regulations, Part 1926.650, covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching on the sides of the excavation, supporting the sides of the excavation, or placing a shield between the sides of the excavation and the work area.

State

The statewide minimum public safety standard for mitigation of earthquake hazards (as established through the California Building Code (CBC), Alquist–Priolo Earthquake Fault Zoning Act, and the Seismic Hazards Mapping Act) is that the minimum level of mitigation for a project should reduce the risk of ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy, but in most cases, is not required to prevent or avoid the ground failure itself. It is not feasible to design all structures to completely avoid damage in worst-case earthquake scenarios. Accordingly, regulatory agencies have generally defined an "acceptable level" of risk as that which provides reasonable protection of the public safety, although it does not necessarily ensure continued structural integrity and functionality of a project (14 CCR 3721(a)). Nothing in these acts, however, precludes lead agencies from enacting more stringent requirements, requiring a higher level of performance, or applying these requirements to developments other than those that meet the acts' definitions of "project."

California Building Code

The CBC has been codified in the CCR as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 to be enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The 2013 edition of the CBC is based on the International Building Code published by the International Code Conference. The 2013 CBC contains California amendments based on the American Society of Civil Engineers Minimum Design Standards 7-05, which provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (such as wind loads) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the state geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and has published maps showing these zones. Earthquake fault zones are designated by the California Geological Survey and are delineated along traces of faults where mapping demonstrates surface fault rupture has occurred within the past 11,000 years. Construction within these zones cannot be permitted until a geologic investigation has been conducted to prove that a building planned for human occupancy will not be constructed across an active fault. These types of site evaluations address the precise location and recency of rupture along traces of the faults and are typically based on observations made in trenches excavated across fault traces.

The proposed project is not within an Alquist–Priolo Earthquake Fault Zone and therefore is not subject to the requirements of this act.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code, Chapter 7.8, Section 2690–2699.6) directs the California Department of Conservation to protect the public from earthquake-induced liquefaction and landslide hazards (note that these hazards are distinct from fault surface rupture hazard regulated by the Alquist–Priolo Special Studies Zone Act of 1972). This act

requires the state geologist to delineate various seismic hazard zones, and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones (i.e., zones of required investigation). Before a development permit may be granted for a site within a Seismic Hazard Zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. CGS Special Publication 117A, *Guidelines for Evaluating and Mitigating Seismic Hazards in California*, provides guidance for evaluating and mitigating earthquake-related hazards for projects within designated zones that require investigations (CGS 2008).

Because proposed structures would be located within a liquefaction hazard zone, the act would apply to the project.

Office of Statewide Health Planning and Development (OSHPD)

The Office of Statewide Health Planning and Development's (OSHPD) Facilities Development Division will review and approve the plans and specifications of the proposed MOB to ensure compliance with the provisions of the CBC, Title 24, California Code of Regulations. OSHPD's Facilities Development Division (FDD) Building Standards Unit is responsible for the development of administrative regulations and building standards for the construction of hospitals, skilled nursing facilities, licensed clinics and correctional treatment centers in California.

Local

There are no local general plan policies or ordinance codes that are applicable to geology and soils. The OSHPD reviews geotechnical reports, plans and specifications for compliance with the CBC and applicable seismic hazard regulations.

City of Irwindale General Plan Public Safety Element

The City's General Plan Public Safety Element describes the existing hazardous safety concerns in the City and ways to reduce risk to people and property from the hazards on persons and of property.

3.4.3 Thresholds of Significance

The significance criteria for this geology and soils impact analysis are adapted from the California Environmental Quality Act (CEQA) Guidelines, Appendix G.

Based on the guidelines, geology and soil impacts resulting from the proposed project would be considered significant if the proposed project would:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction and landslides; or

b) 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.

As indicated in the IS/NOP (Appendix A), the proposed project would have no impact or a less than significant impact with respect to all other issues areas—including fault rupture, strong seismic ground shaking, substantial erosion or loss of topsoil, expansive soils, and soils adequate for septic tanks. Therefore, those issues are not covered in this Draft EIR.

3.4.4 Project Elements That Can Reduce Impacts

Appropriate engineering design and construction measures that meet current Los Angeles County Building Codes, California Building Code (CBC) and OSHPD design parameters shall be incorporated into the project design. Furthermore one of the main objectives of the proposed project is to provide high quality health care in *seismically safe*, state-of-the-art, advanced-care medical center facility.

3.4.5 Impact Analysis

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Seismic-related ground failure, including liquefaction?

Based on the geotechnical analysis conducted by Geobase (2016), the project site is not underlain by liquefiable soils. The soils are in a dense state and the groundwater table underlying the project site is not shallower than 25 feet below the ground surface, which means conditions conducive to liquefaction do not exist at the project site. The geotechnical recommendations regarding site clearing, subgrade preparation, fill placement and specifications, pavement, and foundations designs and are considered part of the proposed project and will be implemented in accordance with Los Angeles County Building Codes, California Building Code (CBC) and OSHPD regulations. Furthermore, seismic design parameters determined in accordance with the CBC will be used in ensuring the building is structurally sound in a design earthquake.

Given the low potential for liquefaction and the implementation of Los Angeles County Building Codes, California Building Code (CBC) and OSHPD regulations, the impact of the proposed project would be **less than significant**. No mitigation is required.

ii) Landslides?

The project site is not mapped under the Seismic Hazards Mapping Act as being within a seismic hazard zone (i.e., "zones of required investigation") pertaining to earthquake-induced landslides (Appendix A, Geobase Inc. 2016). Furthermore, Geobase Inc. (2016) determined the Vulcan Durbin Quarry to be a sufficient distance away (located more than 200 feet away), with adequate benches and maximum 2:1 slopes, such that the hazard of earthquake-induced landsliding is considered low. Mining operations in the area, including the Vulcan Durbin Quarry, are subject to conditions of their use permits, as well as the Surface Mining and Reclamation Act (SMARA) provisions, which limit the depth and slope of allowed excavations to maintain slope stability, and require regular yearly inspection and monitoring activities to ensure that any problems, if detected, are promptly remediated.

Furthermore, the proposed project does not include construction activities or operations that would affect the likelihood, severity, or extent of existing landslide hazards on-site or off-site. Temporary excavations for structural foundations would be confined to the project site, and adequately braced if necessary in accordance with OSHA Excavation and Trenching standards (which require shoring/bracing for any excavation exceeding 4 feet to protect worker safety). The proposed topography does not differ substantially from the existing topography, and thus, proposed grading would not result in cuts into existing slopes or creation of new unstable slopes.

For these reasons, the impact of the proposed project with respect to earthquake-induced landslides is considered **less than significant**. No mitigation is required.

b) Would the project 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?

Based on the geotechnical analysis conducted by Geobase (2016), the potential for landslide, lateral spreading, subsidence, liquefaction and/or soil collapse is very low or non-existent. Given the low potential for these hazards and the implementation of Los Angeles County Building Codes, California Building Code (CBC) and OSHPD regulations, the impact of the project would be **less than significant**. No mitigation is required.

3.4.6 Cumulative Impacts

The effects of the proposed project, when considered with other projects in the region, would not result in a cumulative impact to geology and soils. The impacts of the proposed project related to geology and soils are localized and site-specific in nature, since they relate to how proposed structures would respond to ground motions. The proposed project does not involve activities that would increase ground shaking or liquefaction risks for off-site properties, and likewise there are no off-site projects that would do the same for the proposed project.

Geobase Inc. (2016) determined the Vulcan Durbin Quarry to be a sufficient distance away, with adequate benches and maximum 2:1 slopes, such that the hazard of earthquake-induced landsliding is considered low. It should be noted that the Vulcan Durbin Quarry must operate in accordance with its Conditional Use Permit (CUP), in which the City of Irwindale imposes mining permit requirements (e.g., maximum slopes and depths, minimum setback distances, fencing, and operation hours) and must comply with the requirements of the SMARA. Under SMARA the CGS Office of Mine Reclamation works primarily with the City of Irwindale on issues of slope stability and other geotechnical surface issues (e.g., foundations and erosion). Among other things, these permit conditions ensure that the risk of geologic or slope stability impacts to off-site properties remains minimal. The Vulcan Durbin Quarry is inspected annually to ensure the operator continues to comply with its CUP and to detect and correct any concerns related to erosion, groundwater or slope stability.

Other projects in the cumulative scenario, regardless of their own potential impacts related to geology and soils, would have **no impact** that would geographically overlap with those of the proposed project. No mitigation is required.

3.4.7 Mitigation Measures

No mitigation measures are required.

3.4.8 Level of Significance After Mitigation

All impacts were determined to be **less than significant** prior to mitigation. No mitigation is required.

3.4.9 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

Dibblee, T.W., and Ehrenspeck, H.E. 1999. *Geologic map of the El Monte and Baldwin Park quadrangles, Los Angeles County, California*. Dibblee Geological Foundation Dibblee Foundation Map DF-69, scale 1:24,000.

Geobase Inc. 2016. Geotechnical Report, Kaiser Permanente – Irwindale Specialty MOB, 12761 Shabarun Avenue, Irwindale, California. April 2016.

GoogleEarth 2016. Elevation Profile and Slope Information Tool, 12761 Shabarun Avenue, Irwindale, California. Accessed 8/15/2016.

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3.5 GREENHOUSE GAS EMISSIONS

This section identifies associated regulatory requirements, describes the existing climate change within the area, evaluates potentially adverse impacts related to greenhouse gas (GHG) emissions during construction and operation of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project). Modeling data and information related to the greenhouse gas emissions analysis have been provided in Appendix B.

The Initial Study and Notice of Preparation (IS/NOP) prepared for the proposed project found the proposed project to have a potentially significant impact related to greenhouse gas emissions (Appendix A). As such, all potential impacts are addressed in this Draft Environmental Impact Report (EIR).

3.5.1 Relevant Plans, Policies, and Ordinances

Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), and water vapor (H_2O). Some GHGs, such as CO_2, CH_4, and N_2O, can occur naturally and are emitted into to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Man-made GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3), which are associated with certain industrial products and processes (CAT 2006). The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs; for example, the GWP of CH_4 is 21, and the GWP of N_2O is 310. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG gas emissions are typically measured in terms of pounds or tons of CO_2 equivalent (CO_2E).[1]

Regulation of GHGs in the United States and California is relatively recent, beginning early in the 2000s. In the absence of major federal efforts, California's former governor, Arnold Schwarzenegger, and the legislature took initiatives to establish goals for reductions of GHG emissions in California and to prescribe a regulatory approach to ensuring that the goals would be met. The federal government, primarily through actions of the EPA, has also begun to regulate GHG emissions, although not as comprehensively. This section provides a brief foundation for these regulatory efforts and discusses the key federal and state regulatory efforts that could apply to development under the project and the users of such development.

[1] The CO_2 equivalent for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of CO_2E = (metric tons of a GHG) × (GWP of the GHG). For example, the GWP for CH_4 is 21. This means that emissions of 1 metric ton of CH_4 are equivalent to emissions of 21 metric tons of CO_2.

Federal

Massachusetts v. EPA. On April 2, 2007, in Massachusetts v. EPA, the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and S_F6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act. On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct National Highway Traffic Safety Administration (NHTSA) to State establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

EPA Mandatory Greenhouse Gas Reporting Rule. On September 22, 2009, EPA issued a final rule to require reporting of GHG emissions from all sectors of the United States economy (74 FR 56260–56519). Fossil fuel and industrial GHG suppliers, motor vehicle and engine

manufacturers, and facilities that emit 25,000 metric tons CO_2E or more per year are required to report GHG emissions data to EPA annually. The first annual reports for the largest emitting facilities, covering calendar year 2010, were submitted to EPA in 2011. Additionally, reporting of emissions is required for owners of SF_6- and PFC-insulated equipment when the total nameplate capacity of these insulating gases is above 17,280 pounds. This new program covers approximately 85% of the nation's GHG emissions and applies to roughly 10,000 facilities. The reporting rule has been amended numerous times, most recently on October 22, 2015. The proposed project, including stationary sources, would not trigger federal GHG reporting according to the rule.

EPA and NHTSA Joint Final Rule for Vehicle Standards. On April 1, 2010, the EPA and NHTSA announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016. The joint rule is intended to reduce GHG emissions and improve fuel economy. The EPA approved the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA approved Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act (75 FR 25324–25728).

The EPA GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile in model year 2016, equivalent to 35.5 mpg if the automotive industry were to meet this CO_2 level through fuel economy improvements alone. The CAFE standards for passenger cars and light trucks will be phased in between 2012 and 2016, with the final standards equivalent to 37.8 mpg for passenger cars and 28.8 mpg for light trucks, resulting in an estimated combined average of 34.1 mpg. Together, these standards will cut GHG emissions by an estimated 960 MMT and save 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program. The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers (EPA 2010).

In August 2012, the EPA and NHTSA approved a second round of GHG and CAFE standards for model years 2017 and beyond (77 FR 62624–63200). These standards will reduce motor vehicle GHG emissions to 163 grams of CO_2 per mile, which is equivalent to 54.5 mpg if this level were achieved solely through improvements in fuel efficiency, for cars and light-duty trucks by model year 2025. A portion of these improvements, however, will likely be made through reductions in air conditioning leakage and through use of alternative refrigerants, which would not contribute to fuel economy. The first phase of the CAFE standards (for model year 2017 to 2021) is projected to require, on an average industry fleet-wide basis, a range from 40.3 to 41.0 mpg in model year 2021. The second phase of the CAFE program (for model years 2022 to 2025) is projected to require, on an average industry fleet-wide basis, a range from 48.7 to 49.7 mpg in model year 2025. The second phase of standards has not been finalized due to the statutory requirement that the NHTSA set average fuel economy standards not more than 5

model years at a time. The regulations also include targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including the following:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel-cell vehicles
- Incentives for hybrid technologies for large pickup trucks and for other technologies that achieve high fuel economy levels on large pickup trucks
- Incentives for natural gas vehicles
- Credits for technologies with potential to achieve real-world GHG reductions and fuel economy improvements that are not captured by the standard test procedures.

State

Title 24. Although not originally intended to reduce GHG emissions, California's Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR 6) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficiency technologies and methods. The premise for the standards is that energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for space and water heating) results in GHG emissions. Therefore, increased energy efficiency in buildings results in relatively lower rates of GHG emissions on a building-by-building basis. The Title 24, Part 6 standards are updated every three years. The most recent amendments to Title 24, Part 6, referred to as the 2016 standards, will become effective on January 1, 2017. The previous amendments were referred to as the 2013 standards and are currently effective. Buildings constructed in accordance with the 2013 standards will use 25% less energy for lighting, heating, cooling, ventilation, and water heating than the 2008 standards. Additionally, the standards will save 200 million gallons of water per year and avoid 170,500 tons of GHG emissions per year (CEC 2012).

In July 2008, the California Building Standards Commission adopted statewide green building standards. The California Green Building Standards Code (Part 11, Title 24), also known as CalGreen, was adopted as part of the California Building Standards Code. Part 11 establishes voluntary standards on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. Some of these standards have become mandatory in the 2010 edition of Part 11.

Title 24, Part 6, does not apply to hospitals, but applies to other facilities associated with the medical center, such as the medical office buildings.

Assembly Bill 1493. In response to the transportation sector accounting for more than half of California's CO_2 emissions, Assembly Bill (AB) 1493 (Pavley) was enacted on July 22, 2002. AB 1493 required the California Air Resources Board (CARB) to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

Before these regulations could go into effect, the EPA had to grant California a waiver under the federal Clean Air Act, which ordinarily preempts state regulation of motor vehicle emission standards. The waiver was granted by Lisa Jackson, the EPA administrator, on June 30, 2009. On March 29, 2010, the CARB executive officer approved revisions to the motor vehicle GHG standards to harmonize the state program with the national program for 2012–2016 model years (see EPA and NHTSA Joint Final Rule for Vehicle Standards). The revised regulations became effective April 1, 2010.

Executive Order S-3-05. In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The executive order established the following goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050. The California Environmental Protection Agency secretary is required to coordinate efforts of various agencies to collectively and efficiently reduce GHGs. The Climate Action Team (CAT) is responsible for implementing global warming emissions reduction programs. Representatives from several state agencies compose the CAT. Under the executive order, the California Environmental Protection Agency secretary is directed to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The CAT fulfilled its initial report requirements through the 2006 *Climate Action Team Report to Governor Schwarzenegger and the Legislature* (CAT 2006).

The 2009 *Climate Action Team Biennial Report* (CAT 2010a), published in April 2010, expands on the policy outlined in the 2006 assessment. The 2009 report provides new information and scientific findings regarding the development of new climate and sea level projections using new information and tools that have recently become available and evaluates climate change within the context of broader social changes, such as land use changes and demographics. The 2009 report also identifies the need for additional research in several different aspects that affect climate change in order to support effective climate change strategies. The aspects of climate

change determined to require future research include vehicle and fuel technologies, land use and smart growth, electricity and natural gas, energy efficiency, renewable energy and reduced carbon energy sources, low GHG technologies for other sectors, carbon sequestration, terrestrial sequestration, geologic sequestration, economic impacts and considerations, social science, and environmental justice.

Subsequently, the 2010 *Climate Action Team Report to Governor Schwarzenegger and the California Legislature* (CAT 2010b) reviews past Climate Action Milestones including voluntary reporting programs, GHG standards for passenger vehicles, the Low Carbon Fuel Standard (LCFS), a statewide renewable energy standard, and the cap-and-trade program. Additionally, the 2010 report includes a cataloguing of recent research and ongoing projects; mitigation and adaptation strategies identified by sector (e.g., agriculture, biodiversity, electricity, and natural gas); actions that can be taken at the regional, national, and international levels to mitigate the adverse effects of climate change; and today's outlook on future conditions. The 2010 report also focuses on case studies involving collaborative efforts among multiple agencies on research projects related to climate change and policy development.

Executive Order B-16-12. Governor Brown issued Executive Order B-16-12 on March 23, 2012. The Executive Order requires that state entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emission vehicles. It orders CARB, the California Energy Commission (CEC), the California Public Utilities Commission (CPUC), and other relevant agencies work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following by 2015:

- The state's major metropolitan areas will be able to accommodate zero-emission vehicles, each with infrastructure plans and streamlined permitting
- The state's manufacturing sector will be expanding zero-emission vehicle and component manufacturing
- The private sector's investment in zero-emission vehicle infrastructure will be growing
- The state's academic and research institutions will be contributing to zero-emission vehicle research, innovation and education.

CARB, the CEC, and CPUC, are also directed to establish benchmarks to help achieve the following goals by 2020:

- The state's zero-emission vehicle infrastructure will be able to support up to one million vehicles
- The costs of zero-emission vehicles will be competitive with conventional combustion vehicles

- Zero-emission vehicles will be accessible to mainstream consumers
- There will be widespread use of zero-emission vehicles for public transportation and freight transport
- Transportation sector GHG emissions will be falling as a result of the switch to zero emission vehicles
- Electric vehicle charging will be integrated into the electricity grid
- The private sector's role in the supply chain for zero-emission vehicle component development and manufacturing will be expanding.

Benchmarks are also to be established to help achieve the following goals by 2025:

- Over 1.5 million zero-emission vehicles will be on California roads and their market share will be expanding
- Californians will have easy access to zero-emission vehicle infrastructure
- The zero-emission vehicle industry will be a strong and sustainable part of California's economy
- California's clean, efficient vehicles will annually displace at least 1.5 billion gallons of petroleum fuels.

On a statewide basis, the Executive Order establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050 (State of California 2010).

Assembly Bill 32. In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early-action GHG emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early-action GHG reduction measures under AB 32. The three original early-action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" consist of the following:

1. A low-carbon fuel standard to reduce the "carbon intensity" of California fuels
2. Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants
3. Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early-action regulations, which were also considered "discrete early action GHG reduction measures," consist of the following:

1. Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology
2. Reduction of auxiliary engine emissions of docked ships by requiring port electrification
3. Reduction of PFC emissions from the semiconductor industry
4. Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products)
5. Requirements that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency
6. Restriction on the use of SF_6 from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMT CO_2E. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for the large facilities that account for 94% of GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO_2 in excess of specified thresholds.

On December 11, 2008, CARB approved the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan; CARB 2008) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions,

integrates all CARB and CAT early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

The key elements of the Scoping Plan include the following:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
- Achieving a statewide renewables energy mix of 33%
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the LCFS
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

The First Update to the Climate Change Scoping Plan (Scoping Plan Update) was approved by the CARB Board on May 22, 2014 (CARB 2014). Based on updated information, the Scoping Plan Update revises the 2020 emissions target to 431 MMT CO_2E (based on updated GWPs for GHGs) and also builds upon the initial Scoping Plan with new strategies and recommendations. The update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The update defines CARB's climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan. These efforts were pursued to achieve the near-term 2020 goal and have created a framework for ongoing climate action that can be built upon to maintain and continue economic sector-specific reductions beyond 2020, as required by AB 32. The Scoping Plan Update identifies nine key focus areas or sectors (energy, transportation, agriculture, water, waste management, and natural and working lands), along with short-lived climate pollutants, green buildings, and the cap-and-trade program (CARB 2014). The update also recommends that a statewide mid-term target and mid-term and long-term sector targets be established toward meeting the 2050 goal established by Executive Order S-3-05 to reduce California's GHG emissions to 80% below 1990 levels, although no specific recommendations are made.

Senate Bill 1368. In September 2006, Governor Schwarzenegger signed Senate Bill (SB) 1368, which requires the CEC to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the CPUC. This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

Executive Order S-1-07. Issued on January 18, 2007, Executive Order S-1-07 sets a declining LCFS for GHG emissions measured in CO_2E grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the LCFS would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The LCFS is anticipated to lead to the replacement of 20% of the fuel used in motor vehicles with alternative fuels by 2020.

Senate Bill 375. In August 2008, the legislature passed, and on September 30, 2008, Governor Schwarzenegger signed SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see Senate Bill 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining California Environmental Quality Act (CEQA) requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or alternative

planning strategy. On September 23, 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the Southern California Association of Governments (SCAG) are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. SCAG prepared its RTP/SCS, which was adopted by the SCAG Regional Council on April 4, 2012. The plan quantified a 9% reduction by 2020 and a 16% reduction by 2035. On June 4, 2012, the CARB executive officer issued an executive order accepting SCAG's quantification of GHG reductions and the determination that the SCS would achieve the GHG emission reduction targets established by CARB. On April 7, 2016, SCAG adopted the 2016-2040 RTP/SCS which looks to build on the success of the 2012-20135 RTP/SCS. Targets for SCAG region in the updated plan includes an 8% per capita reduction in GHG emissions from automobiles and light trucks by 2020, an 18% reduction by 2035, and a 21% reduction by 2040 compared with 2005 levels.

Executive Order S-13-08. Governor Schwarzenegger issued Executive Order S-13-08 on November 14, 2008. The executive order is intended to hasten California's response to the impacts of global climate change, particularly sea level rise. It directs state agencies to take specified actions to assess and plan for such impacts. It directs the California Natural Resources Agency (CNRA), in cooperation with the California Department of Water Resources, CEC, California's coastal management agencies, and the Ocean Protection Council, request that the National Academy of Sciences prepare a Sea Level Rise Assessment Report by December 1, 2010. The Ocean Protection Council, California Department of Water Resources, and CEC, in cooperation with other state agencies are required to conduct a public workshop to gather information relevant to the Sea Level Rise Assessment Report. The Business, Transportation, and Housing Agency was ordered to assess within 90 days of the order the vulnerability of the state's transportation systems to sea level rise. The Governor's Office of Planning and Research (OPR) and the CNRA are required to provide land use planning guidance related to sea level rise and other climate change impacts. The order also requires the other state agencies to develop adaptation strategies by June 9, 2009, to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. A discussion draft adaptation strategies report was released in August 2009, and the final adaptation strategies report was issued in December 2009. To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: public health, ocean and coastal resources, water supply and flood protection, agriculture, forestry, biodiversity and habitat, and transportation and energy infrastructure. The report then recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

Senate Bill X1 2. On April 12, 2011, Governor Jerry Brown signed SB X1 2 in the First Extraordinary Session, which would expand the Renewable Portfolio Standard (RPS) by establishing a goal of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill,

a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current and that meets other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB X1 2 adds local publicly owned electric utilities to the RPS. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers in order to achieve targets of 20% by December 31, 2013; 25% by December 31, 2016; and 33% by December 31, 2020. The statute also requires that the governing boards for local publicly owned electric utilities establish the same targets and that the governing boards be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the RPS for retail sellers, while the CEC and CARB will enforce the requirements for local publicly owned electric utilities.

Senate Bill 605. On September 21, 2014, Governor Jerry Brown signed SB 605, which requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state no later than January 1, 2016. As defined in the statute, short-lived climate pollutant means "an agent that has a relatively short lifetime in the atmosphere, from a few days to a few decades, and a warming influence on the climate that is more potent than that of carbon dioxide." SB 605, however, does not prescribe specific compounds as short-lived climate pollutants or add to the list of GHGs regulated under AB 32. In developing the strategy, the CARB must complete an inventory of sources and emissions of short-lived climate pollutants in the state based on available data, identify research needs to address any data gaps, identify existing and potential new control measures to reduce emissions, and prioritize the development of new measures for short-lived climate pollutants that offer cobenefits by improving water quality or reducing other air pollutants that impact community health and benefit disadvantaged communities. The draft strategy released by CARB in September 2015 focuses on methane, black carbon, and fluorinated gases, particularly hydrofluorocarbons, as important short-lived climate pollutants. The draft strategy recognizes emission reduction efforts implemented under AB 32 (e.g., refrigerant management programs) and other regulatory programs (e.g., in-use diesel engines, solid waste diversion) along with additional measures to be developed.

Senate Bill 350. Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the Renewable Portfolio Standard by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent

System Operator into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process.

Executive Order B-30-15. On April 29, 2015, Governor Jerry Brown issued an executive order that identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. Executive Order B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050, as set forth in Executive Order S-3-05. To facilitate achievement of this goal, Executive Order B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. The executive order also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry will be required to prepare GHG reduction plans by September 2015, followed by a report on actions taken in relation to these plans in June 2016. The executive order does not require local agencies to take any action to meet the new interim GHG reduction threshold. It is important to note that Executive Order B-30-15 was not adopted by a public agency through a public review process that requires analysis pursuant to CEQA Guidelines Section 15064.4 and that it has not been subsequently validated by a statute as an official GHG reduction target of the State of California. The executive order itself states it is "not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person."

Local

City of Irwindale 2020 General Plan

The City's General Plan (City of Irwindale 2008) includes various goals and policies designed to help improve air quality within the City. As discussed in the General Plan, policies pertaining to improving air quality and climate change are addressed in the Resource Management Element of the General Plan.

Resource Management Element

- The City of Irwindale supports the ethic of conservation of non-renewable resources. This includes efforts to reduce the use of energy (in any form), GHG emissions (consistent with AB 32) and efforts to find new and more energy efficient methods for delivering services. The City supports the development of building standards that enable the community to design energy saving features such as solar energy systems, water efficient landscaping, and sustainable, green, and energy efficient building standards.

- The City of Irwindale will facilitate communications among residents, businesses, and the South Coast Air Quality Management District (SCAQMD) to quickly resolve air pollution nuisance complaints. The City will distribute information to advise residents on how to register a complaint with SCAQMD.
- The City of Irwindale will actively participate in decisions on the site or expansion of facilities of land uses (e.g., freeway expansions), to ensure the inclusion of air quality mitigation measures.

3.5.2 Existing Conditions

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called GHGs. The greenhouse effect traps heat in the troposphere through a threefold process: short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This "trapping" of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Without it, the temperature of the Earth would be about 0°F (−18°C) instead of its current 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect (National Climatic Data Center 2015).

Contributions to Greenhouse Gas Emissions

United States Emissions. In 2014, the United States produced 6,870 million metric tons (MMT) of CO_2E. The primary GHG emitted by human activities in the United States was CO_2. This primary GHG represented approximately 80.9% of total GHG emissions. The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 93.7% of CO_2 emissions in 2014 (EPA 2016).

State of California Emission. According to the 2013 GHG inventory data compiled by the CARB for the California Greenhouse Gas Inventory for 2000–2013, California emitted 459 MMT CO_2E of GHGs, including emissions resulting from out-of-state electrical generation (CARB 2015). The primary contributors to GHG emissions in California are transportation, industry, electric power production from both in-state and out-of-state sources, agriculture, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2013 are presented in 3.5-1, GHG Sources in California (2013).

Table 3.5-1
GHG Sources in California (2013)

Source Category	Annual GHG Emissions (MMT CO_2E)	Percent of Total[a]
Transportation	169.02	37%
Industrial Uses	92.68	20%
Electricity Generation	90.45[b]	20%
Residential and Commercial uses	43.54	9%
Agriculture	36.21	8%
High Global Warming Potential Substances	18.5	4%
Recycling and Waste	8.87	2%
Totals	**459.28**	**100%**

Source: CARB 2015.
Notes:
[a] Percentage of total has been rounded.
[b] Includes emissions associated with imported electricity, which account for 39.99 MMT CO_2E annually.

Potential Effects of Human Activity on Climate Change

According to CARB, some of the potential impacts in California of global warming may include loss of snow pack, sea level rise, more extreme heat days per year, more high O_3 days, more large forest fires, and more drought years (CCCC 2006). Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California. These reports acknowledge that climate scientists' understanding of the complex global climate system and the interplay of the various internal and external factors that affect climate change, remains too limited to yield scientifically valid conclusions on such a localized scale. Substantial work has been done at the international and national level to evaluate climatic impacts, but far less information is available on regional and local impacts.

The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2°C per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using emission rates from the year 2000 shows that further warming would occur, which would induce further changes in the global climate system during the current century. Changes to the global climate system and ecosystems and to California would include, but would not be limited to, the following:

- The loss of sea ice and mountain snowpack resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures (IPCC 2007)
- A rise in global average sea level primarily due to thermal expansion and melting of glaciers and ice caps and the Greenland and Antarctic ice sheets (IPCC 2007)

- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and increased intensity of tropical cyclones (IPCC 2007)
- A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 70% to as much as 90% over the next 100 years (CAT 2006)
- An increase in the number of days conducive to O_3 formation by 25% to 85% (depending on the future temperature scenario) in high O_3 areas of Los Angeles and the San Joaquin Valley by the end of the 21st century (CAT 2006)
- A high potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level (CAT 2006).

3.5.3 Thresholds of Significance

OPR Guidance

The OPR's Technical Advisory titled *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review* states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008).

Cumulative Nature of Climate Change

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project in the South Coast Air Basin, such as the project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change.

While the project would result in emissions of GHGs during construction and operation, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally believed that

an individual project is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory as scientific uncertainty regarding the significance a project's individual and cumulative effects on global climate change remains.

Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the CNRA, which noted in its Public Notice for the proposed CEQA amendments that the evidence before it indicates that in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009a). Similarly, the Final Statement of Reasons for Regulatory Action on the CEQA Amendments confirm that an EIR or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009b). Accordingly, further discussion of the project's GHG emissions and their impact on global climate are addressed below.

CEQA Guidelines

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15000 et seq.). Section 15064.4(b) provides that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). Similarly, Appendix G, *Environmental Checklist Form*, which is often used as a basis for lead agencies' selection of significance thresholds, do not prescribe specific

thresholds. Rather, the CEQA Guidelines include two CEQA thresholds related to GHGs, and these will therefore be used to discuss significance of project impacts:

a) Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Accordingly, the CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009c).

Status of Proposed SCAQMD Thresholds

The SCAQMD has not adopted recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects. In October 2008, SCAQMD presented to the Governing Board the *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (SCAQMD 2008). The guidance document was not adopted or approved by the Governing Board. This document, which builds on the previous guidance prepared by CAPCOA, explored various approaches for establishing a significance threshold for GHG emissions. Among the concepts discussed, the document considered a "de minimis," or screening, threshold to "identify small projects that would not likely contribute to significant cumulative GHG impacts" (SCAQMD 2008). As further explained in this document, "Projects with GHG emissions less than the screening level are considered to be small projects, that is, they would not likely be considered cumulatively considerable" (SCAQMD 2008). The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. The SCAQMD proposed three tiers of compliance that may lead to a determination that impacts are less than significant, including the following:

1. Projects with GHGs within budgets set out in approved regional plans to be developed under the SB 375 process.
2. Projects with GHG emissions that are below designated quantitative thresholds:
    a. Industrial projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 10,000 MT CO_2E per year.

b. Commercial and residential projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 3,000 MT CO_2E per year, provided that such projects also meet energy efficiency and water conservation performance targets that have yet to be developed.

3. Projects that purchase GHG offsets that, either alone or in combination with one of the three tiers mentioned above, achieve the target significance screening level.

From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The most recent working group meeting on September 28, 2010 (SCAQMD 2010), proposed two options lead agencies can select from to screen thresholds of significance for GHG emissions in residential and commercial projects, and proposed to expand the industrial threshold to other lead agency industrial projects. Option 1 proposed a threshold of 3,000 MT CO_2E per year for all residential and commercial projects; and Option 2 proposed a threshold value by land use type where the numeric threshold is 3,500 MT CO_2E per year for residential projects, 1,400 MT CO_2E per year for commercial projects, and 3,000 MT CO_2E per year for mixed use projects (SCAQMD 2010). Per the SCAQMD guidance, construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008).

The recommended SCAQMD threshold which is applicable to the proposed project is the Option 1, 3,000 MT CO_2E per year for commercial projects. This analysis uses amortized construction emissions in addition to estimated annual operational emissions before comparing operational emissions to the proposed SCAQMD threshold of 3,000 MT CO_2E per year. As discussed above, this threshold is intended to be applied to the proposed project's emissions to determine whether they would result in a cumulatively considerable contribution to the cumulative impacts of global climate change.

3.5.4 Impact Analysis

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

Construction Impacts

Construction of the proposed project would result in GHG emissions that are primarily associated with the use of off-road construction equipment and on-road construction, vendor (delivery) trucks, and worker vehicles. The SCAQMD has not proposed or adopted relevant quantitative GHG thresholds for construction-generated emissions.

Nonetheless, GHG emissions generated during construction of the proposed project are included in this assessment for disclosure purposes.

The California Emissions Estimator Model (CalEEMod) (version 2013.2.2) was used to calculate the annual GHG emissions based on the construction scenario described in Section 3.1, Air Quality. Table 3.5-2, Estimated Annual Construction Greenhouse Gas Emissions, presents construction emissions for the project in 2017 to 2018.

Table 3.5-2
Estimated Annual Construction Greenhouse Gas Emissions

Construction Year	MT CO_2	MT CH_4	MT N_2O	MT CO_2E
2017	1,055.42	0.07	0.00	1,056.90
2018	1,415.16	0.10	0.00	1,417.17
Total Emissions	**2,470.58**	**0.17**	**0.00**	**2,474.07**

Notes: See Appendix B for detailed results.
MT = metric tons; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent

As shown in Table 3.5-2, the estimated total GHG emissions during construction of the proposed project would be approximately 1,057 MT CO_2E in 2017 and 1,417 MT CO_2E in 2018, for a total of 2,474 MT CO_2E over the construction period. Estimated project-generated construction emissions amortized over 30 years would be approximately 82.5 MT CO_2E per year.

As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the proposed project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis below.

Operational Impacts

Operation of the proposed project would result in GHG emissions that are generated through motor vehicle trips to the project site, energy use (natural gas and generation of electricity consumed by the proposed project), generation of electricity associated with water supply, treatment, and distribution and wastewater treatment, and GHGs generated by solid waste disposal. Additionally, since the previous land use (food distribution center) would be replaced by the proposed project, the emissions from the existing use were also calculated as a part of the analysis, then subtracted from proposed project emissions to determine the net increase in GHGs.

The proposed project would result in GHG emissions associated with the vehicular traffic generated by the proposed project. According to the project's traffic analysis prepared by

Linscott, Law, and Greenspan Engineers (LLG 2016) dated March 28, 2016, total project-generated daily traffic is estimated to be 3,252 daily trips, whereas the existing warehouse generates 138 daily trips. CalEEMod default mobile source data, including temperature, trip characteristics, variable start information, emission factors, and trip distances, were conservatively used for the model inputs. Proposed project-related traffic was assumed to be comprised of a mixture of vehicles in accordance with the model outputs for traffic. The default CalEEMod fleet mix was used for the proposed project while the traffic analysis provided a fleet mix for the existing warehouse. The traffic analysis used the following four vehicle types: passenger cars, 2-axle trucks, 3-axle trucks, and 4-axle trucks. Trip rates for each vehicle type were used to calculate an updated fleet mix for light-duty automobiles (LDA), light-duty trucks 1 (LDT1), light-duty trucks 2 (LHD2), medium-heavy duty trucks (MHDT), and heavy heavy-duty trucks (HHDT). Operational emissions were modeled in CalEEMod under the assumption that proposed project's first full year of proposed project operation would occur in 2019.

The estimation of operational energy emissions was based on information provided by Kaiser Permanente and CalEEMod land use defaults and units or total area (i.e., square footage) of the proposed project. Annual natural gas (non-hearth) was estimated in CalEEMod using the emissions factors for Southern California Edison, which would be the energy source provider for the proposed project. Electricity emissions were estimated using adjusted electricity intensity factors based on the proposed project's annual electricity consumption of approximately 1,660,000 kilowatt-hours (kWh) per year (yr) (Brummitt Energy Associates Inc. 2015). The proposed project's annual natural gas consumption was an estimated 12,000 therms per year. It was assumed that the proposed project would meet the 2013 California Building Energy Efficiency Standards (Title 24, Part 6, of the California Code of Regulations) rather than the 2016 standards, which is a conservative assumption since the 2016 standards would result in greater building energy efficiency and reduced GHG emissions. Additionally, the proposed project would also achieve at least a minimum of Gold Status under LEED 2009 for healthcare while aiming for a goal of Platinum. The proposed project would reduce energy use through a combination of a high performance envelope, minimizing loads through equipment selections, and offsetting usage through photovoltaic (PV) panels. Additionally, Kaiser Permanente has committed to achieving a net-zero (i.e. generate as much energy as it consumes) energy strategy for the proposed project. In order to achieve net-zero, the proposed project would include the installation of rooftop PVs on the entire building and parking structure roofs totaling approximately 54,000 sf with an additional 43,600 sf of PVs to be installed on-site along the north side of the MOB. For this analysis it was estimated that the proposed project would produce 2,010,000 kWh or 73.5 kBtu/square foot-year from implementation of PVs in order to achieve net-zero.

Supply, conveyance, treatment, and distribution of water for the proposed project require the use of electricity, which would result in associated indirect GHG emissions. As provided by Kaiser Permanente, the estimated water consumption of the proposed project is 4,585,000 gallons per year excluding weekend operation. Where possible, water reduction would be targeted for building and medical equipment cooling systems and building equipment. The proposed project would also utilize reclaimed water for irrigation.

CalEEMod was also used to estimate GHG emissions from the proposed project's area sources and solid waste generation. Area sources include operation of gasoline-powered landscape maintenance equipment. Solid waste would result in CO_2E emissions associated with landfill off-gassing. CalEEMod default values were used for area sources and solid waste generation.

The estimated operational project-generated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water conveyance and wastewater generation, are shown in Table 3.5-3, Estimated Annual Net Operational Greenhouse Gas Emissions.

Table 3.5-3
Estimated Annual Net Operational Greenhouse Gas Emissions

Emission Source	MT CO_2/year	MT CH_4/year	MT N_2O/year	MT CO_2E/year
Proposed Project				
Area Sources	0.01	0.00	0.00	0.01
Energy (Electricity and Natural Gas)	0.00	0.00	0.00	0.00
Mobile Sources	2,669.93	0.10	0.00	2,672.08
Solid Waste	49.33	2.92	0.00	110.54
Water and Wastewater	0.00	0.00	0.00	0.00
Steam Boilers	0.00	0.00	0.00	0.00
Hot Water Heaters	0.00	0.00	0.00	0.00
Emergency Generator	108.00	0.00	0.00	108.36
Combined Emissions	*2,827.27*	*6.04*	*0.00*	*2,890.99*
Existing				
Area Sources	0.00	0.00	0.00	0.00
Energy (Electricity and Natural Gas)	412.24	0.02	0.00	413.87
Mobile Sources	849.21	0.01	0.00	849.44
Solid Waste	15.74	0.93	0.00	35.28
Water and Wastewater	59.74	0.50	0.01	74.04
Combined Emissions	*1,336.93*	*1.46*	*0.01*	*1,372.63*
Net increase (Proposed Project minus Existing)				**1,518.36**
Net increase (Proposed Project minus Existing) Plus Amortized Construction Emissions				**1,600.86**

Notes: See Appendix B for detailed results.
MT CO_2 = metric tons carbon dioxide; MT CH_4 = metric tons methane; MT N_2O = metric tons nitrous oxide; MT CO_2E = metric tons carbon dioxide equivalent
Emissions reflect compliance with 2013 Title 24 energy efficiency requirements, and a 75% diversion of solid waste per Assembly Bill 341. The proposed project would also reduce energy consumption primarily by offsetting usage through PVs which would help the proposed project achieve Net Zero.

As shown in Table 3.5-3, the net increased GHG emissions attributable to the proposed project during the first full year of operations in 2019 would be approximately 1,600.86 MT CO_2E per year, including amortized construction emissions. As such, annual operational GHG emissions with amortized construction emissions would not exceed the SCAQMD draft threshold of 3,000 MT CO_2E per year. The proposed project would benefit from its location near existing pedestrian infrastructure, transit (Foothill Transit operates routes along Ramona Boulevard south of the project site), and proximity within the Los Angeles metropolitan area. In addition, the proposed project would look to achieve net-zero primarily through the installation of PVs thereby offsetting GHG emissions associated with energy consumption of the proposed project and from the operation of two commercial boilers and two water heaters. Therefore, the proposed project-generated impacts related to GHG emissions would be **less than significant**. No mitigation is required.

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

At this time, the City of Irwindale has not adopted a Climate Action Plan or likewise similar GHG reduction strategy that would be applicable to the proposed project. However, as discussed above, SCAQMD is in the process of preparing recommended significance thresholds for GHGs for local lead agency consideration, which the project does not exceed. As shown in the discussion above, the proposed project would not exceed the SCAQMD draft threshold of significance for GHGs.

The following analysis discusses the consistency of the proposed project to the CARB Scoping Plan and the SCAG 2016 RTP/SCS. In accordance with AB 32, CARB developed the Scoping Plan to outline the state's strategy to achieve 1990-level emissions by year 2020. To estimate the reductions necessary, CARB projected statewide 2020 business-as-usual (BAU) GHG emissions and identified that the state as a whole would be required to reduce GHG emissions by 28.5 percent from year 2020 BAU to achieve the targets of AB 32 (CARB 2008). Since release of the 2008 Scoping Plan, CARB has updated the 2020 GHG BAU forecast to reflect GHG emissions in light of the economic downturn and measures not previously considered in the 2008 Scoping Plan baseline inventory. The revised BAU 2020 forecast shows that the state would have to reduce GHG emissions by 21.6 percent from BAU or 15.7% from the adjusted baseline (i.e., with Pavley and 33% RPS). Additionally, the Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors and are not directly applicable to the proposed project. As shown in Table 3.5-4, the proposed

project would not conflict with the applicable strategies, and therefore, would not conflict with the recommendations of AB 32.

Table 3.5-4
Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	The proposed project's employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low Carbon Fuel Standard	T-2	This is a statewide measure that cannot be implemented by a project applicant or lead agency. When this measure goes into effect, the standard would be applicable to the fuel used by vehicles that would access the project site.
Regional Transportation-Related GHG Targets	T-3	The proposed project is not related to developing greenhouse gas emission reduction targets. To meet the goals of SB 375, the 2016-2040 RTP/SCS is applicable to the proposed project. The proposed project would not preclude the implementation of this strategy.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low Friction Oil 4. Solar Reflective Automotive Paint and Window Glazing	T-4	When this measure is initiated, the standards would be applicable to the light-duty vehicles that would access the project site. Motor vehicles driven by the proposed project's employees and visitors would maintain proper tire pressure when their vehicles are serviced. The proposed project's employees and visitors would replace tires in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. Motor vehicles driven by the proposed project's employees and visitors would use low friction oils when their vehicles are serviced. The proposed project's employees and visitors would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	The proposed project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.

Table 3.5-4
Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	Heavy-duty trucks associated with accessing the proposed project would be in compliance with CARB standards that are in effect at the time of purchase.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Project	T-8	This is a statewide measure that cannot be implemented by a project applicant or lead agency. The standards phase-in over model years 2016 through 2019 are applicable to the vehicles that access the project site.
High-Speed Rail	T-9	Not applicable.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	This is a measure for the State to increase its energy efficiency standards in new buildings. The proposed project is required to build to the new standards and would maximize its energy efficiency through compliance. Additionally, the proposed project would offset energy usage through the use of PVs.
Energy Efficiency (Natural Gas)	CR-1	The proposed project will comply with energy efficiency standards for natural gas appliances and other devices at the time of building construction. Additionally, the proposed project would offset energy usage through the use of PVs.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	The proposed project incorporates active solar energy systems and promotes renewable energy technologies.
Combined Heat and Power	E-2	Not applicable.
Renewable Portfolios Standard (33% by 2020)	E-3	This is a statewide measure that cannot be implemented by a project applicant or lead agency. Southern California Edison is required to increase its percent of power supply from renewable sources to 33 percent by the year 2020 pursuant to various regulations. The electricity used by the project will benefit from reduced GHG emissions resulting from the offset of energy consumption through use of renewable energy sources.
Senate Bill 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and earlier solar programs	E-4	This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs. The proposed project would comply with Title 24 and would commit to achieving net-zero for energy consumption. Therefore, the proposed project would not preclude the implementation of this strategy.
Water Sector		
Water Use Efficiency	W-1	The proposed project would comply with Green Building Code regulations and would implement water conservation features.
Water Recycling	W-2	The proposed project would recycle of water on-site to provide reclaimed water use for irrigation and native planting that will be utilized. This results in an efficient water system and a reduction in GHG emissions that would otherwise be generated by using potable water in place of recycled water.

Table 3.5-4
Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Water System Energy Efficiency	W-3	As previously discussed, the proposed project would use reclaimed water to use for irrigation.
Reuse Urban Runoff	W-4	The proposed project's includes features that would reduce water; as such, reuse of urban runoff would be considered if feasible. The project would also be designed to reduce runoff through turf and mulch, and grading and irrigation design standards.
Renewable Energy Production	W-5	The proposed project promotes renewable energy technologies and commits to incorporation of renewable energy production as feasible. See discussion under Measure E-4.
Green Buildings		
1. State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	The proposed project would be required to be constructed in compliance with state or local green building standards in effect at the time of building construction.
2. Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	The proposed project would comply with the California Energy Code, and thus incorporate applicable energy efficiency features designed to reduce the proposed project's energy consumption.
3. Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	The proposed project would be required to be constructed in compliance with local green building standards in effect at the time of building construction.
4. Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Not applicable for the proposed project, applicable for existing buildings only.
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	This measure would apply to the direct greenhouse gas emissions at major industrial facilities emitting more than 500,000 $MTCO_2e$ per year. The proposed project is not an industrial land use.
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable.
Refinery Flare Recovery Process Improvements	I-4	Not applicable.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks.	I-5	Not applicable.
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	Applicable for certain municipal solid waste landfills. Not applicable for the proposed project.
Increasing the Efficiency of Landfill Methane Capture	RW-2	Applicable for certain municipal solid waste landfills. Not applicable for the proposed project.

Table 3.5-4
Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Mandatory Commercial Recycling	RW-3	During both construction and operation, the proposed project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act as amended. During construction, all wastes would be recycled to the maximum extent possible. The proposed project would also utilize the City of Irwindale recycling services.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable.
Anaerobic/Aerobic Digestion	RW-3	Not applicable.
Extended Producer Responsibility	RW-3	Not applicable.
Environmentally Preferable Purchasing	RW-3	Not applicable.
Forests Sector		
Sustainable Forest Target	F-1	Not applicable.
High GWP Gases Sector		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-professional Servicing	H-1	This measure is applicable to the high global warming potential gases that would be used by sources with large equipment (such as in air conditioning and commercial refrigerators.
SF_6 Limits in Non-utility and Non-semiconductor Applications	H-2	Not applicable.
Reduction of Perfluorocarbons in Semiconductor Manufacturing	H-3	Not applicable.
Limit High GWP Use in Consumer Products	H-4	The proposed project would use consumer products that would comply with the regulations that are in effect at the time of manufacture.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Motor vehicles driven by the proposed project's employees would comply with the leak test requirements during smog checks.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	Not applicable.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	Not applicable.

Source: CARB 2014.

As depicted in Table 3.5-4, the proposed project would be consistent with the applicable strategies and measures in the Scoping Plan, which establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions and recommends strategies for implementation at the statewide level to meet the goals of AB 32. Several statewide

regulations have been adopted by CARB to implement the strategies proposed in the Scoping Plan. To the extent these regulations are applicable to the proposed project, the proposed project would comply with these regulations. In regards to consistency with Executive Order B-30-15 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and Executive Order S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future year analysis. However, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014). As discussed above, the proposed project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions. In addition, since the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the proposed project would be speculative and cannot be identified at this time. With respect to future GHG targets under the executive orders, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet Executive Order S-3-05's 80% reduction target in 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets.

Kaiser Permanente would implement various energy reduction strategies which would help reduce the overall impact associated with operation of the proposed project. These strategies, incorporated into the CalEEMod modeling, are discussed in the operational analysis for impact criterion (a) above. The *Energy Performance Summary Report* (BEA, 2015) details the proposed project's energy performance relative to energy requirements listed in the OPR. The proposed project would meet all of the energy performance requirements listed in the Owner's Project Requirements to meet Gold status under LEED 2009 certification for a healthcare facility. The schematic design of the proposed project would exceed the Owner's Project Requirements energy requirement of 5% for building envelope savings compared with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2010 standard. The standard presents the minimum requirement for energy-efficient design that new buildings are required to meet. Additionally, the proposed project would exceed this standard with an envelope savings of approximately 13%. Current lighting Title 24 standards would be exceeded through the installation of energy-efficient lighting. This strategy would result in a reduction of 40% electricity savings in interior lighting and a 50% electricity savings for exterior lighting. Finally, in order for the site to be net-zero, an approximate 641-kW PV system would be installed which would offset the energy use of the proposed project.

The SCAG 2016 RTP/SCS, adopted April 2016, is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern

California region. The 2016 RTP/SCS incorporates local land use projections and contains improvements to the regional multimodal transportation system including the following: active transportation (non-motorized transportation—biking and walking); transportation demand management; transportation system management; transit; passenger and high-speed rail; goods movement; aviation and airport ground access; highways; arterials; and operations and maintenance. The RTP/SCS is not directly applicable to the proposed project because the underlying purpose of the RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development, though the proposed project would support the goals and policies of the RTP/SCS. As discussed in Section 3.1, Air Quality, the proposed project would not introduce additional population or traffic above that anticipated under the general plan because the proposed project would not conflict with the land use designation of the project site. Therefore, the proposed project would be consistent with the regional growth forecasts in the RTP/SCS. Additionally, the proposed project satisfies the RTP/SCS land use strategy which would be accomplished through infill or redevelopment development of the project site. Therefore, the proposed project would have a **less than significant impact** and would not conflict with any applicable plan, policy, or regulation adopted in order to reduce GHG emissions. No mitigation is required.

3.5.5 Cumulative Impacts

As described in Section 3.5.3, global climate change is a cumulative impact, and there are currently no established thresholds for assessing whether the GHG emissions of a project would be considered a cumulatively considerable contribution to global climate change. There is no mechanism in place that guarantees GHG emission reductions on a cumulative basis relating to compliance with regulations and strategies that are regional or statewide in nature. In addition, the City does not have the jurisdictional authority to control the various cumulative sources of GHGs in the City, county, or State, or the GHG emissions from sources around the globe, which all contribute to climate change. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the City cannot assure that these measures will ultimately be implemented or sufficient to address climate change. Nonetheless, based on the City's recommended approach to assessing potential project impacts under CEQA, the proposed project's cumulative contribution to GHG emissions and associated climate change impacts would be **less than significant**. No mitigation is required.

3.5.6 Mitigation Measures

The proposed project would not result in significant impacts; therefore, no mitigation is required.

3.5.7 Level of Significance After Mitigation

All impacts were determined to be **less than significant**. No mitigation is required.

3.5.8 References

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3.6 HAZARDS AND HAZARDOUS MATERIALS

This section describes the existing hazardous materials within the vicinity of the project site; identifies associated regulatory requirements; evaluates potential impacts related to being located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 that would create a significant hazard to the public or the environment; and identifies mitigation measures related to implementation of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project). The analysis contained in this section relies, in part, on the Phase I Environmental Site Assessment prepared for the proposed project, which has been included as Appendix E.

The Initial Study and Notice of Preparation (IS/NOP) found that the proposed project would have a less than significant impact or no impact as it relates to routine transport, use, or disposal of hazardous materials (such as an accidental release of hazardous materials into the environment); emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school; being located within an airport land use plan, being located within two miles of a public airport, and being located within the vicinity of a private airstrip such that the project would expose people residing or working in the project area to excessive noise levels; interfering with an adopted emergency response plan or emergency evacuation plan; and being in close proximity to wildland fires (Appendix A). As such, these impacts will not be addressed further in this Draft Environmental Impact Report (EIR).

3.6.1 Environmental Conditions

A Phase I Environmental Site Assessment (ESA) was prepared by Stantec Consulting Services Inc. (Stantec) generally in accordance with the American Society for Testing and Materials (ASTM) Standard of Practice E 1527-13, except as may have been modified by the scope of work, and terms and conditions by Kaiser Permanente (provided as Appendix E to this EIR). The project site is located in a predominantly urban environment, generally surrounded by industrial/business park uses. Stantec conducted a site reconnaissance on January 20, 2015; interviewed James A. Dal Pozzo, the chairman and CEO of The Jacmar Companies, and Michael Martinez, the Operations Manager as representative of The Jacmar Companies on January 20, 2015; and contacted the County of Los Angeles Public Health, California Department of Toxic Substances Control (DTSC), Los Angeles County Department of Public Works, Los Angeles County Department of Building and Safety, Los Angeles County Fire Department, and Los Angeles Regional Water Quality Control Board to obtain information pertaining to the property use and/or indications of recognized environmental conditions (RECs) in connection with the property. Stantec also reviewed online historical aerial photographs, historical topographic maps, historical fire insurance maps, and a radius map report from Environmental Data Resources Inc.

