CITY OF LOS ANGELES
OFFICE OF THE CITY CLERK ROOM 395, CITY HALL
LOS ANGELES, CALIFORNIA 90012
CALIFORNIA ENVIRONMENTAL QUALITY ACT
PROPOSED MITIGATED NEGATIVE DECLARATION

LEAD CITY AGENCY	**COUNCIL DISTRICT**
City of Los Angeles	6
PROJECT TITLE	**CASE NO.**
6500 Sepulveda	**ENV-2016-4381-MND; DIR-2016-4380-DB-SPR**

PROJECT LOCATION
6500 N. Sepulveda Boulevard, Van Nuys, CA 91411

PROJECT DESCRIPTION
The Project proposes the construction of a 160-unit apartment building with two levels of parking, including one level of subterranean parking and one level of on-grade parking. Resident amenities such as a pool and lounge would also be provided on the ground level and five levels of residential units would be provided above. Of the 160 apartments, it is envisioned that there would be 85 one-bedroom/one-bathroom units and 75 two-bedroom/two-bathrooms units. Seven of the apartments (five percent of the base density) would be restricted for very-low income households. The maximum height of the Project would be 68'-6" and the FAR would be 3.6:1. The Project is subject to a 15-foot building line. To allow for implementation of the Project, the Project Applicant requests the following discretionary approvals: 1) Site Plan Review and 2) 20% Density Bonus with one on-menu incentive of FAR increase for a 20% increase in FAR.

NAME AND ADDRESS OF APPLICANT IF OTHER THAN CITY AGENCY
IMT Capital IV 6500 Sepulveda, LLC
15303 Ventura Boulevard, Suite 200
Sherman Oaks, CA 91403

FINDING:
The City Planning Department of the City of Los Angeles has Proposed that a mitigated negative declaration be adopted for this project because the mitigation measure(s) outlined on the attached page(s) will reduce any potential significant adverse effects to a level of insignificance
(CONTINUED ON PAGE 2)

SEE ATTACHED SHEET(S) FOR ANY MITIGATION MEASURES IMPOSED.

Any written comments received during the public review period are attached together with the response of the Lead City Agency. The project decision-make may adopt the mitigated negative declaration, amend it, or require preparation of an EIR. Any changes made should be supported by substantial evidence in the record and appropriate findings made.

THE INITIAL STUDY PREPARED FOR THIS PROJECT IS ATTACHED.

NAME OF PERSON PREPARING THIS FORM	**TITLE**	**TELEPHONE NUMBER**
May Sirinopwongsagon	City Planner	213-978-1372

ADDRESS	**SIGNATURE (Official)**	**DATE**
200 N. SPRING STREET, 7th FLOOR Room 763 LOS ANGELES, CA. 90012	Michael Logrande	6-7-17

City of Los Angeles

Department of City Planning • Environmental Analysis Section

City Hall • 200 N. Spring Street, Room 750 • Los Angeles, CA 90012

Initial Study/Mitigated Negative Declaration

This document comprises the Initial Study as required under the California Environmental Quality Act

Van Nuys – North Sherman Oaks Community Plan Area

6500 Sepulveda

Case Numbers: ENV-2016-4381-EAF; DIR-2016-4380-DB-SPR

Location: 6500 N. Sepulveda Boulevard, Van Nuys, CA 91411

Council District: 6, Nury Martinez

Project Description: The Project proposes the construction of a 160-unit apartment building with two levels of parking, including one level of subterranean parking and one level of on-grade parking. Resident amenities such as a pool and lounge would also be provided on the ground level and five levels of residential units would be provided above. Of the 160 apartments, it is envisioned that there would be 85 one-bedroom/one-bathroom units and 75 two-bedroom/two-bathrooms units. Seven of the apartments (five percent of the base density) would be restricted for very-low income households. The maximum height of the Project would be 68'-6" and the FAR would be 3.6:1. The Project is subject to a 15-foot building line.

Discretionary Actions:

1. Site Plan Review.
2. 20% Density Bonus with one on-menu incentive of FAR increase for a 20% increase in FAR.

APPLICANT:

IMT Capital IV 6500 Sepulveda, LLC
15303 Ventura Boulevard, Suite 200
Sherman Oaks, CA 91403

PREPARED BY:

CAJA Environmental Services
11990 San Vicente Boulevard
Suite 250
Los Angeles, CA 90049

ON BEHALF OF:

The City of Los Angeles
Department of City Planning
Environmental Analysis Section
200 North Spring Street, Room 750
Los Angeles, CA 90012-2601

May 2017

TABLE OF CONTENTS

Appendices

1. PROJECT DESCRIPTION

The subject of this Initial Study/Mitigated Negative Declaration (IS/MND) is the proposed 6500 Sepulveda Project. The City's Department of City Planning is the Lead Agency under the California Environmental Quality Act (CEQA).

Project Information

Project Title: 6500 Sepulveda

Project Location: 6500 N. Sepulveda Boulevard, Van Nuys, California 91411

Project Applicant: IMT Capital IV 6500 Sepulveda, LLC
15303 Ventura Boulevard, Suite 200, Sherman Oaks, California 91403

Lead Agency: City of Los Angeles
Department of City Planning
200 North Spring Street, Room 750, Los Angeles, California 90012
Attn: May Sirinopwongsagon

Regional Setting

The Project Site is located at 6500 N. Sepulveda Boulevard in the Van Nuys – North Sherman Oaks Community Plan Area (CPA) in the City of Los Angeles (City). The CPA is located approximately 16 miles northwest of downtown Los Angeles in the southeast quadrant of the San Fernando Valley and is generally bound by the Southern Pacific Railroad on the north; the Tujunga Wash Channel on the east; the Ventura Freeway on the south; and Gloria Avenue, Valjean Avenue, and the San Diego Freeway on the west. The CPA includes the Van Nuys community, the northern portion of the Sherman Oaks community, and the area defined as the San Fernando Valley Administrative Center.

See Figure 1, Regional Vicinity Map, for the location within the context of the City. See Figure 2, Aerial Map, for the Project Site and immediate surrounding areas.

Regional and Local Access

Regional access is provided by the San Diego Freeway (I-405), which is located west of the Project Site. Local access is provided by Haskell Avenue, Kester Avenue, Kittridge Street, Sepulveda Boulevard, Vanowen Street, and Victory Boulevard.

Public Transit

Public transportation through the Project area is provided by the Metropolitan Transit Authority (Metro) and Los Angeles Department of Transportation (LADOT) DASH. The Orange Line transitway is located south of the Project Site with a station located off of Erwin Street west of Sepulveda Boulevard,

approximately 2,000 feet from the Project Site. Metro line 234 and Metro Express 734 operate along the Project frontage on Sepulveda Boulevard. There is a bus stop at Sepulveda and Victory Boulevards and at Sepulveda Boulevard and Vanowen Street for the Metro Express line 734. Metro line 164 operates along Victory Boulevard south of the Project Site and Metro lines 237-656 operates as an extension of the Metro Line south of the Project Site. Metro line 165 operates north of the Project Site along Vanowen Street. LADOT DASH service is provided along Kester Avenue in the Project area.

Site Characteristics

Located in the Van Nuys community of the City of Los Angeles, the Project Site is located on the east side of Sepulveda Boulevard between Haynes Street and Kittridge Street. The Project Site's assessor parcel number (APN), zoning, land use designation, and lot size are listed on Table 1-1. The total area that composes the Project Site is approximately 53,382 square feet. The Site is zoned R4-1-RIO (Multiple Dwelling, Height District 1, River Improvement Overlay District) and is designated High-Medium Residential in the Van Nuys – North Sherman Oaks Community Plan.

Table 1-1
Project Site Information

Address	APN	Zoning	Land Use Designation	Size
6500 N. Sepulveda Boulevard	2235-002-007	R4-1-RIO	High-Medium Residential	53,382 sf
Source: http://zimas.lacity.org/.				

Existing Uses

The Project Site was previously developed with a motel building that has since been demolished, and is currently vacant.

Proposed Project

The Project proposes the construction of a 160-unit apartment building with two levels of parking, including one level of subterranean parking and one level of on-grade parking. Resident amenities such as a pool and lounge would also be provided on the ground level and five levels of residential units would be provided above. Of the 160 apartments, it is envisioned that there would be 85 one-bedroom/one-bathroom units and 75 two-bedroom/two-bathrooms units. Seven of the apartments (five percent of the base density) would be restricted for very-low income households. The maximum height of the Project would be 68'-6" and the floor area ratio (FAR) would be 3.6:1.

Access

Full vehicular access is proposed to/from Sepulveda Boulevard. Currently, Sepulveda Boulevard is striped with three northbound lanes, a two-way left turn lane, and three southbound lanes along the

Project frontage. The two-way left turn lane will facilitate left turns in and out of the Site. One driveway off of Sepulveda gains access to the ground level of parking with an interior ramp to the basement level of parking.

Vehicle Parking

The Project proposes to provide a sufficient number of parking spaces to exceed Code requirements. The applicable City of Los Angeles Municipal Code section (Section 12.22.A.25) would require one space per studio unit, one space per one-bedroom unit, and two spaces per two-bedroom units. In addition, the City of Los Angeles permits residential projects to reduce the number of vehicle spaces by providing replace bicycle parking spaces at a ratio of four bicycle spaces per one vehicle space. Up to 10% of the residential vehicle parking may be replaced by bicycle parking. However, the Project will not be reducing the number of vehicle parking spaces through allowable replacement with bicycle parking. Table 1-2 displays the parking requirements for Project. The Project would provide 274 parking spaces, a surplus of 39 spaces over the requirements.

Table 1-2
LAMC Required Vehicle Parking

Land Use	Size	Requirement	Required Parking Spaces	Provided Parking	Surplus Parking
1-Bedroom	85 units	One per unit	85		
2-Bedroom	75 units	Two per unit	150		
TOTAL	**160 units**		**235**	**274**	**39**
Source: Overland Traffic Consultants, 2016.					

Bicycle Parking

The Project would provide 160 long-term and 16 short-term bicycle parking spaces to meet City requirements.

Open Space

The amount of required and provided open space is presented in Table 1-3. As shown, the Project is required to provide 17,875 square feet of open space and would provide 21,780 square feet of open space, exceeding the requirement by 3,905 square feet.

Table 1-3
Required and Provided Open Space

	Size (square feet)
Required Open Space	
75 units with 3 habitable rooms	75 x 125 sf = 9,375 sf
85 units with less than 3 habitable rooms	85 x 100 sf = 8,500 sf
Total Required	***17,875 sf***
Provided Open Space	
Rear yard open to sky	4,335 sf
Courtyard open to sky	5,072 sf
Rec. room	1,637 sf
Private balconies (105 units x 50 sf)	5,250 sf
Lounge	5,486 sf
Total Provided	***21,780 sf***

sf = square feet
Source: Kamran Tabrizi Architect & Associates, 2016.

Green/Conservation Features

The Project will comply with the Los Angeles Green Building Code (LAGBC), which is based on the 2013 California Green Building Standards Code (CalGreen), and will achieve a LEED Silver equivalent.