(EDR); and reviewed available pertinent records of local, state, and federal agencies in its investigation of the project site. The following discussion summarizes Stantec's findings regarding the existing conditions at the project site.

Site History

The project site was undeveloped until 1999. In 1999, the project site was developed with an industrial warehouse for food storage and distribution (Jacmar Foods Distribution). The industrial warehouse consisted of a multi-story storage building (including a cooling and freezing area), an attached office building, 12 loading positions, surface parking, and landscaping. Jacmar Foods Distribution vacated the project site in the summer of 2015 and relocated to the City of Industry. The project site is currently occupied by a vacant cold storage warehouse with associated surface parking and landscaping.

Site Condition Observations

Jacmar Foods Distribution was still in operation during the time of the site reconnaissance by Stantec. A 12 pit-style hydraulic dock leveler, a pad-mounted transformer, two hydraulic trash compactors, a cooling tower, a 2-stage clarifier, and eight associated compressors were observed by Stantec during the time of the site reconnaissance. Minor staining was observed by Stantec in the area around the dock levelers; however, no spills or improper chemical handling were observed during Stantec's site reconnaissance. On-site chemicals observed by Stantec appeared to be limited to biocides and acids; two chemical storage drums, one labeled Purge water treatment microbiocide and the other labeled CT-100 Cooling Tower Treatment, in association with the previous Jacmar Foods Distribution cooling tower operation. Stantec noted that the active ingredient in Purge water treatment microbiocide was Didecyl dimethyl ammonium chloride, and the active ingredient in the CT-100 Cooling Tower Treatment were Polymaleic acide, Hydroxyethlidene disposphonic acid, and Phosphonobutane tricarboxylic acid. The storage and use of petroleum hydrocarbon and other chemicals at the property is considered a REC. However, Stantec did not observe significant staining or find evidence of release at the project site (Appendix E).

Hazardous Materials History

A review of historical aerial photographs and historical topographic maps from EDR was conducted in order to document prior use of the project site (Appendix E). Table 3.6-1 summarizes land uses and historical development of the site from 1928 through 2012.

Table 3.6-1
Review of Historical Aerial Photographs

Year	Description
1928	The property appears to be undeveloped and in the immediate vicinity of the San Gabriel River. There are no structures visible in the area of the property or its immediate surroundings. Present day Ramona Boulevard is visible to the south, and appears to be major thoroughfare. The areas to the south of Ramona Boulevard appear to be in preparation for development; areas to the west of the aforementioned river bed appear to be used agriculturally.
1938	The property remains undeveloped. No significant changes in land use from the 1928 photograph are visible except the area south of Ramona Boulevard has been further developed. The area west of the San Gabriel River appears to be developed as a residential neighborhood and multiple new structures are present.
1948	The property remains undeveloped. No significant changes in land uses from the 1938 photograph are visible except that areas south of Ramona Boulevard and to the west of the San Gabriel River have been further developed.
1952	The property remains undeveloped, minor dirt roads are visible. No significant changes in land use from the 1948 photograph are visible except that areas south of Ramona Boulevard and to the west of the San Gabriel River have been further developed. Residential development stretches further to the north along the western side of the San Gabriel River.
1964	The property remains undeveloped, minor roads are visible, likely related to mining activities to the north of the property. No significant changes in land use from the 1952 photograph are visible. The San Gabriel River appears to be channeled and the current I-605 is developed as a main route of travel.
1972	The property remains undeveloped, with only minor roads leading towards the mining areas. To the north of the property mining operations are in progress. No significant changes in residential use of the areas south of Ramona and to the west of the San Gabriel River are observed. The I-605 appears to have been developed to its current location and dimensions.
1977	The property remains undeveloped, with minor roads leading towards the mining areas, grading activities (likely for future development projects) area visible to the southeast of the property. To the north of the property, sand/gravel mining operations are in progress. No significant changes in residential use of the areas south of Ramona and to the west of the San Gabriel River are observed.
1981	The property remains undeveloped, with roads leading towards the (still active) mining areas, grading areas are visible to the southeast of the property. To the north of the property mining operations are in progress. No significant changes in residential use of the areas south of Ramona and to the west of the San Gabriel River are observed.
1989	Grading activities and initial development occurred near the property. Schabarum Avenue and initial industrial buildings near the property are visible, the use of the buildings cannot be determined from the aerial photo. Mining pits to the north of the property are filled with water and used as reservoirs.
1990	The property remains undeveloped. The site immediately to the east of the property is developed as a large building with parking areas to the north, east, and west of the structure.
1994	No significant changes in land use and development from the 1990 photograph are visible.
2002	The property, as well as sites to the east, south, and southeast are developed to their current configurations.
2005	No significant changes in land use from the 2002 photograph are visible.
2009	No significant changes in land use from the 2005 photograph are visible.
2010	No significant changes in land use from the 2009 photograph are visible.
2012	No significant changes in land use from the 2010 photograph are visible.

Source: See Appendix E.
Note: I-605: Interstate 605

Table 3.6-2 summarizes historical topographic maps of the project site and surrounding areas from 1894 through 1981.

Table 3.6-2
Review of Historical Topographic Maps

Year	Description
1894	No details regarding specific development of the property were observed. No structures or indicators of potential RECs for the property were depicted on the maps. The South Pacific Rail Road (Covina Branch) is visible on the topographic map of 1904.
1901	
1904	
1927	No details regarding specific development of the property were observed; however, the property appears to exist in an area immediately to the south of a gravel mine/pit and to the east of the San Gabriel River. The topographical map from 1927 shows rail road tracks near the property.
1953	
1966	
1972	
1981	

Source: See Appendix E.
Note: RECs: recognized environmental conditions

Based on Stantec's review of the Department of Conservation, Division of Oil, Gas & Geothermal Resources online well finder database, the project site is not situated in an area that appears to be active with regards to oil exploration, drilling, and production. Based on Stantec's review of the U.S. Environmental Protection Agency (EPA) online superfund site overview for the San Gabriel Valley (SGV) Area 2 – Baldwin Park, for which the project site is located within, the project site located outside the Area of Concern (AOC) for contaminants of concern (COC).

Surrounding Property Use

Nearby properties include industrial/business park uses. Properties surrounding the project site as observed by Stantec (Appendix E) include the following:

- North: A water reservoir/gravel pit (Vulcan Durbin Quarry).
- South: Storage warehouse and office areas, housing Mission Paving and Sealing Inc.
- East: Office building, Gibraltar Construction Co. Inc., and Public Health Foundation Enterprises Women, Infants, and Children.
- West: The Interstate 605 (I-605) freeway followed by the San Gabriel River.

Hazardous Materials Inventory

Table 3.6-3 summarizes the hazardous substances and petroleum products observed during Stantec's site reconnaissance.

Table 3.6-3
Observations Related to Project Site's Hazardous Substances and Petroleum Products

Observations	Description
Hazardous substances and petroleum products as defined by CERCLA 42 U.S.C. Section 9601(14):	Materials related to refrigeration processes were noted on the property in designated areas (Purge Water Treatment Microbiocide and CT-100 Cooling Tower Treatment were stored in the cooling tower; 507 Freon was utilized in the cooling system. This material was reportedly not stored at the property.) Eight compressors were associated with the refrigeration process at the facility. All compressors were located in the cooling tower and no staining was observed during the site reconnaissance by Stantec.
Drums (≥ 5 gallons):	Two labeled drums (Purge Water Treatment Microbiocide and CT-100 Cooling Tower Treatment) were located within the area underneath the cooling tower. Both liquids are utilized in the refrigeration process.
Strong, pungent, or noxious odors:	None detected at the time of the site reconnaissance by Stantec.
Pools of liquid:	None observed at the time of the site reconnaissance by Stantec.
Unidentified substance containers:	None observed at the time of the site reconnaissance by Stantec.
PCB – Containing equipment:	One pad-mounted Los Angeles Department of Water and Power high-voltage transformer (labeled as P5480420) was identified on the eastern edge of the property building exterior. The transformer appeared to be in good condition with no observed stains.
Other observed evidence of hazardous substances or petroleum products:	None observed at the time of the site reconnaissance by Stantec.

Source: See Appendix E.
Note: CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act; PCB: Polychlorinated biphenyl

Hazardous Sites Database Searches

Table 3.6-4 summarizes the reviewed environmental databases generally within a one-mile radius of the project site.

Table 3.6-4
Summary of Environmental Agency Lists, Search Distance, Listings

Agency List/Database	Search Radius	Number of Listed Sites
Federal NPL sites	1.0 mile	1
Federal delisted NPL sites	1.0 mile	0
Federal CERCLIS list	0.5 mile	0
Federal CERCLIS NFRAP list	0.5 mile	0
Federal RCRA CORRACTS facilities	1.0 mile	0
Federal RCRA Non-CORRACTS TSD	0.5 mile	0
Federal RCRA generators	0.25 mile	1
Federal ERNS of Spills	Site	0
State and tribal – Equivalent NPL	1.0 mile	0
State and tribal – equivalent CERCLIS	1.0 mile	2
State and tribal – solid waste facilities	0.5 mile	0
State and tribal – registered storage tank sites	0.25 mile	0

Table 3.6-4
Summary of Environmental Agency Lists, Search Distance, Listings

Agency List/Database	Search Radius	Number of Listed Sites
State and tribal – leaking storage tank sites	0.5 mile	4
State and tribal – voluntary cleanup sites	0.5 mile	0
Local brownfield sites	0.5 mile	0
Local lists of landfill/solid waste disposal sites	0.5 mile	0
Local lists of hazardous waste/contaminated sites	1.0 mile	1
Local lists of registered storage tanks	0.25 mile	3
Local land records	0.5 mile	0
Records of emergency release reports	Site	0
Record of decision	1.0 mile	1
Historical CORTESE	0.5 mile	2
Los Angeles County HMS	Site	1
EDR High Risk Historical Records (EDR Exclusive)		
EDR U.S. Historical Auto Stat	0.25 mile	1
EDR U.S. Historical Cleaners	0.25 mile	1

Source: See Appendix E.
Note: NPL: National Priorities List; CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System; NFRAP: No Further Remedial Action Planned; RCRA: Resource Conservation and Recovery Act; CORRACTS: Corrective Action Report; TSD: Treatment, Storage, and Disposal; ERNS: Emergency Response Notification System; HMS: hazardous materials system; EDR: Environmental Data Resources

As shown on Table 3.6-4, the project site was identified on the Los Angeles County Hazardous Materials System database as having a permitted status (Permit No. 000302577) with no violations were reported.

Table 3.6-5 summarizes the reviewed environmental databases for nearby sites with the most likely potential for conditions to pose a REC, controlled recognized environmental conditions (CREC), or historical recognized environmental conditions (HREC) for the project site.

Table 3.6-5
Summary of Potential Recognized Environmental Conditions
Based Upon Database Evaluation

Listed Facility Name/Address	Database Listing	Distance/Direction from the Project Site	Recognized Environmental Conditions?(Yes/No)
MOBIL#11-E1A – 12670 East Ramona Boulevard	CA LUST; CA FID UST; SWEEPS UST; HIST CORTEST; EDR US Hist Auto Stat; HIST UST; UST	0.245 mile south of the project site	No

Table 3.6-5
Summary of Potential Recognized Environmental Conditions
Based Upon Database Evaluation

Listed Facility Name/Address	Database Listing	Distance/Direction from the Project Site	Recognized Environmental Conditions?(Yes/No)
According to the RWQCB's GeoTracker database, a case was opened for this site on June 5, 1987. The information on the website noted that gasoline was released into the soil and that no remedial actions were entered. The site's status was changed to Completed – Case Closed as of March 25, 1991. Based on the distance separating the property from this petroleum release site, this is not considered a REC.			
ARCO#5210 – 13001 Francisquito Avenue	CA LUST; SWEEPS UST; CHMIRS; HIST CORTESE	0.454 mile east-southeast of the project site	No
According to the RWQCB's GeoTracker database, a case was opened for the site on October 19, 1991. The information on the website noted that gasoline was released from piping into soil, that assessment was conducted, and that no remedial actions were entered. The site's status was changed to Completed – Case Closed as of May 15, 2001. Based on the distance separating the property from this petroleum release site, this is not considered a REC.			
Valle Lindo Continuation High School – 12347 Ramon Boulevard	CA LUST; SCH; ENVIROSTOR	0.466 miles southwest of the project site	No
According to the RWQCB's GeoTracker database, a case was opened for this site on April 18, 2001 when a release of gasoline to soil was discovered. On May 7, 2001, the DTSC entered into a Voluntary Cleanup Agreement with the El Monte Union High School District to provide oversight for the development and implementation of a RAW for the Valle Lindo Continuation High School. The RAW was implemented and that portion of the site was certified by DTSC on August 31, 2001. The RWQCB also lists the cleanup status as Completed – Case Closed as of August 31, 2001. Based on the distance separating the property from this petroleum release site, this is not considered a REC.			
SGV Area 2 – Baldwin Park	Federal NPL Site; ROD; CERCLIS; US ENG CONTROLS; ROD: PRP; AOCONCERN; CA HIST UST	0.564 mile southeast of the project site	No
The SGV Area 2 – Baldwin Park is a groundwater plume that parallels the San Gabriel River to the east in the San Gabriel groundwater basin in the Baldwin Park area of Los Angeles County. The plume is about 7.5 miles long and 1.5 miles wide; the U.S. EPA lists the most prevalent COCs for the SGV Area AOC as TCE, PCE, carbon tetrachloride, perchlorate, and NDMA. This site was added to the NPL in 1984 because it involved a serious problem that required immediate remedial action. The EPA began its enforcement efforts in the site area in 1985 which searched for and evaluated historical Federal, State, and local records on chemical usage, handling, and disposal. In 1985, the CA Regional Water Quality Board began its WIP to identify the sources of groundwater contamination detected in water supply wells. In 1989, EPA entered into a cooperative agreement to expand the WIP program to determine the nature and extent of contamination in the San Gabriel Valley. In March 1994, the ROD document was signed. Based on information provided by EDR and verified through the U.S. EPA's website, the property is located outside the SGV Area 2 – Baldwin Park AOC. According to the EDR Radius map, the property is located approximately 2,000 feet to the northwest of the AOC boundary. As the chemicals used at the property differ from the reported SGV Area 2 – Baldwin Park COCs and the property is located outside the SGV Area 2 - Baldwin Park AOC, proximity to the SGV Area 2 – Baldwin Park AOC is not considered a REC.			

Source: See Appendix E.

Note: CA LUST: California Leaking Underground Storage Tank; CA FID: California Facility Inventory Database Underground Storage Tank; SWEEPS UST: Statewide Environmental Evaluation and Planning System Underground Storage Tank; HIST CORTESE: Hazardous Waste & Substance Site List; EDR: Environmental Data Resources; HIST UST: Historical listing of underground storage tank sites; UST: Underground Storage Tanks; RWQCB: Regional Water Quality Control Board; DTSC: Department of Toxic and Substances Control; REC: Recognized Environmental Condition; SGV: San Gabriel Valley; U.S. EPA: Environmental Protection Agency; CHMIRS: California Hazardous Materials Incident Report System; SCH: School Property Evaluation Program; RAW: Removal Action Workplan; NPL: National Priorities List; ROD: Records of Decision; CERCLIS: Comprehensive Environmental Response, Compensation and Liability Information System; US ENG CONTROLS: Engineering Controls Sites List; AOCONCERN: San Gabriel Valley Areas of Concern; COCs = contaminants of concern; AOC: area of concern; TCE: trichloroethene; PCE: perchloroethylene; NDMA: N-nitrosodimethylamine; WIP: well investigation program

3.6.2 Relevant Plans, Policies, and Ordinances

Hazardous materials and wastes are identified and defined by federal and state regulations for the purpose of protecting public health and the environment. Hazardous materials contain certain chemical, physical, or infectious properties that cause them to be considered hazardous. Hazardous wastes are defined in the Code of Federal Regulations Title 40, Volume 25, Parts 260–265 and in the California Code of Regulations (CCR), Title 22 Div. 4.5, Chapter 11, Article 1, Section 66261. Over the years, the laws and regulations have evolved to deal with different aspects of the handling, treatment, storage, and disposal of hazardous substances.

Federal

Federal Toxic Substances Control Act of 1976

The Federal Toxic Substances Control Act of 1976 tasked the U.S. EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. The Federal Toxic Substances Control Act addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint (EPA 2014).

Resource Conservation and Recovery Act of 1976

The objectives of the Resource Conservation and Recovery Act are to protect human health and the environment from the potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner. The Resource Conservation and Recovery Act of 1976, which amended the Solid Waste Disposal Act in 1984, addresses solid and hazardous waste management activities. The Resource Conservation and Recovery Act affirmed and extended the "cradle-to-grave" system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Act. The Hazardous and Solid Waste Amendments of 1984 also added Subtitle I, which governs underground storage tanks (EPA 2013).

Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List, which is a list of contaminated sites warranting further investigation by the EPA. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986 (EPA 2011a).

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act amended CERCLA on October 17, 1986. The Superfund Amendments and Reauthorization Act had several changes and additions, including the following:

- Stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites
- Required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations
- Provided new enforcement authorities and settlement tools
- Increased state involvement in every phase of the Superfund program
- Increased the focus on human health problems posed by hazardous waste sites
- Encouraged greater citizen participation in making decisions on how sites should be cleaned up
- Increased the size of the trust fund to $8.5 billion.

The Superfund Amendments and Reauthorization Act also required the EPA to revise the Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the National Priorities List (EPA 2011b).

Occupational Safety and Health Act of 1970 and Occupational Safety and Health Administration

The Occupational Safety and Health Act of 1970 was passed to prevent workers from being killed or seriously harmed at work. The Occupational Safety and Health Act of 1970 created the Occupational Safety and Health Administration (OSHA), which sets and enforces protective workplace safety and health standards. OSHA also provides information, training, and assistance to employers and workers. Under the Occupational Safety and Health Act of 1970, employers have the responsibility to provide a safety workplace (OSHA 2011).

State

Primary state agencies with jurisdiction over public health hazards and hazardous chemical materials management are the DTSC and the RWQCB. Other state agencies involved in hazardous materials management are the Department of Industrial Relations (California OSHA (CalOSHA) implementation), Office of Emergency Services (Office of Emergency Services–California Accidental Release Prevention Implementation), California Department of Fish and Wildlife, California Air Resources Board (CARB), California Department of Transportation (Caltrans), State Office of Environmental Health Hazard Assessment (Proposition 65 implementation), and the California Integrated Waste Management Board.

South Coast Air Quality Management District Rules and Regulations pertain to asbestos abatement (including Rule 1403), Construction Safety Orders 1529 (pertaining to asbestos), and 1532.1 (pertaining to lead) from Title 8 of the CCR. Hazardous chemical and biohazardous materials management laws in California include the following statutes:

- **Hazardous Materials Management Act** – requires that businesses handling or storing certain amounts of hazardous materials prepare a hazardous materials business plan, which includes an inventory of hazardous materials stored on site (above specified quantities), an emergency response plan, and an employee training program.
- **Hazardous Waste Control Act (California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq.) –** authorizes the DTSC and local certified unified program agencies to regulate facilities that generate or treat hazardous waste.
- **Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)** – requires the governor to publish and update, at least annually, a list of chemicals known to the state to cause cancer, birth defects, or other reproductive harm, and to inform citizens about exposures to such chemicals.
- **Hazardous Waste Management Planning and Facility Siting, also known as the Tanner Act (Assembly Bill (AB) 2948, 1986)** – requires counties to prepare, for California DTSC

approval, hazardous waste management plans, and prescribes specific public participation activities, which must be carried out during the local land use permit process for siting new or expanding off-site commercial treatment, storage, and disposal facilities.

- **Hazardous Materials Storage and Emergency Response (AB 2185)** – requires the immediate reporting to local fire departments and Offices of Emergency Services of any release or threatened release of a hazardous material, regardless of the amount handled by the business.
- **California Medical Waste Management Act (California Health and Safety Code, Sections 117600–118360)** – establishes procedures for the proper handling, storage, treatment, and transportation of medical waste.
- **Land Disposal Restrictions (CCR, Chapter 18, Title 22)** – set up by Congress in 1984 for the EPA, ensures that toxic constituents present in hazardous waste are properly treated before hazardous waste is land disposed.

State regulations and agencies pertaining to hazardous materials management and worker safety are described in the following subsections.

California Environmental Protection Agency

The boards, departments, and offices that make up the California Environmental Protection Agency (CalEPA) include CARB, the Department of Pesticide Regulation, the Department of Resources Recycling and Recovery, the DTSC, the Office of Environmental Health Hazard Assessment, and the State Water Resources Control Board. These boards, departments and offices were placed within the CalEPA "umbrella" to create a cabinet-level voice for the protection of human health and the environment (such as clean air, clean water, clean soil, safe pesticides, and waste recycling and reduction) to assure the coordinated deployment of state resources.

Government Code Section 65962.5

Pursuant to Government Code 65962.5, environmental regulatory database lists were reviewed to identify and locate properties with known hazardous substance contamination within the proposed project area (California Government Code, Section 65960 et seq.). Four state agencies are required to provide lists of facilities that have contributed, harbor, or are responsible for environmental contamination within their jurisdiction. The four state agencies that are required to provide these lists to the Secretary for Environmental Protection include the DTSC, the State Department for Health Services, the State Water Resources Control Board, and the California Integrated Waste Management Board. The Secretary for Environmental Protection then takes each of the four respective agency lists and forms one list, referred to as the Hazardous Waste

and Substances Site List – Site Cleanup (Cortese List), which is made available to every city and/or county in California.

California Health and Safety Code Section 25501

California law defines a hazardous material as any material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a present or potential hazard to human health and safety or to the environment if released in the workplace or the environment (California Health and Safety Code Section 25501).

California Occupational Safety and Health Administration

CalOSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the work place. California OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337–340). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

California Hazardous Waste Control Law

The California Hazardous Waste Control Law (Health and Safety Code, Division 20, Chapter 6.5) is administered by the CalEPA to regulate the management of hazardous wastes. While the Hazardous Waste Control Law is generally more stringent than the Resource Conservation and Recovery Act, until the EPA approves the California hazardous waste control program (which is charged with regulating the generation, treatment, storage, and disposal of hazardous waste), both the state and federal laws apply in California. The Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

California Accidental Release Prevention Program

Similar to the Federal Risk Management Program, the California Accidental Release Prevention Program includes additional state requirements as well as an additional list of regulated substances and thresholds. The regulations of the program are contained in CCR Title 19, Division 2, Chapter 4.5. The intent of California Accidental Release Prevention Program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws.

California Health and Safety Code

The handling and storage of hazardous materials is regulated by Division 20, Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan (HMBP). HMBPs contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state. Chapter 6.95 of the Health and Safety Code establishes minimum statewide standards for HMBPs.

In addition, in the event that a facility store quantities of specific acutely hazardous materials above the thresholds set forth by California code, facilities are also required to prepare a risk management plan and California Accidental Release Plan. The risk management plan and California Accidental Release Plan provide information on the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and mitigate potential impacts (California Health and Safety Code, Chapter 6.95).

Local

City of Irwindale General Plan Public Safety Element

The City's General Plan Public Safety Element describes the existing hazardous safety concerns in the City and ways to reduce risk to people and property from the hazards on persons and of property. Exhibit 6-4 of the City's General Plan Update identifies registered hazardous waste generators and handlers in the City. Because these businesses use hazardous materials, they are required to obtain necessary permits from various public agencies (City of Irwindale 2008). Additionally, per Chapter 17.80.030(27), the City's Municipal Code requires a Conditional Use Permit for all uses which involve the use, sale, or storage of any materials classified as toxic or hazardous by either the federal or state government as a substantial part of the total use, as shall the parking or storage of vehicles used to carry such materials (City of Irwindale 1966). The City's General Plan Update Public Safety Element includes the following programs and policies related to safety related to hazardous material incidents that will be applied to the proposed project:

- The City of Irwindale will work to reduce potential hazards through conscientious land use planning.
- Hazardous Materials Control. The City shall continue to cooperate with county, State, and federal agencies involved in the regulation of hazardous materials storage, use, and disposal. The City shall work with the County Fire Department in requiring hazardous materials users and generators to identify safety procedures for responding to accidental spills and emergencies. The Fire Department shall also work with local law enforcement officials in regulating the transport of hazardous materials through the City. The City will

continue to promote the safe disposal of "hazardous and toxic substances" used in private households through the support of "Hazardous Materials Collections" conducted at specific locations and times within the City.

3.6.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts related to hazards and hazardous materials are based on Appendix G of the CEQA Guidelines. The IS/NOP for the project (Appendix A) found the project to have a less than significant impact or no impact related to routine transport, use, or disposal of hazardous materials such as accidental release of hazardous materials into the environment; emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school; being located within an airport land use plan, within two miles of a public airport, and being located within the vicinity of a private airstrip such that the project would expose people residing or working in the project area to excessive noise levels. The IS/NOP also found less than significant impacts related to whether the project interferes with an adopted emergency response plan or emergency evacuation plan; and potential for wildland fires. As such, these impacts will not be addressed further in this Draft Environmental Impact Report (EIR). According to Appendix G of the CEQA Guidelines, a significant impact related to hazards and hazardous material would occur if the project would:

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

Site Reconnaissance Methodology

The site reconnaissance by Stantec on January 20, 2015 focused on observation of current conditions and observable indications of past uses and conditions that may indicate the presence of RECs. The site reconnaissance was conducted on foot and Stantec utilized the following methodology:

- Traverse the outer site boundary.
- Traverse transects across the project site.
- Traverse the periphery of all structures on the project site.
- Visually observe accessible interior areas expected to be used by occupants or the public, maintenance and repair areas, utility areas, and a representative sample of occupied spaces.

3.6.4 Project Elements That Can Reduce Impacts

Project design features related to hazards are summarized below and are also included in Table 2-2 in Chapter 2, Project Description, of the Draft EIR.

Prior to demolition of the existing building, an abatement of the existing on-site hazardous materials from the historic storage and use of petroleum hydrocarbon and other chemicals at the project site by the former Jacmar Foods Distribution will occur to ensure hazardous materials are safely removed, in accordance with the Los Angeles County Department of Environmental Health Hazardous Materials Management Division and Los Angeles County's Fire Department standards, from the project site.

During project construction, a hazardous materials spill kit will be maintained on-site for small spills. Additionally, Kaiser Permanente will monitor all contractors for compliance with applicable regulations, including regulations regarding hazardous materials and hazardous wastes, including disposal. Hazardous materials will not be disposed of or released on the ground, in the underlying groundwater, or any surface water. Totally enclosed containment will be provided for all trash. All construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, will be removed to a waste facility permitted to treat, store, or dispose of such materials.

Prior to the City issuing Kaiser Permanente with a certificate of occupancy, the following will occur:

- A medical waste management plan will be prepared, submitted, reviewed, and approved by the Los Angeles County Department of Environmental Health Hazardous Materials Management Division. The medical waste management plan would describe the types and amounts of medical waste generated and how the waste will be disposed.
- A hazardous materials business plan will be prepared and submitted to the Los Angeles County Department of Environmental Health Hazardous Materials Management Division and Los Angeles County's Fire Department. The hazardous materials business plan would contain information on the location, type, quantity, and health risks of hazardous materials stored and used on the site. Within the hazardous materials business plan, Kaiser Permanente would prepare a chemical inventory for all hazardous materials or waste stored in quantities greater than or equal to 500 pounds of a solid, 55 gallons of a liquid, 200 cubic feet of a compressed gas, highly toxic gases of any amount, and extremely hazardous substances stored in quantities greater than threshold amounts.
- Kaiser Permanente will be required to comply with the provisions of the County's Fire Code, the Los Angeles County Department of Environmental Health Hazardous Materials Management Division, and any additional element as required in the California Health and Safety Code, Article 1, Chapter 6.95 for the business emergency plan.

- Transportation of hazardous materials will comply with all U.S. Department of Transportation, California Department of Transportation, U.S. Environmental Protection Agency, Department of Toxic Substances Control, California Highway Patrol, and California State Fire Marshal regulations.

3.6.5 Impact Analysis

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

Less-than-Significant Impact with Mitigation Incorporated. Government Code, Section 65962.5, combines several regulatory lists of sites that may pose a hazard related to hazardous materials or substances. According to Government Code, Section 65962.5(a), there are no hazardous materials or waste sites located on the project site or near the project site (DTSC 2007).

Stantec interviewed the chairman and CEO of The Jacmar Companies (Mr. Pozzo) and the Operations Manager (Mr. Martinez) on January 20, 2015. According to the Mr. Pozzo, a previous Phase 1 Environmental Site Assessment was conducted at the property and an updated version of the report was provided approximately 10 years ago; however, neither report was available for review during the time of the site reconnaissance by Stantec. Mr. Pozzo noted that the Jacmar facility is the first occupant of the property and no previous uses on the project site were known.

A Phase I ESA was prepared for the project site by Stantec in 2015 (Appendix E). As part of the Phase I ESA, a regulatory agency database search report from EDR was conducted by Stantec (Appendix E). Table 3.6-4 (Summary of Environmental Agency Lists, Search Distance and Listings) provides a summary of the environmental agency listings of hazardous materials sites within one mile of the project site. As shown in Table 3.6-4, the project site was identified in the County's Hazardous Materials System. The project is listed in the County's Hazardous Materials System as having a permitted status with no violations reported (Appendix E).

Table 3.6-5 (Summary of Potential Recognized Environmental Conditions Based Upon Database Evaluation) lists facilities with the most likely potential sources of impact to the project site. Stantec evaluated whether the facility creates a REC for the project site, and the rationale.

Additionally, Stantec checked with the County of Los Angeles Public Health, DTSC, Los Angeles County Department of Public Works, Los Angeles County Department of

Building and Safety and Fire Department, and Los Angeles Regional Water Quality Control Board to see whether the project site had any reported incidences of RECs in connection with the property. No violations were identified by the above-mentioned departments and agencies (Appendix E).

Based on the 2015 site reconnaissance by Stantec, on-site chemical use appeared to be generally limited to biocides and acids; two chemical storage drums, one labeled "Purge water treatment microbiocide" and the second labeled "CT-100 Cooling Tower Treatment" were observed at the project site in association with the previous Jacmar Foods Distribution's cooling tower. Stantec noted that the active ingredient in Purge water treatment microbiocide is Didecyldimethyl ammonium chloride, and the active ingredients in CT-100 Cooling Tower Treatment are Polymaleic acid, Hydroxyethylidene disposphonic acid, and Phosphonobutane tricarboxylic acid. Stantec concluded that the chemicals observed on the project site were not considered a REC (Appendix E).

Based on the information provided by EDR and verified through the U.S. EPA's website, the project site is located outside the San Gabriel Valley Area 2 – Baldwin Park AOC. Stantec concluded that the chemicals used on the project site, as mentioned above, differed from the reported SGV Area 2 – Baldwin Park COCs, which include trichloroethene (TCE), perchloroethylene (PCE), carbon tetrachloride, perchlorate, and N-nitrosodimethylamine (NDMA) (Appendix E).

One pad-mounted Los Angeles Department of Water and Power high-voltage transformer was identified by Stantec to be located on the eastern edge of the project site's current building exterior. Based on Stantec's observation during their 2015 site reconnaissance, the transformer appeared to be in good condition with no observed stains. Two large hydraulic trash compactors were observed near the southwestern corner of the project site's current building. Based on Stantec's observation, the compactors appeared to be in good condition with no observed stains. Twelve hydraulic pit-style dock levelers were observed along the southern side of the project site. Minor staining was observed in the area around the dock levelers; however, no spills or improper chemical handling was observed during Stantec's site reconnaissance in 2015 (Appendix E).

The entire warehouse building that is currently on the project site is constructed on a concrete slab. No cracks were observed during Stantec's 2015 site reconnaissance. Although the historic storage and use of petroleum hydrocarbon and other chemicals at the project site by Jacmar Foods Distribution was determined to be a REC by Stantec, Jacmar Foods Distribution vacated the project site in the summer of 2015 and abatement of the existing on-site hazardous materials will occur, in accordance with the Los Angeles County Department of Environmental Health Hazardous Materials Management Division and Los

Angeles County's Fire Department standards, prior to demolition of the existing building (refer to Section 3.6.4 and Table 2-2, Summary of Project Design Features and Construction Measures, in Chapter 2, Project Description, of the Draft EIR). Additionally, Stantec did not observe significant staining or find evidence of releases at the project site during its site reconnaissance in 2015. On-site chemical use was limited and the concrete upon which chemicals were stored appeared intact (Appendix E). As such, the proposed project would not create a significant hazard to the public or the environment.

According to the Phase I ESA (Appendix E), although lead-based paint is not anticipated to occur based on the age of the existing warehouse building (1999) to be demolished, the presence or absence of asbestos and lead-based paint can only be confirmed with the implementation of a sampling and analytical testing program. As such, mitigation measure **MM-HAZ-1** will be incorporated to ensure impacts are less than significant.

Based on Stantec's review of the regional data by the EPA on average indoor radon concentrations in the vicinity of the project site, the site is located in EPA Radon Zone 2, which is considered to have moderate potential for radon. Since the project includes demolition of an existing building, a radon survey would not be required. The new specialty medical office building would need to be constructed in compliance with the provisions of the California Building Code, Title 24, California Code of Regulations, and U.S. EPA Building Codes for Radon – Resistant New Construction. Based on the above discussion, impacts related to hazards and hazardous materials would be **less than significant with mitigation incorporated.**

3.6.6 Cumulative Impacts

Cumulative impacts would result from projects that combine to increase exposure to hazards and hazardous materials. The potential for cumulative impacts to occur is limited since the impacts from on-site hazardous materials uses have been site-specific. The current use on the project site includes a vacant cold storage warehouse with associated surface parking and landscaping. Although the historic storage and use of petroleum hydrocarbon and other chemicals at the project site by Jacmar Foods Distribution was determined to be a REC by Stantec, Jacmar Foods Distribution vacated the project site in the summer of 2015 and abatement of the existing on-site hazardous materials will occur, in accordance with the Los Angeles County Department of Environmental Health Hazardous Materials Management Division and Los Angeles County's Fire Department standards, prior to demolition of the existing building.

According to the Phase I ESA (Appendix E), although lead-based paint is not anticipated to occur based on the age of the existing warehouse building (1999) to be demolished, the presence or absence of asbestos and lead-based paint can only be confirmed with the implementation of a

sampling and analytical testing program. As such, mitigation measure **MM-HAZ-1**, identified in Section 3.6.7, will be implemented to ensure impacts are less than significant.

During project construction, a hazardous materials spill kit will be maintained on-site for small spills. Additionally, Kaiser Permanente will monitor all contractors for compliance with applicable regulations, including regulations regarding hazardous materials and hazardous wastes, including disposal. Prior to the City issuing Kaiser Permanente with a certificate of occupancy, Kaiser Permanente will prepare a medical waste management plan to be submitted, reviewed, and approved by the Los Angeles County Department of Environmental Health Hazardous Materials Management Division; and a hazardous materials business plan to be submitted to the Los Angeles County Department of Environmental Health Hazardous Materials Management Division and Los Angeles County's Fire Department for approval. Kaiser Permanente will be required to comply with the provisions of the County's Fire Code, the Los Angeles County Department of Environmental Health Hazardous Materials Management Division, and any additional elements as required in the California Health and Safety Code, Article 1, Chapter 6.95 for the business emergency plan. Transportation of hazardous materials will comply with all U.S. Department of Transportation, California Department of Transportation, U.S. Environmental Protection Agency, Department of Toxic Substances Control, California Highway Patrol, and California State Fire Marshal regulations (refer to Section 3.6.4 and Table 2-2, Summary of Project Design Features and Construction Measures, in Chapter 2, Project Description, of the Draft EIR).

Based on the above discussion, the potential for cumulative impacts to occur is limited since the impacts from on-site hazardous materials use have been site-specific. Although each development site from the cumulative projects list has potentially unique hazardous materials considerations, it is expected that future development within the area will comply with federal, state, and local statutes and regulations applicable to hazardous materials. Development of the project site would not, therefore, create a cumulative impact related to exposing the public to hazardous materials. For these reasons, cumulative impacts to the public or environment resulting from the accidental release of hazardous materials would be **less than significant with mitigation incorporated**.

3.6.7 Mitigation Measures

CEQA Guidelines Section 15126.4 requires EIRs to describe feasible measures that can minimize significant adverse impacts. The following mitigation measure has been evaluated for feasibility and is incorporated to reduce potentially significant impacts related to hazardous materials.

MM-HAZ-1 Prior to demolition of the existing building, an asbestos and lead-based paint survey shall be conducted by a California Occupational Safety and Health Administration-certified asbestos and lead-based paint consultant and/or certified site surveillance

technician. A report documenting material types, conditions, and general quantities will be provided, along with photos of positive materials and diagrams. Demolition plans and contract specifications shall incorporate any abatement procedures for the removal of material containing asbestos and/or lead-based paint. All abatement work shall be done in accordance with federal, state, and local regulations, and at the approval of the City of Irwindale Department of Planning.

3.6.8 Level of Significance After Mitigation

Following implementation of mitigation measure **MM-HAZ-1**, project impacts related to hazardous materials would be **less than significant**.

3.6.9 References

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3.7 HYDROLOGY AND WATER QUALITY

This section describes the hydrologic and water quality setting of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project) site and within the project's general vicinity. Analysis within this section identifies associated regulatory requirements and identifies potential impacts related to implementation of the proposed project. The information in this section is based primarily on the following, both included as part of Appendix F:

- KPFF 2016a. *Hydrology and Hydraulic Study, Kaiser Permanente – Irwindale Medical Office Building and Parking Structure*. May 2016.
- KPFF 2016b. *County of Los Angeles Low Impact Development Report, Kaiser Permanente – Irwindale Medical Office Building and Parking Structure*. May 2016.

The Initial Study/Notice of Preparation (IS/NOP) found that the proposed project would have a less than significant impact or no impact as it relates to all of the Hydrology and Water Quality significance criteria identified in the California Environmental Quality Act (CEQA) Guidelines Appendix G (14 CCR 15000 et seq.), with the exception of the proposed project's potential impacts on water quality (Appendix A). As such, this section focuses only on the potential for the proposed project to impact water quality.

3.7.1 Existing Conditions

Regional Watershed

The proposed project is located within the jurisdiction of the Los Angeles Regional Water Quality Control Board (RWQCB), which administers a water quality control plan (Basin Plan) and other water quality programs within the coastal watersheds of Los Angeles and Ventura Counties. The Los Angeles RWQCB is a 5,600-square-mile area that encompasses all coastal drainages flowing to the Pacific Ocean between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County line. The boundaries of the Santa Ana River Basin are demarcated partly by physical watershed divides and partly by administrative boundaries (i.e., Orange County/Los Angeles County line) (Los Angeles RWQCB 1994).

Table 3.7-1 shows the watersheds that encompass the project site as designated by the United States Geological Survey (USGS) Watershed Boundary Dataset as well as the Los Angeles RWQCB Basin Plan. The USGS Watershed Boundary Dataset delineates watersheds according to hydrologic units, which are nested within one another according to the scale of interest. USGS identifies hydrologic units by name and by hydrologic unit code (HUC), which gets longer as the watershed boundaries get more detailed. The Los Angeles RWQCB Basin Plan identifies watersheds in a hierarchical system similar to the USGS Watershed Boundary Dataset, but with

somewhat different watershed names and boundaries. These geographic boundaries are likewise watershed based, but are typically referred to as hydrologic units, areas, and sub-areas. These generally constitute the geographic basis around which many surface water quality problems and goals/objectives are defined in the Basin Plan. The proposed project is within the San Gabriel Valley hydrologic area (Basin No. 405.40), and the Main San Gabriel hydrologic sub-area (Basin No. 405.41), one of the many sub-areas within the Los Angeles RWQCB (see Table 3.7-1) (Los Angeles RWQCB 1994). The USGS Watershed Boundary Dataset indicates the project site is encompassed by the 55-square-mile Santa Fe Flood Control Basin-San Gabriel River Sub-watershed (USGS 2016).

Table 3.7-1
Watershed Designations by Agency/Source

Agency/Source	HUC/Basin No.	Analysis Scale	Name	Size (Sq. Mi.)
USGS Watershed Boundary Dataset	180701	Basin	Ventura/San Gabriel	5,606
	18070106	Sub-basin	San Gabriel	689
	1807010606	Watershed	Lower San Gabriel River	277
	180701060601	Sub-watershed	Santa Fe Flood Control Basin-San Gabriel River	55
Los Angeles RWQCB Basin Plan	4	RWQCB Region	Los Angeles	4,412
	405	Hydrologic Unit (HU)	Los Angeles-San Gabriel River	1,608
	405.40	Hydrologic Area (HA)	San Gabriel Valley	473
	405.41	Hydrologic Sub-area (HSA)	Main San Gabriel	227

Sources: USGS 2016; Los Angeles RWQCB 1994.
Notes: HUC = hydrologic unit code; sq. mi. = square miles

Topography and Drainage

As described in Appendix F, existing site drainage can generally be described as flowing from north to south where stormwater discharges on to the public right of way at Schabarum Avenue. The site's highpoint is at its northeast corner, at about 325 feet above mean sea level (amsl), and its low point, at about 320 feet amsl, is at the southeast corner of the site. This 5-foot grade difference over the site creates a relatively flat area with slopes generally being at around 1%. Additionally, there is a concrete swale along the western parking lot which conveys stormwater to an 18" storm drain. From this point it's transported to the public system, a 30" reinforced concrete pipe (RCP) line running through Schabarum Avenue. This 18" high-density polyethylene (HDPE) line is fed by two area drains before sizing up to a 24" RCP line and discharging to the public 30" line. Approximately 14% of the project site consists of pervious area, with the remaining (86%) consisting of impervious surfaces (roofs, asphalt, parking, driveways) (Appendix F).

In the larger vicinity, stormwater runoff is collected in streets through inlets, catch basins and underground storm drains maintained either privately or by the City of Irwindale, and eventually directed to the San Gabriel River, located on the west side of I-605 (County of Los Angeles 2016). Therefore, the "receiving waters" for the project (i.e., all waters within the flow network downstream of the project site) include the San Gabriel River and the Pacific Ocean.

Surface Water Quality

Several water bodies within the watershed are designated as "water quality-limited" for water quality impairments under the federal Clean Water Act's (CWA's) Section 303(d) (Table 3.7-2). Being "water quality-limited" means that a water body is "not reasonably expected to attain or maintain water quality standards" without additional regulation. The law requires that the U.S. Environmental Protection Agency develop total maximum daily loads (TMDLs) for each impaired water body in the nation (described further below in Section 3.7.2). The TMDLs specify the maximum amount of a pollutant a water body can receive and still meet water quality standards. A TMDL may also include a plan for bringing an impaired water body back within standards. The most recently approved Section 303(d) List of Water Quality Limited Segments, as listed in the 2012 Integrated Report (SWRCB 2016), lists the San Gabriel River, and the San Gabriel River Estuary as impaired water bodies under Section 303(d) of the CWA. Pursuant to listing, the Los Angeles RWQCB will be tasked with developing TMDLs for the listed impairments, which include bacteria/pathogens, cyanide, pH and metals. There are no TMDLs currently approved by the U.S. Environmental Protection Agency that apply to the receiving waters for the project. These impairments are relevant to the proposed project because runoff from the site (along with runoff from the whole watershed) eventually discharges into these waters.

Table 3.7-2
CWA Section 303(d) Impairments

Name	Pollutant/Stressor	Potential Sources	TMDL Status	Year
San Gabriel River	Indicator Bacteria (Reach 3)	Source Unknown	Scheduled	2021
	Coliform Bacteria (Reach 1 and 2)	Source Unknown	Scheduled	2019
	Cyanide (Reach 2)	Source Unknown	Scheduled	2021
	Lead (Reach 2)	Source Unknown	Scheduled	2007
	pH (Reach 1)	Source Unknown	Scheduled	2009
San Gabriel River Estuary	Copper	Source Unknown	Scheduled	2007
	Dioxin	Source Unknown	Scheduled	2021
	Nickel	Source Unknown	Scheduled	2021
	Dissolved Oxygen	Source Unknown	Scheduled	2021

Source: SWRCB 2016.
Notes: CWA = Clean Water Act, TMDL = total maximum daily load, DDT = , PCBs = polychlorinated biphenyls.

3.7.2 Regulatory Setting

Federal

Clean Water Act

The CWA (33 U.S.C. 1251 et seq.), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Key sections of the act are as follows:

- Sections 303 and 304 provide for water quality standards, criteria, and guidelines. Under Section 303(d) of the CWA, the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives and establish TMDLs for each pollutant/stressor. The water quality impairments relevant to the project are shown in Table 3.7-2; there are no TMDLs applicable to the project's watershed.
- Section 401 (Water Quality Certification) requires an applicant for any federal permit that proposes an activity which may result in a discharge to waters of the United States, to obtain certification from the state that the discharge will comply with other provisions of the act. As there are no jurisdictional waters on the project site, no water quality certification under CWA Section 401 would be required.
- Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the SWRCB and the nine Regional Water Quality Control Boards, who have several programs that implement individual and general permits related to construction activities, municipal stormwater discharges, and various kinds of non-stormwater discharges.
- Section 404 establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by the U.S. Army Corps of Engineers and the EPA. As there are no jurisdictional waters on the project site, the project would not require a permit under CWA Section 404.

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level this includes the EPA and the U.S. Army Corps of Engineers. At the state level, with the exception of tribal lands, the California EPA and its sub-agencies, including the SWRCB, have been delegated primary responsibility for administering and enforcing the CWA in California.

State

Porter-Cologne Act

The Porter–Cologne Act (codified in the California Water Code, Section 13000 et seq.) is the primary water quality control law for California. Whereas the CWA applies to all waters of the United States, the Porter–Cologne Act applies to waters of the state, which includes isolated wetlands and groundwater in addition to federal waters. It is implemented by the SWRCB and the nine RWQCBs. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state[1] could cause pollution or nuisance, including impacts to public health and the environment.

The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. California Water Code Section 13260 subdivision (a) requires that any person discharging waste or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the state, to file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit is required, which is issued under both state and federal law; for other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as groundwater and isolated wetlands), Waste Discharge Requirements (WDRs) are required and are issued exclusively under state law. WDRs typically require many of the same best management practices (BMPs) and pollution control technologies as required by NPDES-derived permits.

Basin Planning

The California legislature has assigned the primary responsibility to administer and enforce statutes for the protection and enhancement of water quality, including the Porter–Cologne Act and portions of the CWA, to the SWRCB and its nine RWQCBs. The SWRCB provides state-level coordination of the water quality control program by establishing statewide policies and plans for implementation of state and federal regulations. The nine RWQCBs throughout California adopt and implement Basin Plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems. The Los Angeles RWQCB is responsible for the protection of the beneficial uses of waters within the coastal watersheds of Los Angeles and Ventura counties, including the project area.

[1] "Waters of the state" are defined in the Porter–Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050(e)).

The *Water Quality Control Plan Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (California Water Code Sections 13240–13247) (Los Angeles RWQCB 1994). The Los Angeles RWQCB Basin Plan must conform to the policies set forth in the Porter-Cologne Act as established by the SWRCB in its state water policy. The Porter-Cologne Act also provides the RWQCBs with authority to include within their basin plan water discharge prohibitions applicable to particular conditions, areas, or types of waste. The Basin Plan is continually being updated to include amendments related to implementation of TMDLs, revisions of programs and policies within the Los Angeles RWQCB region, and changes to beneficial use designations and associated water quality objectives.

NPDES and WDR Permits

The NPDES and WDR programs regulate construction, municipal, and industrial stormwater and non-stormwater discharges under the requirements of the CWA and the Porter–Cologne Water Quality Control Act. The construction stormwater program is administered by the SWRCB, while the municipal stormwater program and other WDRs are administered by the Los Angeles RWQCB. Table 3.7-3 lists the water-quality-related permits that would apply directly or indirectly (through implementing City ordinances) to the project, each of which is further described below.

Table 3.7-3
State and Regional Water Quality-Related Permits and Approvals

Program/Activity	Order Number/ NPDES Number	Permit Name	Affected Area
Construction Stormwater Program	2009-0009-DWQ/ CAS000002, as amended	NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit)	Statewide
Municipal Stormwater Program	Los Angeles RWQCB Order No. R4-2012-0175 / CAS004001	Waste Discharge Requirements for the Municipal Separate Storm Sewer System (MS4) Discharges (Los Angeles County MS4 Permit)	Coastal Watersheds of Los Angeles County, Except those discharges originating from the City of Long Beach MS4
Non-Stormwater Discharge to Land	SWRCB Order No. 2003-0003-DWQ	Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality (WDR for Discharge to Land)	Statewide

Notes: NPDES = National Pollutant Discharge Elimination System; MS4 = municipal separate storm sewer system; WDR = Waste Discharge Requirement

Construction General Permit (SWRCB Order 2009-0009-DWQ, as amended). For stormwater discharges associated with construction activity in the State of California, the SWRCB has adopted the *General Permit for Storm Water Discharges Associated with*

Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects in which construction activity disturbs one acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires the development and implementation of a stormwater pollution prevention plan (SWPPP), which would include and specify water quality BMPs designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off site into receiving waters. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB.

As nearly all of the 4-acre site will need to be disturbed for construction activity, the proposed project would require coverage under the Construction General Permit.

Municipal Stormwater Permit (Los Angeles RWQCB Order No. R4-2012-0175, as amended). The *Waste Discharge Requirements for the Municipal Separate Storm Sewer System (MS4) Discharges from the Coastal Watersheds of Los Angeles County, except those discharges originating from the City of Long Beach MS4* (MS4 Permit) covers 84 cities and most of the unincorporated areas of Los Angeles County. Under the MS4 Permit, the Los Angeles County Flood Control District is designated as the Principal Permittee. The Permittees are the 84 Los Angeles County cities and Los Angeles County. Collectively, these (including the City of Irwindale) are the "Co-Permittees." The Principal Permittee helps to facilitate activities necessary to comply with the requirements outlined in the MS4 Permit but is not responsible for ensuring compliance of any of the other Permittees.

The MS4 Permit requires Co-Permittees to implement a development planning program to address stormwater pollution. These programs require project applicants for certain types of projects to implement Standard Urban Stormwater Mitigation Plans (SUSMP) throughout the operational life of their projects. The purpose of SUSMP is to reduce the discharge of pollutants in stormwater by outlining BMPs which must be incorporated into the design plans of new development and redevelopment. The proposed project is a regulated project for this purpose, and would prepare and implement a SUSMP. The City of Irwindale enforces the provisions of the Los Angeles County MS4 Permit through its Storm Water and Urban Runoff Pollution Ordinance (Municipal Code Chapter 8.28).

The Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality (SWRCB Order No. 2003-0003-DWQ): This general order applies to projects that discharge to land where the discharge has a low threat to water quality. These are typically low-volume discharges with minimal pollutant concentrations such as well water

discharges, small temporary dewatering projects, and hydrostatic testing discharges of clear water. The primary difference between this permit and the permits under the NPDES program is the destination of the water. This permit regulates discharges to land and the previous sections discuss discharges to storm drains or receiving waters. For instance, if a dewatering discharge will be piped to an infiltration basin during construction, and such activity is not already covered under the Construction General Permit, this permit could apply.

Local

Irwindale General Plan

According to *Resource Management Element Policy 9*, the City will continue to cooperate with the other agencies that are charged with improving air and water quality in the region (City of Irwindale 2008).

In addition, the General Plan commits to continuing its Stormwater Pollution Prevention program. This program is designed to prevent contaminants from entering the storm drain system. A key element of this program is the National Pollution Discharge Elimination System (NPDES) requirements, which are administered through a countywide permit. These requirements call for measures to be imposed during construction activities, handouts for residential uses, and best management practices (BMPs) for non-residential uses. The City shall also continue to implement projects to maintain storm water quality, such as street sweeping, catch basin grills, signs, etc. (City of Irwindale 2008).

Irwindale Municipal Code

Irwindale Municipal Code Chapter 8.28 (Storm Water and Urban Runoff Pollution) implements NPDES requirements by a) regulating non-storm water discharge to the municipal storm water system, b) providing for the control of spillage, dumping, or disposal of materials into the municipal storm water system, and c) reducing pollutants in storm water and urban runoff to the maximum extent practicable. Specifically, Section 8.28.130 requires new development and redevelopment projects to comply with standard urban stormwater mitigation program (SUSMP) conditions assigned by the city that consist of (1) low impact development (LID) structural and non-structural best management practices (BMPs); (2) source control BMPs; and (3) structural and non-structural BMPs for specific types of uses. LID controls effectively reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff. Source control BMPs prevent runoff contact with pollutant materials that would otherwise be discharged to the MS4. The main compliance documents required for project permitting consists of a Standard Urban Stormwater Mitigation Plan (SUSMP), which must be reviewed and approved by the City, and must include a long term maintenance agreement to ensure all features remain effective and operational.

3.7.3 Thresholds of Significance

The following significance criteria are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), and will be used to determine the significance of potential hydrology and water quality impacts. Impacts related to hydrology and water quality would be significant if the proposed project would:

a) Violate any water quality standards or waste discharge requirements?

As indicated in the IS/NOP (Appendix A), the proposed project would have no impact or a less than significant impact with respect to all other issues areas—including depletion of groundwater supplies, interference with groundwater recharge, alteration of drainage patterns, exceedance of stormwater drainage system capacity, and flood-related issues. Therefore, those issues are not discussed in this Draft EIR.

As a requirement of development approvals (refer to Section 2.6), all drainage and stormwater quality BMPs identified in Appendix F, are considered as part of the project design. Therefore CEQA significance determinations for the project impacts are made after considering their effectiveness at addressing water quality issues.