Construction Schedule/Haul Route

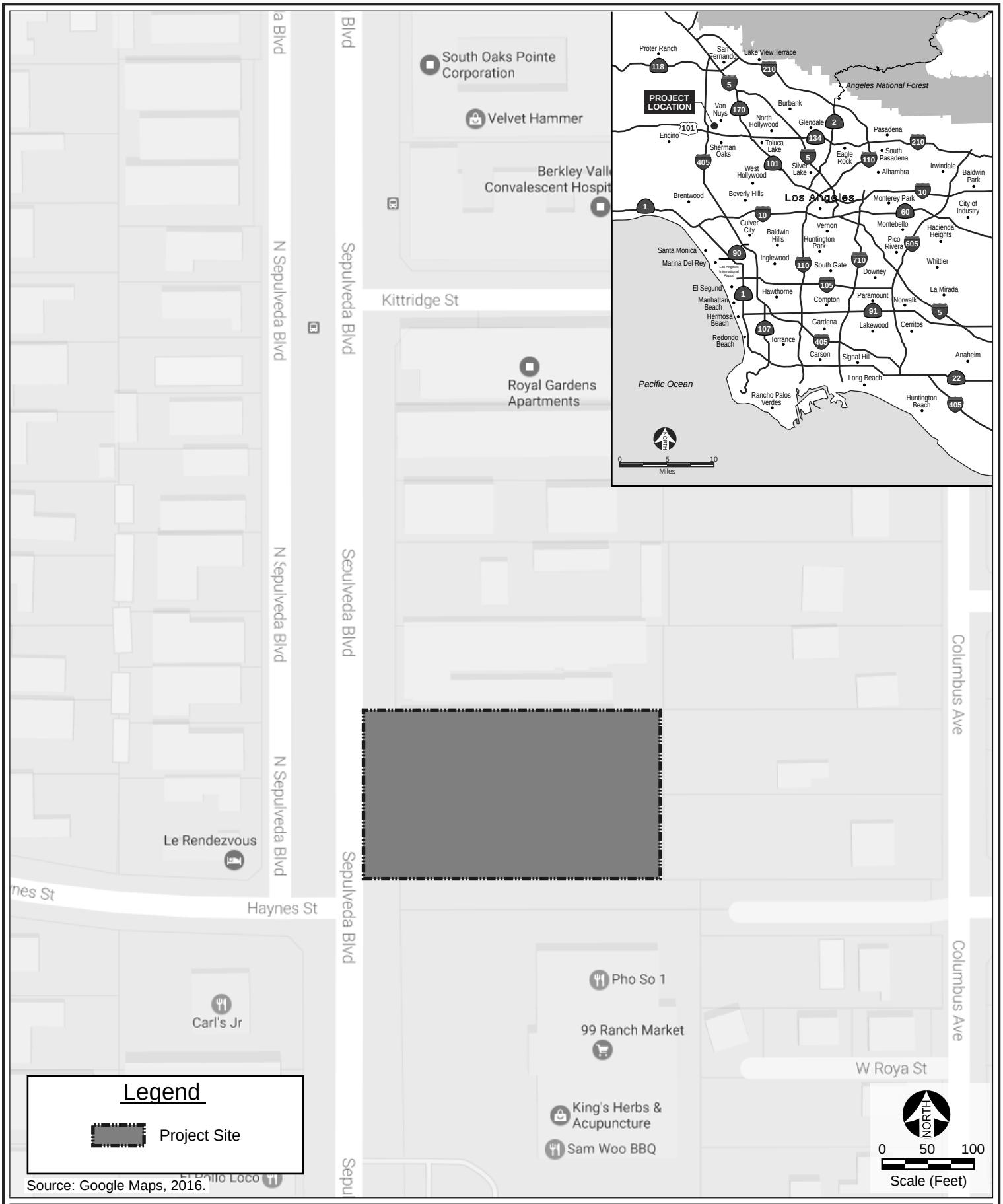
Construction is estimated to take approximately 18 months, with operation beginning in 2019. It is estimated that approximately 20,000 cubic yards of soil would be exported from the Project Site during construction.

It is anticipated that the export and construction debris will be transported to a private landfill in Irwindale. The estimated haul route to the freeway from the Project Site will generally include (most direct path, and to avoid residential neighborhoods): local streets (Sepulveda Boulevard to Victory Boulevard) to the I-405 freeway.

Requested Discretionary Actions

The City of Los Angeles (the City) is the Lead Agency for the Project. In order to construct the Project, the Applicant is requesting approval of the following actions from the City:

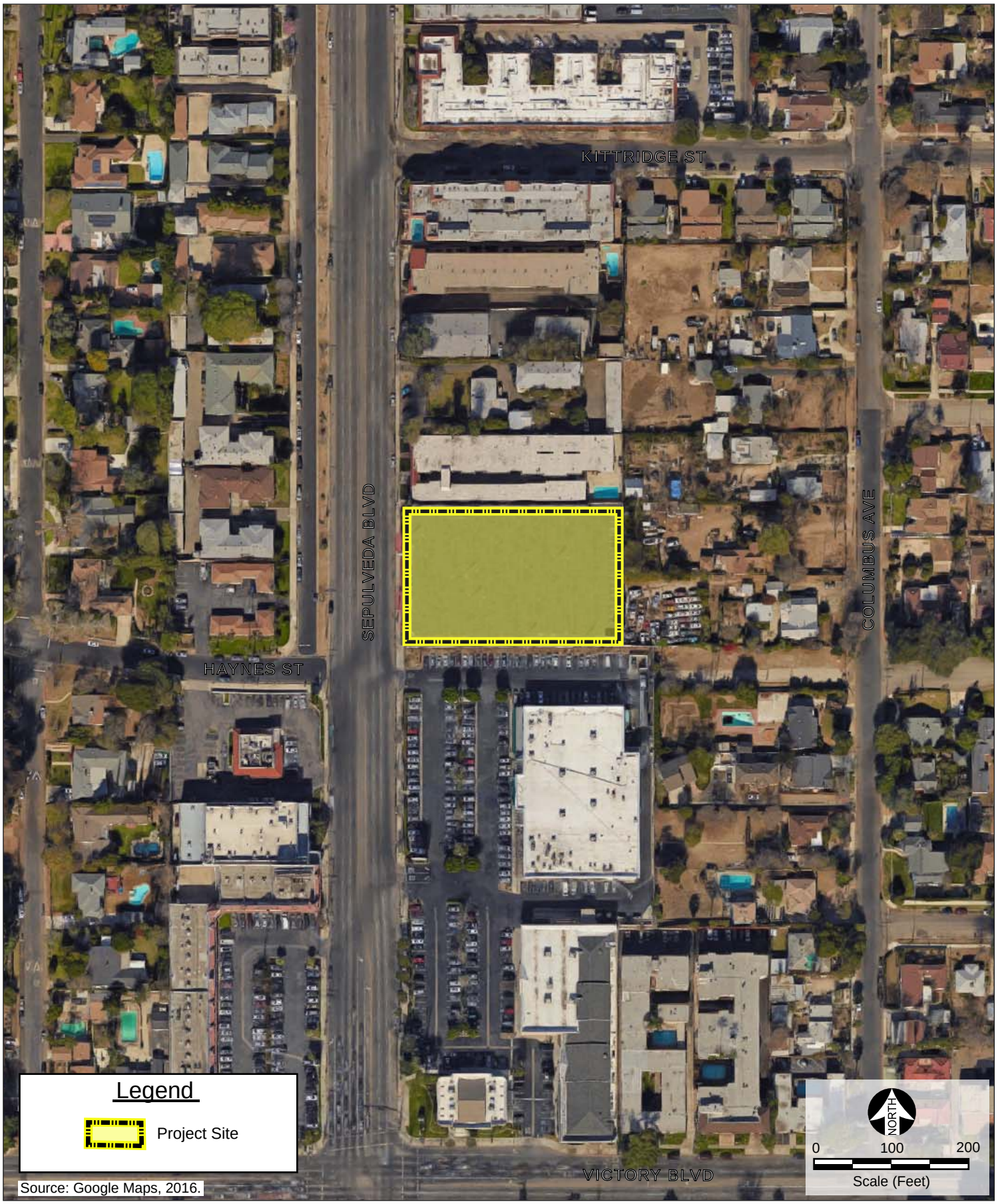
- Site Plan Review.
- 20% Density Bonus with one on-menu incentive of FAR increase for a 20% increase in FAR.



Source: Google Maps, 2016.

CAJA Environmental Services, LLC

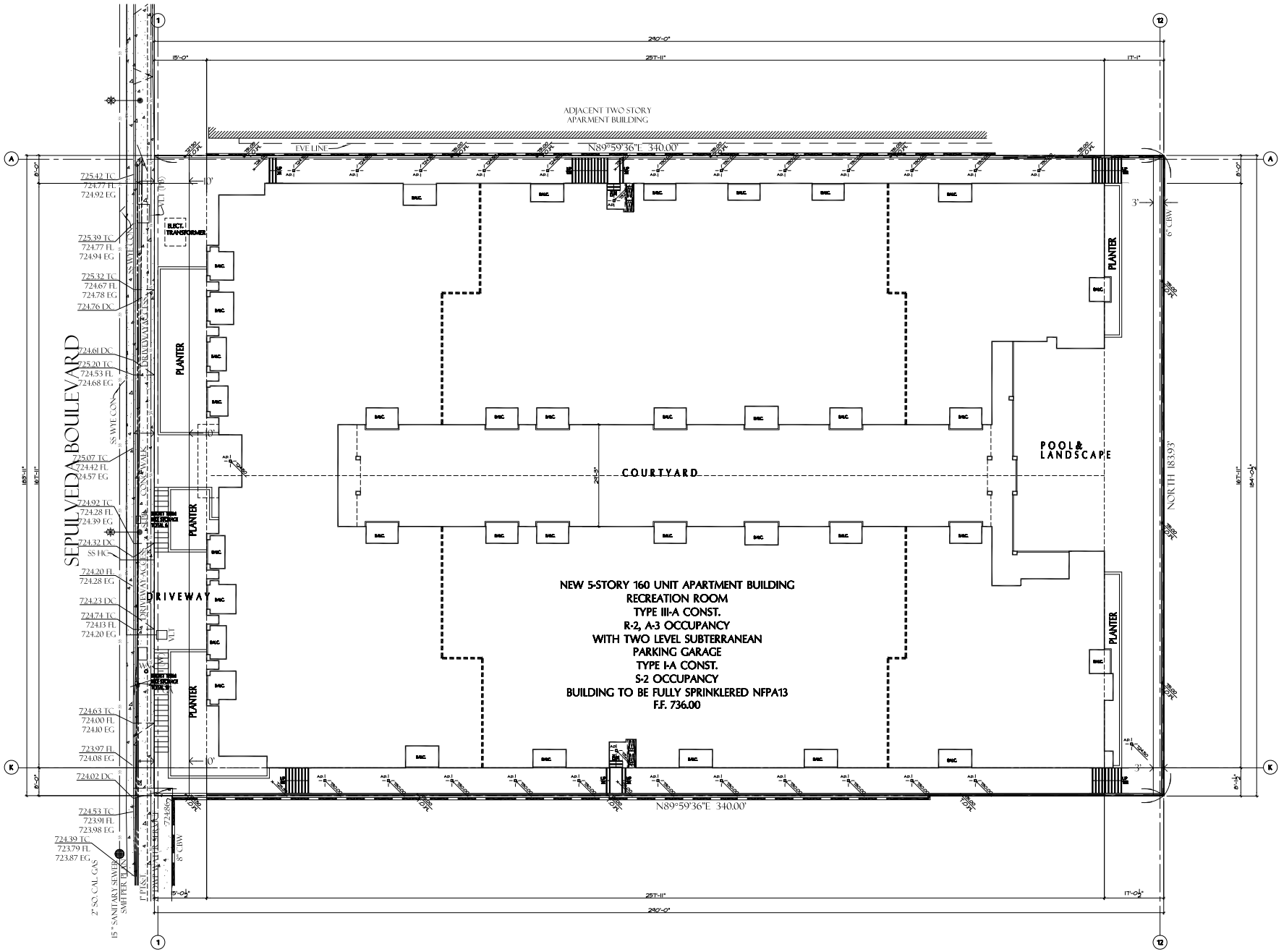
Figure 1
Vicinity Map



Source: Google Maps, 2016.

CAJA Environmental Services, LLC

Figure 2
Aerial Map



Source: Kamran Tabrizi Architect & Associates, 2016.

CAJA Environmental Services, LLC

Figure 3
Site Plan

2. INITIAL STUDY CHECKLIST

LEAD CITY AGENCY	COUNCIL DISTRICT	DATE
City of Los Angeles	6, Nury Martinez	May 2017

RESPONSIBLE AGENCIES

PROJECT TITLE/NO.	CASE NOS.
6500 Sepulveda	ENV-2016-4381-EAF; DIR-2016-4380-DB-SPR

PREVIOUS ACTIONS CASE NO.	
N/A	❑ **DOES have significant changes from previous actions.** ❑ **DOES NOT have significant changes from previous actions.**

PROJECT DESCRIPTION:

See Section 1 (Project Description).

ENVIRONMENTAL SETTING:

See Section 1 (Project Description).

PROJECT LOCATION

6500 Sepulveda Boulevard, Van Nuys, CA 91411

PLANNING DISTRICT	STATUS:
Van Nuys – North Sherman Oaks Community Plan Area	❑ **PRELIMINARY** ❑ **PROPOSED** ■ **ADOPTED**

EXISTING ZONING	MAX. DENSITY ZONING	■ **DOES CONFORM TO PLAN**
R4-1-RIO	1 unit/400 square feet	
PLANNED LAND USE & ZONE	**MAX. DENSITY PLAN**	❑ **DOES NOT CONFORM TO PLAN**
High-Medium Residential; R4-1-RIO	1 unit/400 square feet	
SURROUNDING LAND USES	**PROJECT DENSITY**	❑ **NO DISTRICT PLAN**
Residential, commercial, and retail	1 unit/400 square feet Proposed Floor-Area Ratio: 3.6:1	

DETERMINATION (To be completed by Lead Agency)

On the basis of this initial evaluation:

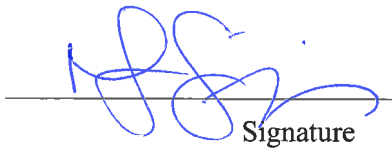
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions on the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

CITY PLANNER

Title

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to a project like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less that significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of a mitigation measure has reduced an effect from "Potentially Significant Impact" to "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross referenced).