3.7.4 Impacts Analysis

a) Would the project violate any water quality standards or waste discharge requirements?

Short Term Impacts of Construction and Demolition

The proposed project would include demolition and construction activities that together would result in land disturbances of approximately four acres. Such activities have the potential to adversely affect the quality of stormwater runoff through increases in turbidity, sedimentation, and construction-related pollutants.

Because land disturbance for project construction activities would exceed one acre, a General Construction Activity Stormwater Permit (Construction General Permit, Order 2009-0009-DWQ) issued by the State Water Resources Board would be required prior to the start of construction on the project site. Irwindale Municipal Code Section 8.28.110 does not allow issuance of grading permits or commencement of construction without proof of having obtained a Construction General Permit from the SWRCB. Specifically, it requires that the following be kept on-site at all times: (i) a copy of the Notice of Intent to Comply with Terms of the General Permit to Discharge Water Associated with Construction Activity; (ii) a waste discharge identification number issued by the SWRCB; (iii) a Storm Water Pollution Prevention Plan and Monitoring Program Plan for

the construction activity requiring the construction permit; and (iv) records of all inspections, compliance and non-compliance reports, evidence of self-inspection and good housekeeping practices.

The SWPPP requires the construction contractor to implement water quality BMPs to ensure that water quality standards are met, and that stormwater runoff from the construction work areas do not cause degradation of water quality in receiving water bodies (in this case the regional storm drain system and the San Gabriel River). The SWPPP must describe the type, location and function of stormwater BMPs to be implemented, and must demonstrate that the combination of BMPs selected are adequate to meet the discharge prohibitions, effluent standards, and receiving water limitations contained in Construction General Permit. The following list includes examples of construction water quality BMPs that are standard for most construction sites subject to the Construction General Permit:

- Silt fences and/or fiber rolls installed along limits of work and/or the project construction site;
- Stockpile containment and exposed soil stabilization structures (e.g., visqueen, fiber rolls, gravel bags and/or hydroseed);
- Runoff control devices (e.g., fiber rolls, gravel bag barriers/chevrons, etc.) used during construction phases conducted during the rainy season;
- Wind erosion (dust) controls;
- Tracking controls at the site entrance, including regular street sweeping and tire washes for equipment;
- Prevention of fluid leaks (inspections and drip pans) from construction vehicles;
- Materials pollution management;
- Proper waste/trash management;
- Regular inspections and maintenance of BMPs.

These BMPs would be refined and/or added to as necessary by a qualified SWPPP professional to meet the performance standards in the Construction General Permit.

Compliance with the Construction General Permit and the Irwindale Municipal Code Section 8.28.110 would ensure that stormwater runoff from the site during construction would not violate water quality standards or waste discharge requirements. Therefore, the construction-related impacts of the proposed project with respect to water quality are considered **less than significant**. No mitigation is required.

Long Term Impacts of Facility Operation and Maintenance

Land uses on-site that could contribute pollutants to stormwater runoff in the long term include uncovered parking areas (through small fuel and/or fluid leaks), uncovered refuse storage/management areas, landscape/open space areas (if pesticides/herbicides and fertilizers are improperly applied), and general litter/debris (e.g., generated during facility loading/unloading activities). During storm events, the first few hours of moderate to heavy rainfall could wash a majority of pollutants from the paved areas where they could enter the municipal storm drain system before eventually being discharged to the San Gabriel River. The majority of pollutants entering the storm drain system in this manner would be dust, litter, and possibly residual petroleum products (e.g., motor oil, gasoline, diesel fuel); however, certain metals, along with nutrients and pesticides from landscape areas, can also be present in stormwater runoff. Between periods of rainfall, surface pollutants tend to accumulate, and runoff from the first significant storm of the year ("first flush") will likely have the largest concentration of pollutants. Given the enormous size (689 square miles) and highly urbanized character of the San Gabriel River watershed, the project site contribution to pollutant loads in receiving waters would be negligible (even if uncontrolled). However, because water quality is a cumulatively significant issue in the region, even small contributions could be cumulatively significant.

As a permittee subject to the MS4 permit, the City of Irwindale is responsible for ensuring that all new development and redevelopment projects comply with the performance criteria contained in the MS4 Permit, and does so primarily through enforcement of Irwindale Municipal Code Chapter 8.28 (Storm Water and Urban Runoff Pollution). The proposed project meets the definition of a redevelopment project and thus will be required to control pollutants, pollutant loads, and runoff volume emanating from the project site by: (1) minimizing the impervious surface area and implementing source control measures, (2) controlling runoff from impervious surfaces using structural BMPs (e.g., infiltration, bioretention and/or rainfall harvest and re-use), and (3) ensuring all structural BMPs are monitored and maintained for the life of the project. Redevelopment of the project site will ensure that modern performance standards related to retention and treatment of site runoff are integrated into the proposed project.

Information provided in Appendix F determines the required stormwater treatment volume for the project (which is based on the 85th percentile storm[2]) and describes the project's approach to complying with the MS4 Permit and Irwindale Municipal Code Chapter 8.28. According to the analysis, the proposed project would slightly change the grades on site, but would maintain the general drainage pattern by directing all on-site

[2] The 85th percentile storm for the project site is 0.96 inches, meaning 85% of all 24 hour periods with measurable rainfall within the historical record produced 0.96 inches or less of precipitation.

drainage to the storm drain line along Schabarum Avenue. Furthermore, the project would maintain a similar ratio of pervious to impervious areas that currently exists on-site. The project site would go from being about 85% impervious under existing conditions to being 86% impervious under proposed conditions[3]. It was determined that the design rate and volume for the purpose of stormwater quality treatment is 1.11 cubic feet per second and 11,122 cubic feet, respectively (Appendix F).

Based on the characteristics of the site, and the preferred treatment hierarchy found in the County of Los Angeles Low Impact Development Handbook, infiltration was considered the preferable method of treatment, given soil percolation testing and other factors make it feasible (Appendix F). A Contech CMP Infiltration System is being proposed to allow pretreatment and infiltration of the treatment design volume. The Contech CMP Infiltration system is designed with perforated corrugated metal pipes in a stabilized infiltration basin allowing water to be stored and percolate as soils allow. Pretreatment will occur in the form of a "CDS unit", which screens, separates and traps trash, debris, sediment, and hydrocarbons from stormwater runoff before entering the infiltration system. The system will be sized to contain 100% of the design volume (i.e., 11,122 cubic feet), will be provided with an overflow, and allowed to infiltrate captured stormwater at its own rate. The site specific system would encompass an approximate 26' x 96' footprint below the surface of the at-grade parking lot for the MOB. In the case of a storm event greater than the 85th percentile, for which the infiltration system is designed, an overflow is built into the system to allow water to overflow into the existing 30" line along Schabarum Avenue.

Appendix F also prescribes other, non-structural BMPs to address water quality. These include:

- Regular sweeping of all open and planter areas, at a minimum, on a weekly basis in order to prevent dispersal of pollutants that may collect on those surfaces;
- Regular pruning of the trees and shrubs in the planter areas to avoid formation of dried leaves and trigs, which can clog surface inlets and drains;
- Trash and recycling containers shall be used such that, if they are to be located outside, are fully enclosed and watertight in order to prevent contact of stormwater with wastewater, which can be a potential source of bacteria and other pollutants in runoff;
- Educational training materials for the owners, to be made aware of the structural BMP installed in the project, their maintenance requirements; and materials to brief

[3] The impervious surface ratio for the proposed project was determined by taking the weighted average of drainage sub-areas shown in Appendix F, Table L.1.

owners about chemical management and proper methods of handling and disposing of wastes; and

- Minimize the use of pesticides and fertilizers to the maximum extent practicable with on-site landscaping.

Appendix F demonstrates that the project is designed to comply with Irwindale Municipal Code Section 8.28 and the Regional MS4 Permit. Since the applicant and/or its contractor will be required to integrate these measures into the proposed project, the long-term impacts of operation and maintenance activities for the project would be **less than significant**. No mitigation is required.

3.7.5 Cumulative Impacts

The cumulative effects of past projects—both point sources of pollution and non-point sources caused by urbanization—have resulted in substantial water quality problems in the region's major waterways. The existing impairments identified under Section 303(d) of the CWA and Table 3.7-2 represent cumulative impacts of urban development within the watersheds draining to the San Gabriel River and eventually the Pacific Ocean. The pollutants causing impairments include bacteria/pathogens, pH, dissolved oxygen, cyanide, and metals (lead, copper, nickel).

For the most part, the primary pollutants of concern for the proposed project do not include those for which the downstream receiving waters are impaired. Pollutants of concern associated with the proposed project would be associated with the construction phase (e.g., sediment, fuels, litter), private vehicle use (e.g., any leakage of grease/oils), landscaping/grounds work (e.g., improper/excessive use of pesticides, herbicides, and/or fertilizers), and/or trash (e.g., due to improper waste disposal). Trash and/or fertilizers, however, could indirectly contribute to a bacteria, pathogen or dissolved oxygen problem by contributing to excessive algae growth and/or eutrophication. The release of such pollutants, however, would be highly localized, periodic in nature, and minor in magnitude; especially when compared to the total volume of stormwater discharges that would be entering the project's receiving waters from the whole watershed (i.e., the San Gabriel River). Furthermore, such impacts would be avoided or substantially minimized through compliance with terms and conditions of the regional NPDES permits and Irwindale Municipal Code Section 8.50.050—as well as the ordinance codes of other municipalities in the region—which all require implementation of a SWPPP and a SUSMP for development and redevelopment projects.

For these reasons, the proposed project's contribution to cumulatively significant impacts on hydrology and water quality would be less than cumulatively considerable. Cumulative impacts are considered **less than significant**. No mitigation is required.

3.7.6 Mitigation Measures

No significant hydrology and water quality impacts would occur; therefore, no mitigation measures are required.

3.7.7 Significance After Mitigation

Overall, the proposed project would result in **less than significant** impacts with respect to hydrology and water quality. No mitigation is required.

3.7.8 References

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3.8 LAND USE AND PLANNING

This section describes the existing land use designations; identifies associated regulatory requirements; and evaluates potential land use impacts related to implementation of the proposed Kaiser Permanente Specialty Medical Office Facility Project (proposed project). This section provides analysis as to whether the proposed project would have potentially adverse impacts due to conflicts with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The design guidelines consistency analysis that supports the analysis in this section is provided as part of Appendix G.

The Initial Study and Notice of Preparation (IS/NOP) found that the proposed project would have a less than significant impact as it relates to physical division of an established community and no impact as it relates to conflicts with a habitat conservation plan or natural community conservation plan (Appendix A). As such, these impacts will not be addressed further in this Draft Environmental Impact Report (EIR).

3.8.1 Environmental Conditions

Existing Land Uses

The project site is currently developed with a vacant, cold storage warehouse. The on-site structure is comprised of the following areas: an approximately 52,800-square-foot (sf) dry warehouse with 12 truck loading areas; an approximately 7,889-sf cooler; an approximately 11,291-sf freezer; and a two-story 11,522-sf office building with associated surface parking and landscaping. The project site was previously operated by Jacmar Foods Distribution from 1999 until 2014. Jacmar Foods Distribution vacated the project site in the summer of 2015 and relocated to the City of Industry. There is also an existing static billboard on the southwest corner of the property, which would remain in place upon project implementation.

Surrounding Land Uses

The project site is located in an urban environment, generally bounded by the Vulcan Durbin Quarry to the north, industrial/business park uses to the east and south, and the Interstate 605 (I-605) freeway immediately to the west. The San Gabriel River is located approximately 580 feet to the west of the project site.

3.8.2 Relevant Plans, Policies, and Ordinances

City of Irwindale General Plan – Community Development Element

The Community Development Element designates the general distribution and intensity of land use and development contemplated within the geographic area governed by the General Plan.

This element also discusses urban design and economic development. The proposed project site is in the Southwestern Planning Area of the General Plan. The project site is located within an area mapped as an existing industrial zone (City of Irwindale 2008a, Exhibit 2-2 "Commercial and Industrial Land Uses in Irwindale"). The project site is designated for Industrial/Business Park land uses in the General Plan Land Use Map (City of Irwindale 2015a). As stated in the General Plan, this land use designation corresponds to the following zone districts: C-M (Commercial Manufacturing), M-1 (Light Manufacturing), and the M-2 (Heavy Manufacturing). The maximum floor area ratio (FAR)[1] for properties within the Industrial/Business Park designation is 1.0 to 1.0 (City of Irwindale 2008a).

City of Irwindale Municipal Code Chapter 17.56 (M-2 Heavy Manufacturing Zone)

The project site is currently zoned M-2 (City of Irwindale 2015a). Permitted uses within the M-2 zone include horn products, manufacture; lamp black, manufacture; oil cloth or linoleum manufacture; plumbing supply, outside storage screened; roofing material manufacture; statuary, manufacturing of clay, papier mache, stone statuary and monuments; stone monuments and tombstone works; wood products, manufacture (excluding planning mill); and accessory buildings and uses customarily incidental to any of the above uses. M-1 zoned uses, C-M zoned uses, C-3 (Heavy Commercial-Residential) zoned uses, C-2 (Heavy Commercial) zoned uses, C-1 (Commercial) zoned uses, and C-P (Commercial Professional) zoned uses are also permitted within the M-2 zone subject to Chapters 17.52, 17.48, 17.44, 17.40, 17.36, 17.32, respectively, of the City's Municipal Code. Medical clinics are conditionally permitted in the C-1 zone (Ordinance 648). The proposed medical office building is, therefore, considered a conditionally permitted use in the M-2 zone (City of Irwindale 2015a, 2015b).

City of Irwindale Commercial and Industrial Design Guidelines

The City adopted the Commercial and Industrial Design Guidelines (Design Guidelines) to ensure the successful integration of commercial and industrial projects into the City with the goal of creating a more aesthetically and functionally cohesive community. The Design Guidelines are divided into three key sections: design principles, detailed design guidelines, and design review processes (City of Irwindale 2009).

City of Irwindale Municipal Code Chapter 17.70 (Site Plan and Design Review)

This chapter of the Municipal Code requires site plan and design review for new structures as well as for improvements, additions, extensions, and/or exterior alternations to existing structures. The purpose of site plan and design review is to ensure that proposed development in the City is in conformity with Chapter 17.70 and to ensure that proposed development is

[1] Floor area ratio is defined as the ratio of the building floor area to the site area (City of Irwindale 2008a).

compatible with surrounding development in terms of scale, style, and construction materials. The criteria for site plan and design review that are set forth in this chapter incorporate criteria from the Commercial and Industrial Design Guidelines. Properties subject to this chapter of the Municipal Code may only be developed, used, and maintained in accordance with the approved site plan and design review and the Commercial and Industrial Design Guidelines. The proposed project would be subject to a site plan and design review permit per Municipal Code Section 17.70.010(A).

3.8.3 Thresholds of Significance

The following significance criteria, included in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), will determine the significance of a land use impact. Impacts related to land use would be significant if the proposed project would:

a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

3.8.4 Project Elements That Can Reduce Impacts

There are no project design features or elements that will reduce impacts related to consistency with land use plans, policies, or regulations.

3.8.5 Impact Analysis

a) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project would result in the development of a medical office building (MOB) at the site of a vacant warehouse. The project's consistency with land use plans and policies applicable to the project site is analyzed in the subsections below. Applicable land use plans and policies consist of the General Plan, the Commercial and Industrial Design Guidelines, and the Zoning Ordinance.

General Plan Consistency

The project site is designated for Industrial/Business Park land uses in the General Plan. As stated in the General Plan, typical land uses and/or developments that occur within areas designated as Industrial/Business Park consist of light industry, heavy industry, and

distribution. The General Plan provides a definition for light industrial and business park uses in the City, which is as follows:

This type of development is usually well landscaped, provides abundant parking, and a uniform architectural design theme. These attractive developments typically include office, manufacturing, and warehousing uses.

The design of the proposed MOB meets the definition of industrial/business park land uses provided in the General Plan. The proposed development would be well landscaped. It would include a native garden, landscape planters throughout the surface parking areas, an urban plaza with landscaping, paths and garden areas, and landscaping around the perimeter of the site. The proposed project would provide parking, including a surface parking lot proving 111 spaces and a five-story parking structure providing 339 spaces. The proposed project would also have a uniform architectural design that is consist with the City's Commercial and Industrial Design Guidelines. The proposed project would be subject to site plan and design review, pursuant to Chapter 17.70 of the Municipal Code, which would ensure that the project design complies with these Design Guidelines and is compatible with surrounding development in terms of architectural style and materials. Additionally, the proposed project would develop medical offices, consistent with the use of industrial/business park areas for office space. For these reasons, the proposed project fits the definition of industrial and business park land uses that is described in the General Plan.

The General Plan also sets forth the required FAR for developments within areas designed as Industrial/Business Park. The required FAR is 1.0 to 1.0. The FAR for the proposed project is approximately 1.16 to 1.0 (204,743 sf of total building area/175,982 sf site area). Therefore, a zone variance would be required to exceed the maximum allowable floor area ratio on-site. The General Plan also provides the corresponding zone districts for the Industrial/Business Park land use designation, one of which is M-2. The project site is within the M-2 zone, and the proposed MOB is a conditionally permitted use within this zone.

For the reasons described above, the proposed project is consistent with the General Plan land use designation for the project site. In addition to the land use designation for the project site, the proposed project is also subject to General Plan policies. Table 3.8-1 outlines the applicable policies identified in the General Plan Community Development Element and the proposed project's consistency with each of these policies.

Table 3.8-1
General Plan Policy Consistency Analysis

Policy	Analysis
Land Use Planning	
(Community Development Element Policy 1) The City of Irwindale, through continued comprehensive land use planning, will strive to preserve the overall mix of land uses and development in the community.	Consistent. The proposed project would establish an MOB at the site of a vacant warehouse building, within an existing and established industrial/business park area. As described throughout this section, the proposed MOB is consistent with the industrial/business park land use designation of the project site. While the proposed project represents a minor change in land use on the site (from a warehouse to an MOB), the proposed use of the site would remain consistent with the industrial/business park designation. As such, the proposed project would contribute to the preservation of the overall mix of land uses in the City. The minor change in land use at the site would not alter the overall mix of land uses in the City.
(Community Development Element Policy 2) The City of Irwindale will continue to plan for the transition of the quarries located within the City to other land uses.	Consistent. The proposed project is not located on the site of a quarry. However, it is located directly south of an existing quarry (the Vulcan Durbin Quarry). The Vulcan Durbin Quarry is currently subject to the Irwindale–Durbin Amended Reclamation Plan (City of Irwindale 2008b). This reclamation plan and the City's General Plan have established anticipated, planned land uses for the Vulcan Durbin Quarry site once the quarry has been reclaimed. These planned land uses consist of recreational use and commercial/retail use (City of Irwindale 2008a, 2008b). The reclamation process at the quarry is anticipated to be completed around 2035 (City of Irwindale 2008b). The proposed land use for the project site (an MOB) would not interfere with the current operation of the Vulcan Durbin Quarry, and it would be consistent with the planned land uses of recreation, commercial, and retail that are anticipated to be developed at the site of the quarry in the future. As such, the proposed project would not preclude the City from planning for the transition of the Vulcan Durbin Quarry to other land uses.
(Community Development Element Policy 3) The City of Irwindale will continue to ensure that the type, location, and intensity of all new development and intensified developments adhere to the requirements that are specified for their particular land use category in the General Plan.	Consistent. As described in the paragraphs above, the proposed project is consistent with the Industrial/Business Park land use designation that has been applied to the project site. The proposed MOB is a conditionally allowable use within the M-2 Zone, which is one of three zone districts that fall within the Industrial/Business Park land use category.
(Community Development Element Policy 5) The City of Irwindale will continue to promote comprehensive development consistent with this General Plan as opposed to piecemeal and incremental planning.	Consistent. The proposed project is consistent with the General Plan land use designation of the project site and with the General Plan land use policies, as demonstrated throughout this section. The proposed project is located within an existing industrial/business park area and is consistent with the Industrial/Business Park land use designation that has been applied to this area.
Economic Development	
(Community Development Element Policy 7) The City of Irwindale will continue to promote economic development through the use of redevelopment.	Consistent. The project site is currently developed with a vacant warehouse. The proposed project would redevelop this underutilized site with an MOB that would provide employment and would serve Kaiser Permanente members throughout the City and surrounding communities. As such, the proposed project would support the City's promotion of economic development through redevelopment projects.
(Community Development Element Policy 9) The City of Irwindale will strive to ensure	Consistent. The proposed MOB would be constructed, operated, and maintained by Kaiser Foundation Health Plan, Inc., which is a California nonprofit public

Table 3.8-1
General Plan Policy Consistency Analysis

Policy	Analysis
that future development, supported in whole or part through redevelopment, is fiscally sound.	benefit corporation. The development is considered to be fiscally sound.
(Community Development Element Policy 10) The City of Irwindale will promote development that will benefit the community as a whole in terms of both jobs and revenue generation.	Consistent. The proposed MOB would provide numerous medical services for Kaiser Permanente members throughout the City and surrounding communities. (Refer to Table 2-1 in this EIR for details regarding the types of medical services that are anticipated to be provided within the proposed MOB). The proposed MOB would serve Kaiser Permanente's "Baldwin Park Service Area," which is anticipated to have 297,729 Kaiser Permanente members at the time of project buildout (2019) and approximately 325,517 members by 2024 (Kaiser Foundation Health Plan, Inc. 2016). As such, the proposed MOB would provide employment opportunities, revenue for the City from property tax and from any project component that produce sales tax, and medical services that can be used by City residents and residents of surrounding communities. The project design would also allow for an open plaza and amphitheater area, which would create a community space where one did not previously exist (Appendix G).
(Community Development Element Policy 11) The City of Irwindale will permit quarry operations to continue as long as it is feasible to do so and only if the quarries are operating in a healthful and safe manner pursuant to existing codes and regulations.	Consistent. While the proposed project would not be located on the site of a quarry, the project site is bordered to the north by an existing, operational quarry (the Vulcan Durbin Quarry). Development of an MOB at the site of a vacant warehouse would not affect the Vulcan Durbin Quarry's ability to operate in a healthful and safe manner, nor would it interfere with the City's ability to enforce existing codes and regulations to sure the continued operation of this quarry in a healthful and safe manner.
Urban Design	
(Community Development Element Policy 12) The City of Irwindale will continue to promote quality design in the review and approval of commercial and industrial development through the application of the commercial and industrial design guidelines.	Consistent. The proposed project would be consistent with the Commercial and Industrial Design Guidelines. (See the analysis under the subsection titled "Design Guidelines Consistency.") Additionally, as described in Section 3.8.2, the proposed project is subject to Municipal Code Chapter 17.70, which requires the project to undergo site plan and design review. In accordance with Chapter 17.70, the proposed site plan and project design for the MOB would be reviewed and approved by the City prior to project implementation, thereby ensuring that the project is consistent with the City's design standards. As stated in Chapter 17.70, properties subject to this chapter of the Municipal Code "may only be developed, used and maintained in accordance with the approved site plan and design review and the commercial and industrial design guidelines."
(Community Development Element Policy 13) The City of Irwindale will continue to employ a design theme in the review of future commercial and industrial development and in the rehabilitation of existing commercial and industrial uses.	Consistent. As described above in the consistency analysis for Policy 12, the proposed project would be subject to site plan and design review. As such, the City would be able to employ a design theme in their review of the project. The proposed project would be consistent with the City's Design Guidelines that have been developed for commercial and industrial uses (see the analysis under the subsection titled "Design Guidelines Consistency").
(Community Development Element Policy 14) The City of Irwindale will continue to promote property maintenance in all areas of the City.	Consistent. Once developed, the proposed MOB would be maintained by Kaiser Permanente in accordance with City requirements.

Table 3.8-1
General Plan Policy Consistency Analysis

Policy	Analysis
(Community Development Element Policy 16) The City of Irwindale will continue to work towards the development of streetscape, sign standards, and a Public Art Program.	Consistent. Regarding streetscape, the proposed project site is located within an existing business park area and lacks street frontage. However, the MOB would include streetscape improvements within the site, including pedestrian pathways, an urban plaza, landscaping, and seating. The proposed project would not hinder the City from developing and enforcing streetscape improvement guidelines for projects with street frontages. Regarding sign standards, the Commercial and Industrial Design Guidelines set forth standards for signs on commercial and industrial developments. The proposed signage would be consistent with the Design Guidelines (see the analysis under the subsection titled "Design Guidelines Consistency"). Furthermore, the proposed signage package would be submitted to the City for review and approval, pursuant to Municipal Code Chapter 17.70, which would ensure consistency with the City's sign standards. Regarding public art, the proposed urban plaza that would be developed on the site would incorporate work commissioned by a local artist (Appendix G).
(Community Development Element Policy 17) The City of Irwindale will continue to encourage a balance of commercial uses to avoid an overconcentration of uses to best serve the residents, employee population, and business community.	Consistent. The proposed project would implement a medical office use within an existing industrial/business park area. The medical offices would serve the residents, provide approximately 264 employment opportunities in the City, and bring a new business (Kaiser Permanente) to the City.

Source: City of Irwindale 2008; Kaiser Foundation Health Plan, Inc. 2016

Design Guidelines Consistency

The City's Commercial and Industrial Design Guidelines establish design principles, detailed design guidelines, and a design review process to ensure that commercial and industrial projects within the City contribute to an aesthetically and functionally cohesive community. The proposed project has been designed to incorporate these design principles and detailed design guidelines, and the proposed project would be subject to the design review process described in the Design Guidelines. The ways in which the proposed project implements the design principles and detailed design guidelines are described in Appendix G. As demonstrated in Appendix G, the proposed project would be designed in manner that is consistent with the Commercial and Industrial Design Guidelines.

Zoning Ordinance Consistency

The project site is within the M-2 zone. As described in Section 3.8.2, Relevant Plans, Policies, and Ordinances, an MOB is considered a conditionally permitted use within this zone. Uses that are allowed within M-1 zones, C-M zones, C-3 zones, C-2 zones, C-1 zones, and C-P zones are also permitted within the M-2 zone subject to the chapters of

the Municipal Code that provide regulations for each of those zone districts. Medical clinics are conditionally permitted in the C-1 zone(Ordinance 648). As such, the proposed MOB is a conditionally permitted use within the M-2 zone (City of Irwindale 2015). The M-2 zone does not have a maximum height limit; as such, the proposed buildings heights would not conflict with the zoning ordinance. The proposed project would be subject to the regulations established in Subsection 17.36.015(3) of the Municipal Code and would comply with those regulations.

New construction requires the approval of a Site Plan and Design Review (DA) in addition to a CUP and zone variance to exceed the maximum allowable floor area ratio on-site. Upon project approval, a conditional use permit, site plan and design review, and zone variance would be issued for the proposed project, and the proposed project would be consistent with the zoning ordinance. The proposal meets the minimum development standards for the M-2 zone. There is no established height limit or lot coverage in the M-2 zone and the proposed setbacks meet the minimum requirements. For these reasons and for the reasons described above, the proposed project would be consistent with applicable land use policies upon project approval, and impacts resulting from the proposed project would therefore be **less than significant**. No mitigation is required.

3.8.6 Cumulative Impacts

Development of the related projects in the City would result in further urbanization and redevelopment within the City of Irwindale. Each related project would be subject to independent environmental review, which includes land use conformity analyses. As discussed the sections above, the proposed project would be consistent with the General Plan policies and the Commercial and Industrial Design Guidelines. Additionally, the proposed project is located on an existing industrial/business park site. While the proposed project would change the land use of the site from that of a warehouse to medical office uses, the proposed redevelopment of this site would be compatible with the surrounding business park area and would not substantially change land use patterns in the City. For these reasons, the proposed project would not represent a considerable contribution to a cumulative impact involving conflicts with land use policy. Conversely, the proposed project would not create a new cumulative impact in this issue area. For these reasons, **no cumulative impact** involving land use would occur as a result of developing the proposed project.

3.8.7 Mitigation Measures

No significant land use impacts would occur; therefore, no mitigation measures are required.

3.8.8 Level of Significance After Mitigation

Since no mitigation measures are necessary, impacts would remain **less than significant**.

3.8.9 References

City of Irwindale. 2008a. *City of Irwindale 2020 General Plan*. Accessed August 17, 2016. http://ci.irwindale.ca.us/index.aspx?NID=138.

City of Irwindale. 2008b. *Irwindale – Durbin Amended Reclamation Plan*. State of California Mine ID #91-19-0023. Prepared by Vulcan Materials Company – Western Division, RGP Planning and Development Services, and City of Irwindale – Planning Department. Last updated September 10, 2008.

City of Irwindale. 2009. *City of Irwindale Commercial and Industrial Design Guidelines*. Prepared by Downtown Solutions. Approved January 14, 2009. Accessed August 18, 2016. http://ci.irwindale.ca.us/index.aspx?NID=136.

City of Irwindale. 2015a. "Zoning Verification Letter No. 08-2015 for 12761 Schabarum Avenue Irwindale, CA 91706." November 30, 2015.

City of Irwindale. 2015b. "Proposed Policy Determination on the Application of Conditional Use Permit Requirements Carrying Over from Less to More Intense Zones." June 24, 2015.

Kaiser Foundation Health Plan, Inc. 2016. "Clinical Lab, Medical Office Building Functional Program – Irwindale Medical Office Building." Baldwin Park Service Area. April 7, 2016.

Ordinance No. 648. "An Ordinance of the City Council of the City of Irwindale Amending Chapters 9.64, 17.08, 17.32, 17.36, and 17.59 of the City of Irwindale Municipal Code, for the Addition of Standards for Massage Related Establishments, which will Affect Properties Citywide." Adopted February 9, 2011.

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3.9 MINERAL RESOURCES

This section describes the existing mineral resources setting; identifies associated regulatory requirements; and evaluates potential impacts to mineral resources related to implementation of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project).

Based on the Initial Study and Notice of Preparation (IS/NOP), this section evaluates whether the proposed project would have potentially adverse impacts by resulting in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state and/or by resulting 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 (Appendix A).

3.9.1 Environmental Conditions

City of Irwindale

The City's physiographic setting is dominated by the San Gabriel River alluvial fan, which has supported at least 32 separate mining operations over the past 125 years (Irwindale Backfilling Committee 2005, as cited in City of Irwindale 2008a). The San Gabriel River alluvial fan has been one of the most productive mining regions in the southwest and has played an important role in the development of Los Angeles and the San Gabriel Valley (City of Irwindale 2008a). There are active quarry operations within the City, and the Division of Mines and Geology (renamed the California Geological Survey in 2006) has mapped areas of the City within Mineral Resource Zone (MRZ) 2. MRZ-2 is a designation given to "areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists" (Division of Mines and Geology 1982). The City's General Plan Land Use Map has a "Quarry Overlay" designation that has been applied to several properties within the City (City of Irwindale 2008b).

The Vulcan Durbin Quarry, owned and operated by Vulcan Materials Company, is located immediately north of the project site and is within a Quarry Overlay, as designated in the City's General Plan. This quarry is one of seven remaining active quarries (two remain idle) within the City (City of Irwindale 2008b). The quarry is subject to the Irwindale – Durbin Amended Reclamation Plan, last updated in September 2008 (City of Irwindale 2008a).

On-Site Conditions

The project site is located within the San Gabriel Production-Consumption Region for Portland Cement Concrete–grade aggregate resources and is within an MRZ-2 designation, as mapped by the Division of Mines and Geology (Division of Mines and Geology 1982). The project site and the areas to the south and east are designated as Industrial/Business Park in the General Plan and

are located outside of the Quarry Overlay. The project site is fully developed with warehouse uses, surface parking, and landscaping.

According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, there are no oil, gas, geothermal, or other known wells located within the project site or surrounding area (DOGGR 2016a).

3.9.2 Relevant Plan, Policies, and Ordinances

State

California Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act (SMARA; California Public Resources Code Section 2710 et seq.; subsequently amended) is the primary regulator of onshore surface mining in the state. It delegates specific regulatory authority to local jurisdictions. SMARA requires the state geologist to identify all mineral deposits within the state and to classify them using the following categories:

- **MRZ-1:** Areas where geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** Areas where geologic information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** Areas containing mineral deposits the significance of which cannot be evaluated from available data.
- **MRZ-4:** Areas where available information does not rule out either the presence or absence of mineral resources.

Local jurisdictions are required to enact specific plan procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. A particular concern of the state legislators in enacting SMARA was premature loss of minerals and protection of sites threatened by development practices which might preclude future mineral extraction. As described in Section 3.9.1, areas in the City have been mapped within MRZ-2, including the project site. SMARA is implemented in the City by Ordinance #356, Mining Permits and Reclamation Plans, Chapter 17.63 of the Irwindale Municipal Code. SMARA also requires operators of mining sites to prepare a reclamation plan. Reclamation plans are used to define subsequent land uses, and implementation schedule for reclamation, design plans for post-mining topography, slope stability and erosion control, drainage, and disposition of old equipment. They also provide details of short-term and long-term monitoring and maintenance requirements. In addition, SMARA requires a Financial

Assurances Plan, providing cost estimates and calculations for purposes of establishing a reclamation bond (City of Irwindale 2008b).

Department of Conservation, Division of Oil, Gas, and Geothermal Resources

The Division of Oil, Gas, and Geothermal Resources (DOGGR) is a subdivision of the California Department of Conservation. DOGGR oversees the drilling, operation, maintenance, and closing of oil, natural gas, and geothermal wells for the purpose of preventing damage to the environment, health, property, and oil, gas, and geothermal reservoirs. It regulates oil and gas extraction activities consistent with state regulations that include Section 3000 et seq. of the California Public Resources Code and Title 14, Division 2, Chapter 4 of the California Code of Regulations (DOGGR 2016b).

Local

City of Irwindale General Plan – Resource Management Element

The Resource Management Element focuses on the remaining natural resources within the City that must be considered in future planning and development, including mineral resources. The element recognizes the classification by the California State Geologist of areas within the City containing regionally significant mineral deposits in accordance with SMARA. The element addresses mining operations and future reclamation efforts and provides policies for the conservation and development of identified significant mineral deposits. The following mineral resource policies are potentially related to the analysis of the proposed project's effects on mineral resources:

- **Resource Management Element Policy 1.** The City of Irwindale will continue to work with the quarries and other regulatory agencies to facilitate their reclamation.
- **Resource Management Element Policy 2.** The City of Irwindale will require that ongoing mining activities adhere to any pertinent regulatory controls as a means to protect the public's safety and health.
- **Resource Management Element Policy 3.** The City of Irwindale will work with the quarry owners and/or operators and regulatory agencies to help facilitate their timely reclamation.
- **Resource Management Element Policy 4.** The City of Irwindale will continue to protect the use of the area's resources through appropriate land use controls and planning.
- **Resource Management Element Policy 12.** The City recognizes the mineral information classified by the California State Geologist and incorporated by the State Mining and Geology Board into the State Mining and Geology Board Reclamation Regulations, at Section 3550.5 for Sectors D and E. Through measures in this Element, City will encourage the conservation and development of identified mineral deposits, subject to environmental considerations and the City's discretionary authority over land use entitlements.

- **Resource Management Element Policy 13.** The City will encourage environmental considerations and the City's discretionary authority over land use entitlements, the conservation and possible future extraction of areas classified by the State Geologist and designated by the State Mining and Geology Board Reclamation Regulations as regionally significant mineral deposits through designation of such areas under the City's Quarry Zone overlay or "Q Zone" and attendant standards and regulations.
- **Resource Management Element Policy 16.** The City will revise the zoning code to specify post-mining land use designations, with a quarry overlay zone to establish uniform mine operation and reclamation standards.
- **Resource Management Element Policy 18.** The City should implement all available measures to update and improve reclamation planning for new entitlements, and to address inadequacies in current reclamation plans. These actions may include more vigorous requirements for identifying end uses and detailed standards for related slope, vegetation, and infrastructure actions for reclamation, and more accurate determination of financial assurances.

City of Irwindale Municipal Code Chapter 17.60 (Quarry Overlay Zone)

The Vulcan Durbin Quarry, located north of the project site, is within the Quarry Overlay Zone. This chapter of the Municipal Code contains standards that apply to the use of a property when mining and reclamation are occurring. Upon completion of the mining and reclamation activities, the applicable zoning of the property reverts to the underlying zone. The Vulcan Durbin Quarry is zoned for Heavy Manufacturing and Agricultural uses (City of Irwindale 2008a). According to the Irwindale–Durbin Amended Reclamation Plan, the City will ultimately rezone all or portions of the property according to the proposed end use. As designated in the General Plan, the Vulcan Durbin Quarry also has an overlay land use designation of Quarry Overlay–Commercial/Recreation and Quarry Overlay–Commercial (City of Irwindale 2008b, Exhibit 2-4 "City of Irwindale Land Use Plan – Overlay Land Use Designations").

This chapter of the Municipal Code requires surface mining and reclamation activities to operate under a reclamation plan that has been approved by the City and the State Office of Mine Reclamation. This chapter sets forth numerous regulations for mining operations, including provision of on-site management and security, site maintenance, drainage and erosion control, protection of water quality, air pollution and dust control, and creation of a reclamation fund.

City of Irwindale Municipal Code Chapter 17.63

This section of the code grants the City authority to require quarry owners to reclaim/rehabilitate their land once mining operations have been completed (City of Irwindale 2008b).

Irwindale–Durbin Amended Reclamation Plan

The amended reclamation plan for the Vulcan Durbin Quarry, adopted September 24, 2008, will achieve the following: permit fill operations to occur concurrently with mining operations to provide land for future retail, commercial, and industrial end use opportunities; modify the planned end uses for the new areas within the reclaimed quarry; and adopt the City's standards for technical Guidelines for Open-Pit Mines related to stability analysis, erosion control, under-water backfilling, and above-water backfilling. The amendment represents changes to the 1988 Durbin Mining and Reclamation Plan that was adopted for the Vulcan Durbin Quarry. Key changes consist of allowing for increased quarry depths, extending the operational life of the quarry such that reclamation is anticipated to be completed in 2035, and re-designating the end use of the quarry. (Previously, the entire area [totaling 334.5 acres] was planned for open space conducive to recreational use. Now, 224.6 acres are planned for open space conducive to recreational use and 110 acres are planned for retail uses) (City of Irwindale 2008a).

3.9.3 Thresholds of Significance

The following significance criteria, included in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), will determine the significance of a biological impact. Impacts related to mineral resources would be significant if the proposed project would result in:

a) Loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b) Loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

3.9.4 Project Elements That Can Reduce Impacts

There are no project design features or elements that will reduce impacts to mineral resources.

3.9.5 Impact Analysis

a) Would the project result in loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

As described in Section 3.9.1, the project site is located within an area that has been designated by the state as potentially containing known mineral resources that may be of value to the region and to the residents of the state. The project site is zoned M-2 (Heavy Manufacturing), a zoning designation in which mining operations are conditionally permitted, subject to approval of a Conditional Use Permit (City of Irwindale 2008a). The project site is located adjacent to an active mining operation that produces approximately

three million tons of aggregate per year. It is anticipated that this mining operation will continue until approximately 2035 (City of Irwindale 2008a). While the project site is located within an area containing potentially significant mineral resources and is adjacent to an operable mine, the project site itself has been developed with industrial land uses between 1994 and 1999. The project site is located in the northwest corner of an existing industrial/business park area that has been designated for such uses in the General Plan. While these existing industrial/business park properties are adjacent to an active mining operation (the Vulcan Durbin Quarry), the conversion of one or more of the industrial/business park properties to a mineral extraction operation would introduce an incompatible land use into the midst of the existing industrial/business park area. Furthermore, the Vulcan Durbin Quarry is subject to a reclamation plan that ultimately proposes recreational and commercial land uses for the Vulcan Durbin Quarry, once mining operations cease. Reclamation of the Vulcan Durbin Quarry is anticipated to be completed in 2035. As such, use of the project site for mineral extraction activities would ultimately be incompatible with the future proposed uses of the adjacent Vulcan Durbin Quarry.

The project site has been developed with industrial uses for approximately 17 years and is surrounded on two sides by existing industrial/business park land uses. It is not located within the City's Quarry Overlay Zone. In the future, the Vulcan Durbin Quarry is expected to be used for open space and commercial/retail land uses. As such, the existing use and land use designation of the project site, as well as the existing and future planned uses or the surrounding properties, render the site unavailable for mineral extraction activities. While the nearby Vulcan Durbin Quarry provides mineral resources that may be considered regionally significant, the proposed project would not alter the operations of this mine. The Vulcan Durbin Quarry would continue to operate as planned, in accordance with the Irwindale–Durbin Amended Reclamation Plan. For these reasons, the conversion of the project site from a vacant warehouse to medical office uses would not result in the loss of available mineral resources, and impacts to regionally significant mineral resources would be **less than significant**. No mitigation is required.

b) Would the project result in loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

As described in the General Plan, the City's Quarry Zone is used to designate those areas where quarries and related sand and gravel industries could locate. The Quarry Zone is also used to recognize the location of mineral deposits identified as regionally significant by the state. The project site is not within the Quarry Overlay Zone (City of Irwindale 2008b). Rather, the project site has been designated for industrial/business park land uses on the General Plan Land Use Map. As such, the project site is not delineated as a locally important mineral resource recovery site on a local land use plan.

The Vulcan Durbin Quarry, located adjacent to the northern project site boundary, is within the City's Quarry Overlay Zone, thereby indicating that this area has been delineated as a locally important mineral resource recovery site. However, the Vulcan Durbin Quarry would continue to operate as planned and in accordance with the Irwindale–Durbin Amended Reclamation Plan, regardless of whether the proposed medical office building is constructed. As such, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site that has been delineated on a local land use plan. Impacts to locally important mineral resources would be **less than significant**. No mitigation is required.

3.9.6 Cumulative Impacts

The proposed project site has been developed with industrial uses for approximately 17 years. While the project site is located within an area mapped as MRZ-2, urban development has already occurred on the project site and on properties to the south and east. The conversion of the project site from a vacant industrial warehouse to a medical office would not result in the loss of any mineral resources that are currently available for extraction. The existing land uses, the surrounding land uses to the south and east, and the existing land use designation of the project site preclude conversion of the project site to a mining operation. The City uses land use and zoning designations (i.e., the Quarry Zone or Quarry Overlay Zone) to delineate areas where quarries are located or could locate in the future (City of Irwindale 2008b). As such, the City's land use policies protect and delineate areas where mineral extraction occurs. The project site is not located within such a zone. For these reasons, the proposed project would not considerably contribute to any cumulative impacts on mineral resources that may be occurring, nor would it cause a new cumulatively significant impact to occur. As such, cumulative impacts to both regionally and locally significant mineral resources would be **less than significant**. No mitigation is required.

3.9.7 Mitigation Measures

No significant impacts to mineral resources would occur; therefore, no mitigation measures are required.

3.9.8 Level of Significance After Mitigation

Since no mitigation measures are necessary, impacts would remain **less than significant**.

3.9.9 References

City of Irwindale. 2008a. *Irwindale – Durbin Amended Reclamation Plan*. State of California Mine ID #91-19-0023. Prepared by Vulcan Materials Company – Western Division, RGP Planning and Development Services, and City of Irwindale – Planning Department. Last updated September 10, 2008.

City of Irwindale. 2008b. *City of Irwindale 2020 General Plan*. Accessed August 17, 2016. http://ci.irwindale.ca.us/index.aspx?NID=138.

Division of Mines and Geology. 1982. *Mineral Land Classification Map – Aggregate Resources Only*. Baldwin Park Quadrangle. June 1, 1982. Accessed August 17, 2016. http://www.quake.ca.gov/gmaps/WH/smaramaps.htm.

DOGGR (California Department of Conservation, Division of Oil, Gas, and Geothermal Resources). 2016a. DOGGR Well Finder. Accessed August 17, 2016. http://maps.conservation.ca.gov/doggr/index.html#close.

DOGGR (California Department of Conservation, Division of Oil, Gas, and Geothermal Resources). 2016b. "Oil, Gas & Geothermal – About Us." 2016. Accessed August 17, 2016. http://www.consrv.ca.gov/dog/pages/aboutUs.aspx.

3.10 NOISE

This section describes the existing noise conditions of the project site and vicinity; identifies associated regulatory requirements; and evaluates potential noise impacts related to implementation of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project). Based on the Initial Study and Notice of Preparation (IS/NOP) prepared for the proposed project (Appendix A), this section evaluates whether the proposed project would expose persons to or generate noise levels in excess of standards established in the local General Plan or Noise Code, or applicable standards of other agencies; whether the proposed project expose persons to or generate groundborne noise levels; and whether the proposed project would create a permanent or substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project resulting from implementation of the proposed project. Modeling data and information related to the noise impact analysis have been provided in Appendix H.

The IS/NOP found that the proposed project would have a less than significant impact or no impact as it relates to being located within an airport land use plan, being located within two miles of a public airport, and being located within the vicinity of a private airstrip such that the project would expose people residing or working in the project area to excessive noise levels (Appendix A). As such, these impacts will not be addressed further in this Draft Environmental Impact Report (EIR).

3.10.1 Environmental Conditions

The project site is located in an urbanized environment and is subject to typical urban noises, such as noise generated by traffic, industrial operations, and day-to-day outdoor activities. The predominant noise sources at the project site include landscape and maintenance activities as the project site is currently vacant. “Transportation noise” typically refers to noise from automobile use, trucking, airport operations, and rail operations. “Stationary noise” typically refers to noise from sources such as heating, ventilation, and air conditioning (HVAC) systems, compressors, landscape maintenance equipment, or machinery associated with local industrial or commercial activities. Site-specific ambient noise measurements are discussed later in this section.

Noise Characteristics

Sound may be described in terms of level or amplitude (measured in decibels (dB)), frequency or pitch (measured in hertz (Hz) or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against low and very high frequencies in a manner

approximating the sensitivity of the human ear. Table 3.10-1 provides examples of A-weighted noise levels from common sounds.

Table 3.10-1
Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
—	110	Rock band
Jet flyover at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—
Diesel truck at 15 meters (50 feet), at 80 kph (50 mph)	80	Food blender at 1 meter (3 feet) Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural night time	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013a.
kph = kilometers per hour; mph = miles per hour

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech interference, sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California, and local agencies have established criteria to protect public health and safety, to prevent disruption of certain human activities, and to minimize annoyance.

Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period (L_{eq}), the day–night average noise level (L_{dn}), and the community noise equivalent level (CNEL). Each of these descriptors uses units of dBA.

L_{eq} is a sound energy level averaged over a specified time period (usually 1 hour). L_{eq} is a single numerical value that represents the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement would represent the average amount of energy contained in all the noise that occurred in that 1 hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors. L_{max} is the greatest sound level measured during a designated time interval or event.

Unlike the L_{eq} metric, L_{dn} and CNEL metrics always represent 24-hour periods, usually on an annualized basis. L_{dn} and CNEL also differ from L_{eq} because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). "Time weighted" refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dBA, and nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dBA. L_{dn} differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 to 1 dBA.

Vibration Characteristics

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment.

Several different methods are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square amplitude is most frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure root mean square. The decibel notation acts to compress the range of numbers required to describe vibration (Caltrans 2013b).

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible (Caltrans 2013b).

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise. As shown in Figure 3.10-1, Off-Site Sensitive Receptors, sensitive receptors near the project site include the following:

- Opportunities for Learning, located approximately 720 feet southeast of the project site.
- Single-family residences, located approximately 1,005 feet southeast of the project site.
- Premiere Career College, located approximately 1,326 feet southeast of the project site.

The above sensitive receptors represent the nearest residential and educational land uses with the potential to be impacted by the proposed project. Additional sensitive receptors are located farther from the project site in the surrounding community and would be less impacted by noise and vibration levels than the above-listed sensitive receptors.

Existing Noise Conditions

Currently, the project site generates noise associated with minor vehicle circulation in and out of the project site and from existing landscape and maintenance activities, as the project site is currently vacant. Additionally, the project site is primarily subject to traffic noise associated with Schabarum Avenue, located southeast and east of the project site, and from the I-605 freeway, located immediately west of the project site.

Ambient Noise Measurements

Noise measurements were conducted on and near the project site in April 2016 to determine the existing noise levels. Table 3.10-2 provides the location, date, and time the noise measurements were taken. The noise measurements were made using a Piccolo Sound Level Meter (Serial Number 130625008) integrating sound level meter equipped with a 0.5-inch pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute (ANSI) standard for a Type 2 (general purpose) sound level meter. The sound level meter was calibrated before and after the measurements, and the measurements were conducted with the microphone positioned approximately five feet above the ground.

Five noise measurement locations that represented key potential sensitive receptors or sensitive land uses were selected on or near the project site; these locations are depicted as M1a, M1b, M2, M3, and M4 on Figure 3.10-2, Noise Measurement Locations. Location M1a was at the project site, located

approximately 230 feet north of the Schabarum Avenue center line. Location M1b was at the project site, located approximately 435 feet northwest of the Schabarum Avenue center line. Location M2 was southeast of the project site at Premiere Career College (12901 Ramona Boulevard), located approximately 130 feet north of the Ramona Boulevard center line. Location M3 was south of the project site at SCE Federal Credit Union (12701 Schabarum Avenue), located approximately 160 feet north of the Ramona Boulevard center line. Location M4 was southeast of the project site at the nearest residence (12736 Ramona Boulevard), located approximately 57 feet south of the Ramona Boulevard center line. Table 3.10-2 provides the location, date, and time the noise measurements were taken, and the measured average noise levels. During the field measurements, physical observations of the predominant noise sources were noted. The major noise source at noise measurement location M1a and M1b were from traffic noise along the I-605 freeway. The major noise source at noise measurement location M2 through M4 were from traffic noise along Ramona Boulevard. Other secondary noise sounds included traffic noise along Schabarum Avenue, rustling leaves, birds, distant aircraft, distant conversations, and other community noises.

Table 3.10-2
Measured Noise Levels

Receptors	Location/Address	Date	Time	Description	L_{eq} (dBA)	L_{max} (dBA)
M1a	Project site (eastern side): 12761 Schabarum Avenue Irwindale, California 91706	April 14, 2016	10:05 a.m. – 10:20 a.m.	North of Schabarum Avenue, approximately 230 feet from the Schabarum Avenue center line	59.6	72.1
M1b	Project site (southwestern side): 12761 Schabarum Avenue Irwindale, California 91706	April 14, 2016	10:25 a.m. – 10:40 a.m.	Northwest of Schabarum Avenue, approximately 435 feet from the Schabarum Avenue center line	78.2	82.7
M2	Premiere Career College: 12901 Ramona Boulevard Irwindale, California 91706	April 14, 2016	11:38 a.m. – 11:53 a.m.	North of Ramona Boulevard and southeast of Schabarum Avenue, approximately 130 feet from the Ramona Boulevard center line	65.6	86.9
M3	SCE Federal Credit Union: 12701 Schabarum Avenue Irwindale, California 91706	April 14, 2016	12:31 p.m. – 12:46 p.m.	North of Ramona Boulevard and west of Schabarum Avenue, approximately 160 feet from the Ramona Boulevard center line	60.8	69.3
M4	Single family residence: 12736 Ramona Boulevard Irwindale, California 91706	April 14, 2016	1:03 p.m. – 1:18 p.m.	South of Ramona Boulevard and east of Schabarum Avenue/Syracuse Avenue, approximately 57 feet from the Ramona Boulevard center line	70.4	85.4

Source: Appendix H
L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dBA = A-weighted decibel scale

3.10.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal regulations related to noise that would apply to this project.

State

Government Code Section 65302(g)

California Government Code Section 65302(g) requires the preparation of a Noise Element in a General Plan, which shall identify and appraise the noise problems in the community. The Noise Element shall recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services and shall quantify, to the extent practicable, current and projected noise levels for the following sources:

- Highways and freeways
- Primary arterials and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Aviation and airport-related operations
- Local industrial plants
- Other ground stationary noise sources contributing to the community noise environment.

California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research (OPR), provides guidance for the acceptability of specific land use types within areas of specific noise exposure. Table 3.10-3, Land Use Compatibility for Community Noise Environments, presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. OPR guidelines are advisory in nature. Local jurisdictions, including the City of Irwindale (City), have the responsibility to set specific noise standards based on local conditions.

Table 3.10-3
Land Use Compatibility for Community Noise Environments

	Community Noise Exposure (dBA CNEL)			
	Normally Acceptable[1]	*Conditionally Acceptable*[2]	*Normally Unacceptable*[3]	*Clearly Unacceptable*[4]
Residential-low density, single-family, duplex, mobile homes	50–60	55–70	70–75	75–85
Residential – multiple-family	50–65	60–70	70–75	70–85
Transit lodging – motel, hotels	50–65	60–70	70–80	80–85
Schools, libraries, churches, hospitals, nursing homes	50–70	60–70	70–80	80–85
Auditoriums, concert halls, amphitheatres	NA	50–70	NA	65–85
Sports arenas, outdoor spectators sports	NA	50–75	NA	70–85
Playgrounds, neighborhood parks	50–70	NA	67.5–77.5	72.5–85
Golf courses, riding stables, water recreation, cemeteries	50–70	NA	70–80	80–85
Office buildings, business commercial and professional	50–70	67.5–77.5	75–85	NA
Industrial, manufacturing, utilities, agriculture	50–75	70–80	75–85	NA

Source: OPR 2003.
CNEL = community noise equivalent level; NA = not applicable
1 Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
2 Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
3 Normally Unacceptable: New construction or development should be discouraged. If new construction of development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.
4 Clearly Unacceptable: New construction or development should generally not be undertaken.

Local

City of Irwindale General Plan Update Noise Element

The City's General Plan Update Public Safety Element describes the ambient noise environment in the City generated from freeways, aircraft overflights, major and minor arterial roadways, railroad lines, and stationary sources. As shown in Table 6-2 in the City's General Plan Update, the CNEL at 50 feet from the center line of the I-605 freeway is 74.1 dBA (City of Irwindale 2008). As noted in the City's General Plan Update, in general, mining operations in the City are not considered significant stationary noise sources. Because noise travels in a line-of-sight manner and attenuates with distance, the depth of the quarries provide significant separation and the pit walls serve as a barrier around the operating equipment. However, above-grade sand and gravel mining plant sites and their conveyor systems have been a source of stationary noise for the community (City of Irwindale 2008). The City's General Plan Update Public Safety Element includes the following policies related to reducing high levels of

noise exposure and maintaining noise levels compatible with various types of land uses that will be applied to the proposed project:

- The City will work to reduce the high levels of noise exposure associated with the existing development and transportation facilities in the City.
- The City will work towards reducing noise exposure in the City by considering noise and land use compatibility in land use planning.
- The City will continue to investigate strategies that will be effective in reducing the community's exposure to harmful noise levels.

City of Irwindale Noise Regulation

The City's Noise Regulation (Chapter 9.28 of the City's Municipal Code) provides controls for excessive and annoying noise from stationary sources such as machinery, equipment, fans, and air conditioning apparatus, industrial development, and commercial activities. Section 9.28.030 of the City's Municipal Code establishes the ambient base noise levels for residential, commercial, and industrial areas. As shown on Table 3.10-4, the City's ambient noise level, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Table 3.10-4
Ambient Base Noise Level[1]

Zone	Ambient Base Noise Level, L_{eq} [1,2]	
	7 a.m. to 10 p.m.	*10 p.m. to 7 a.m.*
Residential	50 dBA	45 dBA
Commercial	55 dBA	50 dBA
Industrial	70 dBA	60 dBA

Source: City of Irwindale 1976.
Notes:
1 Any noise at a level which exceeds the ambient or the ambient base level as set forth in the table, whichever is greater, by more than 10 dB when measured at any boundary line of the property from which the noise emanates shall constitute sufficient proof of violation.
2 As noted in Section 9.28.040 of the City's Municipal Code, it is unlawful for any person to willfully make or continue, or cause to be made or continued any noise at a level which exceeds by more than 5 dB the ambient or the ambient base level as set forth in the table, whichever is greater, when measured at any boundary line of the property from which the noise emanates.
dBA = A-weighted decibel scale; L_{eq} = equivalent noise level over a given period

The City's Noise Regulation also regulates construction activities within the City. As stated in Section 9.28.110 of the City's Municipal Code, it is unlawful for any person within a residential zone, or within a radius of five hundred feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, steam shovel, pneumatic hammer, derrick steam or electric hoist or other construction type device on a development requiring a city permit, in such a manner that noise is produced which would constitute a violation of Section 9.28.040 of the City's Municipal Code, unless

beforehand authorization therefor has been duly obtained from the building inspector. Construction authorized shall be limited to 7 a.m. to 7 p.m. Monday through Saturday, and construction activity is unlawful without a permit during all hours on Sunday. No permit shall be required to perform emergency work as defined in subsection E of 9.28.020 of the City's Municipal Code (City of Irwindale 1976).

Vibration Standards

The California Environmental Quality Act (CEQA) states that the potential for any excessive groundborne noise and vibration levels must be analyzed; however, it does not define the term "excessive" vibration. Numerous public and private organizations and governing bodies have provided guidelines to assist in the analysis of groundborne noise and vibration. To date, the City has not adopted a threshold for groundborne vibration impacts. However, the Department of Transportation (Caltrans) has adopted vibration standards to evaluate potential impacts related to construction activities. Information from Caltrans indicates that continuous vibrations with a peak particle velocity of approximately 0.1 inches per second begin to cause annoyance. For purposes of this analysis, the Caltrans threshold of 0.1 inches per second is used to evaluate the vibrational construction-related and operational impacts of the proposed project.

3.10.3 Thresholds of Significance

The following significance criteria, included in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), will determine the significance of a noise impact. The IS/NOP prepared for the proposed project found the proposed project to have a less than significant impact or no impact as it relates to being located within an airport land use plan, being located within two miles of a public airport, and being located within the vicinity of a private airstrip such that the project would expose people residing or working in the project area to excessive noise levels (Appendix A). As such, these impacts will not be addressed further in this Draft EIR. Impacts related to noise would be significant if the proposed project would result in:

a) ***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.***

b) ***Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.***

c) ***A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.***

d) ***A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.***

Quantitative thresholds of significance have been established for the purposes of this analysis based on the local polices and regulations described in Section 3.10.2, Relevant Plan, Policies, and Ordinances. These thresholds are listed below.

- During construction activities, a project-related temporary increase in ambient base noise levels (70 dBA) of 10 dBA L_{eq} or greater is considered a significant noise impact.
- For operational stationary sources, the ambient base noise level during daytime hours (7 a.m. to 10 p.m.) is 70 dBA L_{eq} and for nighttime hours (10 p.m. to 7 a.m.) is 60 dBA L_{eq} in the industrial zone. Operational noise generated by the proposed project in excess of these levels would be considered significant noise impacts.
- Off-site noise impacts due to project-generated traffic would be considered significant if the project-generated traffic causes an increase of 5 dB above existing traffic noise levels.

3.10.4 Project Elements That Can Reduce Impacts

Construction activities would generally occur Monday through Saturday from 7 a.m. to 7 p.m., consistent with the City's Municipal Code, Section 9.28.110, Construction of building and projects – Times specified. Additionally, a traffic control plan would include provisions for coordinating with emergency service providers regarding construction times.

Kaiser Permanente's contractor will also include the following noise reduction measures during construction activities:

- The project contractor shall, to the extent feasible, schedule construction activities to avoid the simultaneous operation of construction equipment so as to minimize noise levels resulting from operating several pieces of high noise level emitting equipment.
- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. Enforcement shall be accomplished by random field inspections by City personnel during construction activities.
- Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and nearby sensitive receptors, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from or shielded from sensitive receptors.
- During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors.

- Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners to contact the job superintendent if necessary. In the event that the City receives a complaint, appropriate corrective actions shall be implemented and a report of the action provided to the reporting party.

3.10.5 Impact Analysis

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?

On-site noise-generating activities associated with the proposed project would include short-term construction and long-term operational noise. The proposed project would also generate off-site traffic noise along Ramona Boulevard and Schabarum Avenue. In addition, the proposed on- site use will be subject to traffic noise from Schabarum Avenue. The short-term, construction-related noise impacts of the proposed project are analyzed below, followed by a discussion of the long-term operational noise impacts of the proposed project.

Construction Noise (Short-Term Impacts)

The proposed project would be constructed over a 15-month period, beginning in spring 2017 and ending in summer 2018. Development activities for the proposed project would involve the following sequence: (1) demolition, (2) site preparation, (3) grading, (4) building construction, (5) architectural coating, (6) and paving. Although specific project construction details and equipment fleet specifications are not available at this time, the following are typical types of construction equipment that would be expected:

- Concrete/industrial saws
- Excavators
- Rubber-tired dozers
- Tractors/loaders/backhoes
- Graders
- Crawler tractors
- Forklifts
- Generator sets
- Welders
- Aerial lifts
- Air compressors
- Pavers
- Paving equipment
- Plate compactors
- Rollers

The types of construction equipment that would be used to construct the proposed project include standard equipment that would be employed for any routine construction project of this scale; construction equipment with substantially higher noise-generation characteristics (such as pile drivers, rock drills, blasting equipment) would not be necessary for demolition of the existing building or construction of the specialty MOB, parking structure, and related project components.

Construction noise is difficult to quantify because of the many variables involved, including the specific equipment types, size of equipment used, percentage of time each piece is in operation, condition of each piece of equipment, and number of pieces that would operate on the project site. The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 3.10-5. The noise values represent maximum noise generation, or full- power operation of the equipment. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 dBA at 50 feet from their operations. As one increases the distance between equipment, or separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of separate noise sources added together. In addition, typical operating cycles may involve two minutes of full-power operation, followed by three or four minutes at lower levels. The average noise level during construction activities is generally lower (typical levels of approximately 88 dBA L_{eq} at a distance of 50 feet), since maximum noise generation may only occur up to 50 percent of the time.

Table 3.10-5
Typical Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Air compressor	81
Backhoe	80
Compactor	82
Concrete mixer	85
Concrete pump	82
Concrete vibrator	76
Crane, mobile	83
Dozer	85
Generator	81
Grader	85
Impact wrench	85
Jackhammer	88
Loader	85
Paver	89
Pneumatic tool	85
Pump	76
Roller	74

Table 3.10-5
Typical Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Saw	76
Truck	88

Source: FTA 2006

The nearest off-site sensitive receptor to the project boundary would be Opportunities for Learning, located approximately 720 feet southeast of the project site. Other nearby off-site sensitive receptors include single-family residences, located approximately 1,005 feet southeast of the project site and Premiere Career College, located approximately 1,326 feet southeast of the project site (Figure 3.10-1, Off-Site Sensitive Receptors). In all cases, intervening business park buildings exist between the project site and the receivers.

Noise levels from construction operations decrease at a rate of approximately 6 dBA per doubling of distance from the source. Therefore, at a distance of 720 feet (the approximate distance from the project site to Opportunities for Learning), construction noise levels would be approximately 23 dBA lower than shown in Table 3.10-5, ranging from approximately 51 to 66 dBA L_{eq}. At a distance of 1,005 feet (the approximate distance from the project site to the single-family residences to the southeast), construction noise levels would be approximately 26 dBA lower than shown in Table 3.10-5, ranging from approximately 48 to 63 dBA L_{eq}. At a distance of 1,326 feet (the approximate distance from the project site to Premiere Career College to the southeast), construction noise levels would be approximately 28 dBA lower than shown in Table 3.10-5, ranging from approximately 46 to 61 dBA L_{eq}. In all cases, the intervening structures would provide additional, substantial noise reduction generally ranging from approximately 5 to 10 decibels. The noise levels from the construction equipment to nearby sensitive receptors would be nominal given the distance between the construction activity area and the sensitive receptors. The estimated construction noise levels at nearby noise-sensitive land uses are summarized in Table 3.10-6.

Table 3.10-6
Short-Term (Construction) Noise Levels

Representative Noise-Sensitive Land Uses	Approximate Distance from Nearest Construction	Measured Ambient Noise Levels (dBA L_{eq})[1]	Construction Noise Level Range (dBA L_{eq})[2]
Opportunities for Learning	720 feet	N/A	46-61
Single-family residence (south of project site)	1,005 feet	70.4	43-58
Premiere Career College (southeast of project site)	1,326 feet	65.6	41-564

Source: See Figure 3.10-1, Off-Site Sensitive Receptors, and Table 3.10-2.

Note: Construction activities is subject to Section 9.28.110 of the City's Municipal Code, which prohibits construction between the hours of 7 p.m. to 7 a.m. Monday through Saturday, and on any Sunday, unless otherwise specified.
[1] Refer to Table 3.10-2 for measured ambient noise levels are representative noise-sensitive land uses.
[2] Assumes a conservative noise reduction level from intervening structures of 5 decibels.

The City regulates construction noise by restricting the allowable hours of construction. As noted in Section 9.28.110 of the City's Municipal Code, noise sources associated with construction activities may occur between 7 a.m. and 7 p.m. Mondays through Saturdays. Construction activities are not allowed at any time on Sundays (City of Irwindale 1976). These restrictions are applicable to projects taking place within 500 feet of residential land uses; the proposed project is located well beyond 500 feet and are not necessarily bound by them. Nonetheless, as part of the project's design feature as described in Section 4.10.4, construction activity on the project site would adhere to the City's limits on hours of construction, and would thus not take place outside the hours as noted above. Additionally, Kaiser Permanente will incorporate the noise reduction measures as outlined in Section 3.10.4, Project Elements That Can Reduce Impacts. Furthermore, construction activities would be short-term, and would cease upon construction completion. Therefore, short-term construction noise would be **less than significant**. No mitigation is required.

Operational Noise (Long-Term Impacts)

Long-term operational noise associated with the specialty MOB operations would be limited to vehicular circulation, parking structure, and surface parking lot areas, and other on-site noise sources (e.g., HVAC equipment, emergency generator, steam boilers, hot water heaters, solar panels, etc.). Long-term operational noise would also include project-generated traffic along Schabarum Avenue and Ramona Boulevard. The proposed specialty MOB would be subject to traffic noise from Schabarum Avenue.

On-Site Noise Generators

On-site stationary equipment includes HVAC equipment mounted on the roof of the building. The specific details (sizes, manufacturers, and models) of the equipment have not yet been determined. The noise levels generated by this equipment would vary, but would typically range from approximately 50 dBA to 65 dBA at a distance of 50 feet (City of Santa Ana 2010). The nearest residential homes to the southeast would be located approximately 1,005 feet away from the project site, and thus, given the distance between the HVAC and nearest residential home, no nearby off-site sensitive receptors would be potentially exposed to HVAC equipment noise. The HVAC equipment would be surrounded by rooftop parapet walls which would shield the direct line-of-sight between the machinery and the receiver. In addition, the occupants of the proposed specialty MOB would not be subject to adverse noise levels. The building roof and parapet walls would effectively reduce the noise of the rooftop equipment for occupants of the building in line with California Building Code

requirements. Thus, the noise generated by the HVAC equipment would not exceed the City's noise ordinance, and would be **less than significant**. No mitigation is required.

Emergency Generator

The proposed project includes one, 700 kilowatt (kW) diesel-powered emergency generator for maintenance and testing purposes located on the southwest portion of the project site. The generator would run for testing and maintenance approximately 30 minutes each week with a 4-hour, full load test once per 3 years for a total of 30 hours per year, assuming the triennial test is run in a given year. Given that the emergency generator would operate only during maintenance and testing purposes (or during an emergency outage) and would be relatively brief (30 minutes each week), with a 4-hour, full load test once per 3 years, noise from the emergency generator would not be significant. Additionally, given the distance of the emergency generator to the nearest sensitive receptor (over 720 feet), and the existing landscape and business park structures between the project site and the sensitive receptor, noise produced from the emergency generator would not be significant. As such, noise impacts from operation of the emergency generator would be **less than significant**. No mitigation is required.

Steam Boilers

Two natural gas-fired commercial boilers are planned as part of the proposed project's central energy plant components to produce steam. The steam boilers will be located on the southwest portion of the project site in an enclosure. These boilers would have an input of approximately 1.5 million metric British thermal units (MMBTU) per hour. The boilers would be operated, as required, to provide the needs of the proposed project. Maximum daily fuel usage for the boilers would be approximately 72 MMBTU per day. The steam boilers that would serve the MOB would be in operation 16 hours per day (5:00 AM to 9:00 PM). The steam boilers that would serve the Ambulatory Surgery Unit (ASU) in the lower (OSHPD) level only would be in operation 19 hours per day (4:00 AM to 11 PM). However, since the steam boilers would be within an enclosure, given the distance of the steam boilers to the nearest sensitive receptor (over 720 feet), and given the existing landscape and business park structures between the project site and the sensitive receptor, noise produced from the steam boilers would not be significant. As such, noise impacts from operation of the steam boilers would be **less than significant**. No mitigation is required.

Hot Water Heaters

Two domestic natural gas-fired hot water heaters would be included as part of the proposed project. The hot water heaters will be located on the southwest portion of the project site in an enclosure. These heaters would have an input of approximately 0.8 MMBTU per hour. The hot water boilers would be operated, as required, to provide the needs of the proposed project.

Maximum daily fuel usage for the hot water heaters would be approximately 72 MMBTU per day. The hot water heaters that would serve the MOB would be in operation 16 hours per day (5:00 AM to 9:00 PM). The hot water boilers that would serve the ASU in the lower (OSHPD) level only would be in operation 19 hours per day (4:00 AM to 11 PM). However, since the hot water heaters would be within an enclosure, given the distance of the hot water heaters to the nearest sensitive receptor (over 720 feet), and given the existing landscape and business park structures between the project site and the sensitive receptor, noise produced from the hot water heaters would not be significant. As such, noise impacts from operation of the hot water heaters would be **less than significant**. No mitigation is required.

Photovoltaic Panels

The proposed project would reduce energy use through a combination of a high performance envelope, minimizing loads through equipment selections, and offsetting usage through photovoltaic (PV) panels. Additionally, Kaiser Permanente has committed to achieving a net-zero (e.g., generate as much energy as it consumes) energy strategy for the proposed project. In order to achieve net-zero, the proposed project would include the installation of rooftop PVs on the entire MOB and parking structure roofs totaling approximately 54,000 square feet with an additional 43,600 square feet of PVs to be installed on-site along the north side of the MOB. Given the distance of the PV panels to the nearest sensitive receptor (over 930 feet) and the existing landscape and business park structures between the PV panels and the sensitive receptor, noise associated with the PV panels would not be significant. As such, noise impacts from operation of the PV panels would be **less than significant**. No mitigation is required.

Off-Site Traffic Noise Levels

The proposed project would generate traffic along adjacent roads, including Schabarum Avenue, as well as along nearby roadways, including Ramona Boulevard. Potential noise effects from vehicular traffic were assessed using the Federal Highway Administration's Traffic Noise Model version 2.5. Information used in the model included the Existing Without Project, Existing With Project, Future Without Project, and Future With Project traffic volumes and speeds. It should be noted that although the project site was vacated prior to conduct of the traffic counts at the study intersections, a prior use trip credit for the former food distribution center on the project site has been applied in the traffic impact analysis for the proposed project as discussed in Section 3.12, Transportation and Traffic and in Appendix I.[1] Therefore, the existing noise conditions assumed

[1] The project site was previously operated by Jacmar Foods Distribution from 1999 until 2014. Jacmar Foods Distribution vacated the project site in the summer of 2015 and relocated to the City of Industry. The project site is currently occupied by a vacant cold storage warehouse with associated surface parking. However, another similar warehouse tenant would likely occupy the subject site at any time in the future as it would be a permitted use in the City's zoning and land use. As such, given that the project site has historically been a warehouse (Jacmar Foods Distribution was in operation for 15 years at the project site) and given that absent the

traffic noise from the former food distribution center to be consistent with the traffic analysis for the proposed project. Noise levels were modeled at representative off-site noise-sensitive receivers, as shown on Figure 3.10-1. The receivers were modeled to be five feet above the local ground elevation. The City does not have a specific noise criterion for evaluating off-site noise impacts to residences or noise-sensitive areas from project-related traffic. For the purposes of this noise analysis, such impacts are considered significant when they cause an increase of five dBA above existing noise levels. An increase or decrease in noise level of at least five dBA is required before a noticeable change in community response would be expected (Caltrans 2013a). Therefore, a clearly perceptible increase (+5 dBA) in noise exposure of sensitive receptors could be considered significant.

The noise level increases associated with the additional traffic volume for Existing Without Project, Existing With Project, Future Without Project, and Future With Project are depicted in Table 3.10-7. As shown in Table 3.10-7, the proposed project would result in a change in traffic noise levels of one dB or less, when rounded to whole numbers, along the studied roadways in the vicinity of the project site. Increases would be below the significance threshold of five dBA. Thus, the additional traffic volume along the adjacent roads would not substantially increase the existing noise level in the project vicinity, and operational traffic-related noise impacts would be **less than significant**. No mitigation is required.

Table 3.10-7
Traffic Noise Projections

Modeled Receptor	Roadway Segment	Existing Without Project[1]	Existing With Project[1]	Difference (Existing Without Project and Existing With Project)	Future Without Project	Future With Project	Difference (Future Without Project and Future With Project)
M2: Premiere Career College	Ramona Boulevard: southeast of Schabarum Avenue	69	69	0	69	70	1
M3: SCE Federal Credit Union	Ramona Boulevard: west of Schabarum Avenue	68	69	1	68	69	1

proposed project, another similar warehouse tenant would likely occupy the project site in the future, using an occupied warehouse as the future existing baseline for the traffic analysis allows for a more realistic and informative environmental analysis of future traffic conditions at and around the project site.

Modeled Receptor	Roadway Segment	Existing Without Project[1]	Existing With Project[1]	Difference (Existing Without Project and Existing With Project)	Future Without Project	Future With Project	Difference (Future Without Project and Future With Project)
M4: Single-family residential	Ramona Boulevard: east of Schabarum Avenue/Syracuse Avenue	74	74	0	74	74	0

Source: FHWA 2004. Appendix I.
Note: Modeled traffic noise levels are rounded to the nearest whole numbers.
[1]Consistent with the Traffic Impact Analysis (Appendix I) and Section 3.12, Transportation and Traffic, Existing Without Project and Existing With Project conditions assumed traffic noise generated from vehicular trips from the former food distribution center (Jacmar Food Service Distribution Center).

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

Construction activity could generate vibration that could damage nearby buildings or annoy people in the project vicinity. Construction activities can generate varying degrees of groundborne vibration, depending on the construction procedures and the type of construction equipment operated. Construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effects on buildings (e.g., building damage) are dependent on the location of the buildings to the source and the characteristic of the building structure.

During construction, the heavier pieces of construction equipment used at the project site would include dozers, loaders, water trucks, and pavers. Information from Caltrans and other agencies indicate that continuous vibrations with a PPV of approximately 0.1 inch per second begin to cause annoyance (Caltrans 2004). Groundborne vibration is typically attenuated over short distances (typically on the order of 25 feet). Opportunities for Learning is located approximately 720 feet or more from the project site. The closest homes are located approximately 1,005 feet or more from the project site, and Premiere Career College is located approximately 1,326 feet from the project site. At the 720-foot distance between the anticipated construction equipment and the nearest sensitive receptor (Opportunities for Learning), the PPV is estimated to be 0.001 inch per second, which would be well below the 0.1 inch per second threshold identified by Caltrans. Similarly, vibration impacts at the nearest residence (located approximately 1,005 feet from the nearest construction activities) and Premiere Career College (located approximately 1,326 feet from the nearest construction activities) would fall well below (0.000 inch/second) the Caltrans threshold. Therefore, construction activities are not

anticipated to result in continuous vibration levels that typically annoy people, and the vibration impacts to nearby sensitive receptors would be **less than significant**. No mitigation is required.

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

As discussed under Section 3.10.5(a), long-term operational noise would result from the specialty MOB operations, vehicular circulation and surface parking lot areas, and other permanent on-site noise sources (e.g., HVAC equipment, emergency generator, steam boilers, hot water heaters, solar panels, etc.). Long-term operational noise also includes project-generated traffic and overall traffic noise at the project site. The proposed project would generate traffic along adjacent roads, including Schabarum Avenue, as well as along nearby roadways, including Ramona Boulevard. Based on the anticipated trip generation rates and trip distribution patterns noted in the TIA (Appendix I) and traffic noise projections depicted in Table 3.10-7, the proposed project would result in a change in traffic noise levels of one dBA, when rounded to whole numbers, along the studied roadways in the vicinity of the project site. Increases would be below the significance threshold of five dBA. The additional traffic volume along the adjacent roads would not substantially increase the existing noise level in the project vicinity, and operational traffic-related noise impacts would be **less than significant**. No mitigation is required.

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?

As discussed under Section 3.10.5(a), the proposed project would result in temporary noise increases during the approximately 15-month construction period. The temporary increases in ambient noise levels would vary depending on the location of the construction activities and the type of equipment being used. The estimated construction noise levels at nearby noise-sensitive land uses are summarized in Table 3.10-6. As discussed, temporary noise impacts from construction activities would be nominal given the distance between the construction activity area and the sensitive receptors.

The City regulates construction noise by restricting the allowable hours of construction. As noted in Section 9.28.110 of the City's Municipal Code, noise sources associated with construction activities may occur between 7 a.m. and 7 p.m. Monday through Saturdays. Construction activities are not allowed at any time on Sundays (City of Irwindale 1976). As part of the project's design feature as described in Section 3.10.4, construction activity on the project site would adhere to the City's limits on hours of construction, and would thus, not take place outside the hours as noted above. Additionally, Kaiser Permanente will incorporate the noise reduction measures outlined in Section 3.10.4. Furthermore,

construction activities would be short-term and would cease upon construction completion. Therefore, the proposed project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the proposed project. Impacts would be **less than significant**. No mitigation is required.

3.10.6 Cumulative Impacts

Noise in Excess of Standards

The proposed project and related projects would all be subject to applicable noise standards (descriptions of the standards applicable within the City are described throughout this section). The proposed project would incorporate project design features as described in Section 3.10.4 to ensure compliance with applicable noise standards. With incorporation of the project design features described in Section 3.10.4, the project would not contribute to cumulative exceedances of noise standards, and its incremental effect is **not cumulatively considerable**. No mitigation is required.

Temporary/Periodic Increases in Ambient Noise Levels

The proposed project would result in temporary noise increases during the approximately 15-month construction period. The proposed project's construction period would have the potential to overlap with the related projects' construction phases. As such, the proposed project and the nearby projects would have the potential to combine to create a cumulatively significant temporary or periodic increase in ambient noise levels. There are physical barriers (e.g., buildings) and significant distance between the related projects and the proposed project site. Due to the decrease in noise levels with distance and the presence of physical barriers, the majority of the related projects would not combine with the proposed project to produce a cumulative noise effect during construction. Additionally, all projects would be required to comply with the City's Noise Regulation to limit noise hours during construction. Project design features as described in Section 3.10.4, along with the requirement to comply with the City's Noise Regulation, would reduce the project's incremental effect, ensuring that impacts are **not cumulatively considerable**. No mitigation is required.

Vibration

Construction activities due to the project are not likely to expose people to an excessive generation of groundborne vibration. Information from Caltrans indicates that continuous vibrations with a peak particle velocity of approximately 0.1 inch per second begin to cause annoyance (Caltrans 2004). As described in this section, at the 720-foot distance between the anticipated construction equipment and Opportunities for Learning, the peak particle velocity is estimated to be 0.001 inch per second, which would be well below 0.1 inch per second threshold identified by Caltrans. Similarly, vibration impacts at the nearest residences (located

approximately 1,005 feet from the nearest construction activities) and Premiere Career College (located approximately 1,326 feet from the nearest construction activities) would fall well below (0.0002 inch per second) the Caltrans threshold. Other foreseeable projects within the vicinity of the project site would not be close enough to create a combined excessive generation of groundborne vibration. Therefore, cumulative impacts associated with excessive groundborne vibrations would be **less than significant**. No mitigation is required.

Permanent Increase in Ambient Noise Levels

Stationary Sources. Long-term operational noise associated with the specialty MOB operations would be limited to vehicular circulation, parking structure, and surface parking lot areas, and other on-site noise sources (e.g., HVAC equipment, emergency generator, steam boilers, hot water heaters, solar panels, etc.). A cumulative impact could result if noise produced during operation of the proposed project were to combine with noise produced from the operations of related projects to create a cumulatively significant permanent increase in ambient noise levels. The proposed project's operations and those of the related projects would be subject to the City's Noise Control Ordinance, which limits the exterior noise levels at residences to 50 dBA from 7 a.m. to 10 p.m., and 45 dBA between 10 a.m. and 7 a.m.; limits the exterior noise levels in commercial zones to 55 dBA between 7 a.m. to 10 p.m., and 50 dBA between 10 p.m. and 7 a.m.; limits the exterior noise levels in industrial zones to 70 dBA between 7 a.m. to 10 p.m., and 60 dBA between 10 p.m. and 7 a.m. (refer to Table 3.10-4). As discussed in Section 3.10.5(a), given the distance of stationary sources from the nearest sensitive receptor (over 720 feet), and the existing landscape and business park structures between the project site and the sensitive receptors, noise produced from the HVAC equipment, emergency generator, steam boilers, hot water heaters, and photovoltaic panels would not exceed the City's noise ordinance. Similarly, the related projects would be required to comply with the City's noise standards. Compliance with the City's Noise Control Ordinance would reduce the proposed project's operational noise so that its incremental effect is **not cumulatively considerable**. No mitigation is required.

Off-Site Traffic Noise. The proposed project and the related projects would generate off-site traffic noise. When calculating future traffic impacts, Linscott Law & Greenspan (LLG) considered Future without Project and Future With Project scenarios. The related projects and trip generation (as shown on Table 3.12-6 in Section 3.12, Transportation and Traffic) were based on information on file at the City, the of Baldwin Park, the City of El Monte, the County of Los Angeles, and Caltrans. As discussed in Section 3.10.5(a), the noise level increases associated with the additional traffic volume for Existing Without Project, Existing With Project, Future Without Project, and Future With Project would result in a change in traffic noise levels of one dBA or less, when rounded to whole numbers, along the studied roadways in the vicinity of the project site (refer to Table 3.10-7). Increases would be below the significance threshold of five dBA. With or without the proposed project, traffic noise would not be substantially

increased in the project vicinity. As such, the incremental effect of the proposed project on off-site traffic noise is **not cumulatively considerable**. No mitigation is required.

3.10.7 Mitigation Measures

All potential impacts to noise would be avoided through project design features, as previously described. Therefore, impacts would not occur and mitigation would not be necessary.

3.10.8 Level of Significance After Mitigation

All impacts would be **less than significant** and mitigation is not required.

3.10.9 References

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SOURCE: Bing Maps (Accessed 2016)

FIGURE 3.10-1

Off-Site Sensitive Receptors

DUDEK

Kaiser Irwindale Project

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SOURCE: Bing Maps (Accessed 2016)

FIGURE 3.10-2

Noise Measurement Locations

DUDEK

Kaiser Irwindale Project

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3.11 PUBLIC SERVICES

This section describes the existing fire services in the City of Irwindale (City); identifies associated regulatory requirements; and evaluates potential impacts related to fire protection related to implementation of the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project). This section evaluates whether the proposed project would have a potentially adverse impacts to fire protection.

The Initial Study and Notice of Preparation (IS/NOP) found that the proposed project would have a less than significant impact as it relates to the provision of police protection services, schools, parks, and other public facilities (Appendix A). As such, these impacts will not be addressed further in this Draft Environmental Impact Report (EIR).

3.11.1 Environmental Conditions

Fire Protection

The City is included within the jurisdiction of, and is part of, the Los Angeles County Fire Department (LACFD); thus, fire services in the City, including the project site, would be provided by the LACFD. The LACFD maintains one fire station in the City, Station No. 48. Station No. 48 is located at 15546 Arrow Highway Irwindale, California 91706, approximately 3.5 miles northeast of the project site. Fire protection services provided at Station No. 48 include 16 full-time fire fighters and equipment resources include one pumper, one reserve truck, and a paramedic unit. The engine and squad at Fire Station No. 48 are estimated to have an average response time throughout the City of 6 minutes (City of Irwindale 2008). While Fire Station No. 48 is located in the City and could provide service to the project site, Fire Station No. 29, located at 14334 E. Los Angeles Street, Baldwin Park, California 91706, is located approximately 2.6 miles northeast of the project site and is the jurisdictional station for the project site (Johnson 2016). Fire Station No. 29 is staffed with one 4-person quint, one 3-person engine company and a 2-person paramedic squad. Based on the distance to the project site, emergency units from Fire Station No. 29 are estimated to have emergency response times of approximately 6 to 8 minutes (Johnson 2016). There are no current plans to expand facilities, staffing, or equipment at Fire Station No. 29 (Johnson 2016). The LACFD which operates under a regional concept in its approach to providing emergency services would have additional available emergency resources to the project site from anywhere within the LACFD's service territory. LACFD is responsible for emergency medical calls, fire response, and inspection and plan check services.

3.11.2 Relevant Plan, Policies, and Ordinances

Federal

There are no federal regulations applicable to the proposed project.

State

California Fire Code

The California Fire Code is Chapter 9 of Title 24 of the California Code of Regulations. It provides regulations for safeguarding life and property from fire and explosion hazards derived from the storage, handling, and use of hazardous substances, materials, and devices. The provisions of this code apply to construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenance connected or attached to such building structures throughout the state.

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, including regulations for building standards (also set forth in the California Building Code), and fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly

combustible materials; fire hose size requirements; restrictions on the use of compressed air; requirements for access roads; and guidelines for testing, maintaining, and using all firefighting and emergency medical equipment.

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed.

Local

City of Irwindale General Plan Update Public Safety Element

The City's General Plan Public Safety Element addresses fire protection in the City. The City's General Plan Update Public Safety Element includes the following programs and policies related to fire protection that will be applied to the proposed project:

- **Fire Prevention.** The City shall continue to work with the County of Los Angeles Fire Department to promote fire prevention and fire safety programs. The City shall also encourage periodic inspections of existing structures by the Fire Department for compliance with fire safety standards and practices. All new development plans must be submitted to the Fire Department for review and comment during the plan check process. This review must be completed for the development process to continue. New development must conform to applicable standards and regulations.
- **Police & Fire Services Review.** The City shall regularly review the adequacy of law enforcement services and fire protection and emergency services in the City. This review effort shall be a component of the annual budget review of the contract with the Fire Department and the City shall work with the Fire Department to correct any identified deficiencies. Local law enforcement officials and Fire Department representatives shall also continue their review of any proposed development plans. Annual reports concerning each Department will be submitted to the City Council for consideration.
- **Safety Development Review Program.** Certain design standards have been established by the City of Irwindale and the Los Angeles County Fire Department to ensure that site planning and building design consider public safety and fire prevention. These standards include requirements governing emergency access, roadway widths, clearance around structures, location of fire hydrants, etc.

3.11.3 Thresholds of Significance

The following significance criteria, included in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), will determine potential impacts related to fire protection. The IS/NOP prepared for the proposed project (Appendix A) found the proposed project to have a less than significant impact related to the provision of police protection services, schools, parks, and other public facilities, and therefore, these impacts will not be addressed further in this Draft EIR. Impacts related to fire protection and services would be significant if the proposed project would result in:

a) Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- ***Fire protection***

3.11.4 Project Elements That Can Reduce Impacts

There are no project design features or elements that will reduce impacts to fire protection.

3.11.5 Impact Analysis

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- ***Fire protection***

  LACFD currently serves the project site and the surrounding area. The increased use of the project site (from a vacant use to a specialty MOB facility) would increase the frequency of emergency response calls, although the exact frequency and nature of emergency calls is not known. The proposed project would provide emergency access to the project site in accordance with the applicable fire code, which includes requirements for adequate fire flows, water mains, width of emergency access routes, turning radii, automatic sprinkler systems, fire alarms, and floor to sky height limits along emergency access routes. A request for Fire Department Service Information was submitted to the County Fire Department on August 17, 2016. In their response

to the Request for Fire Department Service Information, the LACFD had the following comments and safety requirements, including:

While Fire Station No. 48 is located in the City and could provide service to the project site, Fire Station No. 29, located at 14334 E. Los Angeles Street, Baldwin Park, California 91706, is located approximately 2.6 miles northeast of the project site and is the jurisdictional station for the project site (Johnson 2016). Based on the distance to the project site, emergency units from Fire Station No. 29 are estimated to have emergency response times of approximately 6 to 8 minutes (Johnson 2016). There are no current plans to expand facilities, staffing, or equipment at Fire Station No. 29 (Johnson 2016). Compliance with the fire code standards and specific fire and life safety requirements for the construction phase would be ensured through the plan check process and fire review prior to the issuance of building permits. Payment of development fees by Kaiser Permanente would be used to offset the costs of increased personnel or equipment in order to maintain acceptable service ratios, response times, and other performance objectives. However, the proposed project would not have a significant effect on service demands, as determined by the LACFD. As such, the construction or expansion of existing fire facilities would not be required as a result of implementing the proposed project. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities. Impacts resulting from the proposed project would be **less than significant**. No mitigation is required.3.11.6 Cumulative Impacts

Development of related projects would generally increase the land use intensities in the City. Incremental increases in land use intensity that would be caused as the related projects are developed could lead to incremental increases in the number of calls for fire protection services. As mentioned throughout this section, the project site would be served by the LACFD for fire protection services. The proposed project and related projects would be required to be developed in accordance with applicable fire codes and emergency access requirements. Compliance with these requirements would help prevent and/or ameliorate fire emergencies (automatic sprinkler systems and fire alarms) and would help facilitate more expedient emergency response (adequate fire flows, turning radii, width of emergency accesses). Further, the proposed project and most of the related projects are infill projects, and therefore, involve replacement of existing structures with new structures. New structures are subject to modern standards for fire protection. As such, infill projects generally result in development of structures that are less likely to cause or contribute to an urban fire hazard when compared with structures that were built in

accordance with outdated fire protection requirements. As such, development of the proposed project and related infill projects will incrementally reduce the potential for urban fire hazards within the City. Additionally, LACFD reviews fire station placement and fire services through its annual budget process, and resources are expanded or reassigned as necessary to meet increases in service demands. As such, development patterns and increases in demand are monitored and responded to by LACFD.

Payment of development fees by the proposed project and all related projects would offset the costs of increased service needs as necessary and would ensure that performance objectives for fire services are not substantially affected by incremental increases in land use intensity within service areas. Due to the facilities planning efforts of fire services, required payment of requisite development fees, and compliance with modern performance standards, cumulative impacts would be **less than significant**. No mitigation is required.

3.11.6 Mitigation Measures

No significant fire protection service impacts would occur; therefore, no mitigation measures are required.

3.11.7 Significance after Mitigation

Overall, the proposed project would result in **less than significant** impacts with respect to fire protection services. No mitigation is required.

3.11.8 References

City of Irwindale. 2008. *City of Irwindale 2020 General Plan*. Accessed August 17, 2016. http://ci.irwindale.ca.us/index.aspx?NID=138.

Johnson, Kevin T. 2016. Los Angeles County Fire Department – Request for Fire Information for the Proposed "Kaiser Permanente Specialty Medical Office Building Project," It Consists of the Development of a Three-Story, Approximately 59-foot high, Outpatient Medical Office Building, 12761 Schabarum Avenue, Irwindale, FFER 201600137.

3.12 TRANSPORTATION AND TRAFFIC

This section describes the existing traffic conditions within the project area; identifies associated regulatory requirements; evaluates potential adverse impacts related to conflicts with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system; and conflicts with an applicable congestion management program; and identifies mitigation measures related to implementation of the proposed Kaiser Permanente Specialty Medical Office Building (MOB) Project (project or proposed project). A complete copy of the traffic impact study, prepared by Linscott, Law & Greenspan Engineers (LLG), is included in Appendix I of this Draft Environmental Impact Report (EIR). The study intersections were determined in consultation with City of Irwindale (City) Public Works Department staff with input from City of Baldwin Park, City of El Monte, and the State of California Department of Transportation (Caltrans).

The Initial Study and Notice of Preparation (IS/NOP) found that the proposed project would have a less than significant impact as it relates to changes in air traffic patterns, a substantial increase in hazards due to a design feature, inadequate emergency access, and conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities (Appendix A). As such, these impacts will not be addressed further in this Draft Environmental Impact Report (EIR).

3.12.1 Environmental Setting

The project site is currently occupied by a vacant approximately 83,500-square-foot building that was formerly used as a Jacmar Food Service Distribution Center. A total of 19 study intersections were identified and are analyzed in the EIR for weekday AM and PM peak hours, as well as on a daily basis. A total of 15 of the 19 study intersections are presently controlled by traffic signals, with the remaining four study intersections currently stop sign controlled. Of the 19 intersections identified for inclusion in the analysis, four are located within the City of El Monte; five are located within the City of Baldwin Park; two are shared by the City, City of Baldwin Park, and Caltrans; three are shared by City and City of Baldwin Park; and five are shared by City of Baldwin Park and Caltrans. The study area intersections are listed in Table 3.12-1. The locations of the study area intersections are shown on Figure 3.12-1.

Table 3.12-1
Study Intersections

Intersection Number (Corresponds to Figure 3.12-1)	Intersection	Traffic Control	Jurisdiction(s)
1	Peck Road/Lower Azusa Road	Signalized	City of El Monte
2	Peck Road/Ramona Boulevard	Signalized	City of El Monte

Table 3.12-1
Study Intersections

Intersection Number (Corresponds to Figure 3.12-1)	Intersection	Traffic Control	Jurisdiction(s)
3	Durfee Avenue/Ramona Boulevard	Unsignalized	City of El Monte
4	Gilman Road/Ramona Boulevard	Signalized	City of El Monte
5	I-605 Freeway Southbound Ramps/Ramona Boulevard	Signalized	City of Irwindale/ Baldwin Park/Caltrans
6	I-605 Freeway Northbound Ramps/Ramona Boulevard	Signalized	City of Irwindale/ Baldwin Park/Caltrans
7	Syracuse Avenue-Schabarum Avenue/Ramona Boulevard	Signalized	City of Irwindale/Baldwin Park
8	Frazier Street/I-10 Freeway Eastbound (EB) Off-Ramp-Judith Street	Signalized	City of Baldwin Park/ Caltrans
9	Bess Avenue-I-10 Freeway Westbound (WB) On-Ramp/Garvey Avenue	Unsignalized	City of Baldwin Park/ Caltrans
10	I-10 Freeway Westbound (WB) Off-Ramp- Frazier Avenue/Garvey Avenue	Unsignalized	City of Baldwin Park/ Caltrans
11	Baldwin Park Boulevard/Dalewood Street	Signalized	City of Baldwin Park
12	Baldwin Park Boulevard/I-10 Freeway WB Ramps	Signalized	City of Baldwin Park/ Caltrans
13	Francisquito Avenue/Ramona Boulevard	Signalized	City of Irwindale/Baldwin Park
14	Francisquito Avenue/Frazier Street	Signalized	City of Baldwin Park
15	Baldwin Park Boulevard/Francisquito Avenue	Signalized	City of Baldwin Park
16	Francisquito Avenue/Garvey Avenue	Signalized	City of Baldwin Park
17	Earl Avenue/Ramona Boulevard	Signalized	City of Irwindale/Baldwin Park
18	Baldwin Park Boulevard/Foster Avenue	Signalized	City of Baldwin Park
19	I-10 Freeway WB On/Off-Ramps-Vineland Boulevard/Garvey Avenue	Unsignalized	City of Baldwin Park/ Caltrans

Source: Appendix I.

Table 3.12-2 provides a description of the key roadways segments noted in Table 3.12-1 (Study Intersections) including roadway classifications, direction, number of lanes, median types, and posted speed limits.

Table 3.12-2
Existing Roadway Descriptions

Roadway	Classification[1]	Travel Lanes		Median Types[4]	Speed Limit[5]
		Direction[2]	*Number of Lanes[3]*		
Peck Road	Major Arterial	NB-SB	4	RMI/2WLT	35
Durfee Avenue	Collector Street	NB-SB	4[6]	2WLT	35

Table 3.12-2
Existing Roadway Descriptions

Roadway	Classification[1]	Travel Lanes		Median Types[4]	Speed Limit[5]
		Direction[2]	*Number of Lanes[3]*		
Gilman Road	Local Street	NB-SB	2	N/A	35
Syracuse Avenue-Schabarum Avenue	Local Street	NB-SB	2	N/A	30
Francisquito Avenue (Ramona Blvd to Baldwin Park Blvd)	Collector Street	NB-SB	4	N/A	35
Francisquito Avenue (Baldwin Park Blvd to I-10 Fwy)	Collector Street	NB-SB	4	2WLT	35
Earl Avenue	Local Street	NB-SB	2	N/A	
Baldwin Park Boulevard	Arterial Street	NB-SB	4	RMI	40
Bess Avenue	Local Street	NB-SB	2	N/A	25
Frazier Street	Collector Street	NB-SB	4	2WLT	25
Foster Avenue	Local Street	NB-SB	2	N/A	25
Vineland Avenue	Local Street	NB-SB	2	N/A	25
Judith Street	Local Street	NB-SB	2	N/A	
Lower Azusa Road (Elrovia Ave to Peck Rd)	Secondary Arterial	EB-WB	4[7]	2WLT	35
Lower Azusa Road (Peck Rd to Dyson Ave)	Secondary Arterial	EB-WB	4[7]	N/A	35
Ramona Boulevard (Valley Blvd to Peck Rd)	Secondary Arterial	EB-WB	4	RMI/2WLT	35
Ramona Boulevard (Peck Rd to Gilman Rd)	Secondary Arterial	EB-WB	4	2WLT	35
Ramona Boulevard (Gilman Rd to 605 Fwy NB Ramps)	Secondary Arterial	EB-WB	4	RMI/2WLT	35
Ramona Boulevard (605 Fwy NB Ramps to Earl Ave)	Arterial	EB-WB	4[6]	RMI	40
Garvey Avenue	Local Street	EB-WB	2	N/A	25
Dalewood Street	Local Street	EB-WB	2	N/A	25

Source: Appendix I.
Note:
Arterial roadways are major streets that primarily serve through-traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with two to six travel lanes and their major intersections are signalized. This roadway type is divided into two categories: principal and minor arterials. Principal arterials are typically four-or-more lane roadways and serve both local and regional through-traffic. Minor arterials are typically two-to-four lane streets that service local and commute traffic.
Collector roadways are streets that provide access and traffic circulation within residential and non-residential (e.g., commercial and industrial) areas. Collector roadways connect local streets to arterials and are typically designed with two through travel lanes (i.e., one through travel lane in each direction) that may accommodate on-street parking. They may also provide access to abutting properties.
Local roadways distribute traffic within a neighborhood, or similar adjacent neighborhoods, and are not intended for use as a through-street or a link between higher capacity facilities such as collector or arterial roadways. Local streets are fronted by residential uses and do not typically serve commercial uses.

1 Roadway classifications obtained from the City of Irwindale 2020 General Plan, City of Baldwin Park 2020 General Plan and City of El Monte 2011 General Plan.

[2] Direction of roadways in the project area: NB-SB - northbound and southbound; and EB-WB - eastbound and westbound.
[3] Number of lanes in both directions of the roadway.
[4] Median type of the road: RMI - Raised Median Island; 2WLT - 2-Way Left-Turn Lane; and N/A-Not Applicable.
[5] Roadways with no reported Speed Limit did not have posted speed limits in the vicinity of the project study locations.
[6] Class II Bikeway (Bike Lane).
[7] Class III Bikeway (Bike Routes).

Existing Transportation System

Regional access to the project site is provided by Schabarum Avenue, Durbin Street, Ramona Boulevard, Francisquito Avenue, and the Interstate 605 (I-605) Freeway. Vehicular access to the project site is currently provided via one driveway on the northwest bend of Schabarum Avenue. The existing driveway currently accommodates full access (e.g., right-turn and left-turn ingress and egress movements).

Existing Traffic Volumes and Levels of Service

At the time of the commencement of the traffic analysis, the construction of the Caltrans Interstate 10 (I-10) Freeway/I-605 Freeway Direct Connector project was well underway and included nearby roadway and ramp closures. Therefore, updated traffic counts for the study intersections were not able to be conducted since conditions were atypical. As such, available traffic count data was researched at the City, City of Baldwin Park, and in the traffic engineer's (LLG) files. The researched manual counts of vehicular turning movements were conducted at the study intersections prior to construction of the I-10 Freeway/I-605 Freeway Direct Connector Project and some counts were prior to the economic recession. For those locations where no data were available, new manual counts of vehicular turning movements were conducted at the study intersections during the weekday AM and PM commute periods to determine the peak hour traffic volumes. All of the manual counts were conducted by independent traffic count firms from 7:00 to 9:00 AM to determine the AM peak commute hour, and from 4:00 to 6:00 PM to determine the PM peak commute hour. Additionally, the available manual traffic count data were adjusted by one percent (1.0%) per year to reflect Year 2015 existing conditions and, where necessary, manually adjusted to provide balance between study locations. Traffic volumes at the study intersections show the typical peak periods between 7:00 to 9:00 AM and 4:00 to 6:00 PM generally associated with metropolitan Los Angeles commute periods.

The weekday AM and PM peak hour manual counts of vehicle movements at the study intersections are summarized in Table 3.12-3. The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are shown in Figures 3.12-2 and 3.12-3, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in Appendix A of Appendix I of this EIR.

Table 3.12-3
Existing Traffic Volumes

No.	Intersection	Date	Dir	AM Peak Hour		PM Peak Hour	
				Began	*Volume*	*Began*	*Volume*
1	Peck Road/Lower Azusa Road	06/05/2014	NB	7:15	1,239	5:00	1,270
			SB		1,038		913
			EB		660		1,157
			WB		955		799
2	Peck Road/ Ramona Boulevard	05/19/2015	NB	7:15	788	5:00	1,367
			SB		1,378		1,059
			EB		331		841
			WB		1,251		664
3	Durfee Avenue/ Ramona Boulevard	05/19/2015	NB	7:15	115	4:30	159
			SB		0		0
			EB		713		1,017
			WB		1,120		678
4	Gilman Road/ Ramona Boulevard	09/09/2014	NB	7:15	192	4:30	232
			SB		0		0
			EB		857		1,023
			WB		1,211		717
5	I-605 Freeway SB Ramps/ Ramona Boulevard	05/19/2015	NB	7:15	0	4:30	0
			SB		426		571
			EB		778		1,117
			WB		1,531		925
6	I-605 Freeway NB Ramps/ Ramona Boulevard	05/19/2015	NB	7:15	502	5:00	1,028
			SB		0		0
			EB		682		1,367
			WB		1,641		824
7	Syracuse Avenue-Schabarum Avenue/ Ramona Boulevard	03/17/2015	NB	7:30	289	4:45	158
			SB		105		181
			EB		943		2,022
			WB		1,345		715
8	Frazier Street/ I-10 Freeway EB Off-Ramp Judith Street	05/21/2014	NB	7:30	204	5:00	156
			SB		126		113
			EB		710		590
			WB		132		207
9	Bess Avenue-I10 Freeway WB On-Ramp/ Garvey Avenue	06/23/2015	NB	7:00	0	4:45	0
			SB		411		387
			EB		74		61
			WB		428		276
10	I-10 Freeway WB Off-Ramp/ Garvey Avenue-Frazier Avenue	06/23/2015	NB	7:00	47	4:45	143
			SB		0		0
			EB		113		238
			WB		387		172

Table 3.12-3
Existing Traffic Volumes

No.	Intersection	Date	Dir	AM Peak Hour		PM Peak Hour	
				Began	*Volume*	*Began*	*Volume*
11	Baldwin Park Boulevard/ Dalewood Street	03/06/2007	NB	7:45	1,001	4:45	1,166
			SB		1,184		802
			EB		270		580
			WB		602		563
12	Baldwin Park Boulevard/ I-10 Freeway WB Ramps	02/15/2007	NB	7:15	1,106	5:00	1,449
			SB		1,565		856
			EB		0		0
			WB		281		274
13	Francisquito Avenue/ Ramona Boulevard	05/15/2015	NB	7:15	552	4:45	266
			SB		17		85
			EB		807		1,812
			WB		1,223		614
14	Francisquito Avenue/ Frazier Street	01/24/2007	NB	7:30	900	5:00	592
			SB		540		765
			EB		543		278
			WB		577		287
15	Baldwin Park Boulevard/ Francisquito Avenue	01/17/2007	NB	7:15	537	5:00	1,115
			SB		1,003		792
			EB		562		786
			WB		976		823
16	Francisquito Avenue/ Garvey Avenue	01/17/2007	NB	7:15	1,570	4:45	1,291
			SB		620		1,147
			EB		5		9
			WB		410		337
17	Earl Avenue/ Ramona Boulevard	05/19/2015	NB	7:15	148	5:00	41
			SB		8		17
			EB		627		1,402
			WB		1,890		664
18	Baldwin Park Boulevard/ Foster Avenue	01/17/2007	NB	7:45	566	5:00	974
			SB		1,020		771
			EB		285		154
			WB		162		94
19	I-10 Freeway EB Ramps- Vineland Avenue/Garvey Avenue	06/11/2015	NB	7:15	106	4:15	219
			SB		314		164
			EB		678		740
			WB		189		173

[1] Counts conducted by City Traffic Counters, Accutek Traffic Data, and The Traffic Solution.

Transit Services

Public bus and rail transit service within the project study area is currently provided by the Los Angeles County Metropolitan Transportation Authority (Metro), El Monte Transit (E.M.T.),

Baldwin Park Transit (B.P.T.), Foothill Transit (F.T.), and Metrolink. A summary of the existing transit service, including the transit route, destinations and peak hour headways is presented in Table 3.12-4. The existing public transit routes in the project site vicinity are illustrated in Figure 3.12-4. Also, it is noted that the nearest Metrolink station is the Baldwin Park station which is located approximately two miles from the project site.

Table 3.12-4
Existing Transit Routes [1]

Route	Destinations	Roadway(S) Near Site	No. Of Buses/Trains During Peak Hour		
			Dir	*AM*	*PM*
Metro 190	El Monte to Cal Poly Pomona via Baldwin Park, Covina, West Covina, La Puente, Walnut, and Mt. Sac College	Ramona Boulevard, Gilman Road, Syracuse Avenue, Francisquito Avenue and Earl Avenue	EB WB	3 5	4 3
Metro 270	Norwalk to Monrovia via Santa Fe Springs, Whittier, Rio Hondo College and El Monte	Peck Road, Ramona Boulevard, and Lower Azusa Road	NB SB	1 1	1 1
F.T. 488	Glendora to El Monte via Covina, West Covina and Baldwin Park	Peck Road, Ramona Boulevard, Gilman Road, Syracuse Avenue, Francisquito Avenue, and Baldwin Park Boulevard	EB WB	3 3	2 2
F.T. 494	San Dimas to El Monte via Glendora, Azusa, Duarte, Monrovia and Arcadia	Ramona Boulevard, Francisquito Avenue and Peck Road	EB WB	0 2	1 0
E.M.T. Blue Line	City of El Monte	Peck Road, Ramona Boulevard and Durfee Avenue	EB WB	0 2	0 2
E.M.T. Red Line	City of El Monte	Peck Road and Lower Azusa Road	EB WB	0 2	0 2
B.P.T. Teal Line	City of Baldwin Park via El Monte and Irwindale	Syracuse Avenue, Ramona Boulevard, Earl Avenue and Francisquito Avenue	EB WB	1 0	2 0
B.P.T. Pumpkin Line	City of Baldwin Park	Baldwin Park Boulevard, Francisquito Avenue, and Frazier Street	EB WB	0 2	0 1
Metrolink San Bernardino Line	San Bernardino to Los Angeles Union Station via Rialto, Fontana, Rancho Cucamonga, Upland, Montclair, Claremont, Pomona (North), Covina, Baldwin Park, El Monte, California State University Los Angeles	Baldwin Park Station	EB WB	1 3	3 1
			Total	**29**	**25**

[1] **Sources:** Los Angeles County Metropolitan Transportation Authority (Metro), El Monte Transit (E.M.T.), Baldwin Park Transit (B.P.T.), Foothill Transit (F.T.) and Metrolink websites, 2015.