5) Earlier analysis must be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR, or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

    1) Earlier Analysis Used. Identify and state where they are available for review.

    2) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    3) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared

or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated

7) Supporting Information Sources: A sources list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whichever format is selected.

9) The explanation of each issue should identify:

   1) The significance criteria or threshold, if any, used to evaluate each question; and

   2) The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Population/Housing
☐ Agricultural and Forestry Resources	☐ Hazards & Hazardous Materials	☐ Public Services
☐ Air Quality	☐ Hydrology/Water Quality	☐ Recreation
☐ Biological Resources	☐ Land Use/Planning	☐ Transportation/Traffic ☐ Tribal Cultural Resources
☐ Cultural Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☐ Geology/Soils	☐ Noise	☐ Mandatory Findings of Significance

INITIAL STUDY CHECKLIST (To be completed by the Lead City Agency)

BACKGROUND

PROPONENT NAME	**PHONE NUMBER**
IMT Capital IV 6500 Sepulveda, LLC	

PROPONENT ADDRESS

15303 Ventura Boulevard, Suite 200, Sherman Oaks, CA 91403

AGENCY REQUIRING CHECKLIST	**DATE SUBMITTED**
City of Los Angeles Planning Department	May 2017

Mitigation Measures:

Air Quality

3-1 All off-road construction equipment greater than 50 hp shall meet USEPA Tier 4 emission standards, where available, to reduce PM_{10}, $PM_{2.5}$, and NO_X, emissions at the Project Site. In addition, all construction equipment shall be outfitted with Best Available Control Technology devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. At the time of mobilization of each applicable unit of equipment, a copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided.

3-2 The use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) shall be required. If the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained, the lead agency shall require trucks that meet USEPA 2007 model year NO_X, emissions requirements.

Cultural Resources

5-2 If any paleontological materials are encountered during the course of Project development, construction shall be halted. The services of a paleontologist shall be secured by contacting the Center for Public Paleontology – USC, UCLA, Cal State Los Angeles, Cal State Long Beach, or the County Natural History Museum to assess the resources and evaluate the impact. Copies of the paleontological survey, study, or report shall be submitted to the Los Angeles County Natural History Museum. A covenant and agreement shall be recorded to ensure implementation of this mitigation measure prior to obtaining a grading permit.

Noise

12-1 All powered construction equipment shall be equipped with exhaust mufflers or other suitable noise reduction devices capable of achieving a sound attenuation of at least 3 dBA.

12-2 All construction areas for staging and warming-up equipment shall be located as far as feasible from nearby residences.

12-3 Portable noise sheds for smaller, noisy equipment such as air compressors, dewatering pumps, and generators shall be provided as feasible.

12-4 Temporary sound barriers or walls capable of achieving a sound attenuation of at least 12 dBA shall be erected or maintained to obstruct ground-level line of sight noise travel from the Project Site to the Columbus Avenue Residences. At all other Project boundaries, temporary sound barriers or walls capable of achieving a sound attenuation of at least 5 dBA shall be erected, as feasible.

12-5 Construction and demolition shall be restricted to the hours of 7:00 AM to 6:00 PM Monday through Friday, and 8:00 AM to 6:00 PM Saturday.

Transportation/Traffic

16-1 A construction work site traffic control plan shall be submitted to DOT for review and approval prior to the start of any construction work.

16-2 No hauling shall be done before 9:00 AM or after 3:00 PM.

Regulatory Compliance Measures:

Cultural Resources

5-1 If any archaeological materials are encountered during the course of Project development, construction shall be halted. The services of an archaeologist shall be secured by contacting the Center for Public Archaeology – Cal State University Fullerton, or a member of the Society of Professional Archaeologists (SOPA) or a SOPA-qualified archaeologist to assess the resources and evaluate the impact. Copies of the archaeological survey, study, or report shall be submitted to the South Central Coastal Information Center (SCCIC) at Cal State University Fullerton. A covenant and agreement shall be recorded to ensure implementation of this mitigation measure prior to obtaining a grading permit.

5-3 In accordance with Division 7 of the California Health and Safety Code, if human remains are discovered at the Project Sites during construction, work at the specific construction site at which the remains have been uncovered shall be suspended, and the City Public Works Department and County coroner shall be immediately notified. If the remains are determined by the County coroner to be Native American, the NAHC shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains.

ENVIRONMENTAL IMPACTS (Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**Aesthetics.** Would the project:				
a.	Have a substantial adverse effect on a scenic vista?	❑	❑	❑	■
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state-designated scenic highway?	❑	❑	❑	■
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	❑	❑	■	❑
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	❑	❑	■	❑

Response a:

No Impact. The Project Site and surrounding area are relatively flat. Views from the Project area are limited to those of urban development and associated landscaping, utilities, and roadways. No scenic vistas are available from the Project area. Thus, the Project would have no effect on scenic vistas, and no impacts related to this issue would occur.

Response b:

No Impact. The Project Site is not visible from any designated scenic highway, nor would the Project be located along a designated scenic highway. In addition, the Project Site is currently vacant and therefore the Project would not damage any scenic resources, including, but not limited to, trees, rock outcroppings, or historic buildings within a state scenic highway. As such, no impact would occur.

Response c:

Less Than Significant Impact. The Project Site is located in a highly urbanized area of the City. While the Project Site is currently vacant, the surrounding area is largely developed with multi-family and single-family residential development; commercial uses; roadways, including freeways; and utility infrastructure. The Project includes development of the Site with 160 multi-family residential units in a five-story building with a maximum height of 68 feet, 6 inches. The architecture, massing, and height of the multi-family residential building would be similar to existing multi-family residential and commercial development along Sepulveda Boulevard in the Project vicinity. Although the Project would change the

visual character of the Project Site and area, this change would not constitute a substantial degradation. Therefore, Project impacts related to visual character would be less than significant.

Response d:

Less Than Significant Impact. The Project Site is located in a highly urbanized area of the City. While the Project Site is currently vacant, the surrounding area is largely developed with multi-family and single-family residential development; commercial development; roadways, including freeways; and utility infrastructure. All of the existing development in the area produces light and glare (e.g., indoor/outdoor lighting, windows, light-colored surfaces, etc.) typical of such urban uses in the City. The Project includes development of the Site with 160 multi-family residential units in a five-story building with a maximum height of 68 feet, 6 inches. The Project would include interior and exterior lighting that complies with the LAMC provision that requires minimizing the effect of the new sources of lighting. Specifically, LAMC Section 91.6205 requires that new lighting sources not exceed 1 foot-candle of new light spillover at residential property lines. Consequently, no substantial changes in nighttime illumination would occur that would adversely affect nighttime views in the area and prevent spillover lighting. Also, the Project would be required to use non-reflective glass, pursuant to LAMC Section 93.0117. Therefore, Project impacts related to light and glare would be less than significant.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**Agricultural And Forestry Resources.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest Range and Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency,	❑	❑	❑	■

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	to non-agricultural use?				
b.	Conflict the existing zoning for agricultural use, or a Williamson Act Contract?	❑	❑	❑	■
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined by Public Resources Code section 122220(g)), timberland (as defined by Public Resources Code section 4526, or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?	❑	❑	❑	■
d.	Result in the loss of forest land or conversion of forest land to non-forest use?	❑	❑	❑	■
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	❑	❑	❑	■

Responses a-e:

No Impact. A significant impact may occur if a project were to result in the conversion of state-designated agricultural land from agricultural use to another non-agricultural use, the conversion of land zoned for agricultural use or under a Williamson Act contract from agricultural use to another non-agricultural use, results in the rezoning of forest land or timberland, or involves other changes in the existing environment which, could result in conversion of Farmland to non-agricultural use. The Project Site is located in a highly urbanized area, does not contain any agricultural uses, and is not delineated as such on any maps prepared pursuant to the Farmland Mapping and Monitoring Program.[1] The Site is designated for multi-family development with a land use designation of High Medium Residential and is zoned R4-1-RIO. No Williamson Act Contract applies to the Site. Therefore, no impact would occur.

[1] *State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, website: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2006/los06.pdf, October 28, 2016.*

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	**Air Quality.** The significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the project:				
a.	Conflict with or obstruct 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 non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	❑	■	❑	❑
d.	Expose sensitive receptors to substantial pollutant concentrations?	❑	■	❑	❑
e.	Create objectionable odors affecting a substantial number of people?	❑	❑	■	❑

The following analysis is based on the Air Quality and Greenhouse Gas Technical Modeling, included as Appendix A to this IS/MND.

Both short-term impacts occurring during construction and long-term effects related to the ongoing operation of the Project are discussed below. This analysis focuses on two levels of impacts: pollutant emissions and pollutant concentrations. "Emissions" refer to the quantity of pollutants released into the air, as measured in pounds per day. "Concentrations" refer to the amount of pollutant material per volumetric unit of air, as measured in parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$).

Pollutants and Effects

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state standards have been set 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 carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), particulate matter ten microns or less in diameter (PM_{10}), and lead (Pb). These pollutants are discussed below.

- Carbon Monoxide (CO) is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. It is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient concentrations generally follow the spatial and temporal distributions of vehicular traffic. 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 between November and February.[2] The highest concentrations occur during the colder months of the year when inversion conditions are more frequent. CO is a health concern because it competes with oxygen, often replacing it in the blood and reducing the blood's ability to transport oxygen to vital organs. Excess CO exposure can lead to dizziness, fatigue, and impair central nervous system functions.

- Ozone (O_3) is a colorless gas that is formed in the atmosphere when reactive organic gases (ROG) and nitrogen oxides (NO_X) react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; rather, it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of ROG and NO_X, the components of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. The greatest source of smog-producing gases is the automobile. Short-term exposure (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.

- Nitrogen Dioxide (NO_2) like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10}. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 ppm.

- Sulfur Dioxide (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO_2 are coal and oil used in power plants and

[2] *Inversion is an atmospheric condition in which a layer of warm air traps cooler air near the surface of the earth, preventing the normal rising of surface air.*

industries. Generally, the highest levels of SO_2 are 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. It can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

- Particulate Matter (PM) consists of small liquid and solid particles floating in the air, including smoke, soot, dust, salts, acids, and metals and can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair and results from fuel combustion (e.g. motor vehicles, power generation, industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as SO_2, NO_X, and VOC. Inhalable particulate matter, or 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, they 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. These substances can be absorbed into the blood stream and cause damage elsewhere in the body. These substances can transport absorbed gases, such as chlorides or ammonium, into the lungs and cause 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 tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

- Lead (Pb) in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturers of batteries, paint, 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 phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities have become lead-emission 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.

- Toxic Air Contaminants (TAC) are airborne pollutants that may increase a person's risk of developing cancer or other serious health effects. TACs include over 700 chemical compounds that are identified by State and federal agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process established in 1983 that includes risk identification and risk management.

Regulatory Setting

Federal

The United States Environmental Protection Agency (the "USEPA") is responsible for enforcing the Federal Clean Air Act (CAA), the legislation that governs air quality in the United States. The USEPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS). NAAQS are required under the 1977 CAA and subsequent amendments. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. USEPA has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes emission standards, including those for vehicles sold in states other than California, where automobiles must meet stricter emission standards set by the California Air Resources Board (CARB).

As required by the CAA, NAAQS have been established for seven major air pollutants: CO, NO_2, O_3, $PM_{2.5}$, PM_{10}, SO_2, and Pb. The CAA requires the USEPA to designate areas as attainment, non-attainment, or maintenance for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized on Table 2.3-1. The USEPA has classified the Los Angeles County portion of the Basin as non-attainment for O_3 and $PM_{2.5}$, attainment for PM_{10}, and attainment/unclassified for CO and NO_2.

State

In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for administering the CCAA and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the State to achieve and maintain the CAAQS, which are generally more stringent than the federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB has broad authority to regulate mobile air pollution sources, such as motor vehicles. It is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications, which became effective in March 1996. CARB oversees the functions of local air

pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The state standards are summarized on Table 2.3-1.

The CCAA requires CARB to designate areas within California as either attainment or non-attainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as non-attainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as non-attainment.