3.12.2 Relevant Plans, Policies, and Ordinances

Federal

There are no applicable federal regulations related to traffic that would apply to this project.

State

SB-743 (Status and Application to this Analysis)

On September 27, 2013, California Governor Jerry Brown signed Senate Bill (SB) 743 into law, which creates a process to change the way that transportation impacts are analyzed under California Environmental Quality Act (CEQA). SB 743 requires that the Governor's Office of Planning and Research (OPR) amend the CEQA Guidelines to provide an alternative to levels of service (LOS) for evaluating transportation impacts. Measurements of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated" (New Public Resources Code Section, 21099(b)(1)).

On August 6, 2014, OPR released for public review a preliminary discussion draft of changes to the CEQA Guidelines. The second set of guidelines was released on January 20, 2016, and recommends that transportation impacts under CEQA will be evaluated using Vehicle Miles Traveled (VMT). Local jurisdictions will still be allowed to assess impacts using methodologies in addition to VMT. Once the guidelines are officially adopted, jurisdictions will have a two-year opt-in period to incorporate VMT thresholds into their CEQA-related transportation impact review for projects. Public comment on the second set of guidelines has been completed and OPR will make a second and final set of revisions and submit the final guidelines to begin the 6-month "rulemaking" process. Once that process is completed, there is a 60-day administrative law review before the guidelines officially become law. Cities and other lead agencies will have approximately 120 days to update their respective guidance to comply with the law and implementation required.

Under these updated CEQA Guideline changes, LOS would no longer be considered as a basis for determining significant impacts in many parts of California. Furthermore, parking impacts would also not be considered significant impacts under CEQA for select development projects within infill areas that are near frequent transit service. At this time, the City has not adopted new traffic impact study guidelines in accordance with SB 743, as the updated CEQA Guidelines are still being finalized. As such, this analysis is based on the City's current and existing traffic study guidelines, which use LOS and delay as a measure for significant transportation impacts under CEQA.

Local

Los Angeles County Congestion Management Program

The City is subject to the Los Angeles County Congestion Management Plan (CMP). The Los Angeles County CMP was created statewide because of Proposition 111 and was implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact to be analyzed for individual development projects that may have regional significance. A specific system of arterial roadways plus all freeways comprises the CMP system. A total of 164 intersections are identified for monitoring on the system in Los Angeles County.

CMP Transportation Impact Analysis (TIA) Guidelines are provided in the 2010 Congestion Management Plan for Los Angeles County. According to these guidelines, an analysis of the effects that a project may have on the CMP system is conducted in the following instances:

- The project is projected to add 50 or more vehicle trips during either AM or PM weekday peak hours to CMP arterial monitoring intersections, including freeway on-ramps or off-ramps.
- The project is projected to add 150 or more trips in either direction during either the AM or PM weekday peak hours at CMP mainline freeway monitoring locations.

The proposed project was reviewed for its potential to trigger the above thresholds, which would then require the project to be further analyzed under the CMP. This review is included in Appendix I and is summarized in Section 3.12.4, Impact Analysis.

State of California Department of Transportation

Pursuant to the Caltrans *Guide for the Preparation of Traffic Impact Studies*[1] and based on recent coordination with Caltrans, analyses of State highway facilities should be conducted when and if a proposed project is expected to add 50 or more peak hour trips in either direction on a freeway mainline segment or 10 or more peak hour trips to a freeway off-ramp location. Although the proposed project at build-out is not expected to generate 50 or more vehicle trips, during either the AM or PM peak commute hours, at any of the freeway mainline locations, analysis was prepared for five mainline freeway segments in the project vicinity pursuant to Caltrans analysis methodologies. The proposed project is expected to add 10 or more vehicle trips during the AM and/or PM commute peak hours to some of the adjacent freeway ramp

[1] *Guide for the Preparation of Traffic Impact Studies*, State of California Department of Transportation, December 2002.

locations. Therefore, intersection analyses were prepared for the six Caltrans ramp study intersections in the project vicinity pursuant to Caltrans analysis methodologies.

City of Irwindale General Plan Update

The Infrastructure Element of the City's General Plan Update describes the roadway system and transportation facilities in the City. Regional access to the City is provided by the I-210 Freeway and the I-605 Freeway. The I-210 Freeway traverses the northerly portion of the City in an east-west orientation while the I-605 Freeway bisects the City in a north-south orientation. The I-605 Freeway is located immediately west of the project site.

The Infrastructure Element of the City's General Plan Update includes the following programs and policies applicable to the proposed project:

- **Caltrans Coordination.** The City will coordinate efforts with Caltrans to upgrade area freeways. The purpose of this undertaking is to ensure that the City is fully appraised of roadway and facility improvement efforts in the early stages of planning and design. The City will continue to work with Caltrans and the Metro, as appropriate, and will request to be on all notification lists of future projects that may impact the City.
- **Environmental Review.** The City shall continue to evaluate the environmental impacts of new development and provide mitigation measures prior to development approval, as required by the California Environmental Quality Act (CEQA). Environmental review shall be provided for major projects and those that will have a potential to adversely affect traffic in the City. Among those issues that may be addressed in the environmental analysis are traffic, parking, and circulation. In compliance with CEQA, the City shall also assign responsibilities for the verification of the implementation of mitigation measures. The City's environmental review procedures are currently in place.
- **Mitigation Fee/User Fee Study.** The City will explore strategies to ensure that the City's residents do not bear an undue burden associated with new development. The City will determine a reasonable and fair method of assessing new development for the cost of providing any additional infrastructure required by the development. The first step of this program's implementation calls for the preparation of a mitigation fee strategy study to be initiated by the City Manager. The subsequent phases of this program will involve examining the current truck fees to ensure that the City is receiving its fair share of licensing fees, given the relatively high volumes of truck traffic in the City.
- **Signalization**. The City will strive to provide optimum signalization on major thoroughfares to maximize circulation efficiency, such as participation in a regional signalization program. City staff will outline both the need and strategy for improved

signalization. Coordination with Caltrans, the Department of Public Works, Los Angeles County, and Metro will be emphasized.

- **I-605 Freeway Ramps**. The City will encourage the upgrade and construction of freeway ramps to and from the I-605 Freeway. Future uses and heavy demand in and around the I-605 Freeway will benefit from these improvements.
- **Infrastructure Element Policy 4**. The City of Irwindale will strive to ensure that all new development implements its "fair-share" of infrastructure improvement to offset the potential adverse impacts associated with the additional traffic that will be generated by the new development.

City of Baldwin Park 2020 General Plan

The Circulation Element of the City of Baldwin Park 2020 General Plan includes goals and policies that will be applied to the proposed project related to transportation and traffic.

- **Goal 1.0.** Provide a street and highway system in Baldwin Park that provides adequate capacity to ensure acceptable traffic flow.
- **Policy 1.1**. Develop and maintain the local circulation system illustrated in Figure C-1.
- **Policy 1.4.** Maintain as a goal the provision of service levels at intersections along arterial highways at Level of Service "D" or better during morning and evening peak travel periods.
- **Policy 2.2.** Support Caltrans' efforts to improve traffic flow on the freeway system which could translate to reduced impacts on the arterial roadway system.

City of El Monte General Plan

The Circulation Element of the City of El Monte General Plan includes goals and policies that will be applied to the proposed project related to transportation and traffic.

- **Goal 1.0.** Ensure that the City of Baldwin Park's street and highway system provides adequate capacity to ensure acceptable traffic flow.
- **Policy 1.1**. Provide for the local circulation system illustrated in Figure C-3.
- **Policy 1.4**. Maintain service levels at intersections along arterial highways at Level of Service "D" or better during morning and evening peak travel periods.

3.12.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Based on these thresholds, implementation of the proposed project would have a significant adverse impact related to transportation and traffic if it would:

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.

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.

Methodology

The traffic impact study follows the City's traffic study guidelines[2] and is consistent with the traffic impact assessment guidelines set forth in the Los Angeles County Congestion Management Program.[3] The traffic impact analysis in this section incorporates the data and conclusions of the traffic impact study prepared by LLG, which is appended to this EIR as Appendix I. The traffic impact analysis evaluates potential project-related impacts at 19 key intersections in the vicinity of the project site. Generally, the studied intersections were selected based on the following criteria:

a. Being located immediately adjacent or in close proximity to the project site;

b. Being located in the vicinity of the project site that are documented to have current or projected future adverse operational issues; and

c. Being located in the vicinity of the project site that are forecast to experience a relatively greater percentage of project-related vehicular turning movements (e.g., at freeway ramp intersections).

Based on the above studied intersection criteria, while the proposed project site is situated within the jurisdiction of the City, the traffic impact study also evaluates potential traffic impacts associated with the proposed project at study intersections located in adjoining jurisdictions.

[2] Policy Guidelines for Traffic Impact Reports, City of Irwindale, December 30, 2014.

[3] 2010 Congestion Management Program, Los Angeles County Metropolitan Transportation Authority, October 2010.

Specifically, locations within the cities of Baldwin Park and El Monte have been included. As such, the study intersections were determined in consultation with the City's Public Works Department staff with input from City of Baldwin Park, City of El Monte, and Caltrans. The following describes the intersection impact threshold criteria for the City, City of Baldwin Park, and City of El Monte.

City of Irwindale

The significance of the potential impacts of project-generated traffic at the City study intersections were identified using criteria set forth in the City's traffic study guidelines. The City utilizes the following threshold of significance for signalized intersections:

- When a signalized intersection operates at LOS D or better under existing or future conditions, and the addition of the project trips degrades the intersection operations to LOS E or F.
- When a signalized intersection operates at LOS E under existing or future baseline conditions, and the addition of the project trips degrades the intersection operations to LOS F or increases the Volume-to-Capacity (V/C) ratio by 0.02 or greater.
- When a signalized intersection operates at LOS F under existing or future baseline conditions, and the addition of more than 50 peak hour project trips increases the V/C ratio by 0.02 or greater.

City of Baldwin Park

The significance of the potential impacts of project-generated traffic at the City of Baldwin Park study intersections were identified using criteria set forth in the City of Baldwin Park's traffic study guidelines. According to the City of Baldwin Park's traffic study guidelines, a significant transportation impact is determined based on the criteria presented in Table 3.12-5.

Table 3.12-5
City of Baldwin Park Intersection Impact Threshold Criteria

Final Volume-to-Capacity Ratio	Level of Service	Project-Related Increase in Volume-to-Capacity Ratio is Significant if
>0.900	LOS E or F	equal to or greater than 0.010

Source: Appendix I.

As presented in Table 3.12-5, for those intersections that operate at LOS E or F after the addition of project traffic and the incremental change in the V/C ratio is 0.010 or greater, the project would be considered to have a significant impact.

City of El Monte

The City of El Monte utilizes the following threshold of significance for signalized intersections:

- A significant impact occurs when a proposed project increases traffic demand at a signalized study intersection by two percent or more of capacity (V/C / 0.02), causing or worsening LOS F (V/C > 1.00) for all intersections on major corridors, truck routes, commercial corridors at, or adjacent to freeway ramps (in this case, all intersections along Lower Azusa Road and Ramona Boulevard and at intersections at, or adjacent to freeway ramps).
- A significant impact occurs when a proposed project increases traffic demand at a signalized study intersection by two percent or more of capacity (V/C / 0.02), causing or worsening LOS E (V/C > 0.90) for all intersections which are not on major corridors, truck routes, commercial corridors at or adjacent to freeway ramps.

The City of El Monte does not have established thresholds of significance for unsignalized intersections. However, based on coordination between LLG and City of El Monte staff, the following threshold of significance has been employed in the City of El Monte's General Plan Traffic Impact Study and other traffic studies conducted in the City of El Monte:

- A significant impact occurs when a proposed project increases traffic delay at an unsignalized intersection by two percent or more of capacity, causing or worsening LOS E (control delay > 35 seconds) for those intersections.

The traffic impact analysis first involves determining existing roadway traffic volumes on the study street segments and the amount of traffic that passes through the identified study intersections. This data was gathered in the field. As previously mentioned, the available manual traffic count data were adjusted by one percent (1.0%) per year to reflect Year 2015 existing conditions and, where necessary, manually adjusted to provide balance between study locations. Traffic volumes at the study intersections show the typical peak periods between 7:00 to 9:00 AM and 4:00 to 6:00 PM generally associated with metropolitan Los Angeles commute periods. The Intersection Capacity Utilization (ICU) method was then used to determine V/C ratios and corresponding LOS for the signalized study intersections. The LOS varies from LOS A (free flow) to LOS F (jammed condition). The *Highway Capacity Manual*[4] (HCM 2010) was used to determine intersection delay values and corresponding LOS for the unsignalized study intersections.

Level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Only the portion of total

[4] *HCM2010 Highway Capacity Manual*, Transportation Research Board of the National Academies, 2010.

delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called control delay. The LOS criteria for unsignalized intersections are stated in terms of the average control delay per vehicle. The LOS is determined by the computed or measured control delay and is defined for each minor movement. Average control delay for any particular minor movement is a function of the service time for the approach and the degree of utilization. The following summarizes the HCM criteria for each level of service:

- LOS A describes operations with very low control delay, up to 10 seconds per vehicle.
- LOS B describes operations with control delay greater than 10 and up to 15 seconds per vehicle.
- LOS C describes operations with control delay greater than 15 and up to 25 seconds per vehicle.
- LOS D describes operations with control delay greater than 25 and up to 35 seconds per vehicle.
- LOS E describes operations with control delay greater than 35 and up to 50 seconds per vehicle.
- LOS F describes operations with control delay in excess of 50 seconds per vehicle. For two-way stop controlled intersections, LOS F exists when there are insufficient gaps of suitable size to allow side-street demand to safely cross through a major-street traffic stream. This LOS is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches.

In addition to the existing traffic volumes, the traffic impact study also presents existing plus project traffic volumes, future cumulative baseline traffic volumes, and future plus project volumes. Cumulative project traffic growth is due to specific, known development projects in the vicinity that may affect traffic circulation in the study area. The related projects were based on information on file at the City, City of Baldwin Park, City of El Monte, County of Los Angeles, and Caltrans. The list of related projects in the project site area including traffic generation for the weekday AM and PM peak hours is presented in Table 3.12-6 and shown on Figure 3.12-5. Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*.[5] The distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are shown in Figures 3.12-6 and 3.12-7, respectively.

The list of related projects in the project site area for the future scenario is presented in Table 3.12-6.

[5] Institute of Transportation Engineers *Trip Generation Manual*, 9th Edition, Washington, D.C., 2012.

Table 3.12-6
Related Projects List and Trip Generation [1]

Map No	Project Status	Project Name/Number Address/Location	Land Use Data			Project Data Source	Daily Trip Ends [2] Volumes	AM Peak Hour Volumes [2]			PM Peak Hour Volumes [2]		
			Land-Use	*Size*				*In*	*Out*	*Total*	*In*	*Out*	*Total*
City of Irwindale													
I1	Proposed	Irwindale Regional Shopping Center 500 Speedway Drive	Factory Outlet Center	700,000	SF	[3]	17,788	342	127	469	341	438	779
I2	Proposed	Olive Pit Mining and Reclamation Project Northwest corner Azusa Canyon Road and Los Angeles Street	Mining and Reclamation	32	Acres	[4]	866	72	61	133	45	47	92
I3	Proposed	Arrow Highway Business Park 16203-16223 Arrow Highway	Warehouse Manufacturing Office	20,000 88,000 25,000	SF SF SF	[5]	1,000	119	29	148	47	103	150
I4	Proposed	Irwindale Materials Recovery Facility and Transfer Station Project 2200 Arrow Highway	Materials Recovery Facility Fueling Facility Convenience Store	17.22	Acres	[6]	8,333	350	314	664	336	328	664
I5	Existing	Jacmar Food Distribution 12761 Schabarum Avenue	Food Distribution Center	82,500	SF	[7]	210	10	5	15	5	11	16

Table 3.12-6
Related Projects List and Trip Generation [1]

Map No	Project Status	Project Name/Number Address/Location	Land Use Data			Project Data Source	Daily Trip Ends [2] Volumes	AM Peak Hour Volumes [2]			PM Peak Hour Volumes [2]		
			Land-Use	*Size*				*In*	*Out*	*Total*	*In*	*Out*	*Total*
City of Baldwin Park													
B1	Proposed	Kaiser Permanente Baldwin Park MOB 1011 Baldwin Park Boulevard	Medical Office Building	60,000	GSF	[8]	2,167	114	30	144	38	99	137
B2	Proposed	LA Fitness 13822 Garvey Avenue	Health/Fitness Club Restaurant	45,000 9,000	GSF GSF	[9]	2,788	94	92	186	130	100	230
B3	Proposed	3513 Barnes Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B4	Proposed	3142 Athol Street	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B5	Proposed	3146 Athol Street	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B6	Proposed	3202 Baldwin Park Boulevard	Gasoline Station	6	VFP	[11]	1,011	37	36	73	42	41	83
B7	Proposed	13128 Corak Street	Single-Family Detached Housing	2	DU	[10]	19	1	1	2	1	1	2
B8	Proposed	3353 Athol Street	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B9	Proposed	3346 Vineland Avenue	Single-Family Detached Housing	15	DU	[10]	143	3	8	11	9	6	15
B10	Built	13732 Monterey Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B11	Built	13734 Monterey Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B12	Built	13736 Monterey Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1

Table 3.12-6
Related Projects List and Trip Generation [1]

Map No	Project Status	Project Name/Number Address/Location	Land Use Data			Project Data Source	Daily Trip Ends [2] Volumes	AM Peak Hour Volumes [2]			PM Peak Hour Volumes [2]		
			Land-Use	*Size*				*In*	*Out*	*Total*	*In*	*Out*	*Total*
B13	Built	12723 Bess Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B14	Built	12725 Bess Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B15	Built	12727 Bess Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B16	Built	4143 Hornbrook Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B17	Under Construction	4142-4144 La Rica Avenue	Condominium	8	DU	[12]	46	1	3	4	3	1	4
B18	Built	3323 Baldwin Park Boulevard	Office	4,950	GSF	[13]	55	7	1	8	1	6	7
B19	Under Construction	13329 Garvey Avenue	Office/Warehouse	13,620	GSF	[13]	48	3	1	4	1	3	4
B20	Built	13655 Foster Avenue	Townhome	10	DU	[12]	58	1	3	4	3	2	5
B21	Under Construction	3247 Mangum Street	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B22	Under Construction	4022 Center Street (A) & (B)	Single-Family Detached Housing	2	DU	[10]	19	1	1	2	1	1	2
B23	In Review	3932 La Rica Avenue	Apartment	3	DU	[14]	20	0	2	2	1	1	2
B24	Under Construction	4723 Little John Street	Warehouse	16,133	GSF	[15]	57	4	1	5	1	4	5
B25	In Review	12755 Aukland Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B26	In Review	13276 Francisquito Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1

Table 3.12-6
Related Projects List and Trip Generation [1]

Map No	Project Status	Project Name/Number Address/Location	Land Use Data			Project Data Source	Daily Trip Ends [2] Volumes	AM Peak Hour Volumes [2]			PM Peak Hour Volumes [2]		
			Land-Use	*Size*				*In*	*Out*	*Total*	*In*	*Out*	*Total*
B27	Under Construction	4112 Harlan Avenue	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
B28	In Review	Kenan Center Specific Plan 3825 Baldwin Park Boulevard	Single-Family Detached Housing	50	DU	[10]	476	10	28	38	32	18	50
B29	In Review	13825 Kenmore Avenue	Single-Family Detached Housing	1	DU	[9]	10	0	1	1	1	0	1
B30	In Review	3465 Mangum Street	Single-Family Detached Housing	1	DU	[9]	10	0	1	1	1	0	1
B31	In Review	3913 Stewart Avenue	Apartment	4	DU	[14]	27	0	2	2	1	1	2
B32	In Review	13506 Elwyn Drive	Single-Family Detached Housing	1	DU	[10]	10	0	1	1	1	0	1
City of El Monte													
E1	In Review	Walmart Superstore 4000 Arden Drive	Commercial	182,429	GLSF	[16]	7,595	155	122	277	280	292	572
E2	In Review	4422-4436 Bannister Street	Single-Family Detached Housing	22	DU	[6]	209	4	13	17	14	8	22
E3	Approved	Flair Spectrum 9600 Flair Drive	Hotel Factory Outlet Center Quality Restaurant Condominium	250 64,000 50,000 600	Rooms GSF GSF DU	[17]	21,317	377	348	725	757	659	1,416
E4	Under Construction	Gateway TOD 3527 Santa Anita Avenue	Apartment Retail	485 25,000	DU GLSF	[14] [18]	3,225 1,068	49 15	198 9	247 24	196 45	105 48	301 93

Table 3.12-6
Related Projects List and Trip Generation [1]

Map No	Project Status	Project Name/Number Address/Location	Land Use Data			Project Data Source	Daily Trip Ends [2] Volumes	AM Peak Hour Volumes [2]			PM Peak Hour Volumes [2]		
			Land-Use	*Size*				*In*	*Out*	*Total*	*In*	*Out*	*Total*
E5	In Review	11830 & 11842 Lambert Avenue	Single-Family Detached Housing	6	DU	[10]	57	1	4	5	4	2	6
E6	Approved	4610 Peck Road	Apartment	23	DU	[14]	153	2	10	12	9	5	14
E7	Submitted	4704-4716 Peck Road	Apartment	49	DU	[14]	326	5	20	25	20	10	30
						TOTAL	**69,261**	**1,777**	**1,487**	**3,264**	**2,381**	**2,340**	**4,721**

Source: Appendix I.

Los Angeles County Congestion Management Plan

As required by the 2010 Congestion Management Program, a Traffic Impact Assessment (TIA) has been prepared to determine the potential impacts on designated monitoring locations on the CMP highway system. The analysis has been prepared in accordance with procedures outlined in the *2010 Congestion Management Program*, Los Angeles County Metropolitan Transportation Authority, October 2010.

According to Section D.9.1 (Appendix D, Guidelines for CMP Transportation Impact Analysis, page D-6) of the 2010 CMP manual, the criteria for determining a significant transportation impact is listed below:

> "A significant transportation impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C $\geq$ 0.02), causing or worsening LOS F (V/C > 1.00); if the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C $\geq$ 0.02)."

3.12.4 Impact Analysis

a) Would the project 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?

In considering whether the proposed project would conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, it is necessary to analyze the proposed project's potential impacts relative to the significance criteria used by the City, City of Baldwin Park, and City of El Monte, as discussed above. This impact analysis was conducted under the following six scenarios for the proposed project:

a. Existing conditions.
b. Existing with project conditions.
c. Existing with project conditions with implementation of mitigation measures, where necessary.

d. Future without project conditions (Existing conditions plus one percent (1.0%) annual ambient traffic growth through 2019 and with completion and occupancy of the related projects).

e. Future with project conditions (Existing conditions plus one percent (1.0%) annual ambient traffic growth through 2019 and with completion and occupancy of the proposed project and related projects).

f. Future with project conditions with implementation of mitigation measures, where necessary (Existing conditions plus one percent (1.0%) annual ambient traffic growth through 2019 and with completion and occupancy of the proposed project and related projects with implementation of mitigation measures, where necessary).

Previous Food Distribution Center Traffic

Trip Generation. Traffic volumes expected to be generated by the prior site use (food distribution center) also were forecast during the weekday AM and PM peak hours, as well as on a daily basis. The prior site use forecasts were based on information contained in the *Trip Generation Analysis for High-Cube Warehouse Distribution Center Land Use for the National Association of Industrial and Office Properties (NAIOP) Inland Empire Chapter*, prepared by Kunzman Associates, Inc., July 2010. The study included specific data in terms of the distribution of vehicle trips associated with warehouse distribution centers (e.g., percentages of passenger cars, 2-axle trucks, 3-axle trucks, and 4 or more axle trucks). While the more conservative ITE trip generation rates were used in this review, the breakdown of vehicle trip types have been employed in this analysis for the purposes of applying the appropriate passenger car equivalent (PCE) factors. A passenger car equivalency (PCE) factor of 1.5 was applied to all 2-axle trucks, while a PCE factor of 2.0 was applied to all 3-axle trucks and a PCE of 3.0 was applied to all 4 or more axle trucks.

Project-Only Traffic

Trip Generation. The trip generation forecast for the proposed project is summarized in Table 3.12-7. Traffic volumes expected to be generated by the proposed project during the weekday AM and PM peak hours, as well as on a daily basis, were estimated using rates published in the ITE *Trip Generation Manual*. Traffic volumes expected to be generated by the proposed project were based upon rates per 1,000 gross square feet for the project. ITE Land Use Code 720 (Medical-Dental Office) trip generation rates were used to forecast the traffic volumes expected to be generated by the proposed project.

Table 3.12-7
Project Trip Generation[1]

Land Use	Size	Daily Trip Ends[2] Volumes	AM Peak Hour Volumes[2]			PM Peak Hour Volumes[2]		
			In	*Out*	*Total*	*In*	*Out*	*Total*
Proposed Project								
Medical Office[3]	90,000 GSF	3,252	170	45	215	74	191	265
Subtotal Proposed		*3,252*	*170*	*45*	*215*	*74*	*191*	*265*
Existing Use								
Food Distribution Center	82,500 GSF							
Total Vehicles[4]		138	6	3	9	3	7	10
Total Passenger Cars (69.51% Daily)[5]		96	4	2	6	2	5	7
Total Trucks (30.49% Daily) [5]		42	2	1	3	1	2	3
2-Axle (10.47% of All Trucks)		4	0	0	0	0	0	0
3-Axle (13.36% of All Trucks)		6	0	0	0	0	0	0
4+-Axle (76.17% of All Trucks)		32	2	1	3	1	2	3
2-Axle (1.5 PCE)		6	0	0	0	0	0	0
3-Axle (2.0 PCE)		12	0	0	0	0	0	0
4+-Axle (3.0 PCE)		96	6	3	9	3	6	9
Subtotal Trucks (PCE Adjusted)		*114*	*6*	*3*	*9*	*3*	*6*	*9*
Subtotal Existing		*210*	*10*	*5*	*15*	*5*	*11*	*16*
Net Increase		**3,042**	**160**	**40**	**200**	**69**	**180**	**249**

1 Source: ITE "Trip Generation Manual", 9th Edition, 2012.
2 Trips are one-way traffic movements, entering or leaving.
3 ITE Land Use Code 720 (Medical-Dental Office Building) trip generation average and equation rates.
- Daily Trip Rate: 36.13 trips/1,000 GSF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 2.39 trips/1,000 GSF of floor area; 79% inbound/21% outbound
- PM Peak Hour Trip Rate: Ln(T) = 0.90 Ln(X)+1.53 trips/1,000 SF of floor area; 28% inbound/72% outbound

4 ITE Land Use Code 152 (High-Cube Warehouse) trip generation average rates.
- Daily Trip Rate: 1.68 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.11 trips/1,000 SF of floor area; 69% inbound/31% outbound
- PM Peak Hour Trip Rate: 0.12 trips/1,000 SF of floor area; 31% inbound/69% outbound

5 Based on information contained in the "Trip Generation Analysis for High-Cube Warehouse Distribution Center Land Use for the National Association of Industrial and Office Properties (NAIOP) Inland Empire Chapter", prepared by Kunzman Associates, Inc., July 19, 2010. A PCE factor of 1.5 was applied to all 2-axle trucks, while a PCE factor of 2.0 was applied to all 3-axle trucks and a PCE factor of 3.0 was applied to all 4 or more axle trucks.

As presented in Table 3.12-7, the proposed project is expected to generate 200 net new vehicle trips (160 inbound trips and 40 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 249 net new vehicle trips (69 inbound trips and 180 outbound trips). Over a 24-hour period, the proposed project is forecast to generate 3,042 net new daily trip ends during a typical weekday (1,521 inbound trips and 1,521 outbound trips).

It should be noted that although the site was vacated prior to conduct of the traffic counts at the study intersections, a prior use trip credit for the former food distribution center on

the project site has been applied in the traffic impact analysis for the project. The re-occupancy of the food distribution center has been accounted for in the future pre-project conditions analysis as a related project and thus the trips are accounted for as the site could be reoccupied without any additional environmental review.

Trip Distribution and Assignment. Project traffic volumes both entering and exiting the project site have been distributed and assigned to the adjacent street system based on the following considerations:

- The site's proximity to major traffic corridors (e.g., I-605 Freeway, Ramona Boulevard, Francisquito Avenue, etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Existing site access ingress/egress schemes;
- Ingress/egress scheme planned for the MOB drop-off and pick-up area; and
- Nearby population and employment centers.

The proposed project traffic volume distribution percentages during weekday AM and PM peak hours at the study intersections are illustrated in Figure 3.12-8. The forecast traffic volumes for the proposed project at the study intersections for the weekday AM and PM peak hours are displayed in Figures 3.12-9 and 3.12-10 respectively. The traffic volume assignments presented in Figures 3.12-9 and 3.12-10 reflect the traffic distribution characteristics shown in Figure 3.12-8 and the project traffic generation forecast presented in Table 3.12-7.

Table 3.12-8
City Of Irwindale Summary Of Volume To Capacity Ratios[1]
And Levels Of Service Weekday AM And PM Peak Hours

			[1]		[2]				[3]		[4]				[5]			
			Existing		*Existing With Project*		*Change In V/C*	*Significant Impact*	*Year 2019 Future Pre-Project W/ Ag & Rel. Projects*		*Year 2019 Future With Proposed Project*		*Change In V/C*	*Significant Impact*	*Year 2019 Future With Project Mitigation*		*Change in V/C*	*'Mitigated*
No.	**Intersection**	**Peak Hour**	*V/C*	*LOS*	*V/C*	*LOS*	*[(2)-(1)]*	*[a]*	*V/C*	*LOS*	*V/C*	*LOS*	*[(4)-(3)]*	*[a]*	*V/C*	*LOS*	*[(5)-(3)]*	*[a]*
5	I-605 Freeway SB Ramps/ Ramona Boulevard	AM	0.805	D	0.809	D	0.004	NO	0.849	D	0.852	D	0.003	NO	0.848	D	0.001	---
		PM	0.874	D	0.903	E	0.029	YES	0.921	E	0.950	E	0.029	YES	0.866	D	0.055	YES
6	I-605 Freeway NB Ramps/ Ramona Boulevard	AM	0.870	D	0.892	D	0.022	NO	0.920	E	0.942	E	0.022	YES	0.926	E	0.006	YES
		PM	0.968	E	0.981	E	0.013	NO	1.016	F	1.029	F	0.013	NO	0.865	D	0.151	---
7	Syracuse Avenue-Schabarum Avenue/ Ramona Boulevard	AM	0.748	C	0.811	D	0.063	NO	0.786	C	0.848	D	0.062	NO	---	---	---	---
		PM	0.785	C	0.842	D	0.057	NO	0.826	D	0.883	D	0.057	NO	---	---	---	---
13	Francisquito Avenue/ Ramona Boulevard	AM	0.634	B	0.658	B	0.024	NO	0.664	B	0.689	B	0.025	NO	---	---	---	---
		PM	0.678	B	0.696	B	0.018	NO	0.718	C	0.736	C	0.018	NO	---	---	---	---
17	Earl Avenue/ Ramona Boulevard	AM	0.777	C	0.789	C	0.012	NO	0.812	D	0.823	D	0.011	NO	---	---	---	---
		PM	0.585	A	0.597	A	0.012	NO	0.615	B	0.628	B	0.013	NO	---	---	---	---

1 City of Irwindale intersection impact threshold criteria is as follows:

Pre-Project v/c	LOS	Project Related Increase in v/c
≤ 0.900	D	intersection operating at LOS D degrades to LOS E or F
≥ 0.901 - 1.000	E	equal to or greater than 0.02
> 1.000	F	equal to or greater than 0.02, resulting from 50 or more peak hour project trips

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Ambient Traffic Growth Factor. Horizon year, background traffic growth estimates have been calculated by using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown related projects in the study area, as well as account for typical growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at one percent (1.0%) per year. The ambient growth factor was based on review of the background traffic growth estimates for the Irwindale area (RSA 26, West Covina) published in the *2010 Congestion Management Program for Los Angeles County*, which indicate that existing traffic volumes would be expected to increase at an annual rate of less than one percent (approximately 0.46% per year) between the years 2010 and 2020. However, a one percent (1.0%) ambient traffic growth factor has been employed in this analysis in order to provide a conservative, worst case forecast of future traffic volumes in the area. Application of the ambient traffic growth factor to existing year traffic volumes results in a four percent (4.0%) increase in existing traffic volumes to horizon year 2019. Further, it is noted that the CMP manual's traffic growth rate is intended to anticipate future traffic generated by development projects in the project vicinity. Thus, the inclusion of both a forecast of traffic generated by known related projects plus the use of an ambient traffic growth factor based on CMP travel demand model data, results in a conservative estimate of future traffic volumes at the study intersections.

City of Irwindale Traffic Analysis

The traffic impact analysis prepared for the study intersections for the proposed project development program using the ICU methodology and application of the City's significant traffic impact criteria is summarized in Table 3.12-8.

Existing Conditions

As indicated in column [1] of Table 3.12-8, four of the five City of Irwindale study intersections are presently operating at LOS D or better during the weekday AM and PM peak hours under existing conditions. The following study intersection is expected to operate at LOS E during the peak hour shown below under existing conditions:

- I-605 Freeway NB Ramps/Ramona Boulevard (LOS E during PM peak hours)

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in Figures 3.12-2 and 3.12-3, respectively.

Existing With Project Conditions

As shown in column [2] of Table 3.12-8, application of the City's threshold criteria to the Existing With Project scenario indicates that the proposed project is expected to create a significant impact at one of the five City study intersections. Incremental, but not significant, impacts are noted at the remaining City study intersections. As presented in column [2] of Table 3.12-7, application of the City's threshold criteria to the Existing With Project scenario indicates that the proposed project is expected to create a **significant impact** at the following study intersection:

- I-605 Freeway SB Ramps/Ramona Boulevard (PM peak hour V/C ratio increase from LOS D to LOS E)

The existing with project traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in Figures 3.12-11 and 3.12-12, respectively.

As per coordination between the City and Kaiser Permanente, **MM-TRAF- 1** shall be incorporated to help reduce significant impacts at the I-605 Freeway SB Ramps/Ramona Boulevard intersection. Improvements at this freeway ramp would be located within the Cities of Baldwin Park and Irwindale, and are under shared jurisdiction with Caltrans. While this improvement is expected to reduce the proposed project's traffic impact to less than significant levels, due to the multi-jurisdictional nature (e.g., the intersection is under joint jurisdiction with both cities and Caltrans), timing issues, and fair-share contributions, it has been conservatively concluded that the project's significant traffic impact at this intersection would remain **significant and unavoidable**. No further feasible mitigation is available.

Future Without Project Conditions

The future cumulative baseline conditions were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (e.g., ambient growth). The V/C ratios at all of the study intersections are incrementally increased with the addition of ambient traffic and traffic generated by the related projects listed in Table 3.12-6. As presented in column [3] of Table 3.12-8, three of the five City of Irwindale study intersections are expected to continue to operate at LOS D or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related projects traffic under the future without project conditions.

The following two study intersections are expected to operate at LOS E or F during the peak hours shown below with the addition of growth in ambient traffic and related projects traffic under the future without project conditions:

- I-605 Freeway SB Ramps/Ramona Boulevard (LOS E during PM peak hours)
- I-605 Freeway NB Ramps/Ramona Boulevard (LOS E during AM peak hours and LOS F during PM peak hours)

The future without project (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in Figures 3.12-13 and 3.12-14, respectively.

Future With Project Conditions

As shown in column [4] of Table 3.12-8, application of the City's threshold criteria to the With Project scenario indicates that the proposed project is expected to create a significant impact at two of the five City study intersections. Incremental, but not significant, impacts are noted at the remaining City study intersections. As presented in column [4] of Table 3.12-8, application of the City's threshold criteria to the Future With Project scenario indicates that the project is expected to create a significant impact at the following study intersections:

- I-605 Freeway SB Ramps/Ramona Boulevard (PM peak hour V/C ratio increase of 0.029, remaining at LOS E)
- I-605 Freeway NB Ramps/Ramona Boulevard (AM peak hour V/C ratio increase of 0.022, remaining at LOS E)

The future with project (existing, ambient growth, related projects and project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in Figures 3.12-15 and 3.12-16, respectively. As per coordination between the City and Kaiser Permanente, **MM-TRAF- 1** and **MM-TRAF-2** shall be incorporated to help reduce significant impacts at the I-605 Freeway SB Ramps/Ramona Boulevard and the I-605 Freeway NB Ramps/Ramona Boulevard intersections. Improvements at these freeway ramps would be located within the Cities of Irwindale and Baldwin Park, and are under shared jurisdiction with Caltrans. While these improvements are expected to reduce the proposed project's traffic impacts to less than significant levels, due to the multi-jurisdictional nature (e.g., the intersections are under joint jurisdiction with both cities and Caltrans), timing issues, and fair-share contributions, it has been conservatively concluded that the project's significant traffic impacts at these intersections would remain **significant and unavoidable**. No further feasible mitigation is available.

City of Baldwin Park Traffic Analysis

The traffic impact analysis prepared for the study intersections for the proposed project development program using the ICU methodology and application of the City of Baldwin Park significant traffic impact criteria is summarized in Table 3.12-9.

The more stringent City of Baldwin Park impact criteria was used for the five study intersections shared with the City. Thus, a total of 15 combined jurisdictions study intersections (e.g., 10 City of Baldwin Park intersections and five City of Irwindale intersections) were evaluated based on application of the City of Baldwin Park significant traffic impact criteria.

Existing Conditions

As indicated in column [1] of Table 3.12-9, 14 of the 15 combined jurisdictions study intersections are presently operating at LOS D or better during the weekday AM and PM peak hours under existing conditions. The following study intersection is expected to operate at LOS E during the peak hour shown below under existing conditions:

- I-605 Freeway NB Ramps/Ramona Boulevard (LOS E during PM peak hours)

Future Without Project Conditions

The future cumulative baseline conditions were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (e.g., ambient growth). The V/C and delay ratios at all of the study intersections are incrementally increased with the addition of ambient traffic and traffic generated by the related projects listed in Table 3.12-6. As presented in column [3] of Table 3.12-9, 12 of the 15 combined jurisdictions study intersections are expected to continue to operate at LOS D or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related projects traffic under the future without project conditions. The following three study intersections are expected to operate at LOS E or F during the peak hours shown below with the addition of growth in ambient traffic and related projects traffic under the future without project conditions:

- I-605 Freeway SB Ramps/Ramona Boulevard (LOS E during PM peak hours)
- I-605 Freeway NB Ramps/Ramona Boulevard (LOS E during AM peak hours and LOS F during PM peak hours)
- Baldwin Park Boulevard/Francisquito Avenue (LOS E during PM peak hours)

The future without project (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in Figures 3.12-13 and 3.12-14, respectively.

Future With Project Conditions

As shown in column [4] of Table 3.12-9, application of the City of Baldwin Park's threshold criteria to the With Project scenario indicates that the proposed project is expected to create a significant impact at three of the combined jurisdiction's study intersections. Incremental, but not significant, impacts are noted at the remaining combined jurisdictions study intersections. As presented in column [4] of Table 3.12-9, application of the City of Baldwin Park's threshold criteria to the Future With Project scenario indicates that the project is expected to create a significant impact at the following study intersections:

- I-605 Freeway SB Ramps/Ramona Boulevard (PM peak hour V/C ratio increase of 0.029 remaining at LOS E)
- I-605 Freeway NB Ramps/Ramona Boulevard (AM peak hour V/C ratio increase of 0.022 remaining at LOS E and PM peak hour V/C ratio increase of 0.013 to remain at LOS F)
- Baldwin Park Boulevard/Francisquito Avenue (PM peak hour V/C ratio increase of 0.010 to remain at LOS E)

The future with project (existing, ambient growth, related projects and project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in Figures 3.12-13 and 3.12-14, respectively.

As per coordination between the City and Kaiser Permanente, **MM-TRAF- 1** and **MM-TRAF-2** shall be incorporated to help reduce significant impacts at the I-605 Freeway SB Ramps/Ramona Boulevard and the I-605 Freeway NB Ramps/Ramona Boulevard intersections. Improvements at these freeway ramps would be within the Cities of Baldwin Park and Irwindale, and are under shared jurisdiction with Caltrans. While these improvements are expected to reduce the project's traffic impacts to less than significant levels, due to the multi-jurisdictional nature (e.g., the intersections are under joint jurisdiction with both cities and Caltrans), timing issues, and fair-share contributions, it has been conservatively concluded that the project's significant traffic impacts at these intersections would remain **significant and unavoidable**. No further feasible mitigation is available.

MM-TRAF-3 shall be implemented to help reduce the significant impact at the Baldwin Park Boulevard/Francisquito Avenue intersection. As such, impact to the Baldwin Park Boulevard/Francisquito Avenue intersection would be reduced to **less than significant with mitigation incorporated.** Should the mitigation measure not be reviewed and approved by the City of Baldwin Park, a substitute measure of equal or greater effectiveness would need to be determined. In the event that the proposed mitigation measure is not approved and a substitute measure is not feasible, the impact would remain **significant and unavoidable.** In addition, since the review and approval of the measure is outside both the City of Irwindale and the Applicant's sole control, the impact has conservatively been assumed to remain **significant and unavoidable.**

Table 3.12-9
City Of Baldwin Park Summary Of Volume To Capacity Ratios and Levels of Service [1] Weekday AM and PM Peak Hours

			[1]		[2]				[3]		[4]				[5]			
			Existing Delay Or Los		*Existing With Project Delay Or Los*		*Change in V/C Or. Delay*	*Significant Impact*	*Year 2019 Future pre-Project W/ Ag & Rel. Projects Delay Or Los*		*Year 2019 Future With Proposed Project Delay Or Los*		*Change in V/C Or. Delay*	*Significant Impact*	*Year 2019 Future With Project Mitigation Delay Or Los*		*Change in V/C*	*Mitigated*
No.	**Intersection**	**Peak Hour**	*V/C*	*[a]*	*V/C*	*[a]*	*[(2)-(1)]*	*[d]*	*V/C*	*[4]*	*V/C*	*[a]*	*[(4)-(3)]*	*[d]*	*V/C*	*[a]*	*[(5)-(3)]*	*[d]*
5	I-605 Freeway SB Ramps/ Ramona Boulevard	AM	0.805	D	0.809	D	0.004	NO	0.849	D	0.852	D	0.003	NO	0.848	D	-0.001	---
		PM	0.874	D	0.903	E	0.029	YES	0.921	E	0.950	E	0.029	YES	0.866	D	-0.055	YES
6	I-605 Freeway NB Ramps/ Ramona Boulevard	AM	0.870	D	0.892	D	0.022	NO	0.920	E	0.942	E	0.022	YES	0.926	E	0.006	YES
		PM	0.968	E	0.981	E	0.013	YES	1.016	F	1.029	F	0.013	YES	0.865	D	-0.151	YES
7	Syracuse Avenue-Schabarum Avenue/ Ramona Boulevard	AM	0.748	C	0.811	D	0.063	NO	0.786	C	0.848	D	0.062	NO	—	—	—	—
		PM	0.785	C	0.842	D	0.057	NO	0.826	D	0.883	D	0.057	NO	—	—	—	—
8	Frazier Street/I-10 Freeway EB Off-Ramp-Judith Street	AM	0.708	C	0.708	C	0.000	NO	0.743	C	0.743	C	0.000	NO	—	—	—	—
		PM	0.605	B	0.605	B	0.000	NO	0.630	B	0.630	B	0.000	NO	—	—	—	—
9	Bess Avenue/I-10 WB On-Ramp-Garvey Avenue [b]	AM	18.0	C	18.1	C	0.1	NO	20.0	C	20.2	C	0.2	NO	—	—	—	—
		PM	12.3	B	12.4	B	0.1	NO	13.0	B	13.1	B	0.1	NO	—	—	—	—
10	I-10 WB Off-Ramp/ Garvey Avenue [c]	AM	12.7	B	12.8	B	0.1	NO	13.1	B	13.2	B	0.1	NO	—	—	—	—
		PM	12.5	B	12.5	B	0.0	NO	13.0	B	13.0	B	0.0	NO	—	—	—	—
11	Baldwin Park Boulevard/ Dalewood Street	AM	0.833	D	0.835	D	0.002	NO	0.878	D	0.880	D	0.002	NO	—	—	—	—
		PM	0.840	D	0.844	D	0.004	NO	0.898	D	0.901	E	0.003	NO	—	—	—	—
12	Baldwin Park Boulevard/ I-10 Freeway WB Ramps	AM	0.740	C	0.740	C	0.000	NO	0.793	C	0.794	C	0.001	NO	—	—	—	—
		PM	0.647	B	0.648	B	0.001	NO	0.692	B	0.693	B	0.001	NO	—	—	—	—
13	Francisquito Avenue/ Ramona Boulevard	AM	0.634	B	0.658	B	0.024	NO	0.664	B	0.689	B	0.025	NO	—	—	—	—
		PM	0.678	B	0.696	B	0.018	NO	0.718	C	0.736	C	0.018	NO	—	—	—	—
14	Francisquito Avenue/ Frazier Street	AM	0.618	B	0.630	B	0.012	NO	0.646	B	0.658	B	0.012	NO	—	—	—	—
		PM	0.515	A	0.528	A	0.013	NO	0.541	A	0.554	A	0.013	NO	—	—	—	—
15	Baldwin Park Boulevard/ Francisquito Avenue	AM	0.779	C	0.788	C	0.009	NO	0.838	D	0.847	D	0.009	NO	0.847	D	0.009	---
		PM	0.859	D	0.869	D	0.010	NO	0.934	E	0.944	E	0.010	YES	0.875	D	0.059	YES
16	Francisquito Avenue/ Garvey Avenue	AM	0.655	B	0.662	B	0.007	NO	0.719	C	0.726	C	0.007	NO	—	—	—	—
		PM	0.639	B	0.643	B	0.004	NO	0.709	C	0.713	C	0.004	NO	—	—	—	—
17	Earl Avenue/ Ramona Boulevard	AM	0.777	C	0.789	C	0.012	NO	0.812	D	0.823	D	0.011	NO	—	—	—	—
		PM	0.585	A	0.597	A	0.012	NO	0.615	B	0.628	B	0.013	NO	—	—	—	—
18	Baldwin Park Boulevard/ Foster Avenue	AM	0.614	B	0.617	B	0.003	NO	0.649	B	0.651	B	0.002	NO	—	—	—	—
		PM	0.476	A	0.479	A	0.003	NO	0.504	A	0.507	A	0.003	NO	—	—	—	—
19	I-10 WB Ramps-Vineland Avenue/ Garvey Avenue [b]	AM	10.9	B	10.9	B	0.0	NO	12.1	B	12.1	B	0.0	NO	—	—	—	—
		PM	13.5	B	13.6	B	0.1	NO	18.7	C	18.8	C	0.1	NO	—	—	—	—

[a] Level of Service (LOS) is based on the reported ICU value for signalized intersections and on the delay for unsignalized intersections.
[b] All-Way Stop-Controlled Intersection.
[c] Two-Way Stop-Controlled Intersection. Reported values represent the delays associated with the most constrained approach of the intersection.
[d] According to City of Baldwin Park, a transportation impact on an intersection shall be deemed significant in accordance with the following table:

Final v/c	LOS	Project Related Increase in v/c
>=0.901	E or F - signalized	equal to or greater than 0.010
>35 seconds	E or F - unsignalized	equal to or greater than 1 second

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City of El Monte Traffic Analysis

The traffic impact analysis prepared for the proposed project using the ICU methodology and application of the City of City of El Monte significant traffic impact criteria is summarized in Table 3.12-10.

Existing Conditions

As indicated in column [1] of Table 3.12-10, three of the four City of El Monte study intersections are presently operating at LOS D or better during the weekday AM and PM peak hours under existing conditions The following study intersection is expected to operate at LOS E during the peak hour shown below under existing conditions:

- Peck Road/Lower Azusa Road (LOS E during PM peak hours)

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in Figures 3.12-2 and 3.12-3, respectively.

Existing With Project Conditions

As shown in column [2] of Table 3.12-10, application of the City of El Monte's threshold criteria to the With Project scenario indicates that the proposed project is not expected to create significant impacts at any of the four City of El Monte study intersections. Incremental, but not significant, impacts are noted at the City of El Monte study intersections. The existing with project traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in Figures 3.12-11 and 3.12-12, respectively.

Table 3.12-10
City Of El Monte Summary Of Volume To Capacity Ratios [1] and Levels of Service Weekday AM And PM Peak Hours

No.	Intersection	Peak Hour	[1]		[2]				[3]		[4]			
			Existing Delay Or Los		*Existing With Project Delay Or Los*		*Change in V/C Or Delay*	*Significant Impact*	*Year 2019 Future pre-Project W/ Ag and Rel. Projects Delay Or Los*		*Year 2019 Future With Proposed Project Delay Or Los*		*Change in V/C Or Delay*	*Significant Impact*
			V/C	*[a]*	*V/C*	*[a]*	*[(2)-(1)]*	*[c]*	*V/C*	*[a]*	*V/C*	*[a]*	*[(4)-(3)]*	*[c]*
1	Peck Road/Lower Azusa Road	AM	0.796	C	0.797	C	0.001	NO	0.859	D	0.862	D	0.003	NO
		PM	0.916	E	0.920	E	0.004	NO	1.007	F	1.010	F	0.003	NO
2	Peck Road/ Ramona Boulevard	AM	0.666	B	0.667	B	0.001	NO	0.709	C	0.710	C	0.001	NO
		PM	0.847	D	0.858	D	0.011	NO	0.897	D	0.909	E	0.012	NO
3	Durfee Avenue/ Ramona Boulevard [b]	AM	22.1	C	23.4	C	1.3	NO	27.9	D	29.7	D	1.8	NO
		PM	24.4	C	25.5	D	1.1	NO	32.1	D	33.7	D	1.6	NO
4	Gilman Road/ Ramona Boulevard	AM	0.612	B	0.614	B	0.002	NO	0.639	B	0.641	B	0.002	NO
		PM	0.614	B	0.619	B	0.005	NO	0.648	B	0.652	B	0.004	NO

[a] Level of Service (LOS) is based on the reported ICU value for signalized intersections and on the delay for unsignalized intersections.
[b] Two-Way Stop-Controlled Intersection. Reported values represent the delays associated with the most constrained approach of the intersection.
[c] The City of El Monte intersection impact threshold criteria for signalized and unsignalized intersections are as follows: Signalized Intersections Unsignalized Intersections

Final v/c	LOS	Project Related Increase in v/c	Final delay (s/Veh)	LOS	Project Related Increase
> =1.001	F	equal to or greater than 0.020	> = 35	E	Increase in delay by 2% or more of capacity

Future Without Project Conditions

The future cumulative baseline conditions were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (e.g., ambient growth). The V/C ratios at all of the study intersections are incrementally increased with the addition of ambient traffic and traffic generated by the related projects listed in Table 3.12-6. As presented in column [3] of Table 3.12-10, three of the four City of El Monte study intersections are expected to continue to operate at LOS D or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related projects traffic under the future without project conditions. The following study intersection is expected to operate at LOS F during the peak hours shown below with the addition of growth in ambient traffic and related projects traffic under the future without project conditions:

- Peck Road/Lower Azusa Road (LOS F during PM peak hours)

The future without project (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in Figures 3.12-13 and 3.12-14, respectively.

Future With Project Conditions

As shown in column [4] of Table 3.12-10, application of the City of El Monte's threshold criteria to the With Project scenario indicates that the proposed project is not expected to create a significant impact at the four City of El Monte study intersections. Incremental, but not significant, impacts are noted at the City of El Monte study intersections. The future with project (existing, ambient growth, related projects and project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in Figures 3.12-12 and 3.12-13, respectively.

California Department of Transportation Analysis

In addition to the intersection analyses, which utilize the respective cities of Irwindale, Baldwin Park, and El Monte methodologies, a supplemental analysis was prepared based on the latest edition of the *Highway Capacity Manual* (HCM 2010) operational analysis methodologies pursuant to the Caltrans *Guide for the Preparation of Traffic Impact Studies*.[6] The analysis locations were determined in consultation with Caltrans and City staff based on their proximity to the project site and the anticipated distribution of project vehicular trips. According to the Caltrans document, the LOS for operating State highway facilities is based upon measures of

[6] *Guide for the Preparation of Traffic Impact Studies*, State of California Department of Transportation, December 2002.

effectiveness (MOEs). Caltrans "endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities"; it does not require that LOS "D" (shall) be maintained. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing state highway facility is operating at less than the appropriate target LOS, the existing MOE should be maintained. Based on recent coordination with Caltrans, analyses of Caltrans facilities should be conducted when and if a proposed project is expected to add 50 or more peak hour trips in either direction on a freeway mainline segment or 10 or more peak hour trips to a freeway off-ramp location.

Freeway Mainline Analysis

For mainline freeway segments, the MOE is determined based on density in passenger cars per mile per lane (pc/mi/ln). Furthermore, based on coordination with Caltrans, when a mainline freeway segment is operating near capacities under existing conditions (e.g., LOS E or LOS F), the corresponding LOS is also determined based on speed in miles per hour.

The following mainline freeway segments along the I-605 and I-10 freeways have been identified for analysis based on their proximity to the project site and the expected level of project-generated traffic. These segments are forecast to experience a relatively greater percentage of project-related traffic than other mainline freeway segment locations:

- I-605 Freeway north of Ramona Boulevard
- I-605 Freeway north of the I-10 Freeway
- I-605 Freeway south of the I-10 Freeway
- I-10 Freeway west of the I-605 Freeway; and
- I-10 Freeway east of Baldwin Park Boulevard.

The proposed project's effect on the regional mainline freeway system has been determined based on a review of available traffic volume data for existing weekday peak hour conditions. A review was undertaken of traffic volume data published in the *Traffic Volumes on the California State Highway System*[7], the Caltrans' Traffic Data Branch – California Freeway Performance Measurement System (PeMS), and the *2010 Congestion Management Program*. The existing traffic volumes were increased by the CMP annual average growth rate of 1.0% per year so as to reflect the future year 2019 cumulative without project analysis condition. The Caltrans freeway mainline traffic analysis is summarized in Table 3.12-11 for all traffic analysis conditions.