Table 2.3-1
State and National Ambient Air Quality Standards and Attainment Status for the South Coast Air Basin

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	Non-attainment	--	--
	8-hour	0.070 ppm (137 µg/m^3)	N/A[1]	0.075 ppm (147 µg/m^3)	Non-attainment
Respirable Particulate Matter (PM_{10})	24-hour	50 µg/m^3	Non-attainment	150 µg/m^3	Attainment
	Annual Arithmetic Mean	20 µg/m^3	Non-attainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-hour	--	--	35 µg/m^3	Non-attainment
	Annual Arithmetic Mean	12 µg/m^3	Non-attainment	15 µg/m^3	Non-attainment
Carbon Monoxide (CO)	8-hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Maintenance
	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Maintenance
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Attainment	53 ppb (100 µg/m^3)	Unclassified/ Attainment
	1-hour	0.18 ppm (338 µg/m^3)	Attainment	100 ppb (188 µg/m^3)	Unclassified/ Attainment
Sulfur Dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)	Attainment	--	Attainment
	1-hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 µg/m^3)	Attainment
Lead (Pb)	30-day average	1.5 µg/m^3	Attainment	--	--
	Calendar Quarter	--	--	0.15 µg/m^3	Non-attainment

[1]N/A = CARB has not determined 8-hour O_3 attainment status
Source: CARB, Ambient Air Quality Standards, and attainment status, August 1, 2016, (www.arb.ca.gov/desig/adm/adm.htm).

Local

South Coast Air Quality Management District

The 1977 Lewis Air Quality Management Act merged four air pollution control district to create the SCAQMD to coordinate air quality planning efforts throughout Southern California. It is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain State and federal ambient air quality standards. Programs include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

The SCAQMD monitors air quality over its jurisdiction of 10,743 square miles, including the Basin, which covers an area of 6,745 square miles and is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto mountains to the north and east; and the San Diego County line to the south. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAQMD also regulates the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin.

All areas designated as non-attainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. The SCAQMD prepares the Air Quality Management Plan (AQMP) to address CAA and CCAA requirements by identifying policies and control measures. The Southern California Association of Governments (SCAG) assists by preparing the transportation portion of the AQMP. On December 7, 2012, the SCAQMD adopted its 2012 AQMP, which is now the legally enforceable plan for meeting the 24-hour $PM_{2.5}$ strategy standard. In October 2016, the SCAQMD released its revised Draft 2016 AQMP, which proposed strategies to meet the NAAQS for the 8-hour ozone standard by 2032, the annual $PM_{2.5}$ standard by 2021-2025, the 1-hour ozone standard by 2023, and the 24-hour $PM_{2.5}$ standard by 2019. In its role as the local air quality regulatory agency, the SCAQMD also provides guidance on how environmental analyses should be prepared. This includes recommended thresholds of significance for evaluating air quality impacts.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) assists in air quality planning efforts by preparing the transportation portion of the AQMP through the adoption of its Regional Transportation Plan (RTP). This includes the preparation of a Sustainable Communities Strategy (SCS) that responds to planning requirements of SB 375 and demonstrates the region's ability to attain greenhouse gas reduction targets set forth in State law. In April 2016, SCAG adopted its 2016-2040 RTP, a plan to invest $556.5 billion in transportation systems over a six-county region.

City of Los Angeles

Air quality policies are governed by the City's General Plan, which includes an Air Quality Element. Adopted on November 24, 1992, the Element includes six key goals that relate directly or indirectly to air quality:

1. Good air quality in an environment of continued population growth and healthy economic structure.

2. Less reliance on single-occupant vehicles with fewer commute and non-work trips.

3. Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand management techniques.

4. Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

5. Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting.

6. Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

Air Pollution Climatology

The Project Site is located within the Los Angeles County non-desert portion of the South Coast Air Basin. The Basin is in an area of high air pollution potential due to its climate and topography. The region lies in the semi-permanent high pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The Basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature, and winds throughout the region.

The Basin experiences frequent temperature inversions that help to form smog. While temperature typically decreases with height, it actually increases under inversion conditions as altitude increases, thereby preventing air close to the ground from mixing with the air above. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO_2 react under strong sunlight, creating smog.

Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland toward the mountains.

Air quality problems also occur during the fall and winter, when CO and NO_2 emissions tend to be higher. CO concentrations are generally worse in the morning and late evening (around 10:00 p.m.) when temperatures are cooler. High CO levels during the late evenings result from stagnant atmospheric conditions trapping CO. Since CO emissions are produced almost entirely from automobiles; the highest CO concentrations in the Basin are associated with heavy traffic. NO_2 concentrations are also generally higher during fall and winter days.

Air Monitoring Data

The SCAQMD monitors air quality conditions at 45 locations throughout the Basin. The Project Site is located in SCAQMD's East San Fernando Valley receptor area. Historical data from the area was used to characterize existing conditions in the vicinity of the Project area. Table 2.3-2 shows pollutant levels, State and federal standards, and the number of exceedances recorded in the area from 2012 through 2014. The one-hour State standard for O_3 was exceeded 12 times during this three-year period, the daily State standard for PM_{10} was exceeded three times while the daily State standard for $PM_{2.5}$ was exceeded eight times. CO and NO_2 levels did not exceed the CAAQS from 2012 to 2014.

Toxic Air Pollution

According to the SCAQMD's Multiple Air Toxics Exposure Study IV (MATES IV), the incidence of cancer over a lifetime in the US population is about 1 in 4, to 1 in 3, which translates into a risk of about 300,000 in 1 million. One study, the Harvard Report on Cancer Prevention, estimated that, of cancers associated with known risk factors, about 30 percent were related to tobacco, about 30 percent were related to diet and obesity, and about 2 percent were associated with environmental pollution related exposures. The potential cancer risk for a given substance is expressed as the incremental number of potential excess cancer cases per million people over a 70-year lifetime exposure at a constant annual average pollutant concentration. The risks are usually presented in chances per million. For example, if the cancer risks were estimated to be 100 per million, this would predict an additional 100 excess cases of cancer in a population of 1 million people over a 70-year lifetime.

Table 2.3-2
2012-2014 Ambient Air Quality Data in the Project Site Vicinity

Pollutant	Pollutant Concentration & Standards	East San Fernando Valley		
		2012	2013	2014
Ozone	Maximum 1-hour Concentration (ppm)	0.117	0.110	0.091
	Days > 0.09 ppm (State 1-hour standard)	8	4	0
	Days > 0.075 ppm (Federal 8-hour standard)	8	6	1
Carbon Monoxide	Maximum 1-hour Concentration (ppm)	N/A	N/A	3.0
	Days > 20 ppm (State 1-hour standard)	N/A	N/A	0
	Maximum 8-hour Concentration (ppm)	2/4	2.4	3.0
	Days > 9.0 ppm (State 8-hour standard)	0	0	0
Nitrogen Dioxide	Maximum 1-hour Concentration (ppm)	0.0795	0.0725	0.0732
	Days > 0.18 ppm (State 1-hour standard)	0	0	0
PM_{10}	Maximum 24-hour Concentration (µg/m^3)	55	52	60
	Days > 50 µg/m^3 (State 24-hour standard)	1	1	1
$PM_{2.5}$	Maximum 24-hour Concentration (µg/m^3)	54.2	45.1	64.6
	Days > 35 µg/m^3 (Federal 24-hour standard)	2	4	2
Sulfur Dioxide	Maximum 24-hour Concentration (ppm)	0.0065	0.0108	0.0045
	Days > 0.04 ppm (State 24-hour standard)	0	0	0

Source: SCAQMD annual monitoring data (www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year) accessed August 1, 2016.
N/A: Not available at this monitoring station.

As part of the SCAQMD's environmental justice initiatives adopted in late 1997, the SCAQMD adopted the MATES IV study in May 2015, which was a follow-up to the previous MATES I, II, and III air toxics studies conducted in the Basin. The MATES IV study was based on monitored data throughout the Basin and included a monitoring program, an updated emissions inventory of TACs, and a modeling effort to characterize carcinogenic risk across the Basin from exposure to TACs. The MATES IV study applied a 2-kilometer (1.24-mile) grid over the Basin and reported carcinogenic risk within each grid space (each covering an area of 4 square kilometers or 1.54 square miles). The study concluded that the average of the modeled air toxics concentrations measured at each of the monitoring stations in the Basin equates to a background cancer risk of approximately 897 in 1 million primarily due to diesel exhaust particulate matter (DPM). Using the MATES IV methodology, about 94 percent of the cancer risk is attributed to emissions associated with mobile sources, and about 6 percent of the risk is attributed to toxics emitted from stationary sources, which include industries, and businesses such as dry cleaners and chrome plating operations. The MATES IV study found lower ambient concentrations of most of the measured air toxics, as compared to the levels measured in the previous MATES III study finalized in September 2008.

Existing Emissions

The Project is currently vacant of any improvements. As such, there are no existing emissions from the Project Site.

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. CARB has identified the following typical groups who are most likely to be affected by air pollution: children under 14; the elderly over 65 years of age; athletes; and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

Sensitive receptors near the Project Site include the following:

- Sepulveda Villas, multi-family residences; 6524 Sepulveda Boulevard; 5 feet north of the Project Site.
- Multi-family residences; 6513-6519 Sepulveda Boulevard; 170 feet west of the Project Site.
- Single-family residence; 6517 Columbus Avenue; 155 feet east of the Project Site.
- Columbus Avenue School; 6700 Columbus Avenue; 1,160 feet north of the Project Site.
- Valley Presbyterian Hospital and Barlow Respiratory Hospital; 15107 Vanowen Street; 1,840 feet north of the Project Site.
- Van Nuys Community Adult School; 6535 Cedros Avenue; 2,330 feet east of the Project Site.
- Sylvan Park Elementary School; 6238 Noble Avenue; 1,990 feet southeast of the Project Site.
- Delano Park; 15100 Erwin Street; 2,145 feet south of the Project Site.

Response a:

Less Than Significant Impact.

SCAQMD Air Quality Management Plan

The proposed residential land use will neither conflict with the SCAQMD's 2012 Air Quality Management Plan (AQMP) nor jeopardize the region's attainment of air quality standards. The AQMP focuses on achieving clean air standards while accommodating population growth forecasts by SCAG. Specifically, SCAG's growth forecasts from the 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) are largely built off local growth forecasts from local governments like the City of Los Angeles. The 2012 RTP/SCS accommodates up to 3,991,700 persons; 1,455,700 households; and 1,817,700 jobs in the City of Los Angeles by 2020. The 2016 RTP/SCS, adopted in April 2016, accommodates 4,609,400 persons; 1,690,300 households; and 2,169,100 jobs by 2040. However, the updated RTP/SCS has not been formally included in the region's adopted AQMP. As such, this analysis addresses consistency with the growth forecast in the legally adopted air quality plan.

The Project Site is located in the Van Nuys-North Sherman Oaks Community Plan area that implements land use standards of the General Plan Framework at the local level. The Project is consistent with the City's growth capacity for the Community Plan, which accommodated a projected population of 164,973 persons and housing base of 63,995 units by 2010.[3] No further projections beyond 2010 have been prepared by the City.

The Project would develop 160 multi-family residential units. Based on the City's projected household density in the Community Plan area, the Project could add 415 residents to the Plan area. The Project Site is designated as "High Medium Residential" in the Community Plan, a classification that allows residential uses. The RTP/SCS' assumptions about growth in the City accommodate housing and growth on this Site. As such, the Project does not conflict with the growth assumptions in the regional air plan and this impact is considered less than significant.

City of Los Angeles General Plan Air Quality Element

The City's General Plan Air Quality Element identifies 30 policies that identify specific strategies for advancing the City's clean air goals. As illustrated in Table 2.3-3, the Project is consistent with the applicable policies in the General Plan. As such, the Project's impact on the City's General Plan would be considered less than significant.

The air quality impacts of residential development on the Project Site are accommodated in the region's emissions inventory for the 2012 and 2016 RTP/SCS and 2012 AQMP. The Project is therefore not expected to conflict with or obstruct implementation of the AQMP, and any impact on the Plan would be considered less than significant. Similarly, the Project is consistent with the City's General Plan Air Quality Element's policies and would not conflict with its six goals and 15 objectives.

Table 2.3-3
Project Consistency with City of LA General Plan Air Quality Element

Policy	Analysis
Policy 1.3.1 Minimize particulate emissions from construction sites.	**Consistent**. The Project would minimize particulate emissions during construction through best practices required by SCAQMD Rule 403 (Fugitive Dust) and/or mitigation measures.
Policy 1.3.2 Minimize particulate emissions from unpaved roads and parking lots, which are associated with vehicular traffic.	**Consistent**. There will be no unpaved roads or parking lots. All areas will be paved and developed.
Policy 2.1.1. Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce vehicle trips and/or VMT as an employer	**Not Applicable.** The Project is a residential project and would not implement employer-based transportation demand management programs. However, the Project would be located in an urban area with significant

[3] *Van Nuys-North Sherman Oaks Community Plan, http://cityplanning.lacity.org/complan/pdf/vnycptext.pdf*

Table 2.3-3
Project Consistency with City of LA General Plan Air Quality Element

Policy	Analysis
and encourage the private sector to do the same to reduce work trips and traffic congestion.	infrastructure to facilities alternative transportation modes, including proximity to bus routes operating by Metro (i.e., Routes 164, 165, 237, 234, 656, 734), LADOT DASH, and the Metro Orange Line station at Erwin and Sepulveda, about 2,000 feet from the Project Site.
Policy 2.1.2. Facilitate and encourage the use of telecommunications (i.e., telecommuting) in both the public and private sectors, in order to reduce work trips.	**Not Applicable.** The Project is a residential project and would not implement employer-based transportation telecommunications programs. Nonetheless, the Project would not interfere with the implementation of such strategies.
Policy 2.2.1. Discourage single-occupant vehicle use through a variety of measures such as market incentive strategies, mode-shift incentives, trip reduction plans and ridesharing subsidies.	**Not Applicable.** The Project is a residential project and would not implement employer-based transportation trip reduction programs. Nonetheless, the Project would not interfere with the implementation of such strategies.
Policy 2.2.2. Encourage multi-occupant vehicle travel and discourage single-occupant vehicle travel by instituting parking management practices.	**Not Applicable.** The Project is a residential project and would not implement parking management programs. Nonetheless, the Project would not interfere with implementation of such strategies.
Policy 2.2.3. Minimize the use of single-occupant vehicles associated with special events or in areas and times of high levels of pedestrian activities.	**Not Applicable.** The Project does not include special events that would require traffic management.
Policy 3.2.1. Manage traffic congestion during peak hours.	**Consistent.** The Project would minimize traffic impacts below significance thresholds as described in the traffic section of this IS/MND.
Policy 4.1.1. Coordinate with all appropriate regional agencies on the implementation of strategies for the integration of land use, transportation, and air quality policies.	**Consistent.** The Project is being entitled through the City of Los Angeles, which coordinates with SCAG, Metro, and other regional agencies on the coordination of land use, air quality, and transportation policies.
Policy 4.1.2. Ensure that project level review and approval of land use development remains at the local level.	**Consistent.** The Project would be entitled and environmentally cleared at the local level.
Policy 4.2.1. Revise the City's General Plan/Community Plans to achieve a more compact, efficient urban form and to promote more transit-oriented development and mixed-use development.	**Not Applicable.** This policy calls for City updates to its General Plan.
Policy 4.2.2 Improve accessibility for the City's residents to places of employment, shopping centers, and other establishments.	**Consistent.** The Project would be infill development that would provide residents with proximate access to jobs, shopping, and other uses.
Policy 4.2.3 Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	**Consistent.** The Project would be located in an urban area with significant infrastructure to facilities alternative transportation modes, including proximity to bus routes operating by Metro (i.e., Routes 164, 165, 237, 234, 656, 734), LADOT DASH, and the Metro Orange Line station at Erwin and Sepulveda, about 2,000 feet from the Project Site.
Policy 4.2.4 Require that air quality impacts be a	**Consistent.** The Project is being evaluated under CEQA

Table 2.3-3
Project Consistency with City of LA General Plan Air Quality Element

Policy	Analysis
consideration in the review and approval of all discretionary projects.	for air quality impacts and complies with this policy.
Policy 4.2.5. Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	**Consistent.** The Project would be located in an urban area with significant infrastructure to facilities alternative transportation modes, including proximity to bus routes operating by Metro (i.e., Routes 164, 165, 237, 234, 656, 734), LADOT DASH, and the Metro Orange Line station at Erwin and Sepulveda, about 2,000 feet from the Project Site.
Policy 4.3.1. Revise the City's General Plan/Community Plans to ensure that new or relocated sensitive receptors are located to minimize significant health risks posed by air pollution sources.	**Not Applicable.** This policy calls for City updates to its General Plan.
Policy 4.3.2. Revise the City's General Plan/Community Plans to ensure that new or relocated major air pollution sources are located to minimize significant health risks to sensitive receptors.	**Not Applicable.** This policy calls for City updates to its General Plan.
Policy 5.1.1. Make improvements in Harbor and airport operations and facilities in order to reduce air emissions.	**Not Applicable.** This policy calls for cleaner operations of the City's water port and airport facilities.
Policy 5.1.2 Effect a reduction in energy consumption and shift to non-polluting sources of energy in its buildings and operations.	**Not Applicable.** This policy calls for cleaner operations of the City's buildings and operations.
Policy 5.1.3. Have the Department of Water and Power make improvements at its in-basin power plants in order to reduce air emissions.	**Not Applicable.** This policy calls for cleaner operations of the City's Water and Power energy plants.
Policy 5.1.4. Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.	**Not Applicable.** This policy calls for City facilities to reduce solid waste and energy consumption.
Policy 5.2.1. Reduce emissions from its own vehicles by continuing scheduled maintenance, inspection and vehicle replacement programs; by adhering to the State of California's emissions testing and monitoring programs; by using alternative fuel vehicles wherever feasible, in accordance with regulatory agencies and City Council policies.	**Not Applicable.** This policy calls for the City to gradually reduce the fleet emissions inventory from its vehicles through use of alternative fuels, improved maintenance practices, and related operational improvements.
Policy 5.3.1. Support the development and use of equipment powered by electric of low-emitting fuels.	**Consistent.** The Project would be designed to meet the applicable requirements of the States Green Building Standards Code and the City of Los Angeles' Green Building Code.
Policy 6.1.1. Raise awareness through public-information and education programs of the actions that individuals can take to reduce air emissions.	**Not Applicable.** This policy calls for the City to promote clean air awareness through its public awareness programs.
Table: DKA Planning, 2016.	

Response b:

Less Than Significant With Mitigation Incorporated.

A project would result in a significant air quality impact if project-related emissions exceed federal, state or regional standards or thresholds, or if project-related emissions would substantially contribute to an existing or projected air quality violation.

Construction

Construction-related emissions were estimated using the SCAQMD's CalEEMod 2016.3.1 model using assumptions from the Project's developer, including the Project's construction schedule of 18 months. Table 2.3-4 summarizes the proposed construction schedule that was modeled for air quality impacts.

Table 2.3-4
Proposed Construction Schedule

Phase	Duration	Notes
Grading	6/1/17 - 7/15/17	20,000 cubic yards of soil export
Building Construction	7/16/17 - 1/15/19	
Paving	10/1/18 - 12/1/18	
Architectural Coatings	7/1/18 - 11/15/18	
Source: DKA Planning, 2016.		

Regional Emissions

As shown in Table 2.3-5, the construction of the Project would not produce VOC, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions in excess of SCAQMD's regional thresholds. However, NO_X, emissions during any concurrent building construction, architectural coatings, and paving activities would exceed the recommended threshold for this ozone precursor. As, a result, construction of the Project could contribute to an existing violation of air quality standards for regional pollutants (ozone). This impact is considered potentially significant, but would be reduced to less than significant with implementation of Mitigation Measures 3-1 and 3-2, provided below, as well as compliance with SCAQMD Rules 403 and 1113.

Table 2.3-5
Estimated Daily Construction Emissions - Unmitigated

Construction Phase Year	Pounds Per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2017	22	225	160	<1	13	11
2018	42	321	236	<1	16	14
2019	18	179	156	<1	9	8
Maximum Regional Total	42	321	236	<1	16	14
Regional Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	No	Yes	No	No	No	No
Maximum Localized Total	42	320	233	<1	13	14
Localized Significance Threshold	--	80	498	--	4	3
Exceed Threshold?	N/A	Yes	No	N/A	Yes	Yes

Source: DKA Planning, 2016 based on CalEEMod 2016.3.1 model runs. LST analyses based on 1 acre site with 25 meter distances to receptors in East San Fernando Valley source receptor area. This table conservatively does not assume the application of BACMs to control fugitive dust.

Local Emissions

In terms of local air quality, the Project would produce emissions that do not exceed the SCAQMD's recommended localized standards of significance for CO during the construction phase. However, construction activities could produce PM_{10}, $PM_{2.5}$, and NO_X, emissions that exceed localized thresholds, primarily from vehicle exhaust and fugitive dust emissions from off-road construction vehicles during any concurrent building construction, coating, and paving phases. As a result, construction impacts on localized air quality are considered potentially significant, but would be reduced to less than significant with implementation of Mitigation Measures 3-1 and 3-2, provided below, as well as compliance with SCAQMD Rules 403 and 1113.

Mitigation Measures

3-1 All off-road construction equipment greater than 50 hp shall meet USEPA Tier 4 emission standards, where available, to reduce PM_{10}, $PM_{2.5}$, and NO_X, emissions at the Project Site. In addition, all construction equipment shall be outfitted with Best Available Control Technology devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. At the time of mobilization of each applicable unit of equipment, a copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided.

3-2 The use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) shall be required. If the lead agency determines that 2010 model year or newer

diesel trucks cannot be obtained, the lead agency shall require trucks that meet USEPA 2007 model year NO_X, emissions requirements.

Construction Impacts After Mitigation

As shown in Table 2.3-6, implementation of Mitigation Measures 3-1 and 3-2, as well as compliance with SCAQMD Rules 403 and 1113, would substantially reduce PM_{10}, $PM_{2.5}$, and NO_X, emissions during the construction process. As a result, construction of the Project would not produce any violation of air quality standards or contribute to an existing or projected air quality violation, and impacts would be less than significant.

Table 2.3-6
Estimated Daily Construction Emissions - Mitigated

Construction Phase Year	Pounds Per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2017	5	70	184	<1	5	3
2018	17	52	281	<1	2	2
2019	17	70	281	<1	5	3
Maximum Regional Total	17	70	281	<1	5	3
Regional Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Maximum Localized Total	17	36	57	<1	<1	<3
Localized Significance Threshold	--	80	498	--	4	3
Exceed Threshold?	N/A	No	No	N/A	No	No
Source: DKA Planning, 2016 based on CalEEMod 2016.3.1 model runs. LST analyses based on 1 acre site with 25 meter distances to receptors in East San Fernando Valley source receptor area.						

Operation

Regional Emissions

The Project would generate long-term emissions in the region primarily from motor vehicles that access the Project Site. The Project could add up to 904 vehicle trips to and from the Project Site on a peak weekday at the start of operations in 2019. However, as shown on Table 2.3-7, the Project's operational emissions would not exceed SCAQMD's regional significance thresholds for VOC, NO_X, CO, PM_{10} and $PM_{2.5}$ emissions. Therefore, Project impacts related to regional operational emissions would be less than significant.

Table 2.3-7
Estimated Daily Operations Emissions

Emission Source	Pounds per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	8	1	53	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	2	11	32	<1	8	2
Net Regional Total	**10**	**12**	**85**	**<1**	**8**	**2**
Regional Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Threshold?	No	No	No	No	No	No
Net Localized Total	**8**	**1**	**53**	**<1**	**<1**	**<1**
Localized Significance Threshold	**-**	**80**	**498**	**-**	**4**	**1**
Exceed Threshold?	N/A	No	No	N/A	No	No

Source: DKA Planning 2016 based on CalEEMod 2016.3.1 model runs. LST analysis based on 1 acre site with 25 meter distances to receptors in East San Fernando Valley source receptor area.

Local Emissions

With regard to localized air quality impacts, as shown on Table 2.3-7, the Project's localized operational emissions would not approach the SCAQMD's localized significance thresholds that signal when there could be human health impacts at nearby sensitive receptors during long-term operations. Therefore, Project impacts related to localized operational emissions would be less than significant.

Response c:

Less Than Significant With Mitigation Incorporated.

Construction

A project's construction impacts could be considered cumulative considerable if it substantially contributes to cumulative air quality violations when considering other projects that may undertake concurrent construction activities. As demonstrated above, construction of the Project would not contribute significantly to cumulative emissions of any non-attainment regional pollutants. For regional ozone precursors, the Project would exceed SCAQMD mass emission thresholds for ozone precursor NO_x during construction. Therefore, construction emissions impacts on regional criteria pollutant emissions would be considered potentially significant, but would be reduced to less than significant with implementation of Mitigation Measures 3-1 and 3-2, as well as compliance with SCAQMD Rules 403 and 1113.