[7] *2014 Traffic Volumes on the California State Highway System*, California State Transportation Agency, Department of Transportation Division of Traffic Operations, 2014.

Table 3.12-11
Caltrans Freeway Impact Analysis [1] Weekday AM and PM Peak Hours

Freeway Segment	Peak Hour	Direction	Existing Year					Project Trip Ends	Existing Year With Project			Density Increase With Project	Impact	Future Year 2019 Pre-Project			Project Trip Ends	Future Year 2019 With Project			Density Increase With Project	Impact
			Traffic Volumes	*Density (pc/mi/ln)*	*LOS*	*Speed (mph)*	*LOS*		*Traffic Volumes*	*Density (pc/mi/ln)*	*LOS*			*Traffic Volumes*	*Density (pc/mi/ln)*	*LOS*		*Traffic Volumes*	*Density (pc/mi/ln)*	*LOS*		
			[2]	*[3]*	*[4]*	*[5]*	*[5]*	*[6]*	*[7]*	*[3]*	*[4]*	*[8]*		*[9]*	*[3]*	*[4]*	*[5]*	*[10]*	*[3]*	*[4]*	*[11]*	
I-605 Freeway																						
North of Ramona Boulevard	AM	NB	4,536	17.8	B	55.4	E	6	4,542	17.9	B	0.1	No	4,717	18.6	C	6	4,723	18.6	C	0.0	No
		SB	7,241	31.8	D	40.3	F	24	7,265	32.0	D	0.2	No	7,531	33.9	D	24	7,555	34.1	D	0.2	No
	PM	NB	5,189	20.6	C	61.4	D	27	5,216	20.7	C	0.1	No	5,397	21.5	C	27	5,424	21.6	C	0.1	No
		SB	5,901	23.9	C	60.3	D	10	5,911	24.0	C	0.1	No	6,137	25.1	C	10	6,147	25.2	C	0.1	No
North ofI-10 Freeway	AM	NB	5,433	21.7	C	64.8	C	24	5,457	21.8	C	0.1	No	5,650	22.7	C	24	5,674	22.8	C	0.1	No
		SB	7,663	34.9	D	34.6	F	6	7,669	35.0	D	0.1	No	7,970	37.5	E	6	7,976	37.5	E	0.0	No
	PM	NB	6,105	25.0	C	65.3	--	10	6,115	25.0	C	0.0	No	6,349	26.3	D	10	6,359	26.3	D	0.0	No
		SB	6,397	26.5	D	59.3	E	29	6,426	26.7	D	0.2	No	6,653	28.0	D	29	6,682	28.2	D	0.2	No
South ofI-10 Freeway	AM	NB	6,057	25.2	C	61.4	D	13	6,070	25.2	C	0.0	No	6,299	26.5	D	13	6,312	26.6	D	0.1	No
		SB	6,382	27.0	D	66.2	--	3	6,385	27.0	D	0.0	No	6,637	28.5	D	3	6,640	28.5	D	0.0	No
	PM	NB	6,281	26.4	D	50.5	F	6	6,287	26.4	D	0.0	No	6,532	27.9	D	6	6,538	27.9	D	0.0	No
		SB	6,000	24.9	C	68.6	--	14	6,014	24.9	C	0.0	No	6,240	26.2	D	14	6,254	26.2	D	0.0	No
I-10 Freeway																						
West ofI-605 Freeway	AM	EB	5,729	23.9	C	64.3	D	10	5,739	23.9	C	0.0	No	5,958	25.0	C	10	5,968	25.0	C	0.0	No
		WB	7,125	31.5	D	31.4	F	2	7,127	31.5	D	0.0	No	7,410	33.4	D	2	7,412	33.4	D	0.0	No
	PM	EB	5,772	24.1	C	23.9	F	4	5,776	24.1	C	0.0	No	6,003	25.2	C	4	6,007	25.2	C	0.0	No
		WB	6,007	25.2	C	59.4	E	11	6,018	25.3	C	0.1	No	6,247	26.4	D	11	6,258	26.5	D	0.1	No
East of Baldwin Park Boulevard	AM	EB	4,790	18.8	C	64.6	C	2	4,792	18.8	C	0.0	No	4,982	19.6	C	2	4,984	19.6	C	0.0	No
		WB	5,884	25.0	C	43.3	F	8	5,892	25.1	C	0.1	No	6,119	26.2	D	8	6,127	26.3	D	0.1	No
	PM	EB	3,747	14.7	B	11.4	F	11	3,758	14.7	B	0.0	No	3,897	15.3	B	11	3,908	15.3	B	0.0	No
		WB	5,887	25.1	C	67.6	--	3	5,890	25.1	C	0.0	No	6,122	26.2	D	3	6,125	26.3	D	0.1	No

[1] Freeway analysis based on the Highway Capacity Manual 2010, operational analysis methodologies, per the Caltrans' *Guide for the Preparation of Traffic Impact Studies* , December 2002.
[2] Source: Caltrans PeMS website, 2015. Data reflects the 85th percentile volumes and speeds for weekday AM and PM peak period volumes from May 2015.
[3] pc/mi/ln: passenger cars per mile per lane.
[4] Freeway mainline Levels of Service by density were based on the following criteria:

Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
≤ 11	A	> 26-35	D
> 11-18	B	> 35-45	E
> 18-26	C	> 45	F

[5] Freeway mainline Levels of Service by minimum speeds were based on the following criteria:

Speed (mph)	LOS	Speed (mph)	LOS
≥ 65.0	A	<64.6-59.7	D
≥ 65.0	B	<59.7-52.2	E
<65.0-64.6	C	<52.2	F

[6] Based on the project trip generation and trip distribution for the project.
[7] Derived by combining the existing traffic volumes and the proposed project volumes.
[8] Derived by subtracting the density of the existing with project conditions with the existing conditions pursuant to the Highway Capacity Software (HCS) worksheets which report density results to one decimal place.
[9] Derived by combining the existing traffic volumes increased by an ambient growth rate of 1.00% per year to the year 2019.
[10] Derived by combining the year 2019 without project traffic volumes and the proposed project volumes.
[11] Derived by subtracting the density of the year 2019 with project conditions with the year 2019 without project conditions pursuant to the Highway Capacity Software (HCS) worksheets which report density results to one decimal place.

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Existing and Existing With Project Conditions

As shown in Table 3.12-11, all five study freeway segments are presently operating at LOS E or LOS F during either the weekday AM and/or PM peak hours under existing conditions. With the addition of proposed project traffic, all study freeway segments are expected to continue to operate at LOS E or LOS F during the weekday AM and/or PM peak hours. As stated previously, based on recent coordination between LLG and Caltrans, analyses of Caltrans facilities should be conducted when and if a proposed project is expected to add 50 or more peak hour trips in either direction on a freeway mainline segment. As shown in Table 3.12-11, the proposed project will not add 50 or more trips in either direction on any of the freeway mainline analysis segments during the weekday AM and PM peak hours. Therefore, no freeway impacts are noted at the study freeway segments and no further review is required.

Future Without and Future With Project Conditions

Growth in traffic due to the combined effects of continuing development, intensification of existing development, and other factors, were assumed to be one percent (1.0%) per year through year 2019 resulting in a four percent (4.0%) increase in background ambient traffic growth. All five study freeway segments are expected to continue to operate at LOS E or LOS F during either the weekday AM and/or PM peak hours under the future without project and future with project conditions. As stated previously, based on recent coordination between LLG and Caltrans, analyses of Caltrans facilities should be conducted when and if a proposed project is expected to add 50 or more peak hour trips in either direction on a freeway mainline segment. As shown in Table 3.12-11, the proposed project will not add 50 or more trips in either direction on any of the freeway mainline analysis segments during the weekday AM and PM peak hours. Therefore, no freeway impacts are noted at the study freeway segments and no further review is required.

Intersection Analysis

Supplemental intersection analyses were also prepared for the State facility intersections within the project study area pursuant to Caltrans' *Guide for the Preparation of Traffic Impact Studies*. According to the Caltrans document for state-controlled study intersections, the MOE is determined based on control delay in seconds per vehicle (sec/veh). The intersection analyses were prepared utilizing the *Synchro 9* software package which implements the HCM 2010 Highway Capacity Manual operational methods. A *Synchro* network was created based on current traffic signal timing charts and field review of existing conditions at the Caltrans study intersections. In addition, specifics such as lane configurations, lane widths, storage lengths, crosswalk locations, posted speed limits, traffic signal phasing and cycle length, traffic volumes, etc., were coded to complete the existing network.

The following six intersections have been identified for analysis based on their proximity to the project site and consultation between LLG, Caltrans and City staff:

- I-605 Freeway Southbound Ramps/Ramona Boulevard
- I-605 Freeway Northbound Ramps/Ramona Boulevard
- I-10 Freeway Westbound Off-Ramp-Frazier Street/Garvey Avenue
- Baldwin Park Boulevard/Dalewood Street-I-10 Freeway Eastbound Ramps
- Baldwin Park Boulevard/I-10 Freeway Westbound Ramps
- I-10 Freeway Westbound Ramps-Vineland Boulevard/Garvey Avenue

Table 3.12-12 summarizes the intersection analyses for the existing, existing with project, and Year 2019 future conditions both without and with the proposed project. The first column [1] of Table 3.12-12 presents a summary of existing traffic conditions. The second column [2] presents existing with project traffic conditions based on existing intersection geometry. The third column [3] presents Year 2019 traffic conditions based on existing intersection geometry, but without any project-generated traffic. The fourth column [4] presents future forecast traffic conditions with the addition of project traffic.

As shown in Table 3.12-12, application of the Caltrans LOS standards and guidelines to the Existing With Project and Year 2019 With Project scenarios indicates that the proposed project could be expected to result in one impact at the I-605 Freeway Northbound Ramps/Ramona Boulevard intersection during the weekday PM peak hour. The remaining five Caltrans study intersections are not expected to be impacted by the proposed project. As shown in column [5] of Table 3.12-12, and incorporated as **MM-TRAF-2**, the proposed improvement (if approved by Caltrans and the City as Lead Agency) is expected to mitigate the impact at the I-605 Freeway Northbound Ramps/Ramona Boulevard intersection. While this improvement is expected to reduce the project's traffic impact to less than significant levels, due to the multi-jurisdictional (intersection is under joint jurisdiction with City and City of Baldwin park), timing issues, and fair-share contribution, it has been conservatively concluded that the project's significant traffic impact at this intersection would remain **significant and unavoidable**. No further feasible mitigation is available.

Table 3.12-12
Caltrans Intersection Impact Analysis [a] Weekday AM and PM Peak Hours

No.	Intersection	Traffic Control	Peak Hour	[1] Existing Delay [B]	[1] Existing Los [C]	[2] Existing With Project Delay [B]	[2] Existing With Project Los [C]	[2] Change In Delay [(2)-(1)]	Impact	[3] Year 2019 Future W/O Project Delay [B]	[3] Year 2019 Future W/O Project Los [C]	[4] Year 2019 Future With Project Delay [B]	[4] Year 2019 Future With Project Los [C]	[4] Change In Delay [(4)-(3)]	Impact [e]	[5] Year 2019 Future With Project Mitigation delay [B]	[5] Year 2019 Future With Project Mitigation Los [C]	[5] Change In Delay [(5)-(3)]	Mitigated
5	I-605 Freeway SB Ramps/ Ramona Boulevard	Signalized	AM	29.4	C	30.6	C	1.2	No	35.8	D	37.7	D	1.9	No	35.8	D	0.0	---
			PM	31.3	C	34.2	C	2.9	No	35.9	D	37.3	D	1.4	No	32.2	C	-3.7	---
6	I-605 Freeway NB Ramps/ Ramona Boulevard	Signalized	AM	38.2	D	40.6	D	2.4	No	45.5	D	50.2	D	4.7	No	48.7	D	3.2	---
			PM	59.6	E	61.3	E	1.7	Yes	65.8	E	68.0	E	2.2	Yes	41.2	D	-24.6	Yes
10	I-10 Freeway WB Off-Ramp-Frazier Street/ Garvey Avenue	Two-Way Stop Control	AM	12.7	B	12.8	B	0.1	No	13.1	B	13.2	B	0.1	No	--	--	--	---
			PM	12.5	B	12.5	B	0.0	No	13.0	B	13.0	B	0.0	No	--	--	--	---
11	Baldwin Park Boulevard/Dalewood Street-I-10 Freeway EB Ramps	Signalized	AM	58.6	E	58.8	E	0.2	No	70.1	E	70.6	E	0.5	No	--	--	--	---
			PM	66.7	E	67.2	E	0.5	No	>80.0	F	>80.0	F	0.5	No	--	--	--	---
12	Baldwin Park Boulevard/ I-10 Freeway WB Ramps	Signalized	AM	24.7	C	24.8	C	0.1	No	32.0	C	32.5	C	0.5	No	--	--	--	---
			PM	21.2	C	21.2	C	0.0	No	24.7	C	24.8	C	0.1	No	--	--	--	---
19	I-10 Freeway WB Ramps-Vineland Boulevard/ Garvey Avenue [d]	All-Way Stop Control	AM	10.9	B	10.9	B	0.0	No	12.1	B	12.1	B	0.0	No	--	--	--	---
			PM	13.5	B	13.6	B	0.1	No	18.7	C	18.8	C	0.1	No	--	--	--	---

[a] Intersection analysis based on the Highway Capacity Manual operational analysis methodologies, per the Caltrans' *Guide for the Preparation of Traffic Impact Studies,* December 2002.
[b] Reported control delay values in seconds per vehicle. For Two-Way Stop-Controlled intersections, reported values represent the delays associated with the most constrained approach of the intersection.
[c] Level of Service (LOS) is based on the reported control delay for the intersection. When LOS F is reached, the intersection becomes unstable and the calculated delay values become unreliable/unrealistic. Small increases in traffic volumes may result in very large increases in the calculated delay values which is not representative of actual conditions. Therefore, where calculated delay values are over 80.0 seconds for signalized intersections or 50.0 seconds for unsignalized intersections (i.e., LOS F conditions by HCM definitions), over-saturated conditions are expected and delay values of ">80.0" or ">50.0" seconds are reported in this table.

Levels of Service are based on the following criteria (For State highway facilities the LOS is based on the Measures of Effectiveness [MOEs]):

Signalized Intersections Control Delay (s/veh)	LOS	Unsignalized Intersections Control Delay (s/veh)	LOS
<= 10	A	<= 10	A
> 10-20	B	> 10-15	B
> 20-35	C	> 15-25	C
> 35-55	D	> 25-35	D
> 55-80	E	> 35-50	E
> 80	F	> 50	F

[d] Intersection analysis based on the 2000 Highway Capacity Manual operational analysis methodology in order to accurately reflect the eastbound right-turn free flow movement.
[e] For this analysis, LOS D is the target level of service standard and is utilized to assess the project impacts at the Caltrans study intersections. For signalized intersections, Caltrans considers a location to be impacted if the target MOE is not maintained and a corresponding change in control delay in seconds per vehicle (sec/veh) is 1.0 second or more.

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Ramp Vehicle Queuing Analysis

The proposed project is expected to add 10 or more vehicle trips during the weekday AM peak hour to some of the adjacent freeway off-ramp locations, which is the threshold for preparation of a Caltrans ramp analysis. Therefore, a detailed review was undertaken with respect to vehicle queuing on the freeway off-ramp approaches at six locations. The queuing analysis was prepared utilizing the *Synchro 9* software package which implements the HCM 2010 operational analysis methodologies. In forecasting vehicle queuing, the *Synchro* software considers traffic volume data, lane configurations, traffic signal timing and phasing for signalized locations, and available vehicle storage lengths for the respective traffic movements. The vehicle queuing review has been prepared using the respective weekday AM and PM peak hour traffic volume forecasts for existing, existing with project, and Year 2019 conditions both without and with the proposed project.

Each of the six analyzed freeway ramp intersection approaches were reviewed in terms of expected maximum vehicle queues (e.g., 95th percentile queues) which represent the maximum back of vehicle queues with 95th percentile traffic volumes. The corresponding maximum vehicle queue lengths were then compared with the 85th percentile available ramp storage lengths pursuant to Caltrans recommendation.

As presented in Table 3.12-13, adequate 85th percentile storage areas are provided to accommodate the forecast 95th percentile queues at five of the six subject off-ramp locations under all analysis conditions. The 95th percentile queue at the I-605 Freeway Northbound Off-Ramp at Ramona Boulevard currently exceeds the 85th percentile storage area under the existing weekday PM peak hour conditions.

As shown in Table 3.12-13, and incorporated as **MM-TRAF-2**, the proposed improvement (if approved by Caltrans and the City of Irwindale) is expected to result in adequate storage area to accommodate the forecast 95th percentile queue at the I-605 Freeway Northbound Ramps/Ramona Boulevard intersection. Therefore, vehicle queuing back onto the I-605 Freeway mainline travel lanes is not expected. While this improvement is expected to reduce the project's traffic impact to less than significant levels, due to the multi-jurisdictional (intersection is under joint jurisdiction with City and City of Baldwin park) and timing issues and fair-share contribution, it has been conservatively concluded that the project's significant traffic impact at this intersection would remain **significant and unavoidable**. No further feasible mitigation is available.

Parking

The proposed project will include the construction of a five-story parking structure with a total of approximately 339 parking spaces. Additionally, 111 surface parking spaces will be included on-site. A drop-off/pick up zone will be provided just south of the new parking structure, along the

eastern side the medical office building. Construction of the proposed project is expected to commence in 2016 with occupancy in 2019. The site plan for the proposed project is illustrated in Figure 3.12-17.

The number of parking spaces required to support the proposed MOB was calculated using the City's Municipal Code requirements as contained in Section 17.64, Off-Street Parking. Specifically, requirements identified in Section 17.64.030 of the City's Municipal Code apply to the proposed land use associated with the proposed MOB. The City's Municipal Code parking requirements for the proposed land use are as follows:

- Medical or dental clinics and medical professional offices: 1.0 space for each 200 square feet of gross floor area.

The City's Municipal Code parking requirement for the proposed MOB is calculated as follows:

- 90,000 gross square feet ÷ 200 square feet = 450 parking spaces

A total of approximately 450 parking spaces is planned to be provided as part of the proposed project. Thus, the planned project parking supply satisfies the City Municipal Code parking requirements.

As part of the parking supply, the project must also provide a minimum of 45 handicap-accessible spaces. A total of approximately 45 handicap-accessible parking spaces are planned to be provided as part of the proposed project. This complies with the American with Disabilities Act (ADA) requirement to ensure that a minimum of ten percent of the total parking supply is provided to serve free-standing buildings providing outpatient clinical services, with one in every six handicap spaces being van accessible. As such, the project provides an adequate parking supply. Impacts related to parking would be **less than significant**. No mitigation is required

b) Would the project 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?

Please refer to item 3.12.4(a) for discussion related to LOS. The City is subject to the Los Angeles CMP. As such, the following discussion includes the CMP intersection and freeway analyses in accordance with the Los Angeles CMP.

Table 3.12-13
Summary of Potential Freeway Off-Ramp Vehicle Queuing[1] Weekday AM and PM Peak Hours

	Intersection	Peak Hour	85th Percentile Available Off-Ramp Storage[2] (Feet)	Existing Year		Existing Year With Project		Future Year 2019 Without Project		Future Year 2019 With Project		Future Year 2019 With Project And Mitigation	
				95th Percentile Queue [3] (Feet)	*Exceeds 85th Percentile Storage? (Yes/No)*	*95th Percentile Queue [3] (Feet)*	*Exceeds 85th Percentile Storage? (Yes/No)*	*95th Percentile Queue [3] (Feet)*	*Exceeds 85th Percentile Storage? (Yes/No)*	*95th Percentile Queue[3] (Feet)*	*Exceeds 85th Percentile Storage? (Yes/No)*	*95th Percentile Queue[3] (Feet)*	*Exceeds 85th Percentile Storage? (Yes/No)*
5	I-605 Freeway SB Ramps/ Ramona Boulevard	AM	1,280	738	No	789	No	810	No	861	No	1,017	No
		PM	1,280	873	No	912	No	1,197	No	1,242	No	981	No
6	I-605 Freeway NB Ramps/ Ramona Boulevard	AM	1,690	1,095	No	1,221	No	1,206	No	1,353	No	1,299	No
		PM	1,690	2,310	Yes	2,373	Yes	2,562	Yes	2,634	Yes	1,635	No
10	I-10 Freeway WB Off-Ramp-Frazier Street/ Garvey Avenue	AM	740	30	No	30	No	30	No	30	No	--	--
		PM	740	30	No	30	No	33	No	36	No	--	--
11	Baldwin Park Boulevard/ Dalewood Street-I-10 Freeway EB Ramps	AM	1,500	912	No	915	No	1,245	No	1,248	No	--	--
		PM	1,500	741	No	741	No	798	No	798	No	--	--
12	Baldwin Park Boulevard/I-10 Freeway WB Ramps [4]	AM	600	400	No	402	No	445	No	448	No	--	--
		PM	600	350	No	350	No	365	No	364	No	--	--
19	I-10 Freeway WB Ramps-Vineland Avenue/ Garvey Avenue	AM	520	33	No	33	No	45	No	45	No	--	--
		PM	520	69	No	69	No	105	No	105	No	--	--

1 Intersection queuing analysis based on the Highway Capacity Manual (HCM) methodologies. Refer to calculation worksheets in Appendix C of Appendix I of this Draft EIR.
2 Available storage represents 85% of existing storage space, as measured via Google Earth, 2015.
3 The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. An average vehicle length of 30 feet (including vehicle separation) was assumed for analysis purposes.
4 The HCM 2000 analysis methodology was used for this intersection since the HCM 2010 analysis methodology does not support clustered intersections. The 95th percentile queue was determined by dividing the reported queue by 25 feet to obtain the number of vehicles and multiplying by 30 feet to calculate the length of queue per Caltrans methodology.

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Los Angeles County Congestion Management Program

Intersection. There are no CMP intersection monitoring locations in the project vicinity. The CMP TIA guidelines require that intersection monitoring locations be examined if the proposed project will add 50 or more trips during either the weekday AM or PM peak hours. The proposed project will not add 50 or more trips during either the weekday AM or PM peak hours (e.g., of adjacent street traffic) at CMP monitoring intersections, as stated in the CMP manual as the threshold criteria for a traffic impact assessment. Therefore, no further review of potential impacts to intersection monitoring locations that are part of the CMP highway system is required.

Freeways. The following CMP freeway monitoring locations in the project vicinity have been identified:

CMP Station	Location
Segment Number 1017	I-10 Freeway east of Peck Road
Segment Number 1018	I-10 Freeway east of Puente Avenue

The CMP TIA guidelines require that freeway monitoring locations be examined if the proposed project will add 150 or more trips (in either direction) during either the weekday AM or PM peak hours. The proposed project will not add 150 or more trips (in either direction) to CMP freeway monitoring locations during either the weekday AM or PM peak hours, which is the threshold for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, no further review of potential impacts to freeway monitoring locations that are part of the CMP highway system is required.

Transit. Section 3.12.1, Environmental Setting, and Table 3.12-4 describes the existing transit service in the vicinity of the proposed project site. The project trip generation, as shown in Table 3.12-7, was adjusted by values set forth in the 2010 CMP manual to estimate transit trip generation for each time period. Based on the CMP manual, trips assigned to transit may be calculated by multiplying the total project trips by 1.4 to convert from vehicle trips to person trips and multiplying the result by a factor of 3.5 percent (3.5%) for project sites not located within 0.25 mile of a CMP transit center, corridor or multi-modal transportation center. Pursuant to the CMP guidelines, the proposed project is forecast to generate demand for 10 transit trips during the weekday AM peak hour and 13 transit trips during the weekday PM peak hour. Over a 24-hour period, the proposed project is forecast to generate demand for 149 daily transit trips. Therefore, the calculations are as follows:

- Weekday AM Peak Hour = $200 \times 1.4 \times 0.035 = 10$ Transit Trips
- Weekday PM Peak Hour = $249 \times 1.4 \times 0.035 = 13$ Transit Trips
- Weekday Daily Trips = $3{,}042 \times 1.4 \times 0.035 = 149$ Transit Trips

As shown in Table 3.12-4, nine bus/rail transit lines and routes are provided adjacent to, or in close proximity to, the project site. As outlined in Table 3.12-4, under the "Number of Buses/Trains During Peak Hour" column, these nine transit lines provide services for an average of (e.g., average of the directional number of buses during the peak hours) roughly 29 and 25 buses/trains during the weekday AM and PM peak hours, respectively. Therefore, based on the above calculated weekday AM and PM peak hour trips, this would correspond to less than one additional transit rider per bus/train. It is anticipated that the existing transit service in the project area will adequately accommodate the increase of project-generated transit trips. Thus, given the number of project-generated transit trips per bus/train, no project impacts on existing or future transit services in the project area are expected to occur as a result of the proposed project. As such, impacts are considered to be **less than significant**. No mitigation is required.

Vehicle Maneuvering Analysis

Vehicular access to the proposed project site will be provided via a single driveway located on Schabarum Avenue, located on the southeast corner of the project site. Vehicular circulation throughout the project site will be provided via an internal roadway system which will facilitate drop-off and pick-up operations near the MOB entrance and access to/from the project's parking facilities. The project site driveway will also provide internal access around the service/loading dock areas at the southern portion of the project site. The project driveway will accommodate full access (e.g., left-turn and right-turn ingress and egress turning movements) (see Figure 3.12-17). The project driveway will be reviewed by the City's Planning Department and Public Works Department to ensure that the project driveway is constructed to City design standards.

Vehicular access to the parking structure will be provided via two access points; one access point located at the northwest corner of the parking structure and the other access point located at the southeast corner of the parking structure. The northerly parking structure entrance will provide access to Level P1 of the parking structure while the southerly parking structure entrance will provide access to the Plaza Level (Level P3) of the parking structure (Figure 3.12-18).

An analysis of vehicle maneuvering associated with the proposed project was prepared using the AutoTURN software package. The turning movement analysis was prepared based on a single unit truck (e.g., 30-foot size vehicle [SU designation]) which is similar to the size of delivery vehicles experienced at other similar sites. Figure 3.12-18 shows the envisioned delivery truck maneuvers for access to the project site, as well as the proposed loading space/areas. As demonstrated in Figure 3.12-18, vehicle turning maneuvers into and out of the project site can be accommodated given the current site design.

A general review of sight distance was conducted for the new project driveway location. Since there are no posted speed limit signs on Schabarum Avenue in the project vicinity, a prima facie

speed limit of 25 miles per hour was assumed and used as a basis in determining the calculated intersection sight distance requirement for a stopped passenger car to turn left onto a two-lane roadway with no median. While an adequate intersection sight distance was determined, **MM-TRAF-4** has been incorporated to ensure sufficient intersection sight distance is provided. Impacts would be **less than significant with mitigation incorporated**.

3.12.5 Mitigation Measures

CEQA Guidelines Section 15126.4 requires EIRs to describe feasible measures that can minimize significant adverse impacts. The following mitigation measures have been evaluated for feasibility and are incorporated in order to reduce potentially significant impacts related to traffic.

MM-TRAF-1 **I-605 Freeway SB Ramps/Ramona Boulevard.** Prior to the issuance of the certificate of occupancy by the City of Irwindale (City), the project applicant shall submit a fair-share contribution towards the conversion of the shared left-turn/through lane on the Interstate 605 (I-605) Freeway Southbound Off-Ramp to Ramona Boulevard to an exclusive left-turn lane and the conversion of the exterior off-ramp right-turn only lane to a shared left-turn/through/right-turn lane. To accommodate what in essence becomes dual left-turn lanes, the existing off-ramp shall be restriped and the existing raised median island on Ramona Boulevard (easterly of the off-ramp) may also require a minor modification. The resultant southbound lane configuration shall provide one left-turn lane and one shared left/through/right-turn lane. In addition, the I-605 Freeway Southbound On-Ramp shall be restriped to reflect the relocation of the High Occupancy vehicle (HOV) lane from the exterior on-ramp lane to the interior on-ramp lane (e.g., the lane closest to and adjacent to the freeway mainline, as is typical of many HOV on-ramp lanes). In addition, the ramp metering equipment shall be relocated to the west side of the on-ramp from its current location along the east side of the on-ramp. This measure would result in greater clarity associated with more typical designs in that HOV motorists would subsequently be passing any stopped motorist at the ramp meter on the left-hand side rather than on the right-hand side. The fair-share contribution will also include funds towards the associated Caltrans-required Permit Engineering and Evaluation Report (PEER) and subsequent traffic engineering design plan preparation.

MM-TRAF-2 **I-605 Freeway NB Ramps/Ramona Boulevard.** Prior to the issuance of the certificate of occupancy by the City, the project applicant shall submit a fair-share contribution towards the conversion of the shared left-turn/though lane

on the Interstate 605 (I-605) Freeway Northbound Off-Ramp to Ramona Boulevard to a shared left-turn/through/right-turn lane. To accommodate the proposed shared left-turn/through/right-turn lane (e.g., in essence the dual right-turn lane operation), the existing off-ramp shall be restriped. In addition, Ramona Boulevard may need to be widened (e.g., possible curb widening along the south side of Ramona Boulevard and/or a minor modification to the existing raised median island) due to the existence of the bike lanes on Ramona Boulevard and the likely opposition to any proposed removal of the bike lanes. The resultant northbound lane configuration would provide one shared left-turn/through/right-turn lane and one right-turn lane. The fair-share contribution will also include funds towards the associated Caltrans-required Permit Engineering and Evaluation Report (PEER) and subsequent traffic engineering design plan preparation.

MM-TRAF-3 **Baldwin Park Boulevard/Francisquito Avenue.** Prior to the issuance of the certificate of occupancy by the City, the northbound approach on Baldwin Park Boulevard at Francisquito Avenue shall be modified to accommodate the installation of a right-turn only lane. To accommodate the proposed right-turn only lane, the existing roadway striping shall be adjusted as needed. The resulting lane configuration at the northbound approach would provide one left-turn lane, two through lanes, and one right-turn lane.

MM-TRAF-4 In order to ensure sufficient intersection sight distance, the building plans shall reflect formal red curb to be installed along Schabarum Avenue (e.g., from the project driveway to a point 20 feet to the west and from the project driveway to the east property line); installation of double yellow striping in the middle of Schabarum Avenue to delineate motorist right-of-way; and installation of a formal stop sign and corresponding pavement legend facing the exiting driveway approach. These striping, pavement marking/s and signage shall be completed prior to the issuance of the certificate of occupancy by the City.

3.12.6 Level of Significance After Mitigation

With implementation of mitigation measures **MM-TRAF-1** through **MM-TRAF-2**, the proposed project would reduce significant impacts at the I-605 Freeway SB Ramps/Ramona Boulevard and the I-605 Freeway NB Ramps/Ramona Boulevard intersections. Improvements at the mentioned freeway ramps are located within the Cities of Baldwain Park and Irwindale, and under shared jurisdiction with Caltrans. While these improvements are expected to reduce the project's traffic impacts to less than significant levels, due to the multi-jurisdictional nature (e.g.,

the intersections are under joint jurisdiction with both cities and Caltrans), timing issues, and fair-share contributions, it has been conservatively concluded that the project's significant traffic impacts at these intersections would remain **significant and unavoidable**.

With the implementation of mitigation measure **MM-TRAF-3**, the proposed project impact would be reduced to less than significant at the Baldwin Park Boulevard/Francisquito Avenue intersection. Should the mitigation measure not be reviewed and approved by the City of Baldwin Park, a substitute measure of equal or greater effectiveness would need to be determined. In the event that the proposed mitigation measure is not approved and a substitute measure is not feasible, the impact would remain **significant and unavoidable.** In addition, since the review and approval of the measure is outside both the City of Irwindale and the Applicant's sole control, the impact has been conservatively assumed to remain **significant and unavoidable**. With the implementation of mitigation measure **MM-TRAF-4**, the proposed project would ensure sufficient intersection sight distance is provided, and impacts would be **less than significant**.

3.12.7 References

County of Los Angeles Metropolitan Transit Authority (Metro). 2010. *Congestion Management Program for Los Angeles County*. Accessed November 23, 2015. http://media.metro.net/projects_studies/cmp/images/CMP_Final_2010.pdf

HCM. 2010. Highway Capacity Manual, Transportation Research Board of the National Academies.

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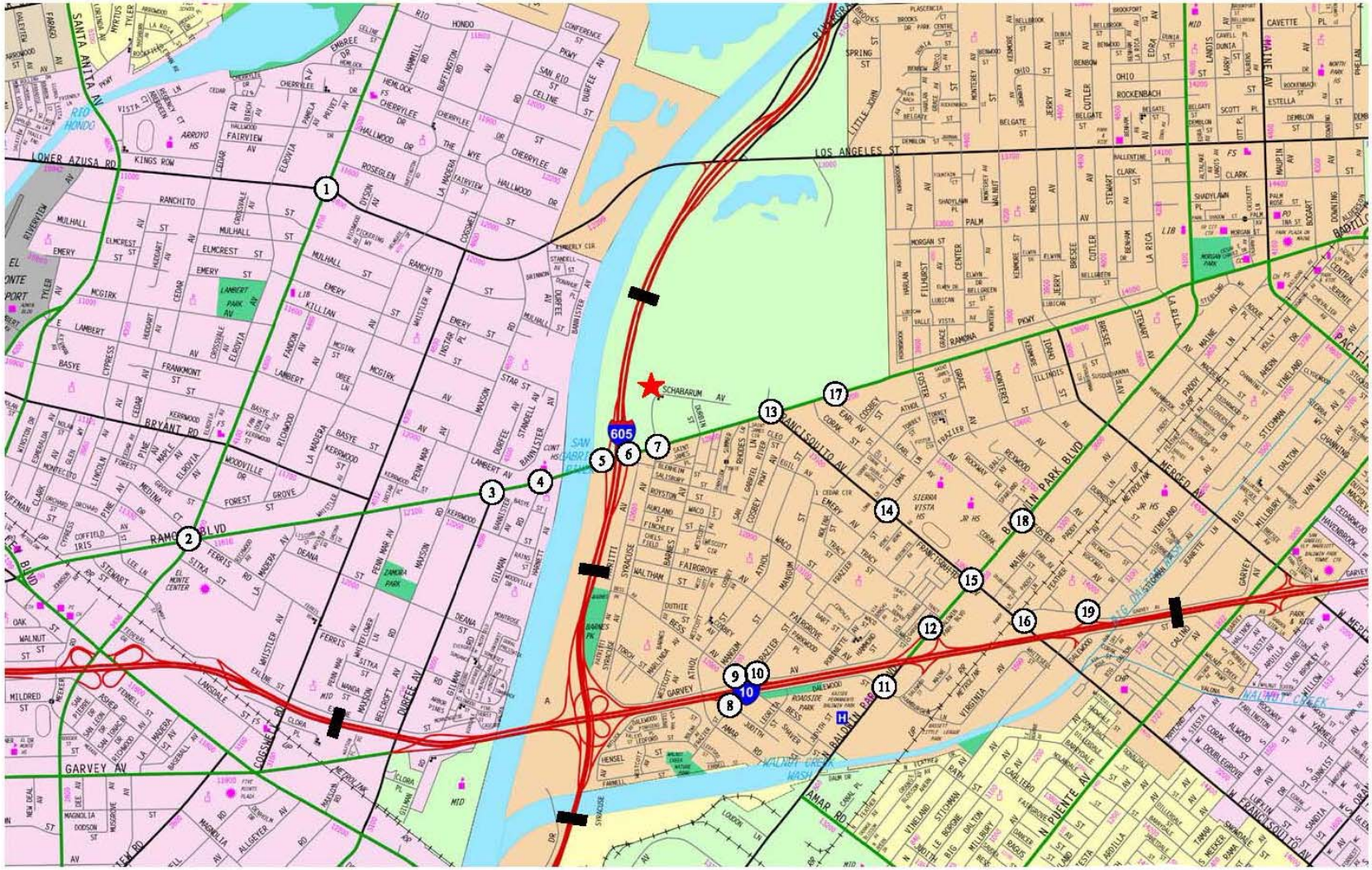

NOT TO SCALE

MAP SOURCE: RAND MCNALLY & COMPANY

★ PROJECT SITE

(X) STUDY INTERSECTION

STUDY FREEWAY SEGMENT

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-1
Vicinity Map

Kaiser Permanente Specialty Medical Office Building Project

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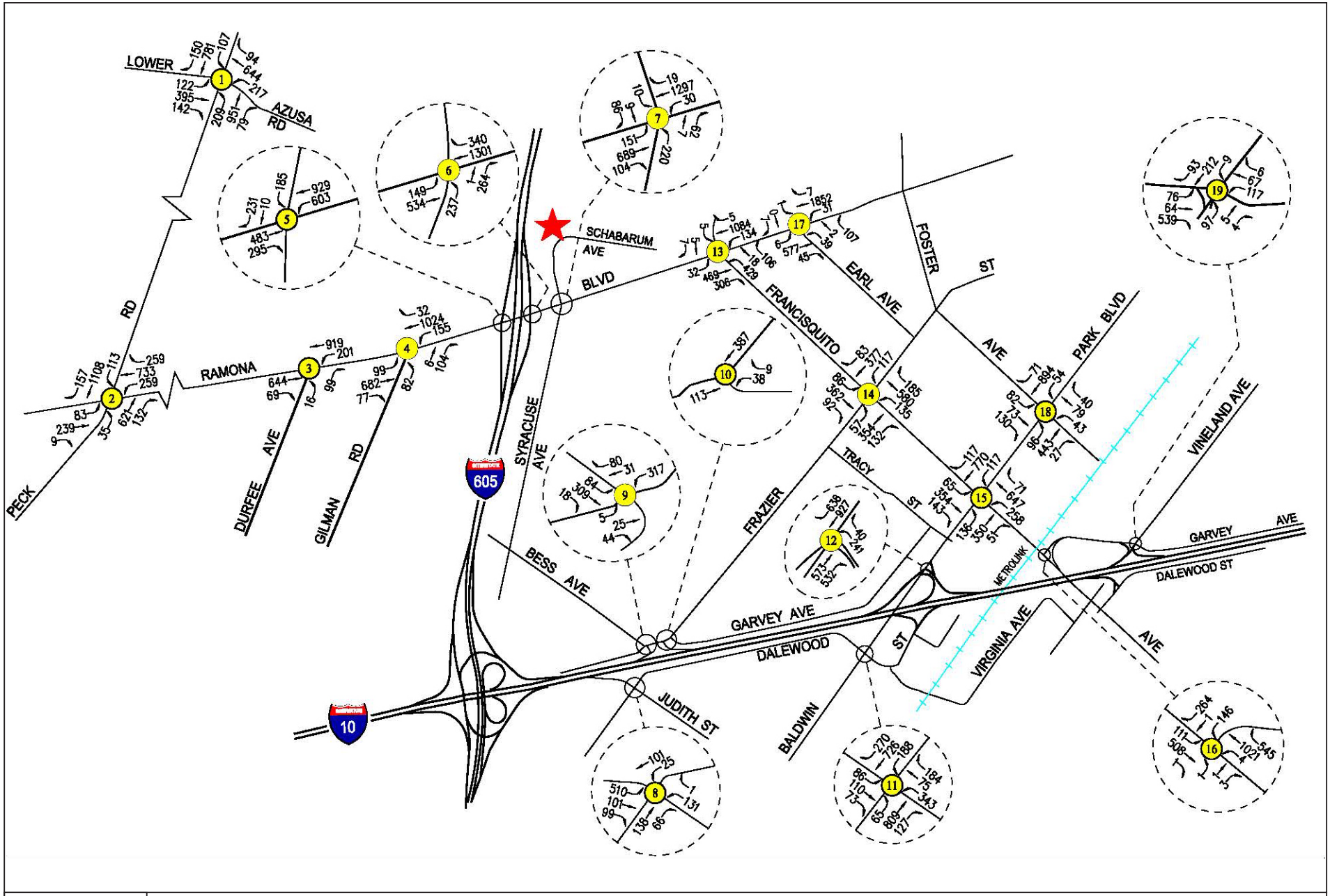

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-2

Existing Traffic Volumes - Weekday AM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-3

Existing Traffic Volumes - Weekday PM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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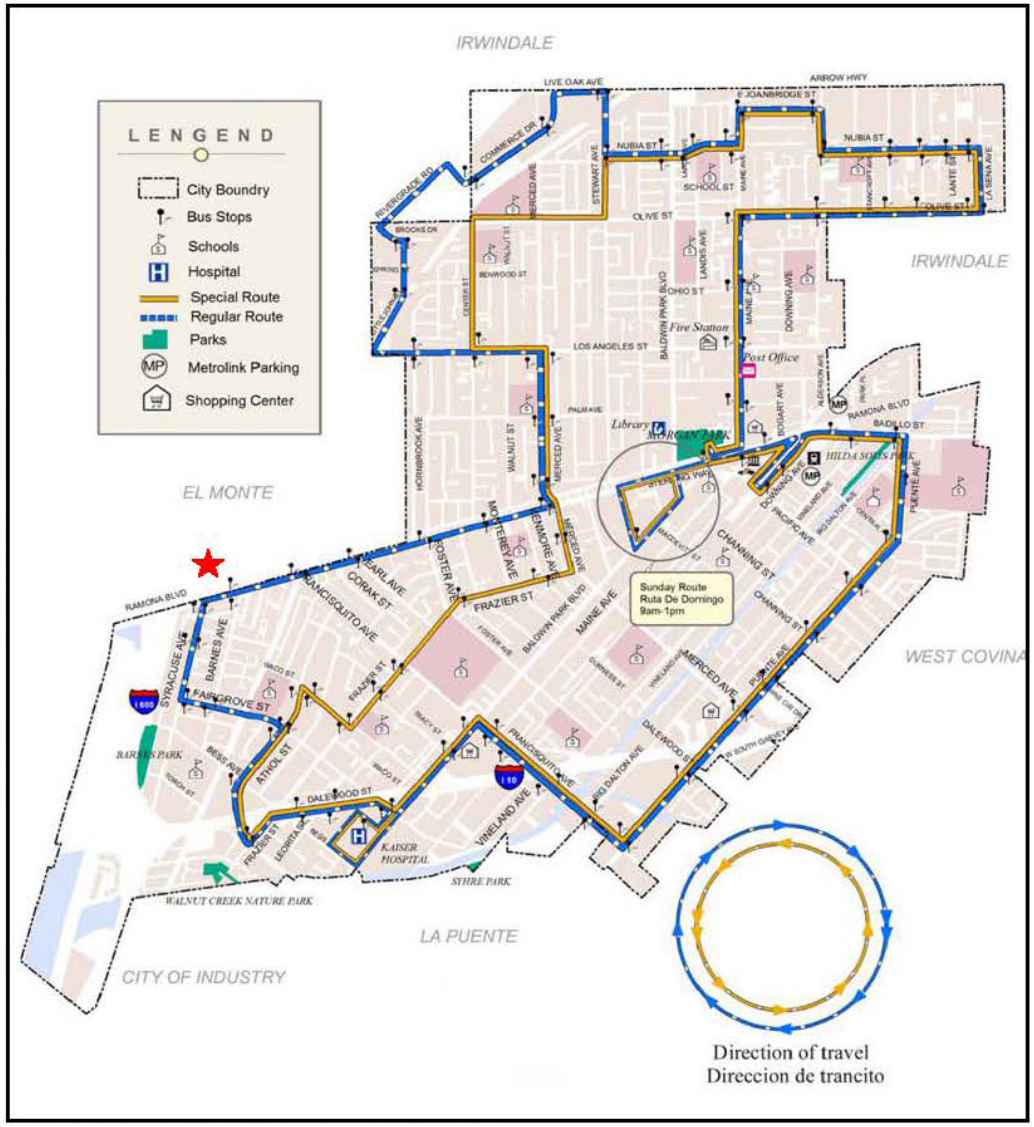
MAP SOURCE: FOOTHILL TRANSIT



MAP SOURCE: CITY OF BALDWIN PARK TRANSIT

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-4

Existing Public Transit Routes

Kaiser Permanente Specialty Medical Office Building Project

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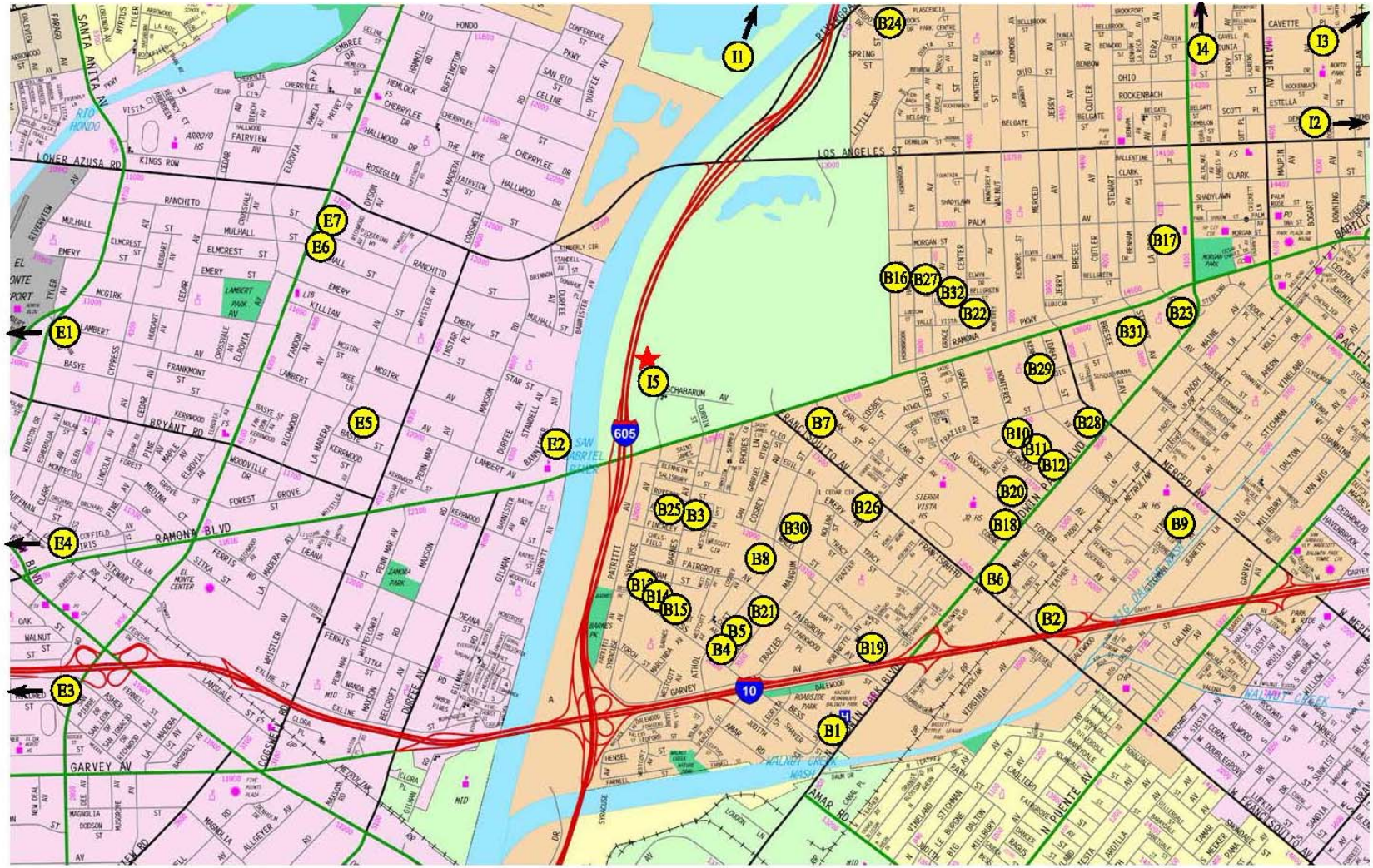

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MAP SOURCE: RAND MCNALLY & COMPANY

★ PROJECT SITE

(I) CITY OF IRWINDALE RELATED PROJECT

(B) CITY OF BALDWIN PARK RELATED PROJECT

(E) CITY OF EL MONTE RELATED PROJECT

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-5

Location of Related Projects

Kaiser Permanente Specialty Medical Office Building Project

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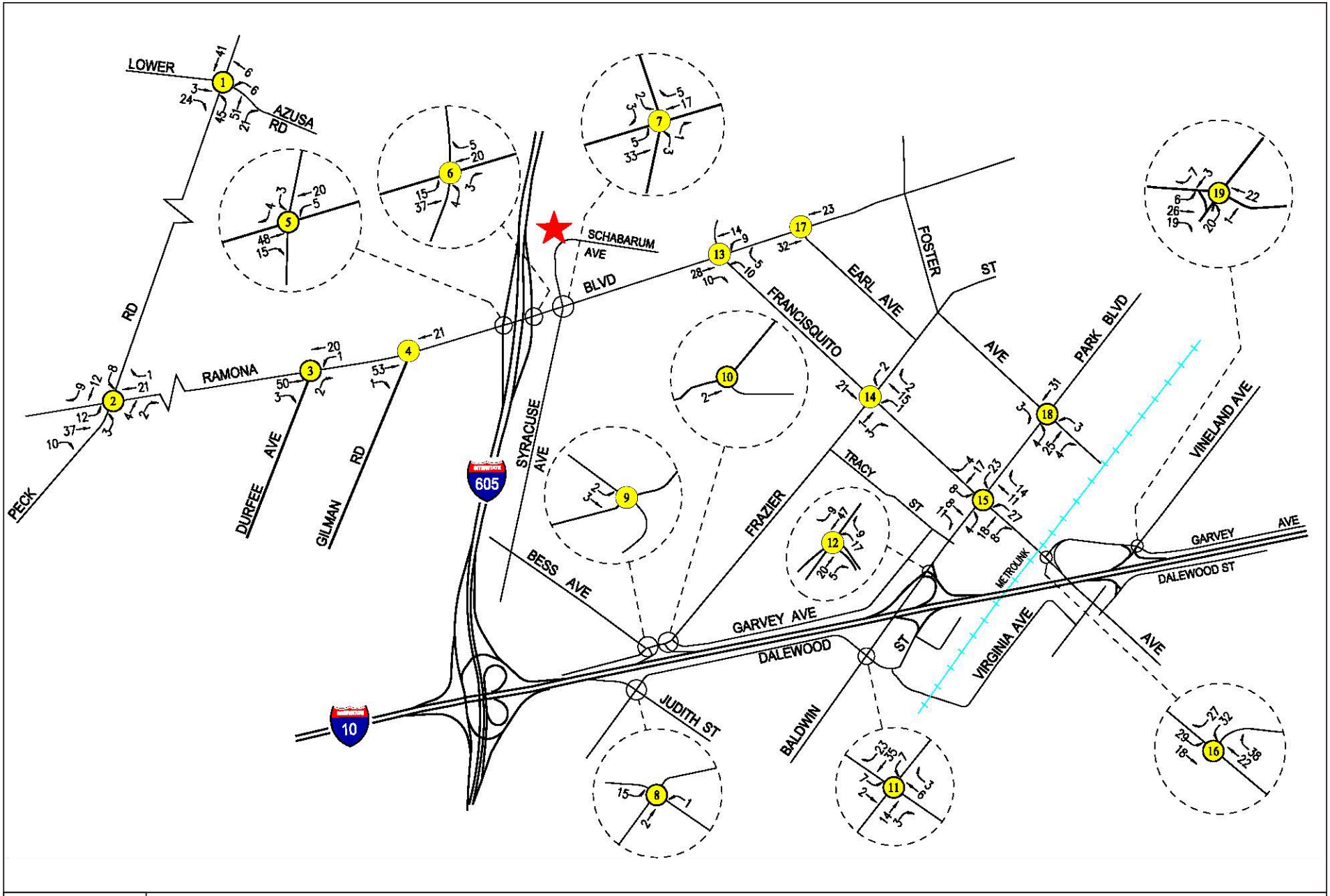

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-6

Related Projects Traffic Volumes - Weekday AM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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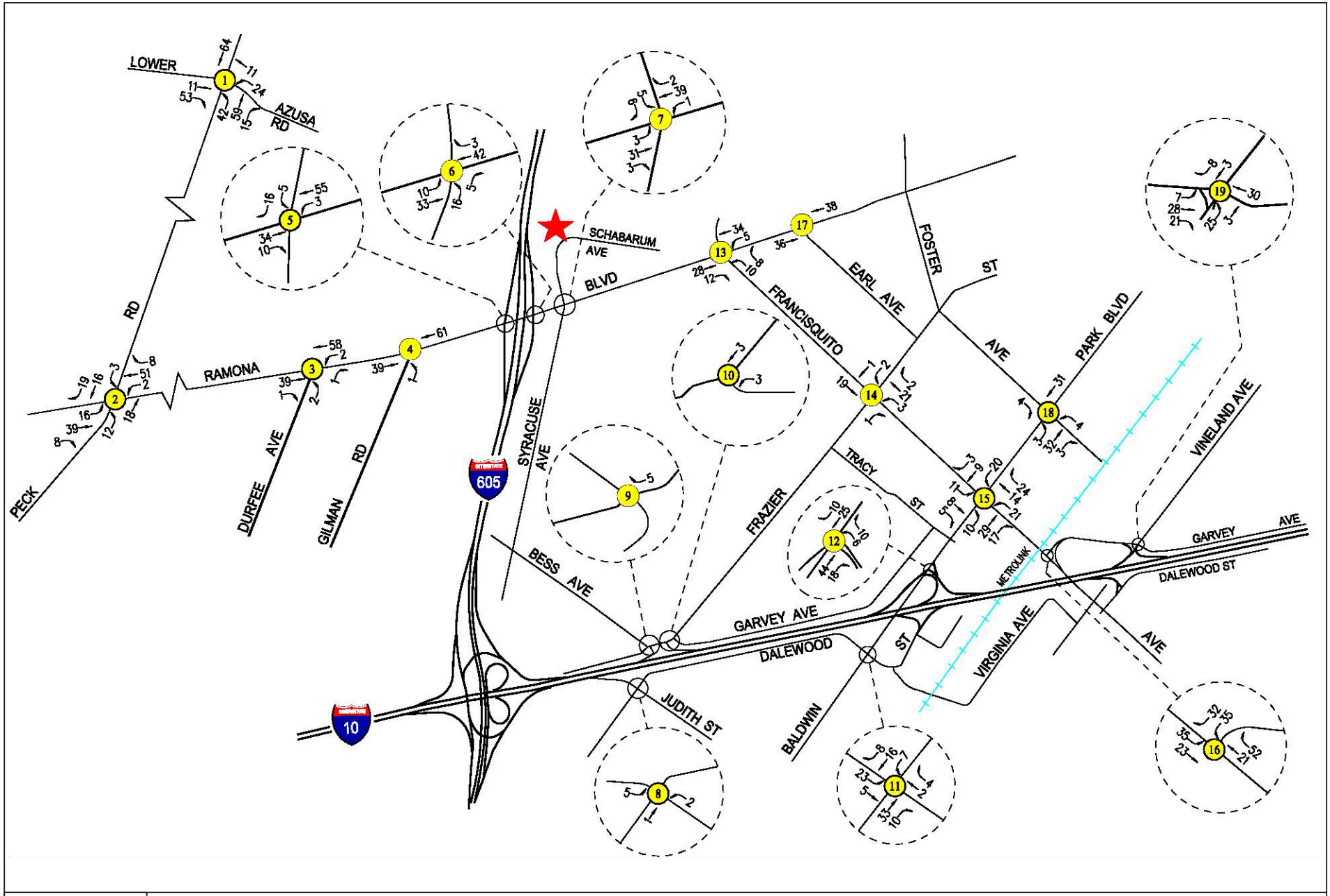

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-7

Related Projects Traffic Volumes - Weekday PM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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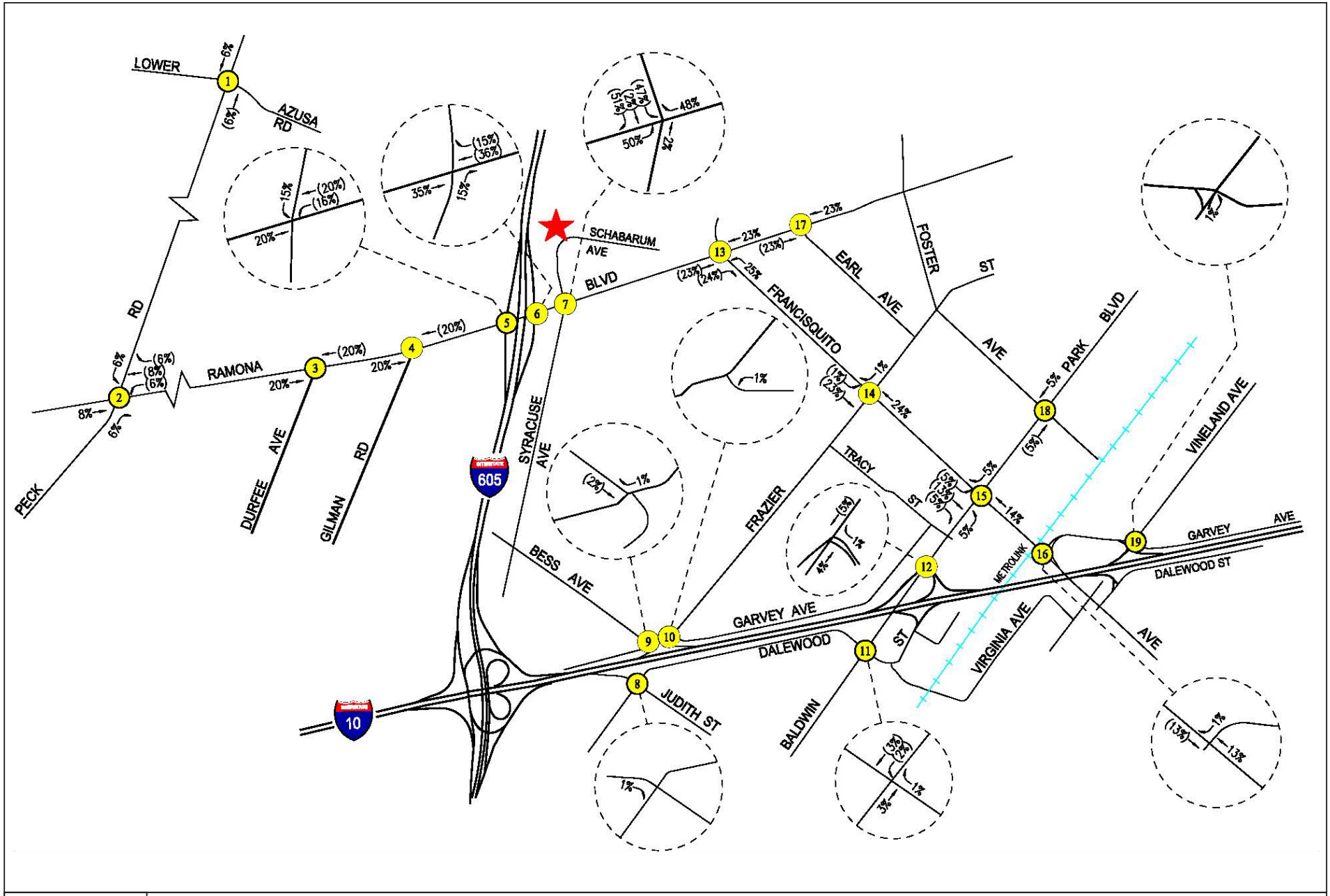

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-8

Project Trip Distribution

Kaiser Permanente Specialty Medical Office Building Project

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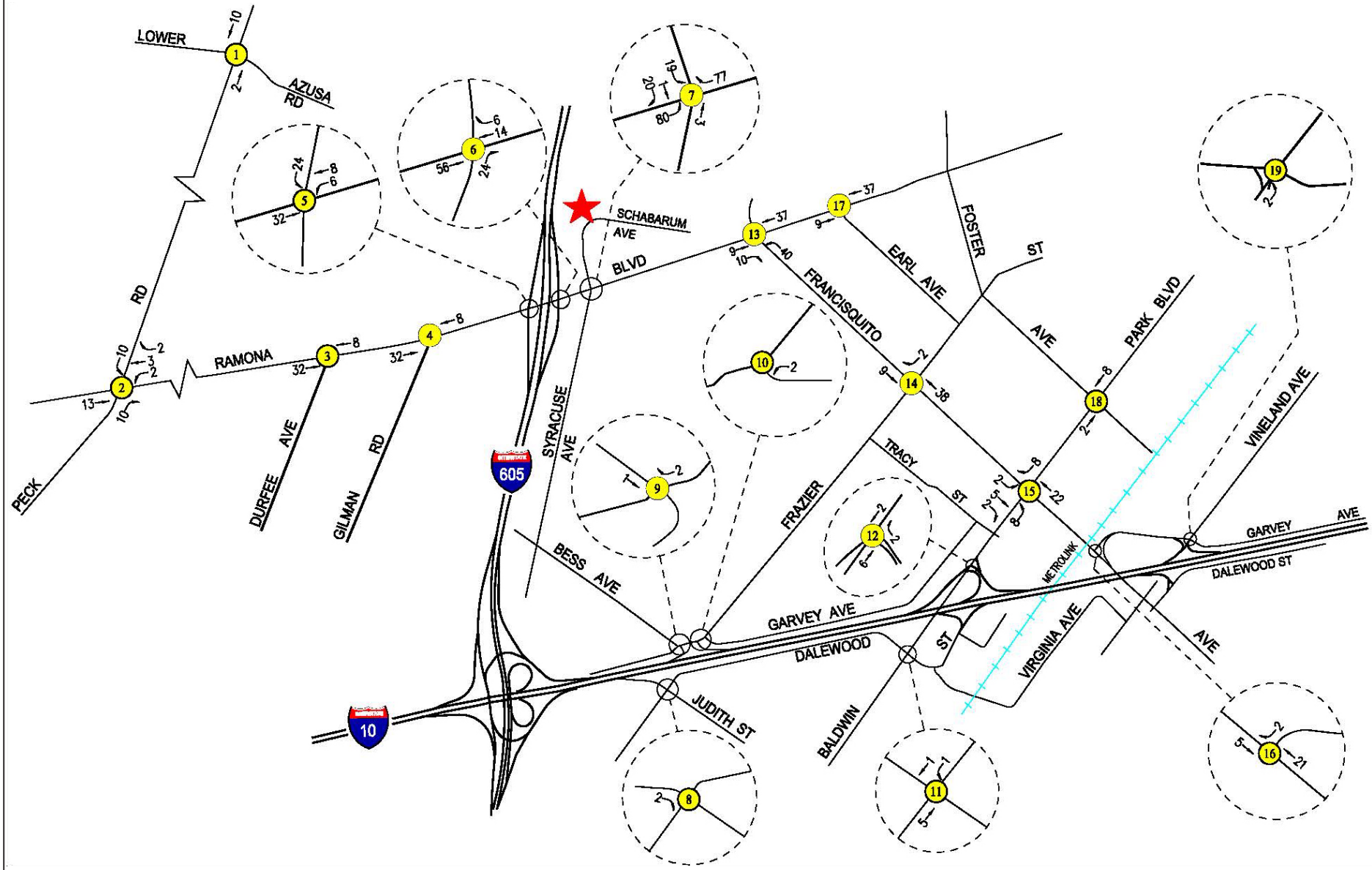

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-9

Net New Project Traffic Volumes - Weekday AM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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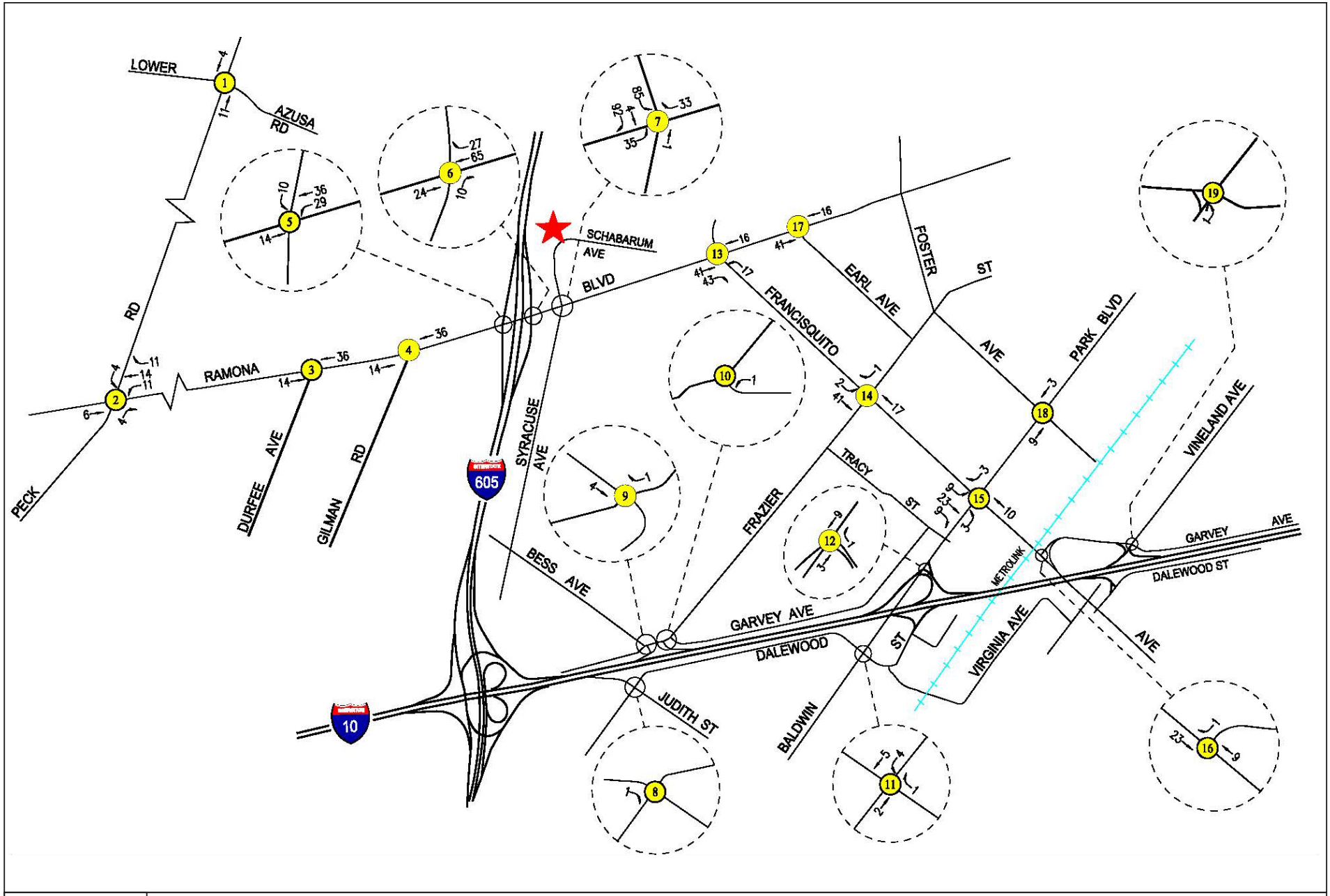

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-10

Net New Project Traffic Volumes - Weekday PM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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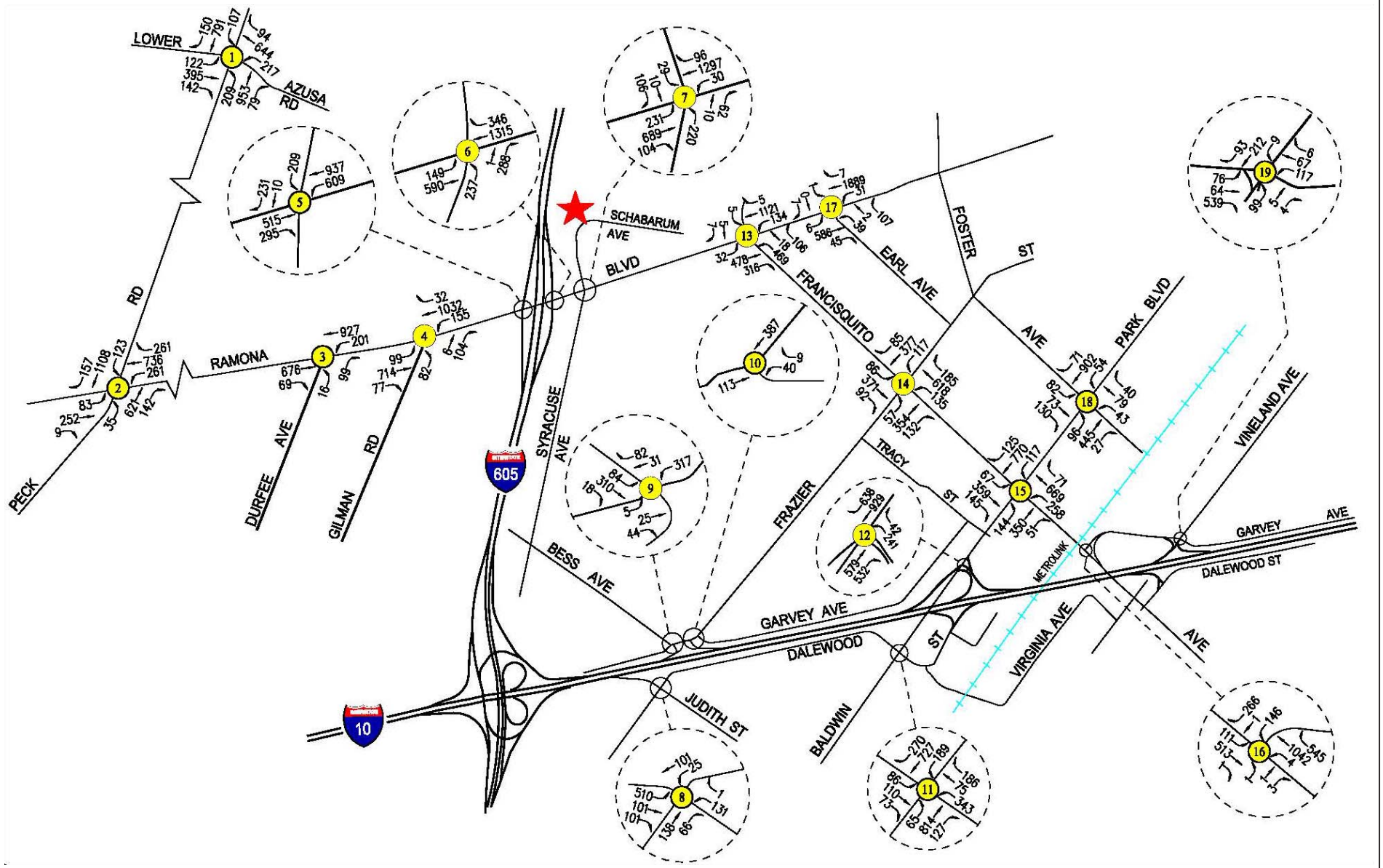

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-11

Existing with Project Traffic Volumes - Weekday AM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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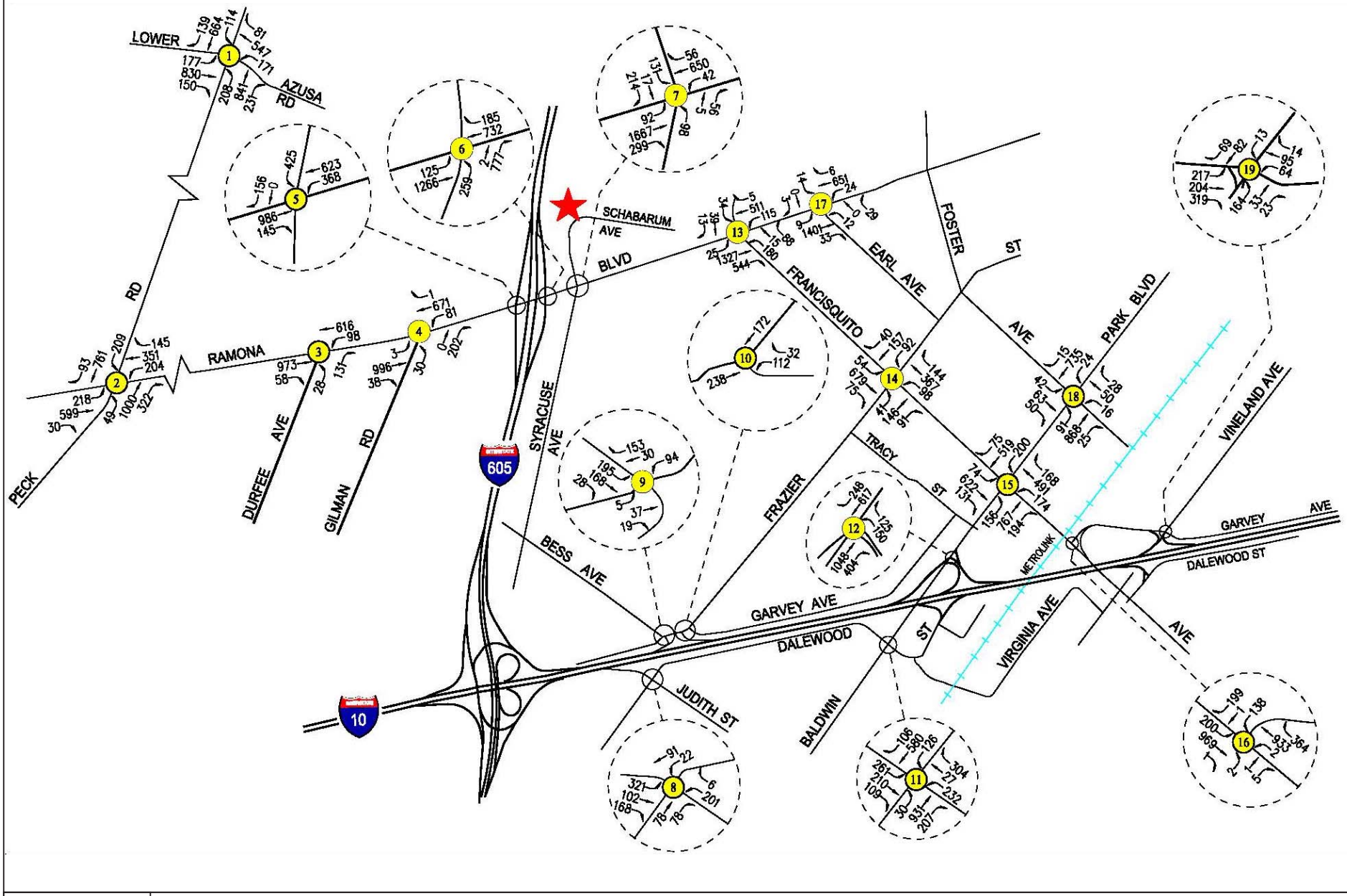

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-12

Existing with Project Traffic Volumes - Weekday PM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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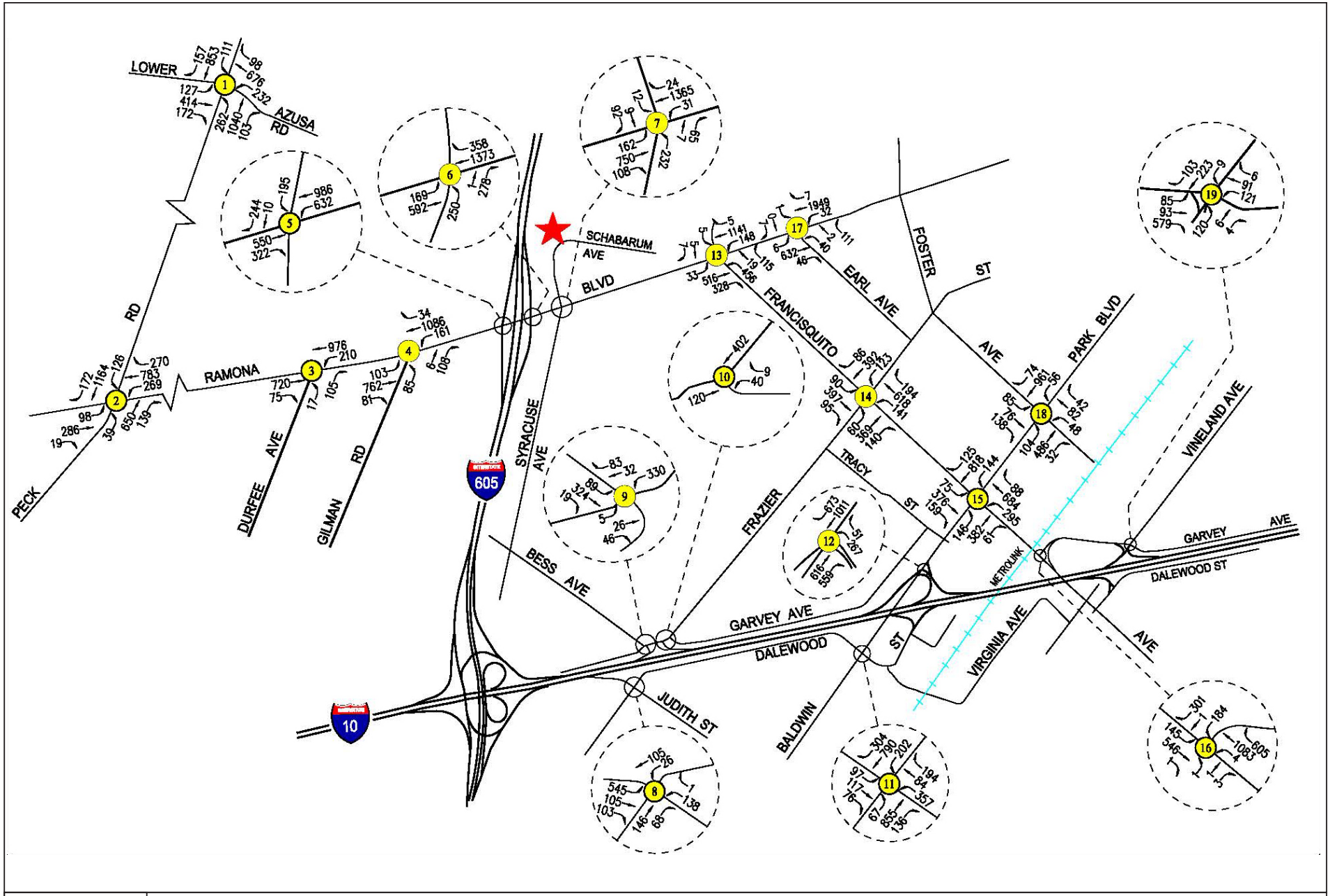

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-13

Future without Project Traffic Volumes - Weekday AM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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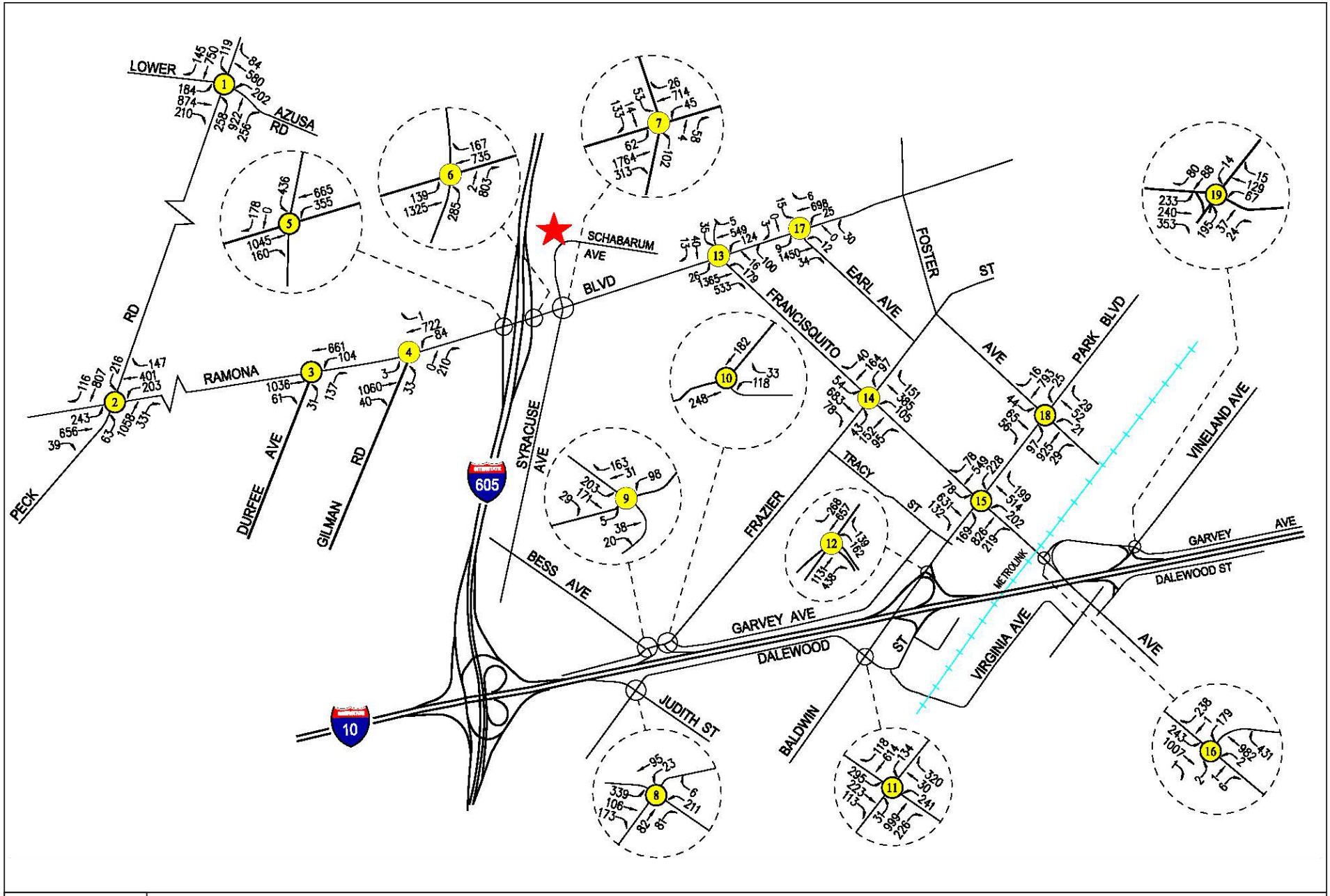

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-14

Future without Project Traffic Volumes - Weekday PM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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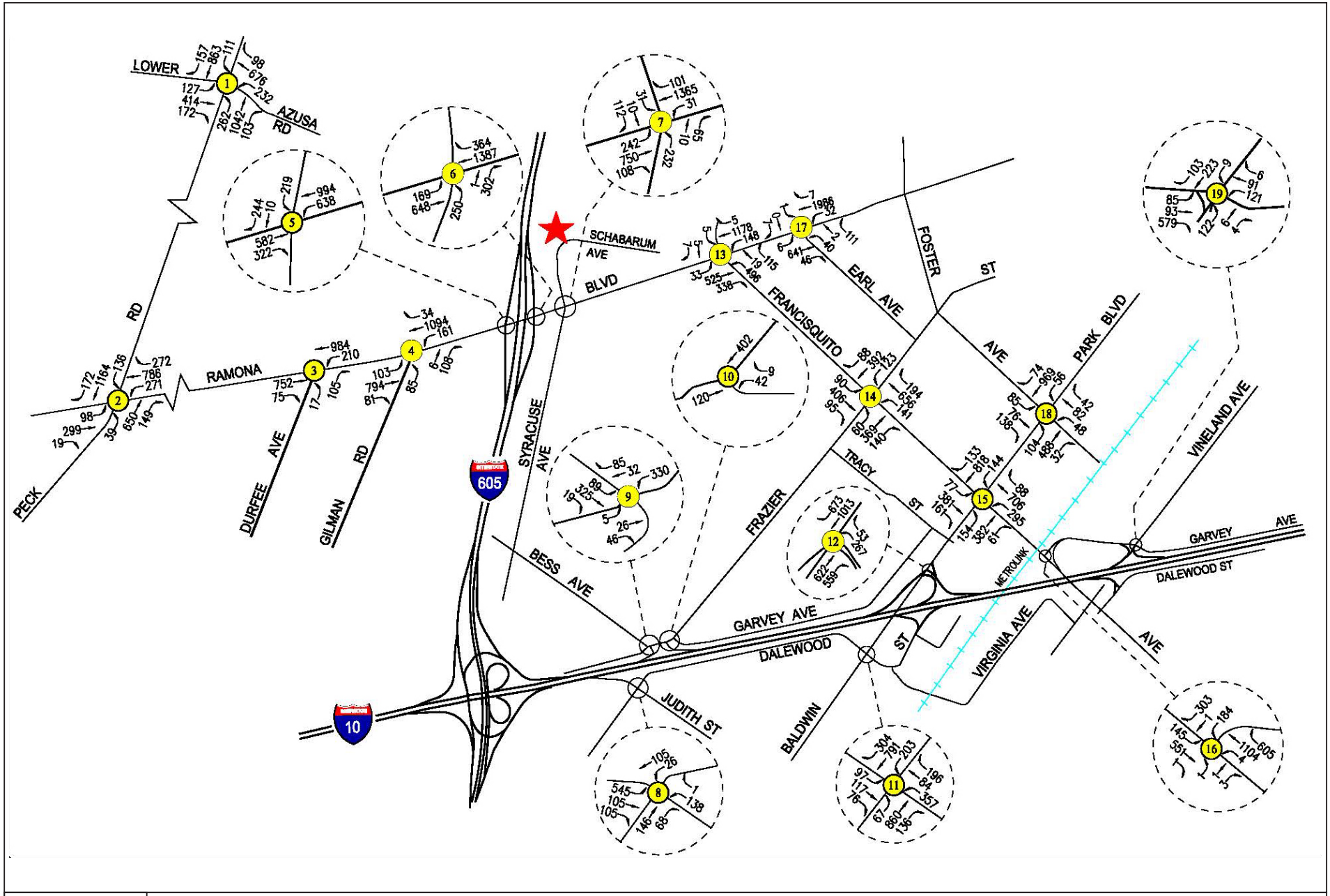

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-15

Future with Project Traffic Volumes - Weekday AM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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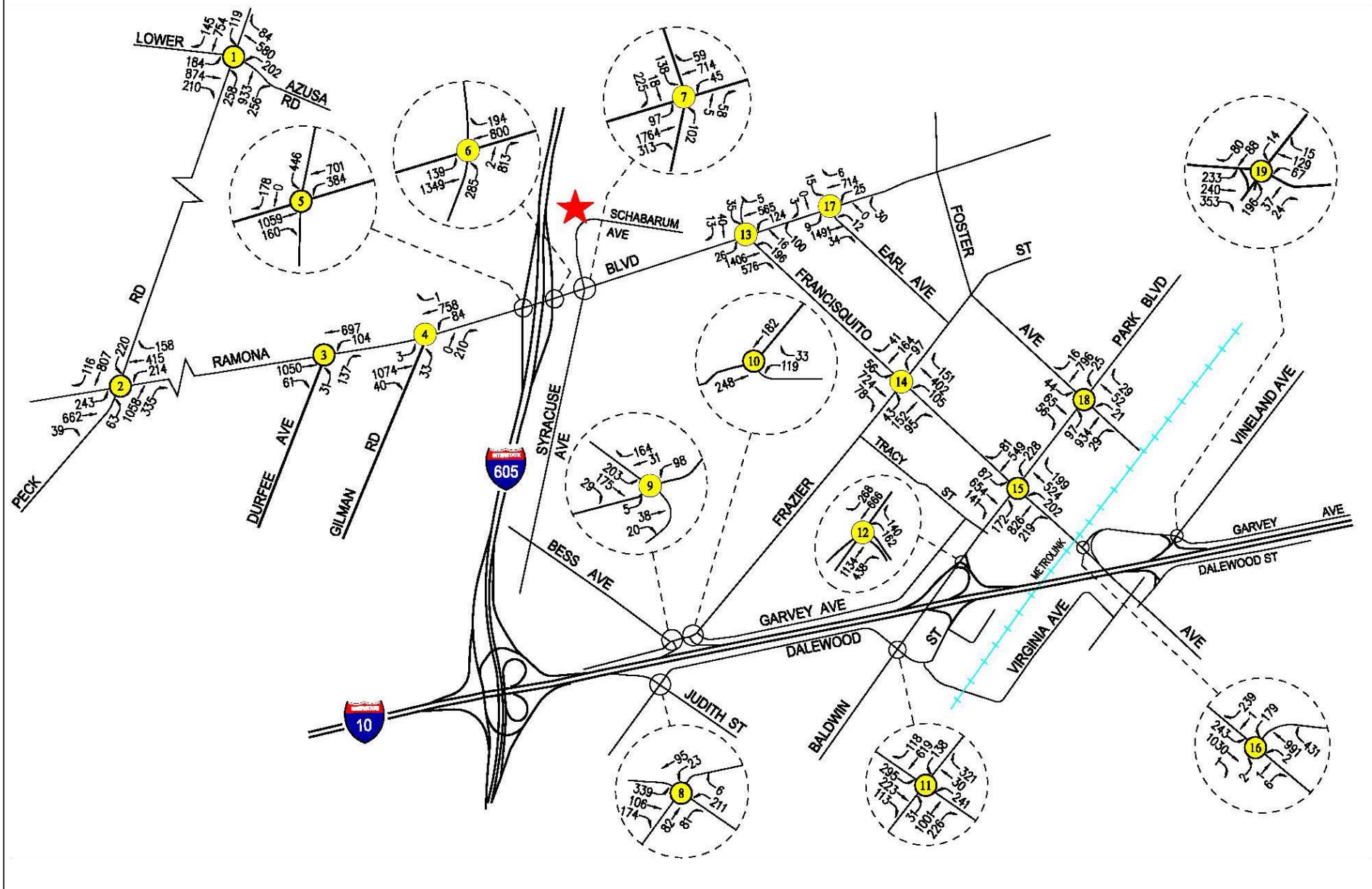

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-16

Future with Project Traffic Volumes - Weekday PM Peak Hour

Kaiser Permanente Specialty Medical Office Building Project

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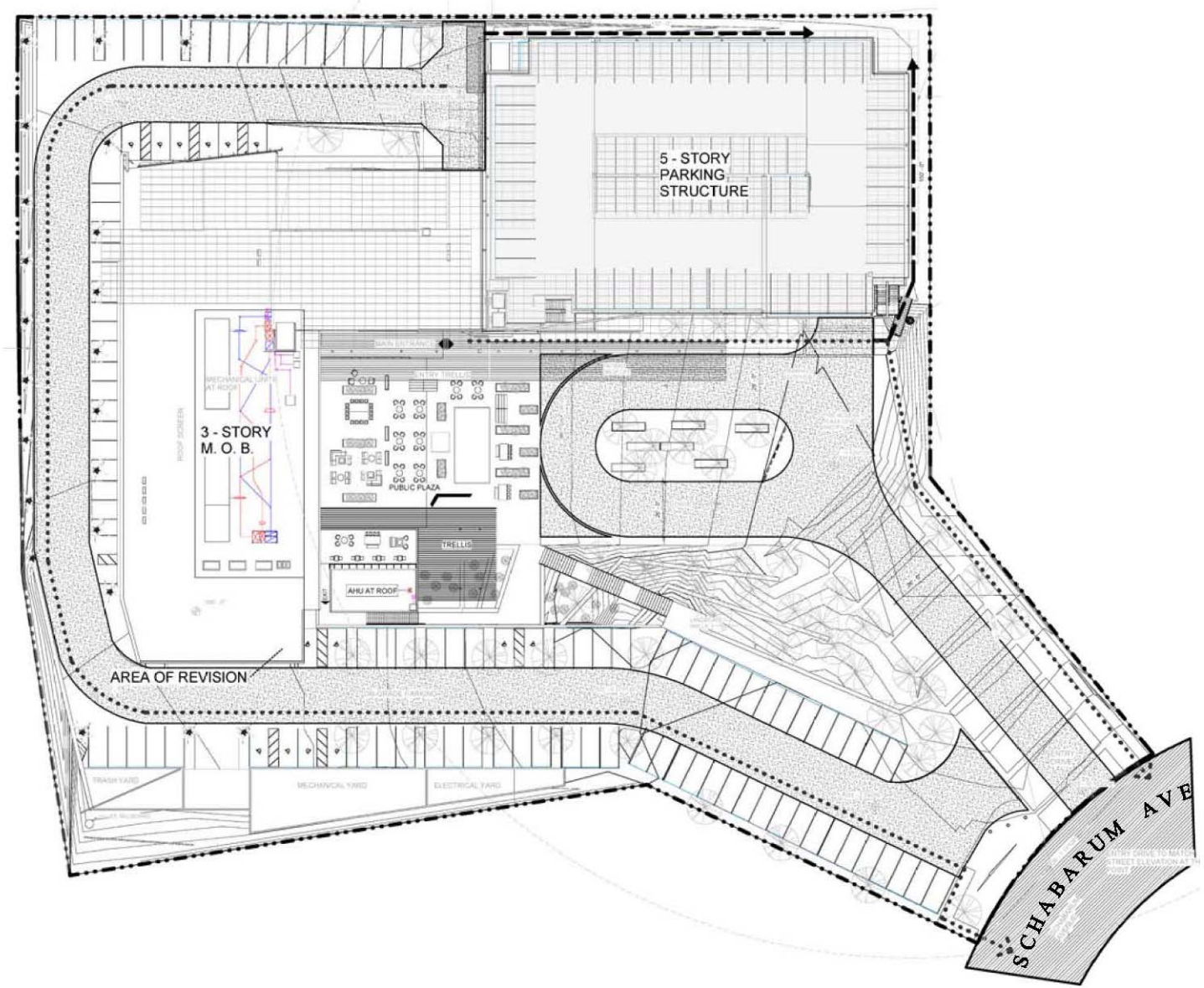

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-17
Site Plan

Kaiser Permanente Specialty Medical Office Building Project

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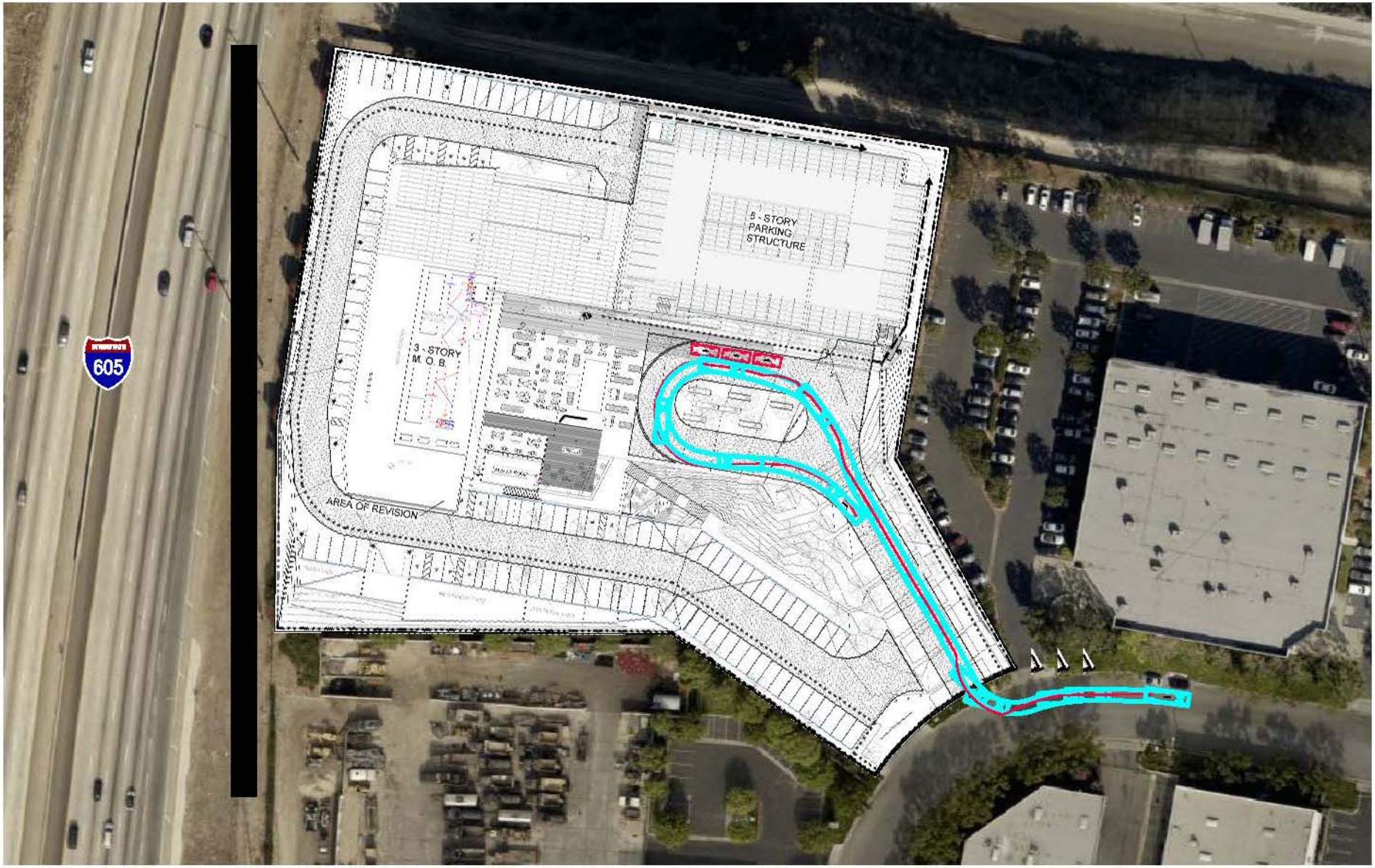

SOURCE: Linscott Law & Greenspan Engineers, 2016

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FIGURE 3.12-18

Vehicle Maneuvering Analysis

Kaiser Permanente Specialty Medical Office Building Project

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3.13 UTILITIES AND SERVICE SYSTEMS

This section describes the utilities and service systems that would serve the proposed Kaiser Permanente Specialty Medical Office Building Project (project or proposed project) site. Analysis within this section identifies associated regulatory requirements and identifies potential impacts related to implementation of the proposed project.

The Initial Study/Notice of Preparation (IS/NOP) prepared for the proposed project found that the proposed project would have a less than significant impact or no impact as it relates to all of the Utilities and Service Systems significance criteria identified in the California Environmental Quality Act (CEQA) Guidelines Appendix G (14 CCR 15000 et seq.), with the exception of wastewater, stormwater, and solid waste facilities/capacity (Appendix A). As such, this section focuses only on the potential for the proposed project to significantly impact wastewater, stormwater, and solid waste facilities/capacity.

3.13.1 Existing Conditions

Sewer System

An existing 10-inch sewer line which runs along Schabarum Avenue directly serves the project site and increases downstream to a 12-inch sewer main line.

The County Sanitation Districts of Los Angeles County (CSDLAC) provides all of Irwindale‘s sewer services and would be responsible for the treatment of wastewater generated by the project. The proposed project is located within CSDLAC District 15, which is one of the seventeen districts that form the Join Outfall System (JOS) (CSDLAC 2016a). The JOS covers approximately 660 square miles, from the foothills of the San Gabriel Mountains in the north to San Pedro Bay in the south, and from the Los Angeles city limits on the west to the Los Angeles County border on the east. This system provides sewage treatment, reuse and disposal for residential, commercial, and industrial users. The JOS includes the main Joint Water Pollution Control Plant in Carson, and six satellite water reclamation plants (WRPs). The six WRPs include La Cañada WRP, Long Beach WRP, Los Coyotes WRP, Pomona WRP, San Jose Creek WRP, and Whittier Narrows WRP.

The closest WRPs to the project site are the San Jose Creek WRP and the Whittier Narrows WRP:

- **The San Jose Creek WRP** is located at 1965 Workman Mill Road, Los Angeles, California 90601, approximately 3.5 miles southwest of the project site. The San Jose Creek WRP has the capacity to provide primary, secondary, and tertiary treatment for 100 million gallons per day (mgd) of wastewater and serves a large residential population of approximately one million people. The San Jose Creek WRP currently processes an average flow of 65.7 mgd of wastewater, resulting in a remaining capacity of approximately 34.3 mgd of wastewater (CSDLAC 2016a).

- **The Whittier Narrows WRP** is located at 301 N. Rosemead Boulevard, El Monte, California 91107, approximately 5.3 miles southwest of the project site. The Whittier Narrows WRP has the capacity to provide primary, secondary and tertiary treatment for 15 million mgd and serves a population of approximately 150,000 people. The Whittier Narrows WRP currently processes an average flow of 7.3 mgd of wastewater, resulting in a remaining capacity of approximately 7.7 mgd of wastewater (CSDLAC 2016a).

Together, these two WRPs have a total treatment capacity of 115 mgd and a remaining capacity of 42 mgd.

Storm Drain System

The storm drainage on the project site consists of a concrete swale along the western parking lot and two area drains, which convey stormwater to an 18" high-density polyethylene (HDPE) line. The 18" line then sizes up to a 24" line before connecting to the public system, which consists of a 30" reinforced concrete pipe (RCP) line running through Schabarum Avenue (Appendix F). In the larger vicinity, stormwater runoff is collected in streets through inlets, catch basins and underground storm drains maintained either privately or by the City of Irwindale, and eventually directed to the San Gabriel River through a culvert that passes under and to the west side of the Interstate 605 (I-605) freeway (County of Los Angeles 2016). The San Gabriel River is maintained by the Los Angeles County Flood Control District.

Solid Waste and Recycling Services

The City of Irwindale has an exclusive franchise agreement with Athens Services to provide mixed waste collection services and other available programs to its residents and business community. Businesses located in the City of Irwindale and those contractors conducting business in the city are required to contact Athens Services directly to set up trash collection services. Athens Services currently transports all of Irwindale's commercial waste to a Material Recovery Facility, where recyclable materials are sorted and then diverted from local landfills.

3.13.2 Regulatory Setting

State

Protection of Underground Infrastructure

California Government Code, Section 4216 et seq., requires an excavator to contact a regional notification center (e.g., Underground Service Alert (USA) or Dig Alert) at least 2 days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call USA Southern California, the regional notification center for Southern California. USA will notify the utilities that may have buried lines

within 1,000 feet of the project. Representatives of the utilities, once notified, are required to mark the specific locations of their facilities within the work area prior to the start of project activities.

Municipal Stormwater Permit (Los Angeles RWQCB Order No. R4-2012-0175, as amended).

The *Waste Discharge Requirements for the Municipal Separate Storm Sewer System (MS4) Discharges from the Coastal Watersheds of Los Angeles County, except those discharges originating from the City of Long Beach MS4* (MS4 Permit) covers 84 cities and most of the unincorporated areas of Los Angeles County. Under the MS4 Permit, the Los Angeles County Flood Control District is designated as the Principal Permittee. The Permittees are the 84 Los Angeles County cities and Los Angeles County. Collectively, these are the "Co-Permittees" (including the City of Irwindale). The Principal Permittee helps to facilitate activities necessary to comply with the requirements outlined in the MS4 Permit but is not responsible for ensuring compliance of any of the other Permittees.

The MS4 Permit requires Los Angeles County and the City of Irwindale to implement a development planning program to address stormwater pollution. These programs require project applicants for certain types of projects to implement Standard Urban Stormwater Mitigation Plans (SUSMP) throughout the operational life of their projects. The purpose of SUSMP is to reduce the discharge of pollutants in stormwater by outlining BMPs which must be incorporated into the design plans of new development and redevelopment. The proposed project is a regulated project for this purpose, and would prepare and implement a SUSMP to outline how the project would capture, treat, and infiltrate the 85th percentile storm event.

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Assembly Bill (AB) 939), administered by the California Integrated Waste Management Board, regulates nonhazardous solid waste. The law provides a solid waste management system to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible and in an efficient and cost-effective manner to conserve natural resources, to protect the environment, and to improve landfill safety. Local agencies are required to establish recycling programs, reduce paper waste, purchase recycled products, and implement integrated waste management programs that conform to the state's requirements (California Public Resources Code, Section 40000 et seq.). AB 939 specifically required that each city and county in California divert 25% of its waste stream by 1995 and 50% by 2000 (CalRecycle 1997). The bill also required each state agency to develop and adopt an integrated waste management plan, in consultation with the Waste Management Board, before July 1, 2000.

State Agency Model Integrated Waste Management Act of 1999

AB 75 was passed in 1999, and the State Agency Model Integrated Waste Management Act (Chapter 764, Statutes of 1999, Strom-Martin) took effect on January 1, 2000. The State Agency

Model Integrated Waste Management Act mandated that state agencies develop and implement an integrated waste management plan. The act also mandated that community service districts providing solid waste services report disposal and diversion information to the city, county, or regional agency in which the community service district is located. Provisions of the act require all state agencies and large state facilities to divert at least 50% of solid waste from landfills after 2004 and that each state agency and large facility submit an annual report to the California Department of Resources Recycling and Recovery summarizing its yearly progress in implementing waste diversion programs (CalRecycle 2012).

Local

Sanitation Districts of Los Angeles County Ordinances

The Sanitation Districts adopted a Wastewater Ordinance effective April 1, 1972, as amended on July 1, 1980, July 1, 1983, November 1, 1989, and July 1, 1998, to protect and finance the operation of the Sanitation Districts' wastewater conveyance, treatment, and disposal facilities. Individual Sanitation Districts also adopted Connection Fee Ordinances in 1981 (which were amended in 1984, 1990, 1992, and 1997). Companies that discharge industrial wastewater to the sewerage system are governed by both the Wastewater Ordinance and the Connection Fee Ordinance for the District in which the discharge is located. These legal mechanisms establish the Sanitation Districts' Industrial Wastewater Discharge Permit, Connection Fee, and Surcharge Programs. The Industrial Wastewater Discharge Permit Program allows for the regulation of industrial wastewater dischargers to protect the public health, environment, and the public sewerage system. The Surcharge Program requires all industrial companies discharging to the Sanitation Districts' sewerage system to pay their fair share of the wastewater treatment and disposal costs. The Connection Fee Program requires all new users of the Sanitation Districts' sewerage system, as well as existing users that significantly increase the quantity or strength of their wastewater discharge, to pay their fair share of the costs for providing additional conveyance, treatment, and disposal facilities (CSDLAC 2016b).

Medical and professional buildings are normally exempt from the Wastewater Ordinance, however, this determination is to be made only by Sanitation Districts' personnel (CSDLAC 2016b).

Irwindale Municipal Code

Irwindale Municipal Code Chapter 8.28 (Storm Water and Urban Runoff Pollution) implements NPDES requirements by a) regulating non-storm water discharge to the municipal storm water system, b) providing for the control of spillage, dumping, or disposal of materials into the municipal storm water system, and c) reducing pollutants in storm water and urban runoff to the maximum extent practicable. Specifically, Section 8.28.130 requires new development and redevelopment projects to comply with standard urban stormwater mitigation program (SUSMP)

conditions assigned by the city that consist of (1) low impact development (LID) structural and non-structural best management practices (BMPs); (2) source control BMPs; and (3) structural and non-structural BMPs for specific types of uses. LID controls effectively reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff. Source control BMPs prevent runoff contact with pollutant materials that would otherwise be discharged to the MS4. The main compliance documents required for project permitting consists of a Standard Urban Stormwater Mitigation Plan (SUSMP), which must be reviewed and approved by the City, and must include a long term maintenance agreement to ensure all features remain effective and operational.

Irwindale General Plan

The City of Irwindale General Plan has an infrastructure element that discusses certain utilities, including sewer (City of Irwindale 2008). Aside from a general commitment to maintain the highest service standards, the General Plan does not contain any specific policies that directly apply to the proposed project. As a matter of policy, the City seeks to determine a reasonable and fair method of assessing new development for the cost of providing any additional infrastructure required by the development. General polities are as follows:

Issue Area – Maintenance of Service Standards. City of Irwindale will continue to maintain the highest levels of public service to respond to the existing and future demand for such services.