When considering local impacts, cumulative construction emissions are considered when projects are within close proximity of each other that could result in larger impacts on local sensitive receptors. Construction of the Project itself could produce cumulative considerable emissions of localized nonattainment pollutants NO_x, PM_{10}, and $PM_{2.5}$, as the anticipated emissions would exceed LST thresholds set by the SCAQMD. This is considered a potentially significant impact, but would be reduced to less than significant with

implementation of Mitigation Measures 3-1 and 3-2, as well as compliance with SCAQMD Rules 403 and 1113.

If any other of projects were to undertake construction concurrently with the Project, localized CO, $PM_{2.5}$, PM_{10}, and NO_2 concentrations would be further increased. However, the application of LST thresholds to each cumulative project in the local area would help ensure that each project does not produce localized hotspots of CO, $PM_{2.5}$, PM_{10}, and NO_2. Any projects that would exceed LST thresholds (after mitigation) would perform dispersion modeling to confirm whether health-based air quality standards would be violated. The SCAQMD's LST thresholds recognize the influence of a receptor's proximity, setting mass emissions thresholds for PM_{10} and $PM_{2.5}$ that generally double with every doubling of distance.

With implementation of Mitigation Measures 3-1 and 3-2, as well as compliance with SCAQMD Rules 403 and 1113, construction of the Project would not have any considerable contribution to cumulative impacts on pollutant concentrations at nearby receptors.

Operation

The proposed residential land use would not produce cumulatively considerable emissions of nonattainment pollutants at the regional or local level. Because the Project's air quality impacts would not exceed the SCAQMD's operational thresholds of significance as noted in Table 2.3-7, the Project's impacts on cumulative emissions of non-attainment pollutants is considered less than significant. The Project is a residential development that would not include major sources of combustion or fugitive dust. As a result, its localized emissions of PM_{10} and $PM_{2.5}$ would be minimal. Likewise, existing land uses in the area include land uses that do not produce substantial emissions of localized nonattainment pollutants. Therefore, long-term operation of the Project would not result in a cumulatively considerable increase of criteria pollutants, and impacts would be less than significant.

Response d:

Less Than Significant With Mitigation Incorporated.

Construction

As discussed above, sensitive receptors near the Project Site include the following:

- Sepulveda Villas, multi-family residences; 6524 Sepulveda Boulevard; 5 feet north of the Project Site.
- Multi-family residences; 6513-6519 Sepulveda Boulevard; 170 feet west of the Project Site.
- Single-family residence; 6517 Columbus Avenue; 155 feet east of the Project Site.
- Columbus Avenue School; 6700 Columbus Avenue; 1,160 feet north of the Project Site.
- Valley Presbyterian Hospital and Barlow Respiratory Hospital; 15107 Vanowen Street; 1,840 feet north of the Project Site.
- Van Nuys Community Adult School; 6535 Cedros Avenue; 2,330 feet east of the Project Site.
- Sylvan Park Elementary School; 6238 Noble Avenue; 1,990 feet southeast of the Project Site.

- Delano Park; 15100 Erwin Street; 2,145 feet south of the Project Site.

As illustrated in Table 2.3-6, implementation of Mitigation Measures 3-1 and 3-2, as well as compliance with SCAQMD Rules 403 and 1113, would substantially reduce PM_{10}, $PM_{2.5}$, and NO_X, emissions during the construction process, and the Project would not have any significant impacts on pollutant concentrations at nearby receptors. Impacts would therefore be less than significant.

Operation

The Project would generate long-term emissions on-site from area and energy sources that would generate negligible pollutant concentrations of CO, NO_2, $PM_{2.5}$, or PM_{10} at nearby sensitive receptors. While long-term operations of the Project would generate traffic that produces off-site emissions, these would not result in exceedances of CO air quality standards at roadways in the area due to three key factors. First, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to this Project area. Second, auto-related emissions of CO continue to decline because of advances in fuel combustion technology in the vehicle fleet. Finally, the Project would not contribute to the levels of congestion that would be needed to produce the amount of emissions needed to trigger a potential CO hotspot.[4] Specifically, traffic levels of service at six intersections studied in the vicinity of the Project would not be significantly impacted by traffic volumes from the development under existing or 2019 horizon scenarios.[5]

Finally, the Project would not result in any substantial emissions of TACs during the construction or operations phase. During the construction phase, the primary air quality impacts would be associated with the combustion of diesel fuels, which produce exhaust-related particulate matter that is considered a toxic air contaminant by CARB based on chronic exposure to these emissions.[6] However, construction activities would not produce chronic, long-term exposure to diesel particulate matter. During long-term Project operations, the Project does not include typical sources of acutely and chronically hazardous TACs such as industrial manufacturing processes and automotive repair facilities. As a result, the Project would not create substantial concentrations of TACs. In addition, the SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulate emissions (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[7] The Project would not generate a substantial number of truck trips. Based on the limited activity of TAC sources, the Project would not warrant the need for a health risk assessment associated with on-site activities. Therefore, Project impacts related to TACs would be less than significant.

---

[4] *Caltrans, Transportation Project-Level Carbon Monoxide Protocol, updated October 13, 2010.*

[5] *Overland Traffic Consultants, Inc., "Traffic Impact Analysis for a Residential Project 160-Unit Apartment Building", November 2016.*

[6] *California Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. www.* http://oehha.ca.gov/public_info/facts/dieselfacts.html

[7] *SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.*

Response e:

Less Than Significant Impact. The Project would introduce residential land use to the area but would not result in activities that create objectionable odors. It would not include any land uses typically associated with unpleasant odors and local nuisances (e.g., rendering facilities, dry cleaners). SCAQMD regulations that govern nuisances (i.e., Rule 402, Nuisances) would regulate any occasional odors associated with on-site uses. As a result, any odor impacts from the Project would be considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	❑	❑	❑	■
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	❑	❑	❑	■
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❑	❑	❑	■
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	❑	❑	❑	■
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	❑	❑	❑	■
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat	❑	❑	❑	■

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
conservation plan?				

Response a:

No Impact. A significant impact would occur if a project would remove or modify habitat for any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulation, or by the state or federal regulatory agencies cited above. The Project Site is located in an urbanized area of Los Angeles and does not contain any trees or vegetation. The Site does not contain any natural open spaces, act as a wildlife corridor, nor possess any areas of significant biological resource value. No hydrological features are present on the Site and there are no sensitive habitats present. Due to the lack of biotic resources, no candidate, sensitive, or special status species identified in local plans, policies, regulations, by the California Department of Fish and Game (CDFG), the California Native Plant Society (CNPS), or the U.S. Fish and Wildlife Service (USFWS) would be expected to occur on the Site. Therefore, no impact would occur.

Response b:

No Impact. A significant impact would occur if riparian habitat or any other sensitive natural community identified locally, regionally, or by the state and federal regulatory agencies cited would be adversely modified by a project. There are no riparian areas located on or adjacent to the Project Site.[8] Therefore, no impact would occur.

Response c:

No Impact. A significant impact would occur if federally protected wetlands, as defined by Section 404 of the Clean Water Act, would be modified or removed by a project. Review of the National Wetlands Inventory identified no wetlands or water features on the Project Site.[9] Therefore, no impact would occur.

Response d:

No Impact. A significant impact would occur if a project would interfere or remove access to a migratory wildlife corridor or impede the use of native wildlife nursery sites. Due to the existing urban development in the Project area, the Project Site does not function as a corridor for the movement of native or migratory animals. Additionally, no native wildlife nurseries are located in the Project area. Therefore, no impact to migratory wildlife corridors or native wildlife nursery sites would occur.

---

[8] *NavigateLA, Water, Lakes, and Streams layer: http://navigatela.lacity.org/navigatela/, October 28, 2016.*

[9] *U.S. Fish & Wildlife Service, National Wetlands Inventory: http://www.fws.gov/wetlands/data/mapper.HTML*

Response e:

No Impact. A significant adverse impact would occur if a project were inconsistent with local regulations pertaining to biological resources. Local ordinances protecting biological resources are limited to the City of Los Angeles Native Tree Preservation Ordinance. The Project Site is located in an urbanized area of the City. There are no trees or vegetation on the Project Site. No impact to biological resources such as trees would occur.

Response f:

No Impact. A significant impact would occur if a project would be inconsistent with policies in any draft or adopted conservation plan. The Project Site is located in an urbanized area of Los Angeles and is not located in or adjacent to an existing or proposed Significant Ecological Area.[10] Additionally, there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that applies to the Project Site. The Project would not conflict with any habitat conservation plans. Therefore, no impact would occur.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V.	**Cultural Resources:** Would the project:				
a.	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Section 15064.5?	❑	❑	❑	■
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?	❑	❑	■	❑
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❑	■	❑	❑
d.	Disturb any human remains, including those interred outside of formal cemeteries?	❑	❑	■	❑

Response a:

No Impact. Section 15064.5 of the State CEQA Guidelines defines an historical resources as: 1) a resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; 2) a resource listed in a local register of historical resources or identified as significant in an historical resource survey meeting certain state guidelines; or

[10] *NavigateLA, Significant Ecological Area layer: http://navigatela.lacity.org/navigatela/, March 11, 2016.*

3) an object, building, structure, site, area, place, record or manuscript which a lead agency determines to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the lead agency's determination is supported by substantial evidence in light of the whole record. A project-related significant adverse effect would occur if the proposed project were to adversely affect a historical resource meeting one of the above definitions. The Project Site was previously developed with an apartment building originally constructed in 1964. On March 16, 2016, the Department of Building and Safety issued a permit for the demolition of the building. The permit was finalized on April 27, 2016. The Site was not found to be a potential historic resource in the SurveyLA findings or the City's HistoricPlacesLA website. Therefore, there would be no impact.

Response b:

Less Than Significant Impact. Section 15064.5 of the State CEQA Guidelines defines significant archaeological resources as resources which meet the criteria for historical resources, as discussed above, or resources which constitute unique archaeological resources. A project-related significant adverse effect could occur if the Project was to affect archaeological resources that fall under either of these categories. The Project Site is located in a highly urbanized area of the City. However, the Project would require excavation for one subterranean parking level, utility and foundation work, and grading. Thus, there is the potential for buried archaeological resources to exist within the Project Site. With implementation of Regulatory Compliance Measure 5-1, this impact would be less than significant.

Regulatory Compliance Measure

5-1 If any archaeological materials are encountered during the course of Project development, construction shall be halted. The services of an archaeologist shall be secured by contacting the Center for Public Archaeology – Cal State University Fullerton, or a member of the Society of Professional Archaeologists (SOPA) or a SOPA-qualified archaeologist to assess the resources and evaluate the impact. Copies of the archaeological survey, study, or report shall be submitted to the South Central Coastal Information Center (SCCIC) at Cal State University Fullerton. A covenant and agreement shall be recorded to ensure implementation of this mitigation measure prior to obtaining a grading permit.

Response c:

Less Than Significant With Mitigation Incorporated. A project-related significant adverse effect could occur if grading or excavation activities associated with the Project would disturb paleontological resources or geologic features which presently exist within the Project Site. The Project Site is located in a highly urbanized area of the City. However, the Project would require excavation for one subterranean parking level, utility and foundation work, and grading. Thus, there is the potential for buried paleontological resources to exist within the Project Site. With implementation of Mitigation Measure 5-2, this impact would be less than significant.

Mitigation Measure

5-2 If any paleontological materials are encountered during the course of Project development, construction shall be halted. The services of a paleontologist shall be secured by contacting the Center for Public Paleontology – USC, UCLA, Cal State Los Angeles, Cal State Long Beach, or the County Natural History Museum to assess the resources and evaluate the impact. Copies of the paleontological survey, study, or report shall be submitted to the Los Angeles County Natural History Museum. A covenant and agreement shall be recorded to ensure implementation of this mitigation measure prior to obtaining a grading permit.

Response d:

Less Than Significant Impact. A project-related significant adverse effect could occur if grading or excavation activities associated with the Project would disturb previously interred human remains. The Project Site is located in a highly urbanized area of the City. However, the Project would require excavation for one subterranean parking level, utility and foundation work, and grading. Thus, there is the potential for buried human remains to exist within the Project Site. With implementation of Regulatory Compliance Measure 5-3, this impact would be less than significant.