- **Infrastructure Element Policy 1.** The City will continue to support the efforts of the City of Irwindale Public Works Department in maintaining the highest service standards feasible.
- **Infrastructure Element Policy 2.** The City will continue to cooperate with those utility providers in the City to ensure that sufficient infrastructure capacity is available to meet current and future service demands (City of Irwindale 2008).

3.13.3 Thresholds of Significance

The following significance criteria are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), and will be used to determine the significance of potential utilities and service systems impacts. Impacts related to utilities and service systems would be significant if the proposed project would:

a) 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?

b) 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?

c) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

All other significance criteria related to utilities and service systems were focused out of the analysis in the IS/NOP prepared for the proposed project (Appendix A), and thus, is not further discussed in this Draft EIR.

3.13.4 Impacts Analysis

a) 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 effects?

The IS/NOP for the proposed project (Appendix A) found issues related to new water treatment facilities (or expansion of such facilities) to be less than significant because the proposed project's water demand would be nominal compared to the overall water demands served by the San Gabriel Valley Water Company.

With regard to construction/expansion of wastewater facilities, the IS/NOP (Appendix A) described impacts as potentially significant, based primarily on the lack of a project-specific sewer capacity study. A 6-inch sewer lateral is proposed that will connect to the existing 10-inch sewer main along Schabarum Avenue. Prior to connection to the sewer trunk lines, the proposed project would be required to obtain a will serve letter from the CSDLAC. The expected increase in average wastewater flow from the proposed project is 22,896 gallons per day after all structures on the project site are demolished (CSDLA 2016). As indicated in the setting, the San Jose Creek and Whittier Narrows WRPs currently process a remaining capacity of approximately 34.3 mgd and 7.7 mgd of wastewater, respectively. Therefore, the proposed project's wastewater generation is nominal compared to the existing capacities of the two closest WRPs to the project site (i.e., 0.0668% of the San Jose Creek WRP remaining capacity and 0.297% of the Whittier Narrows WRP remaining capacity). Therefore, the proposed project would not result in either plant exceeding sewage treatment capacities.

For both water and wastewater service connections, the applicant would be required to pay connection fees to the utility service provider (CSDLAC 2016b). These fees must be paid before connection permits are issued. Among other things, these fees are used to fund improvements needed to continue serving the applicable service area, ensure

adequate capacity, and comply with State Water Resources Control Board treatment requirements. Impacts with respect to construction of new (or expanded) wastewater treatment facilities would, therefore, be **less than significant**. No mitigation is required.

b) 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?

The proposed drainage system consists of area drains to capture runoff in the at-grade parking lots, a new 21-inch RCP line to convey stormwater, 6-inch roof drains to convey stormwater runoff over building footprints, an infiltration system designed to infiltrate the 85th percentile storm, and a new 21-inch RCP overflow pipe connected to the existing 30-inch RCP City line. The proposed storm drain lines were sized to accommodate the 25-Year Design storm and to prevent flooding of the proposed structures (Appendix F). The Hydrology and Hydraulic Study prepared for the proposed project (Appendix F) found that the proposed drainage system for the proposed project will be able to accommodate the 25-year design storm as set forth by the guidelines in the Los Angeles County Hydrology Manual. Furthermore, the amount of impervious surfaces on the project site would remain essentially the same, and the infiltration system proposed would decrease the volume of stormwater runoff entering the 30' RCP line on Schabarum Avenue as compared to existing conditions (see Section 3.9, Hydrology and Water Quality for additional details).

Construction of new stormwater drainage systems would be limited to the project site itself and a connection to the 30-inch RCP at the site's entrance. Therefore, the impacts of constructing the on-site stormwater systems are included in the environmental review of the overall footprint impacts of the proposed project. Furthermore, construction of new storm water drainage facilities would not cause significant environmental effects beyond those analyzed throughout this Draft EIR. Therefore, impacts would be **less than significant**. No mitigation is required.

c) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Demolition activities for the proposed project are likely to produce substantial quantities of debris that would need to be disposed of. State regulations require diversion (i.e., recycling/reuse) of at least 50% of construction and demolition (C&D) debris, which Athens Services would accommodate as the franchise hauler in the City. This C&D requirement would substantially reduce solid waste associated with the proposed project's C&D activities. The remaining construction material would be disposed of at a solid waste

facility with available capacity. Regionally, both Los Angeles County and San Bernardino County have adequate landfill capacity to accommodate waste disposal needs through 2025 assuming a medium growth rate projection for the region (CalRecycle 2016).

During long-term operations, solid waste from the proposed project would also be hauled by Athens Services. Any materials that are not composted or recycled by Athens Services are transferred to the Mid-Valley Sanitation Landfill in the City of Rialto. The landfill is permitted to accept a max of 7,500 tons of solid waste per day (Cal Recycle 2016). Additionally, Athens recently signed a long term contract with the City of Irwindale to permit, design, construct and operate a new regional materials recovery facility. The facility will have the ability to process mixed waste processing, construction and demolition, organic and green waste, source separated recyclables, transfer, and self-haul recovery. Although the exact rate of solid waste generation for the proposed project is unknown, it would be typical of a commercial office building. As indicated above, both Los Angeles County and San Bernardino County have adequate landfill capacity to accommodate waste disposal needs through 2025 assuming a medium growth rate projection for the region (CalRecycle 2016). As adequate daily surplus capacity exists at the receiving landfill(s), development of the proposed project would not significantly affect current operations or the expected lifetime of the landfills serving the project area. Solid waste disposal impacts would be **less than significant**. No mitigation is required.

Any hazardous wastes that are generated during construction and operations (e.g., medical wastes) would be managed and disposed of in compliance with all applicable federal, state, and local laws (see Section 3.6, Hazards and Hazardous Materials, for additional detail).

3.13.5 Cumulative Impacts

The geographic extent for the analysis of cumulative impacts associated with utilities and service systems consists of the service area associated with each utility. The project-specific analysis associated with utilities and service systems is by nature also a cumulative impacts analysis, because it deals with the current and future demands on wastewater, stormwater, and solid waste facilities and systems in the context of the whole service area. Water and wastewater utility service providers will continue to be responsible for meeting water quality regulations and waste discharge requirements, and continue to be responsible for providing sufficient and reliable service within their respective service areas. Projects requiring new or altered connections or services must coordinate with the applicable utility to execute service agreement(s), and if applicable, pay impact fees. Determinations of sewer treatment capacity and landfill capacity provided by CalRecycle (2016) take future growth into consideration. Therefore, the less than significant conclusions reached in Section 3.13.4, Impacts Analysis, are equally applicable in the cumulative context. Cumulative impacts are considered **less than significant**. No mitigation is required.

3.13.6 Mitigation Measures

No mitigation is required.

3.13.7 Significance After Mitigation

All impacts were determined to be **less than significant** prior to mitigation. No mitigation is required.

3.13.8 References

CalRecycle (California Department of Resources Recycling and Recovery). 1997. "History of California Solid Waste Law, 1985–1989." Last updated January 1, 1997. Accessed August 24, 2016. http://www.calrecycle.ca.gov/Laws/Legislation/calhist/1985to1989.htm.

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County of Los Angeles. 2016. Los Angeles County GIS Portal. Department of Public Works Storm Drain System Web Map Viewer. Available at http://dpw.lacounty.gov/fcd/stormdrain/index.cfm, accessed August 21, 2016.

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CHAPTER 4
ALTERNATIVES

The California Environmental Quality Act (CEQA) requires that an EIR describe a range of reasonable alternatives to a proposed project that would feasibly attain most of the basic objectives of the project but would avoid or lessen any significant environmental impacts. EIRs are also required to evaluate the comparative merits of the alternatives. This chapter of the EIR describes and evaluates project alternatives and implements the requirements set forth in the CEQA Guidelines for alternatives analysis. This chapter also identifies the Environmentally Superior Project Alternative as required by CEQA Guidelines Section 15126.6(e)(2).

4.1 SELECTION OF ALTERNATIVES

The range of alternatives and methods for selection is governed by CEQA and applicable CEQA case law. As stated in CEQA Guidelines Section 15126.6(a), the lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. This chapter includes the range of project alternatives that have been selected by the lead agency (in this case, the City of Irwindale) for examination, as well as its reasoning for selecting these alternatives.

As stated in Section 15126.6(a) of the CEQA Guidelines, there is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. This rule is described in Section 15126.6(f) of the CEQA Guidelines and requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. As defined in Section 15126.6(f), the rule of reason limits alternatives analyzed to those that would avoid or substantially lessen one or more of the significant effects of a project. Of those alternatives, an EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. Other relevant provisions set forth in the CEQA Guidelines state that EIRs do not need to consider every conceivable alternative to a project, nor are they required to consider alternatives that are infeasible.

4.1.1 Proposed Project

As described above, the project objectives and the significant impacts of a project are key determiners of the alternatives that are initially examined by the lead agency and the alternatives that are ultimately carried forward for detailed analysis in an EIR. To that end, this subsection includes (a) a summary of the proposed project's characteristics to facilitate comparison between the proposed project and its alternatives, (b) the list of project objectives, and (c) a summary of the project's significant impacts.

Project Summary

The proposed project would consist of a medical office building (MOB) and a parking structure. The MOB would be approximately 90,000 square feet in size and three stories (59 feet) in height. The parking structure would be approximately 115,339 square feet in size, would provide 339 parking spaces, and would be located in the northeastern portion of the site. The parking structure would be approximately 64 feet in height. An additional 111 parking spaces would be provided in a surface parking lot that would be located along the south, west, and north sides of the MOB. The project would be located at 12761 Schabarum Avenue in the City of Irwindale, at the site of a warehouse, formerly used by Jacmar Foods Distribution. The site is located in the northwestern corner of an area that has been developed for industrial and business park land uses. Immediately to the north of the site is the Vulcan Durbin Quarry and to the west is the Interstate 605 (I-605). The proposed MOB would house the following departments, to be relocated from Kaiser Permanente's Baldwin Park Medical Center campus: podiatry, ophthalmology, gastroenterology, and outpatient surgery. In addition to the relocated departments, the proposed MOB would also house the following services: an imaging department, an ambulatory surgery unit, a laboratory, pathology, pharmacy, and support services. The project would also include landscaping and community space, consisting of a native garden, an urban plaza, an amphitheater, and several landscaped pathways.

Project Objectives

As described in Chapter 2 of this EIR, the project objectives include the following:

- Meet all projected Kaiser Permanente member demands.
- Provide high quality health care in seismically safe, state-of-the-art, advanced-care medical center facility for Kaiser Permanente members throughout the City of Irwindale area and surrounding communities.
- Supplement and support Kaiser's existing clinics and medical facilities in Baldwin Park, El Monte, Arcadia, Duarte, Azusa, and Covina, and provide needed advanced-care medical facilities to the community.
- Create a comprehensively planned, advanced-care medical center that provides community vitality, economic growth, and a wide range of employment opportunities in Irwindale and the surrounding region.
- Implement many green building features using the standards of the Green Guide for Healthcare, as such standards evolve over time, and Leadership in Energy and Environmental Design (LEED) Gold certification or equivalent, as well as Kaiser's existing sustainable building strategies.

Environmental Impacts of the Proposed Project

As discussed in detail in Chapter 3, Environmental Analysis, the proposed project would result in significant, unavoidable, adverse impacts related to air quality and transportation/traffic, summarized as follows:

- As described in Section 3.1, Air Quality, significant and unavoidable impacts would result during project operation due to exceedances of thresholds for emissions that would occur when the proposed emergency generator is operated under worst-case-scenario conditions.
- As described in Section 3.12, Traffic, the proposed project would result in significant and unavoidable impacts at two intersections (I-605 Freeway Southbound Ramps/Ramona Boulevard and I-605 Freeway Northbound Ramps/Ramona Boulevard).

4.1.2 Alternatives Considered But Rejected

One of the requirements for alternatives analysis that is set forth in the CEQA Guidelines is identification of alternatives that were considered by the lead agency but rejected as infeasible during the scoping process. As stated in Section 15126.6(c) of the CEQA Guidelines, the EIR should briefly explain the reasons underlying this determination. Among the factors that may be used to eliminate alternatives from detailed consideration in the EIR are:

i. Failure to meet most of the basic project objectives,

ii. Infeasibility, or

iii. Inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6(c)).

Section 15126.6(f)(1) of the CEQA Guidelines states that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." However, as stated in this subsection, no one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In accordance with 15126.6(c) of the CEQA Guidelines, several alternatives were considered but rejected from further analysis due to one or more of the above reasons. A description of each alternative and the rationale for rejection is provided below.

Alternative Sites

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the project site. Under this alternative, the proposed project would be constructed on another site in the City or in a nearby jurisdiction. Development of the proposed project on an alternative site would attain all of the project objectives, since the proposed MOB would still be developed such that the MOB would serve Kaiser Permanente members in the City and in surrounding communities, would supplement existing facilities in the area, would create a medical center that would provide community vitality and economic growth, and would be developed with the same green building features as the proposed project. However, alternative sites were rejected from further analysis in the EIR due to infeasibility and inability to avoid the project's significant impacts.

Inability to Avoid Significant Environmental Impacts. As stated in Section 15126.6(f)(2)(A), the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered in the EIR. Under the proposed project, a significant and unavoidable impact would result in the category of air quality during project operation. Exceedances in the South Coast Air Quality Management District (SCAQMD) thresholds for NO_x would be caused by the operation of the proposed MOB's emergency generator. The exceedances would occur under a worst-case operational scenario for the generator. The proposed MOB would have an emergency generator with the same worst-case operational scenario regardless of the site on which the MOB is constructed. As such, if this proposed project were to be constructed on an alternative site, it is anticipated that impacts to air quality would remain potentially significant and unavoidable. Additionally, development at an alternate site would not necessarily reduce impacts to traffic, as the impacts could merely be relocated to other intersections within the City. While the distribution of trips among intersections in the vicinity could potentially change if an alternative site were to be used, it is possible that a similar number of patients and employees would access the site via the I-605 freeway and that similar impacts to the I-605 ramps could still occur. For these reasons, alternative sites would not avoid or substantially lessen the significant effects of the proposed project.

Infeasibility. There are sites within the City and nearby communities of an approximately equivalent size to the project site that could be redeveloped with an MOB project; however, Kaiser Permanente does not control another site within the City or surrounding communities of comparable land area and/or with compatible surrounding land uses. One of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site" (CEQA Guidelines Section 15126.6(f)(1)). Kaiser Permanente examined approximately 25 sites throughout the City and in surrounding jurisdictions to determine whether an alternative site could be acquired. The sites were evaluated using the following criteria:

ability to acquire the site (i.e., whether the site is for sale); the compatibility of the site and surrounding properties with the proposed medical office use; and site size (i.e., whether the proposed MOB can be developed on the site). After examining the 25 sites using these criteria, it was determined that the 25 alternative sites cannot be acquired by Kaiser Permanente, are not compatible with the proposed medical office use, and/or are not large enough for the scope of the proposed development. As such, obtaining another site of a similar size that is located in an area that would be compatible with a medical office use is not considered feasible.

Reduced Project (MOB less than 60,000 SF)

Under this alternative, a smaller MOB would be constructed. This alternative was considered because it could avoid or substantially lessen impacts on traffic identified in association with the proposed project. With this alternative, the existing on-site warehouse uses would still be demolished and replaced with an MOB and parking structure with similar landscaping and community amenities. The size of the MOB that could be built while ensuring that no significant and unavoidable impacts to nearby intersections would occur was examined. According to Linscott Law & Greenspan, the consultant who prepared the traffic impact study for the proposed project, the proposed MOB would need to be reduced to a size of 29,500 square feet in order to avoid the significant and unavoidable traffic impacts of the proposed project (LLG 2016, pers. comm.). A smaller MOB may also lessen the project's impacts in the category of air quality. A smaller building would result in fewer activities during construction and decreased land use intensity during operation. The project's significant and unavoidable impact in the category of air quality would be caused by the proposed emergency generator. The emissions of an emergency generator for a smaller building may be less than those of the proposed emergency generator, potentially lessening or avoiding the project's significant and unavoidable impact to air quality. While this alternative would lessen its potentially significant and unavoidable impact to air quality, impacts related to traffic would still remain significant and unavoidable. This alternative was subsequently rejected from detailed consideration in the EIR due to infeasibility. Additionally, not all of the project objectives would be attained by this alternative as the MOB would not be able to serve the projected Kaiser Permanente member demands in the City and in surrounding communities and would not be able to supplement and support all of Kaiser's existing clinics and medical facilities in Baldwin Park, El Monte, Arcadia, Duarte, Azusa, and Covina. This alternative would create a medical center that would provide less community vitality and economic growth, and would be developed with fewer green building features than the proposed project due to the significant size reduction of the MOB.

Infeasibility. The MOB that is being proposed for the City is anticipated to serve a membership base of approximately 297,729 Kaiser Permanente members at the time of project buildout (2019) and approximately 325,517 members by 2024 (Kaiser Foundation Health Plan, Inc. 2016). The MOB is anticipated to house four departments that would be relocated from Kaiser

Permanente's Baldwin Park Medical Center campus, as well as several additional departments and services. An MOB that is less than 60,000 square feet would not accommodate enough members or services to be economically viable or useful for facilities planning purposes. As such, a Kaiser Permanente MOB that is less than 60,000 square feet would not be designed, proposed, or constructed by Kaiser Permanente and is, therefore, considered infeasible, per Section 15126.6(f)(1) of the CEQA Guidelines.

Failure to Meet Objectives. An MOB that is less than 60,000 square feet would be able to meet some of the project objectives. For example, an MOB of a reduced size could still provide high-quality health care, could supplement some of Kaiser Permanente's existing clinics, could create an advanced-care medical center, and could be designed to implement green building features. However, some of these objectives would be met to a much lesser degree than under the proposed project. For example, a smaller MOB would provide fewer services, and the services that it provided would accommodate fewer Kaiser Permanente members. This would reduce the project's ability to serve Kaiser Permanente members in the City and surrounding communities and would reduce the project's ability to supplement and support Kaiser Permanente's existing clinics and medical facilities in nearby communities. The entire 90,000-square-foot MOB would be required in order to meet the projected Kaiser Permanente member demand. Furthermore, a smaller MOB would require fewer employees, thereby reducing the project's ability to foster economic growth and also reducing the range of employment opportunities that would be provided by the MOB. As such, this alternative was eliminated from further analysis in the Draft EIR because it is considered infeasible and would not meet all the project objectives compared to the proposed project.

4.2 ALTERNATIVES CARRIED FORWARD FOR CONSIDERATION

Pursuant to Section 15126.6 of the CEQA Guidelines, the City selected a reasonable range of alternatives to the proposed project that would feasibly attain some of the basic objectives of the proposed project but would avoid or substantially lessen one or more of the significant effects of the proposed project. Each of the selected alternatives is described below. Pursuant to Section 15126.6(d) of the CEQA Guidelines, these descriptions include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives is required to focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. As such, the three alternatives presented below would all avoid or substantially lessen at least one of the significant impacts of the proposed project that have been identified in Chapter 3.0 of this EIR.

4.2.1 Alternative 1 – No Project (Vacant Site) Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate the specific alternative of "no project" along with its impact. As stated in this section of the CEQA Guidelines, the purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. As specified in Section 15126.6(e)(3)(B) of the CEQA Guidelines, the no project alternative for a development project consists of the circumstance under which a proposed project does not proceed. Section 15126.6(e)(3)(B) further states that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." Section 15126.6(e)(2) of the CEQA Guidelines provides guidance related to establishing the existing environmental setting that is used to define the "no project" alternative. As stated in this section, "the 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published… as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." Alternative 1 assumes that the environmental conditions of the project site at the time that the Notice of Preparation was published (July 2016) would remain in place. As such, under Alternative 1, the project site would remain occupied by a vacant and unused warehouse, as it was in July 2016. However, as stated in Section 15126.6(e)(2) of the CEQA Guidelines, the lead agency is required to examine conditions that are reasonably expected to occur in the foreseeable future if the project were not approved. Because the project site has existing infrastructure to support a foods distribution center, it is reasonably foreseeable that the project site would support such a business in the future, if the proposed project were not approved. However, it is also foreseeable that the project site would continue to remain vacant. Both of these reasonably foreseeable "no project" scenarios have been analyzed herein: Alternative 1 assumes the project site would remain vacant while Alternative 2 assumes that a new foods distribution company would use the existing on-site facilities.

As such, under Alternative 1, the existing environment on the project site, consisting of a warehouse, surface parking lot, truck loading area, cooler, freezer, office building, and landscaping, would remain in place. While the project site was previously occupied by Jacmar Foods Distribution, it was vacated by that business in summer 2015. Alternative 1 assumes that the project site remains vacant. The proposed MOB, parking structure, urban plaza, and native garden would not be constructed on the project site and no food distribution operation would use the existing on-site facilities.

Ability to Meet Project Objectives

Alternative 1 would not achieve any of the project objectives. It would not meet projected Kaiser Permanente member demands, would not provide high-quality health care services for Kaiser

Permanente members in the City and surrounding communities, would not supplement and support Kaiser Permanente's existing clinics and medical facilities, would not create an advanced-care medical center, would not support economic growth or provide a wide range of employment opportunities in the City and surrounding region, and would not result in the construction of a building that has LEED Gold certification or meets equivalent green building standards.

Comparison of the Effects of Alternative 1 to the Proposed Project

Construction impacts associated with the proposed project would be avoided because no development would occur on the project site under the No Project Alternative. The existing structures would remain in place and would remain vacant, unused industrial structures. The potential for uncovering previously unknown archaeological or paleontological resources would be avoided because excavation would not take place on the project site. No construction noise or air emissions would occur resulting from construction equipment at the project site. No construction-related hazardous materials would be introduced to the project site, since no construction equipment or materials would be brought to the project site.

Operational impacts associated with the proposed project would be avoided. While some landscaping and maintenance activities may periodically occur on the vacant industrial site, the noise and traffic produced by such activities is considered negligible. Thus, operational impacts related to air quality, noise, and greenhouse gas emissions associated with the proposed project would be avoided under Alternative 1. The existing on-site trees would not be removed; as such, potential impacts to nesting birds would be avoided. The existing structures would not be removed from the project site; as such, potential impacts related to the release of hazardous building materials would not occur. Any minimal amounts of water usage and sewage generation that may currently occur on the project site for minor maintenance activities would not increase. Likewise, the need for other public services and utilities would not increase relative to existing conditions. Any minor demands on public services and utilities that are required by the vacant industrial structures would remain the same as existing conditions under Alternative 1 and are considered negligible. As such, impacts to public services and utilities would be avoided. No changes in land use would occur under Alternative 1. However, the proposed project includes elements that would implement certain land use plans and policies that have been established for the project site and project area. This includes policies to promote economic development, fiscally sound development, and quality design, and policies to promote a balance of commercial uses to best serve the residents, the employee population, and the business community. Retaining a vacant warehouse use on the project site would not result in the implementation of these policies. Furthermore, the proposed project would also be subject to the City's Commercial and Industrial Design Guidelines and would implement the design principles and specific guidelines established in that document. Retaining a vacant warehouse on the project site would not result in the implementation of these Design Guidelines. However, with the exception of failing to

implement certain land use plans and policies, the No Project Alternative would result in the avoidance of environmental impacts relative to the proposed project. Table 4-1 provides a summary of the comparison of the environmental effects of the proposed project to the alternatives presented in this section, including the No Project Alternative.

4.2.2 Alternative 2 – No Project (Planned Development) Alternative

The exiting industrial structures on the project site were previously occupied and used by Jacmar Foods Distribution, until the summer of 2015. Alternative 2 assumes that a similar industrial tenant (i.e., a food distribution company) would occupy the project site and would use the site and the existing structures as a typical food distribution center. Because the project site operated as a foods distribution center until 2015, it is assumed that minimal improvements would be required at the project site to resume operation. Therefore, construction activities would be limited to internal renovations of the existing facilities. The appearance and function of the existing structures would remain the same or similar, and the existing landscaping and surface parking would remain in place. The proposed MOB, parking structure, urban plaza, and native garden would not be constructed on the project site.

It is assumed that the operational scenario of the new industrial tenant would be similar to the operational scenario that was established for Jacmar Foods Distribution in the traffic impact study, air quality study, and off-site traffic noise study that was conducted for the proposed project. The traffic impact study for the proposed project quantified the number of truck trips and passenger car trips that were expected to occur under the operating conditions of a typical food distribution center (see Appendix I for details). Similarly, the air quality analysis for the proposed project quantified the daily net operational criteria air pollutant emissions that were expected to occur under the operating conditions of Jacmar Foods Distribution (see Section 3.1 for details).

Ability to Meet Project Objectives

Alternative 2 would not achieve any of the project objectives. It would not meet projected Kaiser Permanente member demands, would not provide high-quality health care services for Kaiser Permanente members in the City and surrounding communities, would not supplement and support Kaiser's existing clinics and medical facilities, would not create an advanced-care medical center, would not support economic growth or provide a wide range of employment opportunities in the City and surrounding region, and would not result in construction of a building that has LEED Gold certification or that meets equivalent green building standards.

Comparison of the Effects of Alternative 2 to the Proposed Project

Construction activities for Alternative 2 would be minor relative to the construction activities that would be required for the proposed project. No demolition or new building construction would

occur. Construction would be limited to interior modifications. Such modifications would require fewer truck trips, fewer construction workers, less construction waste, and a shorter duration of construction when compared to the proposed project. Minimal to no ground disturbance would occur, since the existing buildings, surface parking, and landscaping would remain in place.

Operation would be similar to the environmental baseline that was established for the operational traffic analysis, air quality, and off-site traffic noise analysis of the proposed project, which was the site conditions as of 2015 (see Section 2.5.1 for details regarding selection of the environmental baseline for this EIR). As explained in Section 4.2.1, the Notice of Preparation for this EIR was released in July 2016. As such, the site conditions as of July 2016 generally establish the baseline environmental conditions for the analysis in this EIR and for the analysis of Alternative 1, the No Project (Vacant Site) Alternative. However, the baseline conditions for traffic are considered to be 2015. Environmental impacts that are caused by traffic (operational air quality emissions and operational off-site traffic noise analysis) also have an environmental baseline of 2015. (As described in Section 2.5.1 of this EIR, the CEQA Guidelines and applicable case law recognize that the date for establishing an environmental baseline can vary depending on the circumstances of a project.) Jacmar Foods Distribution was still in operation in 2015. As such, the traffic analysis, operational air quality analysis, and off-site traffic noise analysis in this EIR account for the existing operation of Jacmar Foods Distribution. As shown in the traffic impact study for the proposed project, the number of passenger car trips and truck trips associated with operation of Jacmar Foods Distribution falls well below the number of trips that would be associated with the proposed project (Appendix I). Similarly, the criteria air pollutant emissions are less than those of the proposed project (see Section 3.1). Off-site traffic noise would be generally the same for Jacmar Foods Distribution as it would be for the proposed project (see Section 3.10).

Air Quality

Under Alternative 2, air quality impacts would be reduced when compared with the proposed project. Fewer construction activities would occur, since the existing buildings would not be demolished and no new structures would be built. While some construction workers and truck trips would be necessary to renovate the existing structures, the number of trips is expected to be less than those required for construction of the proposed project. Operational emissions are also anticipated to be reduced as compared with the proposed project. As shown in Table 4.3-11 of this EIR, the operational emissions associated with Jacmar Foods Distribution falls below the SCAQMD emissions thresholds for criteria air pollutants. The significant and unavoidable impact of the proposed project related to NO_x emissions would be avoided. As such, construction and operational air quality emissions for Alternative 2 are anticipated to be less than those of the proposed project.

Biological Resources

Under Alternative 2, impacts to biological resources would be reduced as compared with the proposed project. As stated in Section 3.2, the existing ornamental landscaping on the project site and in the public right-of-way may provide suitable nesting habitat for some bird species. Removal of the existing landscaping under the proposed project would have the potential to result in impacts to nesting birds. Unlike the proposed project, the on-site landscaping would remain in place under Alternative 2. As such, effects to biological resources would be avoided.

Cultural Resources

Under Alternative 2, impacts to cultural resources would be reduced as compared with the proposed project. Because construction would be limited primarily to interior improvements, Alternative 2 would not involve demolition or ground disturbance, which is associated with the potential for uncovering unanticipated cultural resources that could be buried on the project site. As such, effects to cultural resources would be reduced as compared with the proposed project.

Geology and Soils

Under Alternative 2, impacts involving geology and soils would be less than those identified for the proposed project. Alternative 2 would not involve new building construction, nor would it involve operation of an MOB on the project `site. As compared with the proposed MOB, it is anticipated that fewer people would be present on the project site with a new industrial use. As such, in the unlikely event that a geological hazard were to adversely affect the project site, fewer individuals would be exposed to potential geological hazards. As such, potential impacts related to geology and soils would decrease under Alternative 2 as compared with the proposed project.

Greenhouse Gas Emissions

Under Alternative 2, impacts involving greenhouse gas emissions would be reduced as compared with the impacts of the proposed project. As shown in Table 4.7-3 in this EIR, the existing on-site use (operation of Jacmar Foods Distribution) produced less greenhouse gas emissions than those anticipated to be produced by the proposed project. As such, it is expected that the operation of a similar industrial use would also produce fewer greenhouse gas emissions than those anticipated to be produced by the proposed project. As with the proposed project, operation of a new industrial use at the project would be subject to applicable plans, policies, and regulations adopted for the purpose of reducing greenhouse gas emissions. However, Alternative 2 would involve retaining the existing structures on-site, which were built in 1999, while the proposed project would involve new construction that would incorporate modern green building features, including the features required for LEED Gold certification or an equivalent. As such, the building constructed for the proposed project would likely be more efficient when compared

with the existing on-site structures. However, it is expected that the increased land use intensity that would occur under the proposed project would still result in slightly greater greenhouse gas emissions relative to those of Alternative 2, even considering the increased energy efficiency of the proposed MOB. As such, greenhouse gas emissions for Alternative 2 are expected to be less than those of the proposed project.

Hazards and Hazardous Materials

Under Alternative 2, impacts involving hazards and hazardous materials would be similar to those of the proposed project. The interior improvements that would likely occur under Alternative 2 would involve the potential for hazardous building materials to be removed from the buildings, thereby causing the potential for materials such as asbestos and lead-based paint to be released to the environment. However, as with the proposed project, implementation of MM-HAZ-1 would reduce impacts to below a level of significance. Impacts would be similar to those of the proposed project.

Hydrology and Water Quality

Under Alternative 2, impacts involving hydrology and water quality would decrease relative to the proposed project during construction and would be similar to the proposed project during operation. Construction activities would be limited to interior modifications; as such, the volume of stormwater runoff from the project site during construction is not anticipated to increase, nor is the amount of pollution carried by the stormwater runoff. Operational impacts would be similar to those of the proposed project but could slightly increase, because Alternative 2 would entail renewed activities at the project site without triggering compliance with the most recent Municipal Stormwater Permit for Los Angeles County, which includes a requirement to capture and treat the volume of water produced by the 85th percentile storm event.

Land Use and Planning

Under Alternative 2, impacts involving land use and planning would be similar to those of the proposed project. Because the existing warehouse structures would remain, no changes in land use would occur under Alternative 2. A new industrial tenant in the existing warehouse would be generally consistent with land use policies to promote economic development and to retain the overall mix of land uses in the City. Alternative 2 would not result in implementation of the Commercial and Industrial Design Guidelines, since the existing warehouse built in 1999 would remain in place. However, overall land use and planning impacts are considered to be similar to that of the proposed project, since Alternative 2 would be generally consistent with land use policies and designations for the project site.

Mineral Resources

Under Alternative 2, impacts to mineral resources would be similar to those of the proposed project. Because the project site is the same, it would be located within an area containing potentially significant mineral resource deposits (see Section 3.9 of this EIR). However, as explained in Section 3.9, the project site is located within an existing industrial/business park area and is designated for such uses in the General Plan. Converting the project site into a mineral resource recovery area is considered inconsistent with immediately adjacent industrial/business park land uses, with the existing land use of the project site, and with the land use designations of the project site. As with the proposed project, impacts would be less than significant.

Noise

Under Alternative 2, it is expected that impacts involving noise would be less than those of the proposed project during construction and relatively similar during operation. Construction noise would be reduced when compared to the proposed project, since fewer trips, construction workers, and pieces of construction equipment would be required to renovate the existing buildings. During operation, an industrial use at the project site would likely involve similar on-site noise sources as the proposed project, such as heating, ventilation, and air conditioning systems. Several additional on-site noise sources could be involved, such as increased ingress/egress of delivery trucks to the project site and operation of warehouse equipment, such as the opening and closing of loading dock doors. The proposed project would also involve additional on-site noise sources that would not occur under Alternative 2, such as an increase in personnel and visitors, as well as additional on-site noise generators such as the proposed steam boilers. As shown in Table 4.10-7 in this EIR, traffic noise projections are similar for the proposed project relative to operation of a foods distribution center. (The existing conditions shown in Table 4.10-7 relies on the traffic impact analysis conducted for the proposed project, which assumes that Jacmar Foods Distribution is in operation.) As such, noise impacts for Alternative 2 would be slightly less during construction and are expected to be generally similar during operation when compared with the proposed project.

Public Services

Under Alternative 2, impacts to public services would be reduced when compared to the proposed project. Alternative 2 would involve a new industrial tenant on the project site, similar to the tenant that previously occupied and used the project site. As such, public services in the area have already served a similar on-site use. Since the proposed project represents an increase in land use intensity and building area on the project site, Alternative 2 would result in slightly reduced impacts when compared to the proposed project.

Traffic

Under Alternative 2, traffic impacts would be reduced when compared to the proposed project. The construction scenario for Alternative 2 would involve fewer truck trips and construction worker trips when compared to those required for the proposed project. During operation, the number of trips would also be less than those associated with the proposed project. This is demonstrated in Table 3.12-7 in this EIR, which shows the number of trips associated with operation of a food distribution center. Daily trip ends, AM peak hour volumes, and PM peak hour volumes would be less for a typical food distribution center when compared to those that would be generated by the proposed MOB. As such, impacts would be reduced when compared to the proposed project and the significant, unavoidable impacts of the proposed project would be avoided.

Utilities and Service Systems

Under Alternative 2, impacts to utilities and service systems would be reduced when compared to the proposed project. The existing utilities and service systems served the operation of Jacmar Foods Distribution until the company relocated in 2015. As such, it is expected that the existing utilities and service systems would remain capable of servicing the needs of a similar operation on the same site. While a new industrial use on the project site would require utilities and would place demands on service systems, the overall land use intensity of the project site would be less than the land use intensity that would be implemented under the proposed project. As such, it is anticipated that water use, wastewater generation, and solid waste generation would be slightly less when compared to the proposed project. Stormwater runoff volumes and pollutants may be slightly greater under Alternative 2 when compared to the proposed project, since Alternative 2 would involve renewed activities on the project site without triggering compliance with the most recent Municipal Stormwater Permit for Los Angeles County, which includes a requirement to capture and treat the volume of water produced by the 85th percentile storm event. However, overall, impacts to utilities and service systems are considered to be slightly reduced under Alternative 2, when compared to the proposed project, due to the overall comparative decrease in land use intensity.

4.2.3 Alternative 3 – Reduced Project (MOB of 60,000 SF)

Under this alternative, a smaller MOB would be constructed. This alternative was considered because it would lessen impacts on traffic identified in association with the proposed project. With this alternative, the existing on-site warehouse uses would still be demolished and replaced with an MOB and parking structure with similar landscaping and community amenities as the proposed project. The size of MOB that could be built while ensuring that no significant and unavoidable impacts to nearby intersections would occur was studied. According to Linscott Law & Greenspan

(traffic engineers), the proposed MOB would need to be reduced to a size of 29,500 square feet in order to avoid the significant and unavoidable impacts of the proposed project (LLG 2016, pers. comm.). As explained in Section 4.1.2, this alternative was subsequently rejected from detailed consideration in the EIR due to infeasibility. However, an MOB of 60,000 square feet would be viable from a facilities planning perspective and an economic perspective. As such, Alternative 3 was carried forward for analysis in this EIR and would involve construction of a 60,000–square foot MOB on the project site. Alternative 3 would also include construction of a parking structure, urban plaza, and native garden on the project site. The parking structure, however, would be smaller than the parking structure that is planned under the proposed project, since an MOB of a lesser size would require fewer parking spaces.

Ability to Meet Project Objectives

An MOB that is 60,000 square feet would meet some of the project objectives. An MOB of a reduced size could still provide high-quality health care, could supplement some of Kaiser Permanente's existing clinics, could create an advanced-care medical center, and could be designed to implement green building features. However, some of these objectives would be met to a lesser degree than they would be met under the proposed project. For example, a smaller MOB would provide fewer services, and the services that it provided would accommodate fewer Kaiser Permanente members. This would reduce the project's ability to serve Kaiser Permanente members in the City and surrounding communities and would reduce the project's ability to supplement and support Kaiser Permanente's existing clinics and medical facilities in nearby communities. The entire 90,000-square-foot MOB would be required in order to meet the projected Kaiser Permanente member demand. Further, a smaller MOB would require fewer employees, thereby reducing the project's ability to foster economic growth and reducing the range of employment opportunities that would be provided.

Comparison of the Effects of Alternative 3 to the Proposed Project

Construction activities for Alternative 3 would be reduced in intensity when compared to the proposed project. While all of the existing on-site structures would be demolished, the new buildings that are constructed would be smaller in size. As such, Alternative 3 would involve a slight reduction in the number of truck trips, construction workers, and construction duration as compared to the proposed project.

Operational activities for Alternative 3 would be similar to those of the proposed project but would be slightly reduced in intensity due to the smaller building size. A smaller MOB would involve fewer employees and fewer patients, thereby leading to a decrease in the number of trips to and from the project site. A smaller building and scaled-down operational scenario would place less demand on existing public facilities and service systems.

Air Quality

Air quality impacts would be reduced when compared with the proposed project. While construction activities would be generally the same as the proposed project, the intensity of several construction phases (namely, building construction and architectural coating) would be reduced when compared to the proposed project, since the MOB would be smaller. Operational activities for Alternative 3 would be generally similar to those of the proposed project. However, fewer employees and patients would travel to and from the project site, thereby decreasing vehicular traffic sources of emissions. While similar stationary sources would be involved (an emergency generator, steam boilers, and hot water heaters), their emissions may slightly decrease relative to the proposed project, since these devices would be serving a smaller building. However, an emergency generator would still be required, and the emergency generator would still need to undergo routine testing. While the proposed MOB would be smaller under Alternative 2, the decrease in size would not be substantial enough to reduce the significant and unavoidable impact associated with NO_x emissions from operation of the emergency generator under a worst-case scenario. As such, air quality impacts would be reduced when compared with the proposed project but would still remain significant and unavoidable.

Biological Resources

Impacts to biological resources would be similar to those of the proposed project. The on-site landscaping would be removed; as such, the potential for impacts to nesting birds would remain. However, as with the proposed project, implementation of MM-BIO-1 would reduce impacts to below a level of significance. As such, the potential for effects to nesting birds would be generally the same as those of the proposed project.

Cultural Resources

Impacts to cultural resources would be the same as the proposed project. As with the proposed project, potentially significant impacts could still occur to archeological resources, paleontological resources, and human remains in the event that unknown resources or remains were to be uncovered during excavation. The same mitigation measures provided for the proposed project would reduce these impacts to below a level of significance (MM-CUL-1,MM-CUL-2, MM-CUL-3, and MM-CUL-4). As such, impacts to cultural resources would be similar to those of the proposed project.

Geology and Soils

Impacts related to geology and soils would be slightly reduced. As compared with the proposed MOB, fewer people would be present on the site of the smaller MOB. As such, in the unlikely event that a geological hazard were to adversely affect the project site, fewer individuals would

be exposed to potential geological hazards, in the event that a hazardous geologic event were to occur on the project site. As such, potential impacts would slightly decrease under Alternative 3 as compared with the proposed project.

Greenhouse Gas Emissions

The greenhouse gas emission impacts of Alternative 3 would be less than those of the proposed project, since the land use intensity of the project site would decrease relative to the proposed project. The building would be smaller than the proposed project, with fewer employees and patients. As such, energy use, resource use, and vehicular trips to and from the project site would all decrease when compared with the proposed project.

Hazards and Hazardous Materials

Under Alternative 3, impacts involving hazards and hazardous materials would be similar to those of the proposed project. As with the proposed project, hazardous building materials may be discovered within the existing on-site structures during construction, resulting in the potential for materials such as asbestos and lead-based paint to be released to the environment. However, as with the proposed project, implementation of MM-HAZ-1 would reduce impacts to below a level of significance. Impacts would, therefore, be similar to those of the proposed project.

Hydrology and Water Quality

As with the proposed project, Alternative 4 would be required to comply with all applicable state and local water quality standards and waste discharge requirements. The intensity of construction activities would slightly decrease; however, the potential for increased stormwater runoff and increased stormwater pollution would remain, and a Stormwater Pollution Prevention Plan would be required. During operation, compliance with the most recent Municipal Stormwater Permit for Los Angeles County would be required. As such, project features that retain or treat site runoff in accordance with the Municipal Stormwater Permit would be incorporated, similar to the proposed project. As such, impacts would be similar to those of the proposed project.

Land Use and Planning

The proposed land use is the same as the proposed project (i.e., a medical office building). The smaller MOB would implement certain polices to a lesser extent when compared with the proposed project, such as policies to promote economic development. However, policies relative to design would still be implemented, and Alternative 3 would be designed consistent with the Commercial and Industrial Design Guidelines. A smaller MOB would implement several policies to a lesser degree than the proposed project but would be overall consistent with

applicable land use policies and plans. Impacts involving land use and planning would, therefore, be similar to those of the proposed project.

Noise

Temporary, construction-related noise impacts would be reduced under this alternative because the intensity and duration of construction would decrease relative to the proposed project. Similarly, operational noise impacts would decrease because the traffic generation of the project would decrease. While similar stationary sources would be involved, it is expected that the noise produced by these devices would slightly decrease relative to the proposed project, since they would be serving a smaller building. As such, noise impacts would be slightly reduced when compared with the proposed project.

Public Services

Alternative 3 would result in a decrease in building size relative to the proposed project. While demands on public services would still increase relative to existing conditions, they would increase to a lesser extent as compared with the proposed project. As such, impacts would be slightly reduced as compared to the proposed project.

Traffic

An MOB that is 60,000 square feet would reduce traffic impacts when compared to the proposed project. However, as determined by Linscott Law & Greenspan (traffic engineers), the proposed MOB would need to be reduced to a size of 29,500 square feet in order to avoid the significant and unavoidable impacts that were identified for the proposed project (LLG 2016, pers. comm.). As such, while traffic impacts would be reduced relative to the proposed project, they would remain potentially significant, and mitigation measures MM-TRAF-1 through MM-TRAF-3 would still be required, and mitigation measure MM-TRAF-4 could also still be required. Impacts would remain significant and unavoidable.

Utilities and Service Systems

Alternative 3 would result in an overall decrease in the building size relative to the proposed project. As such, water use, wastewater generation, and solid waste generation would be slightly less when compared to the proposed project. Stormwater pollution and runoff volumes are anticipated to be relatively similar to those of the proposed project, since the project site would be generally impervious and the same project site runoff retention and treatment standards would be required. Overall, impacts would be slightly reduced relative to the proposed project.

4.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives to a project shall identify an Environmentally Superior Alternative among the alternatives evaluated in an EIR. The CEQA Guidelines also state that should it be determined that the No Project Alternative is the Environmentally Superior Alternative, the EIR shall identify another Environmentally Superior Alternative among the remaining alternatives.

A comparative summary of the environmental impacts associated with each alternative is provided in Table 4-1. As shown, Alternative 1, the No Project (Vacant Site) Alternative, would be the environmentally superior alternative, as it would result in no new environmental impacts, would avoid many of the proposed project's impacts and would eliminate the significant and unavoidable impacts identified for the proposed project related to air quality and traffic. Alternative 2, the No Project (Planned Development) Alternative, would also eliminate the significant and unavoidable impacts identified for the proposed project. However, this alternative would generally reduce (rather than avoid) some of the proposed project's impacts. Further, neither Alternative 1 nor Alternative 2 would feasibly attain the basic objectives of the project.

Alternative 3, Reduced Project (MOB of 60,000 SF) is, therefore, the environmentally superior alternative to the proposed project. This alternative would reduce many of the proposed project's impacts and would meet the basic project objectives, although to a lesser degree when compared with the proposed project.

Table 4-1
Comparison of Impacts

Impact Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3
Air Quality	Significant and unavoidable	Impacts avoided	Impacts reduced; the significant and unavoidable impact associated with routine emergency generator testing would be avoided	Impacts reduced; impact associated with the emergency generator would remain significant and unavoidable
Biological Resources	Less than significant with incorporation of mitigation measures	Impacts avoided	Impacts avoided	Similar impacts
Cultural Resources	Less than significant with incorporation of mitigation measures	Impacts avoided	Impacts reduced	Similar impacts
Geology and Soils	Less than significant	Impacts avoided	Impacts reduced	Impacts reduced
Greenhouse Gas Emissions	Less than significant	Impacts avoided	Impacts reduced	Impacts reduced

Table 4-1
Comparison of Impacts

Impact Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3
Hazards and Hazardous Materials	Less than significant with incorporation of mitigation measures	Impacts avoided	Similar impacts	Similar impacts
Hydrology and Water Quality	Less than significant	Impacts avoided	Construction impacts reduced Operational impacts slightly greater	Similar Impacts
Land Use and Planning	Less than significant	Slightly greater impacts	Similar Impacts	Similar Impacts
Mineral Resources	Less than significant	Similar Impacts	Similar Impacts	Similar Impacts
Noise	Less than significant	Impacts avoided	Impacts reduced during construction Similar impacts during operation	Impacts reduced
Public Services	Less than significant	Impacts avoided	Impacts reduced	Impacts reduced
Traffic	Significant and unavoidable	Impacts avoided	Impacts reduced; significant and unavoidable impacts avoided	Impacts reduced but would remain significant and unavoidable
Utilities and Service Systems	Less than significant	Impacts avoided	Impacts reduced	Impacts reduced
Meets Most of the Basic Project Objectives?	Yes	No	No	Yes

4.4 REFERENCES

Kaiser Foundation Health Plan, Inc. 2016. "Clinical Lab, Medical Office Building Functional Program – Irwindale Medical Office Building." Baldwin Park Service Area. April 7, 2016.

LLG (Linscott Law & Greenspan). 2016. "KP Irwindale Sensitivity Analysis." Email correspondence between LLG and Dudek. August 2, 2016.

CHAPTER 5
OTHER CEQA REQUIREMENTS

5.1 SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL IMPACTS

This section is prepared in accordance with Section 15126.2(b) of the CEQA Guidelines, which requires the discussion of any significant environmental effects that cannot be avoided if a project is implemented. These include impacts that can be mitigated, but cannot be reduced to a less than significant level. An analysis of environmental impacts caused by the proposed project has been conducted and is contained in this EIR. Thirteen issue areas were analyzed in detail in Chapter 3.0. According to the environmental impact analysis presented in Chapter 3.0, the proposed project would result in significant and unavoidable adverse impacts to air quality (during operation) and traffic.

5.2 EFFECTS NOT FOUND TO BE SIGNIFICANT

Section 15128 of the CEQA Guidelines requires a statement that briefly indicates the reasons that various possible significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR. As stated in the CEQA Guidelines, such a statement may be contained in an attached copy of an Initial Study. The Initial Study for the proposed project is included in this EIR as Appendix A. As described and substantiated in Appendix A, the following issue areas were not found to be significant and were not further analyzed in the EIR: aesthetics, agriculture and forestry resources, population and housing, and recreation.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the CEQA Guidelines requires that an EIR analyze the extent to which the proposed project's primary and secondary effects would impact the environment and commit nonrenewable resources to uses that future generations will not be able to reverse. Nonrenewable resources that would be used on-site during construction and operation include natural gas, other fossil fuels, water, concrete, steel, and lumber. The proposed project would result in the commitment of such resources.

Electricity is provided to the project site by Southern California Edison (SCE). SCE serves approximately 180 cities in 11 counties across Central and Southern California. SCE's electrical energy generation sources include natural gas, coal, nuclear, renewable energy (geothermal, small hydroelectric, solar, and wind), and large hydroelectric facilities. The Southern California Gas Company provides the City with natural gas service. The company's service territory encompasses approximately 20,000 square miles and more than 500 communities. The project site is located within the San Gabriel Valley Water Company service area. San Gabriel provides public utility water service within its service area (45 square miles) which includes all or

portions of the cities of Arcadia, Baldwin Park, El Monte, Industry, Irwindale (including the project site), La Puente, Montebello, Monterey Park, Pico Rivera, Rosemead, San Gabriel, Santa Fe Springs, South El Monte, West Covina, Whittier, and unincorporated areas of Los Angeles County including Hacienda Heights, and South San Gabriel. These entities that supply the project site with resources are subject to a variety of policies that require reductions in resource usage and/or reductions in emissions. Examples include the California Renewables Portfolio Standard, AB 939, SB 1374, and the requirement to prepare Urban Water Management Plans.

While the City does not have direct jurisdiction over the utilities that serve it, use of resources within the City is inventoried within the City's General Plan (City of Irwindale 2008), and there are numerous policies and programs in place to reduce the use of nonrenewable resources within the City as a whole. As discussed in the General Plan, policies pertaining to improving air quality and climate change are addressed in the Resource Management Element of the General Plan as follows:

- The City of Irwindale supports the ethic of conservation of non-renewable resources. This includes efforts to reduce the use of energy (in any form), GHG emissions (consistent with AB 32) and efforts to find new and more energy efficient methods for delivering services. The City supports the development of building standards that enable the community to design energy saving features such as solar energy systems, water efficient landscaping, and sustainable, green, and energy efficient building standards.
- The City of Irwindale will facilitate communications among residents, businesses, and the South Coast Air Quality Management District (SCAQMD) to quickly resolve air pollution nuisance complaints. The City will distribute information to advise residents on how to register a complaint with SCAQMD.
- The City of Irwindale will actively participate in decisions on the site or expansion of facilities of land uses (e.g., freeway expansions), to ensure the inclusion of air quality mitigation measures.

These policies are currently in place within the City and apply to the proposed project and other development that occurs within the City. Additionally, the City has specific ordinances that address recycling and use of nonrenewable resources. These include a requirement to recycle 65% of all demolition and construction materials in accordance with the 2014 Los Angeles County Green Building Code, Chapter 5 for commercial uses, which would reduce the amount of waste that would be generated during the construction process for the proposed project and would help ensure that construction waste is reused and that additions to area landfills are minimized. The project's sustainable design features are summarized in Chapter 2.0, Project Description, and are further detailed in Appendix B. The proposed medical office building would implement many green building features using the standards of the Green Guide for Healthcare,

as such standards evolve over time, and Leadership in Energy and Environmental Design (LEED®) Gold certification or equivalent, as well as Kaiser's existing sustainable building strategies. Such LEED® features would include energy-efficient structures, a pedestrian- and bicycle-friendly site design, and water conservation measures. LEED standards or equivalent green building standards would be incorporated in order to reduce energy and water usage, and thus, would minimize associated greenhouse gas emissions. The proposed project would incorporate an environmentally sustainable design using green building technologies as identified in the principles for energy efficiency, water conservation, environmentally preferable building materials, and overall waste reduction.

As described above, the utilities that service the City, the City itself, and the design of the proposed project are all subject to regulations that are working to reduce the amount of nonrenewable resources that are committed to development projects. Additionally, the proposed project has incorporated voluntary sustainable design factors to go beyond the requirements. As such, the proposed project is not anticipated to consume substantial amounts of energy in a wasteful manner, and it would not result in significant impacts from consumption of utilities. Although irreversible environmental changes would result from the proposed project, such changes would not be considered significant.

5.4 GROWTH-INDUCING IMPACTS

According to Section 15126.2(d) of the CEQA Guidelines, growth-inducing impacts of the proposed project shall be discussed in the EIR. Growth-inducing impacts are those effects of the proposed project that might foster economic or population growth or the construction of new housing, either directly or indirectly, in the surrounding environment. According to CEQA, increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place without implementation of the project. Typically, the growth-inducing potential of a project would be considered significant if it results in growth or population concentration that exceeds those assumptions included in pertinent master plans, land use plans, or projections made by regional planning authorities. However, the creation of growth-inducing potential does not automatically lead to growth, whether it would be below or in exceedance of a projected level.

The environmental effects of induced growth are secondary or indirect impacts of the proposed project. Secondary effects of growth could result in significant, adverse environmental impacts, which could include increased demand on community or public services, increased traffic and noise, degradation of air and water quality, and conversion of agricultural land and open space to

developed uses. The Population and Housing section of the Initial Study (Appendix A) discusses the potential growth inducement of the proposed project. The proposed project would demolish an existing warehouse building and replace it with a specialty MOB, parking structure, surface parking areas, and associated infrastructure improvements. No housing would be constructed as part of the proposed project. While the proposed specialty MOB would contribute to a small increase in employment relative to the existing vacant warehouse building, these additional employees would likely derive from the City and surrounding areas. Temporary construction jobs provided by the proposed project would also be likely to serve existing residents and surrounding areas. Therefore, the revitalization of the proposed project site would not result in substantial population growth or exceed local population projections.

The proposed project would provide additional employment on the project site. However, the number of new jobs would be within employment growth projections that have been calculated by the SCAG. It is anticipated that most of the jobs associated with the proposed project would be filled by existing City residents or by residents of neighboring cities (i.e., Baldwin Park) in the densely populated Los Angeles metropolitan area. Therefore, it is not anticipated that the employment generated by the proposed project would lead to a substantial influx of residents to the City. Due to the ability of the existing regional population to provide an ample employment pool within proximity to the project site and due to the minor increase in employment relative to total jobs available in the City, the proposed project would not generate substantial population growth. As such, the growth-inducing impacts of the project, if any, would be minor. As such, the proposed project would not result in significant adverse secondary effects related to induced growth.

CHAPTER 6
LIST OF PREPARERS

The following individuals participated in the preparation of the Kaiser Permanente Medical Office Building Project Environmental Impact Report and its associated technical studies.

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