Regulatory Compliance Measure

5-3 In accordance with Division 7 of the California Health and Safety Code, if human remains are discovered at the Project Sites during construction, work at the specific construction site at which the remains have been uncovered shall be suspended, and the City Public Works Department and County coroner shall be immediately notified. If the remains are determined by the County coroner to be Native American, the NAHC shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Geology and Soils. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	❑	❑	■	❑
ii. Strong seismic ground shaking?	❑	❑	■	❑

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iii.	Seismic-related ground failure, including liquefaction?	❑	❑	■	❑
iv.	Landslides?	❑	❑	❑	■
b.	Result in substantial soil erosion or the loss of topsoil?	❑	❑	■	❑
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potential result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	❑	❑	■	❑
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	❑	❑	■	❑
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	❑	❑	❑	■

Response a.i:

Less Than Significant Impact. Fault rupture is defined as the surface displacement that occurs along the surface of a fault during an earthquake. Based on criteria established by the California Geological Survey (CGS), faults can be classified as active, potentially active, or inactive. Active faults may be designated as Earthquake Fault Zones under the Alquist-Priolo Earthquake Fault Zoning Act, which includes standards regulating development adjacent to active faults. In addition, the City of Los Angeles designates Fault Rupture Study Zones on each side of active and potentially active faults to establish areas of hazard potential. The Project Site is not within an Alquist-Priolo Fault Zone or a Fault Rupture Study Zone.[11] The Project would comply with the CGS *Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California* (1997), which provides guidance for evaluation and mitigation of earthquake-related hazards, and with seismic safety requirements in the UBC and the LAMC. As such, a less than significant would occur.

Response a.ii:

Less Than Significant Impact. A significant impact may occur if a project represents an increased risk to public safety or destruction of property by exposing people, property or infrastructure to seismically induced ground shaking hazards that are greater than the average risk associated with locations in the

[11] *City of Los Angeles, ZIMAS Parcel Profile Reports, website: http://zimas.lacity.org, October 10, 2016.*

Southern California region. Southern California is active seismic region (UBC Seismic Zone IV). Although the Project Site is not within an Alquist-Priolo Zone, the Site is susceptible to ground shaking during a seismic event. However, the Project would conform to all applicable provisions of the City Building Code and the UBC with respect to new construction. Adherence to current building codes and engineering practices would ensure that the Project would not expose people, property or infrastructure to seismically induced ground shaking hazards that are greater than the average risk associated with locations in the Southern California region. Therefore, Project impacts related to ground shaking would be less than significant.

Response a.iii:

Less Than Significant Impact. Liquefaction is a form of earthquake-induced ground failure that occurs primarily in relatively shallow, loose, granular, water-saturated soils. Liquefaction can occur when these types of soils lose their inherent shear strength due to excess water pressure that builds up during repeated movement from seismic activity. Low groundwater table and the presence of loose to medium dense sand and silty sand are factors that could contribute to the potential for liquefaction. The Project Site is identified by ZIMAS as being within a liquefaction zone.[12] However, the Project would be required to comply with building regulations set forth by the State Geologist, which require site analysis prior to development. Furthermore, the Project would comply with the CGS *Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California* (1997), which provides guidance for evaluation and mitigation of earthquake-related hazards including liquefaction. Further, the Project Applicant has prepared a Final Geotechnical Report that addresses the building standards and recommendations that shall be followed in order to develop the Project building based on the types of soils found at the Site, including areas prone to liquefaction. A Soils Report Approval Letter was issued by the Department of Building and Safety on October 3, 2016. Through compliance with the City's building code and recommendations contained in the Final Geotechnical Report and Soils Report Approval Letter, impacts related to liquefaction would be less than significant.

Response a.iv:

No Impact. A significant adverse effect may occur if a project is located in a hillside area with soil conditions that would suggest high potential for sliding. Landslides can occur on slopes under normal gravitational forces and during earthquakes when strong ground motion can cause failure. Landslides tend to occur in loosely consolidated, wet soil, and/or rock on unstable sloping terrain. The Project Site is topographically level and is not identified by ZIMAS as being within a landslide hazard zone.[13] Therefore, no impact would occur.

---

[12] *Ibid.*
[13] *Ibid.*

Response b:

Less Than Significant Impact. During the Project's construction phase, the Project developer would be required to implement SCAQMD Rule 403 – Fugitive Dust to minimize wind and water-borne erosion at the Site. Also, the Project developer would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during Project construction. The SWPPP would include best management practices (BMPs) and erosion control measures to prevent pollution in storm water discharge. Typical BMPs that could be used during construction include good-housekeeping practices (e.g., street sweeping, proper waste disposal, vehicle and equipment maintenance, concrete washout area, materials storage, minimization of hazardous materials, proper handling and storage of hazardous materials, etc.) and erosion/sediment control measures (e.g., silt fences, fiber rolls, gravel bags, storm water inlet protection, and soil stabilization measures, etc.). The SWPPP would be subject to review and approval by the City for compliance with the City's Development Best Management Practices Handbook, Part A, Construction Activities. Additionally, all Project construction activities would comply with the City's grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Through compliance with these existing regulations, the Project would not result in any significant impacts related to soil erosion during the construction phase. Additionally, during the Project's operational phase, most of the Project Site would be developed with impervious surface, and all stormwater flows would be directed to storm drainage features and would not come into contact with bare soil surfaces. Thus, no significant impacts related to erosion would occur as a result of Project operation.

Response c:

Less Than Significant Impact. A significant impact may occur if a project is built in an unstable area without proper site preparation or design features to provide adequate foundations for project buildings, thus posing a hazard to life and property. According to ZIMAS, the Project Site is located within a liquefaction zone. However, the Project Applicant has prepared a Final Geotechnical Report that addresses the building standards and recommendations that shall be followed in order to develop the Project building based on the types of soils found at the Site, including areas prone to liquefaction and geologic/soil instability. As discussed above, the Department of Building and Safety issued a Soils Report Approval Letter on October 3, 2016. Through compliance with the City's building code and recommendations of the Final Geotechnical Report and Soils Report Approval Letter, impacts related to liquefaction and geologic/soil instability would be less than significant.

Response d:

Less Than Significant Impact. A significant impact may occur if a project is built on expansive soils without proper site preparation or design features to provide adequate foundations for project buildings,

thus posing a hazard to life and property. Expansive soils are clay-based soils that tend to expand (increase in volume) as they absorb water and shrink as water is drawn away. If soils below the development consist of expansive clays within a zone where the water content can fluctuate, foundation movement and/or damage can occur. The Project Applicant has prepared a Final Geotechnical Report that addresses the building standards and recommendations that shall be followed in order to develop the Project building based on the types of soils found at the Site, including expansive soils. As discussed above, the Department of Building and Safety issued a Soils Report Approval Letter on October 3, 2016. Through compliance with the City's building code and recommendations of the Final Geotechnical Report and Soils Report Approval Letter, impacts related to expansive soils would be less than significant.

Response e:

No Impact. A significant impact may occur if a project is located in an area not served by an existing sewer system. The Project Site is located in a developed area of the City of Los Angeles, which is served by a wastewater collection, conveyance and treatment system operated by the City. No septic tanks or alternative disposal systems are necessary, nor are they proposed. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Greenhouse Gas Emissions. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact upon the environment?	❑	❑	■	❑
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	❑	❑	■	❑

Response a:

Less Than Significant Impact. The global nature of climate change creates unique challenges for assessing the Project's climate change impact under CEQA, which focuses on cause and effect. When compared to the cumulative inventory of greenhouse gas emissions (GHGs) across the globe, a single project's impact will be negligible. To further complicate this, there is debate about whether a project's emissions are adding to the net emissions worldwide, or simply redistributing emissions that would have occurred anyway somewhere in the world.

Climate change analyses are also unique because emitting carbon dioxide (CO_2) into the atmosphere is not itself an adverse environmental effect. It is the increased concentration of CO_2 in the atmosphere resulting in global climate change and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although it

is possible to estimate a project's incremental contribution of CO_2 into the atmosphere, it is typically not possible to determine whether or how an individual project's relatively small incremental contribution might translate into physical effects on the environment. Nevertheless, both short-term impacts occurring during construction and long-term effects related to the ongoing operation of the Project are discussed in this section.

Pollutants and Effects

Various gases in the Earth's atmosphere, classified as atmospheric GHG emissions, play a critical role in determining the Earth's surface temperature. Solar radiation entering Earth's atmosphere is absorbed by the Earth's surface. When the Earth emits this radiation back toward space, the radiation changes from high-frequency solar radiation to lower-frequency infrared radiation. GHG emissions are transparent to solar radiation and absorb infrared radiation. As a result, radiation that otherwise would escape back into space is now retained, warming the atmosphere. This phenomenon is known as the greenhouse effect.

GHGs that contribute to the greenhouse effect include:

- Carbon Dioxide (CO_2) is released to the atmosphere when solid waste, fossil fuels (oil, natural gas, and coal), and wood and wood products are burned. CO_2 emissions from motor vehicles occur during operation of vehicles and operation of air conditioning systems. CO_2 comprises over 80 percent of GHG emissions in California.[14]

- Methane (CH_4) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in solid waste landfills, raising livestock, natural gas and petroleum systems, stationary and mobile combustion, and wastewater treatment. Mobile sources represent 0.5 percent of overall methane emissions.[15]

- Nitrous Oxide (N_2O) is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels. Mobile sources represent about 14 percent of N_2O emissions.[16] N_2O emissions from motor vehicles generally occur directly from operation of vehicles.

- Hydrofluorocarbons (HFCs) are one of several high global warming potential (GWP) gases that are not naturally occurring and are generated from industrial processes. HFC (refrigerant)

---

[14] *California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, p. 11.*

[15] *United States Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2003, April 2005 (EPA 430-R-05-003).*

[16] *United States Environmental Protection Agency, U.S. Adipic Acid and Nitric Acid N_2O Emissions 1990-2020: Inventories, Projections and Opportunities for Reductions, December 2001.*

emissions from vehicle air conditioning systems occur due to leakage, losses during recharging, or release from scrapping vehicles at end of their useful life.

- Perfluorocarbons (PFCs) are another high GWP gas that are not naturally occurring and are generated in a variety of industrial processes. Emissions of PFCs are generally negligible from motor vehicles.

- Sulfur Hexafluoride (SF_6) is another high GWP gas that is not naturally occurring and are generated in a variety of industrial processes. Emissions of SF_6 are generally negligible from motor vehicles.

For most non-industrial development projects, motor vehicles make up the bulk of GHG emissions, particularly carbon dioxide, methane, nitrous oxide, and HFCs.[17] As illustrated in Table 2.7-1, the other GHGs are less abundant but have higher GWP than CO_2. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. High GWP gases such as HFCs, PFCs, and SF_6 are the most heat-absorbent.

Table 2.7-1
Global Warming Potential for Greenhouse Gases

Greenhouse Gas	Global Warming Potential
Carbon Dioxide (CO_2)	1
Methane (CH_4)	28
Nitrous Oxide (N_2O)	265
Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs)	7,000 – 11,000
Sulfur Hexafluoride (SF_6)	23,500
Note: Global warming potential measures how much heat a GHG traps in the atmosphere, in this case, over a 100-year period. *Source: California Air Resources Board, First Update to the Climate Change Scoping Plan. May 2014.*	

The effects of increasing global temperature are far-reaching and difficult to quantify. If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. According to a California Energy Commission (CEC) report, the snowpack portion of the supply could potentially decline by 70 to 90 percent by the end of the 21st century. This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the state; however, since this would likely increasingly come in the form of rain rather than snow

[17] *California Air Resources Board, Climate Change Emission Control Regulations, 2004*.

in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system. Sea level has risen approximately seven inches during the last century and, according to the CEC report, it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels. If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or worse, failure of species to migrate in time to adapt to the perturbations in climate, could also result.

While efforts to reduce the rate of GHG emissions continue, the State has developed a strategy to adapt the State's infrastructure to the impacts of climate change. The 2009 California Climate Adaptation Strategy (Strategy) analyzes risks and vulnerabilities and proposes strategies to reduce risks. The Strategy begins what will be an ongoing process of adaptation, as directed by Governor Schwarzenegger's Executive Order S-13-08. The Strategy analyzes two components of climate change: projecting the amount of climate change that may occur using computer-based global climate models, and assessing the natural or human systems' abilities to cope with and adapt to change by examining past experience with climate variability and extrapolating from this to understand how the systems may respond to the additional impact of climate change. The Strategy's key preliminary adaptation recommendations included:

- Appointment of a Climate Adaption Advisory Panel;
- Improved water management in anticipation of reduced water supplies, including a 20 percent reduction in per capita water use by 2020 from 2011 levels;
- Consideration of project alternatives that avoid significant new development in areas that cannot be adequately protected from flooding due to climate change;
- Preparation of agency-specific adaptation plans, guidance or criteria by September 2010;
- Consideration of climate change impacts for all significant State projects;
- Assessment of climate change impacts on emergency preparedness;
- Identification of key habitats and development of plans to minimize adverse effects from climate change;
- Development of guidance by the California Department of Public Health by September 2010 for use by local health departments to assess adaptation strategies;
- Amendment of General Plans and Local Coastal Plans to address climate change impacts and to develop local risk reduction strategies; and
- Inclusion of climate change impact information into fire program planning by State fire fighting agencies.

Regulatory Setting

International

Kyoto Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States (the "U.S.") joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (the "UNFCCC") agreement with the goal of controlling greenhouse gas emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHG emissions in the U.S. The plan currently consists of more than 50 voluntary programs for member nations to adopt.

The Kyoto Protocol (the Protocol) is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. Some have estimated that if the commitments outlined in the Protocol are met, global GHG emissions could be reduced an estimated five percent from 1990 levels during the first commitment period of 2008-2012. Notably, while the U.S. is a signatory to the Kyoto protocol, Congress has not ratified the Protocol and the U.S. is not bound by the Protocol's commitments. In December 2009, international leaders from 192 nations met in Copenhagen to address the future of international climate change commitments post-Protocol.

The major feature of the Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions. The targets amount to an average of five percent reduction levels against 1990 levels over the five-year period 2008-2012. The major distinction between the Protocol and the UNFCCC is that while the UNFCCC encouraged industrialized countries to stabilize GHG emissions, the Protocol commits them to do so. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

On December 12, 2015, a Conference of the Parties to the UNFCCC and the 11th session of the Kyoto Protocol negotiated an agreement in Paris that would keep the rise of temperature below 2 degrees Celsius. While 186 countries published their action plans detailing how they plan to reduce their GHG emissions, these reductions would still result in up to 3 degrees Celsius of global warming. The Paris agreement asks all countries to review their plans every five years from 2020 and acknowledges that $100 billion is needed each year to enable countries to adapt to climate change. The agreement was signed into law on April 22, 2016.

The Western Regional Climate Action Initiative

The Western Regional Climate Action Initiative (WCI) is a partnership among seven states, including California, and four Canadian provinces to implement a regional, economy-wide cap-and-trade system to reduce global warming pollution. The WCI will cap GHG emissions from the region's electricity,

industrial, and transportation sectors with the goal to reduce the heat trapping emissions that cause global warming to 15 percent below 2005 levels by 2020. When the WCI adopted this goal in 2007, it estimated that this would require 2007 levels to be reduced worldwide between 50 percent and 85 percent by 2050. California is working closely with the other states and provinces to design a regional GHG reduction program that includes a cap-and-trade approach. The California Air Resources Board's (CARB) planned cap and-trade program, discussed below, is also intended to link California and the other member states and provinces.

Federal

The United States Environmental Protection Agency (U.S. EPA) has historically not regulated GHGs because it determined the Clean Air Act did not authorize it to regulate emissions that addressed climate change. In 2007, the U.S Supreme Court found that GHGs could be considered within the Clean Air Act's definition of a pollutant.[18] In December 2009, U.S. EPA issued an endangerment finding for GHGs under the Clean Air Act, setting the stage for future regulation. In September 2009, the National Highway Traffic Safety Administration and U.S. EPA announced a joint rule that would tie fuel economy to GHG emission reduction requirements. By 2016, this could equate to an overall light-duty vehicle fleet average fuel economy of 35.5 miles per gallon.

In June 2013, President Obama announced a Climate Action Plan that calls for a number of initiatives, including funding $8 billion in advanced fossil energy efficiency projects, calls for federal agencies to develop new emission standards for power plants, investments in renewable energy sources, calling for adaptation programs, and leading international efforts to address climate change. In September 2013, U.S. EPA announced its first steps to implement a portion of the Obama Climate Action Plan by proposing carbon pollution standards for new power plants.

Vehicle Standards

Other regulations have been adopted to address vehicle standards including the U.S. EPA and National Highway Traffic Safety Administration (NHTSA) joint rulemaking for vehicle standards.

- On March 30, 2009, the NHTSA issued a final rule for model year 2011.[19]
- On May 7, 2010, the U.S. EPA and the NHTSA issued a final rule regulating fuel efficiency and GHG emissions pollution from motor vehicles for cars and light-duty trucks for model years 2012–2016.[20]

---

[18] *Massachusetts v. Environmental Protection Agency et al [127 S. Ct. 1438 (2007]).*

[19] *NHSTA. 2009. Average Fuel Economy Standards Passenger Cars and Light Trucks Model Year 2011, Final Rule. 75 Fed. Reg. 25324.*

- On August 9, 2011, U.S. EPA and NHTSA issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal GHG emissions and fuel economy standards for model year 2017-2025 light-duty vehicles.[21]

- NHSTA intends to set standards for model years 2022-2025 in a future rulemaking.[22]

- In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the U.S. EPA and the NHTSA announced fuel economy and GHG emissions standards for medium- and heavy-duty trucks that applies to vehicles from model year 2014–2018.[23]

Energy Independence and Security Act

Among other key measures, the Energy Independence and Security Act (EISA) would do the following, which would aid in the reduction of national GHG emissions, both mobile and non-mobile:

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) Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

3) While superseded by NHTSA and U.S. EPA actions described above, EISA also set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

---

[20] *U.S. EPA. 2010. Light Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, Final Rule. 75 Fed. Reg. 25324.*

[21] *Available: http://www.gpo.gov/fdsys/pkg/FR-2011-08-09/pdf/2011-19905.pdf.*

[22] *NHSTA. 2012. 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards. 77 Fed. Reg. 62624.*

[23] *U.S. EPA Office of Transportation and Air Quality. 2011. EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium-and Heavy-Duty Vehicles. Available: http://www.epa.gov/otaq/climate/documents/420f11031.pdf. Accessed June 14, 2016.*

State

Assembly Bill 1493

California has adopted a series of laws and programs to reduce emissions of GHGs into the atmosphere. Assembly Bill (AB) 1493 was enacted in September 2003 and requires regulations to achieve "the maximum feasible reduction of greenhouse gases" emitted by vehicles used for personal transportation.

Executive Order S-3-05

On June 1, 2005, Governor Schwarzenegger issued Executive Order S-3-05, which set the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels. The California Environmental Protection Agency formed a Climate Action Team that recommended strategies that can be implemented by State agencies to meet GHG emissions targets. The Team reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the Executive Order.[24] Furthermore, the report provided to Governor Schwarzenegger in 2006, referenced above, indicated that smart land use and increased transit availability should be a priority in the State of California.[25] According to the California Climate Action Team, smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development (TOD), and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land-use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order setting a statewide GHG reduction target of 40 percent below 1990 levels by 2030. This action aligns the state's GHG targets with those set in October 2014 by the European Union and is intended to help the state meets its target of reducing GHG emissions 80 percent below 1990 levels by 2050. The measure calls on state agencies to implement measures accordingly and directs CARB to update the Climate Change Scoping Plan.

A recent study shows that the state's regulatory framework will allow the state to reduce its GHG emissions level to 40 percent below 1990 levels by 2030 (consistent with Executive Order B-30-15), and to 60 percent below 1990 levels by 2050. Even though this study did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, it demonstrated that various combinations of

---

[24] *California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.*

[25] *California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, p. 57.*

policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the study could allow the state to meet the 2030 and 2050 targets.[26]

Assembly Bill 32

In September 2006, AB 32 was signed into law by Governor Schwarzenegger, focusing on achieving GHG emissions equivalent to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. It mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved.

AB 32 charges CARB with the responsibility to monitor and regulate sources of GHG emissions. On June 1, 2007, CARB adopted three early action measures: setting a low carbon fuel standard, reducing refrigerant loss from motor vehicle air conditioning maintenance, and increasing methane capture from landfills.[27] On October 25, 2007, CARB approved measures improving truck efficiency (i.e., reducing aerodynamic drag), electrifying port equipment, reducing PFCs from the semiconductor industry, reducing propellants in consumer products, promoting proper tire inflation in vehicles, and reducing sulfur hexaflouride emissions from the non-electricity sector. CARB also developed a mandatory reporting program on January 1, 2008 for large stationary combustion sources that emit more than 25,000 metric tons of CO_2 per year and make up 94 percent of the point source CO_2 emissions in California.

CARB developed an AB 32 Scoping Plan that contains strategies to achieve the 2020 emissions cap. This Scoping Plan, which was developed by CARB in coordination with the Climate Action Team, was first published in October 2008 (the "2008 Scoping Plan"). The 2008 Scoping Plan proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce the state's dependence on oil, diversify the state's energy sources, save energy, create new jobs, and enhance public health. It accommodated the State's projected population growth. Moreover, it expressly encouraged called for coordinated planning of growth, including the location of dense residential projects near transportation infrastructure, including public transit.

An important component of the plan is a cap-and-trade program covering 85 percent of the state's emissions. Additional key recommendations of the 2008 Scoping Plan include strategies to enhance and expand proven cost-saving energy efficiency programs; implementation of California's clean cars standards and increasing the amount of clean and renewable energy used to power the state. Furthermore, the 2008 Scoping Plan proposes full deployment of the California Solar Initiative, high-speed rail, water-related energy efficiency measures, and a range of regulations to reduce emissions from trucks and from

---

[26] *Greenblatt, Jeffrey, Energy Policy, "Modeling California Impacts on Greenhouse Gas Emissions" (Vol. 78, pp. 158-172).*

[27] *California Air Resources Board, Proposed Early Action Measures to Mitigate Climate Change in California, April 20, 2007.*

ships docked in California ports. As required by AB 32, CARB must update its Scoping Plan every five years to ensure that California remains on the path toward a low carbon future.

In order to assess the scope of reductions needed to return to 1990 emissions levels, CARB first estimated the 2020 business-as-usual (BAU) GHG emissions in the 2008 Scoping Plan. These are the GHG emissions that would be expected to result if there were no GHG emissions reduction measures, and as if the state were to proceed on its pre-AB 32 GHG emissions track. After estimating that statewide 2020 BAU GHG emissions would be 596 metric tons, the 2008 Scoping Plan then identified recommended GHG emissions reduction measures that would reduce BAU GHG emissions by approximately 174 metric tons (an approximately 28.4 percent reduction) by 2020.

On August 19, 2011, following legal action in opposition to the Scoping Plan, CARB updated the Scoping Plan through a Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED or 2011 Scoping Plan).[28] CARB updated its 2020 BAU emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions achieved through implementation of regulations recently adopted for motor vehicles, building energy efficiency standards, and renewable energy.[29] Under that scenario, the state would have had to reduce its BAU GHG emissions by approximately 21.7 percent by 2020 (down from 28.4 percent).

On May 22, 2014, CARB approved its first update to the AB 32 Scoping Plan, recalculating 1990 GHG emissions using Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report (AR4) released in 2007. It states that based on the AR4 global warming potentials, the 427 million metric tons of CO_2e ($MMTCO_2e$) 1990 emissions level and 2020 GHG emissions limit would be slightly higher than identified in the Scoping Plan, at 431 $MMTCO_2e$. Based on the revised estimates of expected 2020 emissions identified in the 2011 supplement to the FED and updated 1990 emissions levels identified in the draft first update to the Scoping Plan, achieving the 1990 emission level would require a reduction of 76 $MMTCO_2e$ (down from 507 $MMTCO_2e$) or a reduction by approximately 15.3 percent (down from 28.4 percent) to achieve in 2020 emissions levels in the BAU condition. The CARB's First Update "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by CARB would serve to reduce the Project's post-2020 emissions level to the extent applicable by law by focusing on reductions from several sectors. [30,31]

---

[28] *California Air Resources Board, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED), Attachment D, August 19, 2011.*

[29] *California Air Resources Board, Greenhouse Gas Inventory – 2020 Emissions Forecast, http://www.arb.ca.gov/cc/inventory/data/forecast.htm. Accessed August 1, 2016.*

[30] *CARB, First Update, p. 4, May 2014. See also id. at pp. 32–33 [recent studies show that achieving the 2050 goal will require that the "electricity sector will have to be essentially zero carbon; and that electricity or hydrogen will have to power much of the transportation sector, including almost all passenger vehicles."]*

[31] *CARB, First Update, Table 6: Summary of Recommended Actions by Sector, pp. 94-99, May 2014.*

As shown on Table 2.7-2, these reductions are to come from a variety of sectors, including energy, transportation, high-global warming potential sources, waste, and the state's cap-and-trade emissions program. Nearly all reductions are to come from sources that are controlled at the statewide level by state agencies, including the Air Resources Board, Public Utilities Commission, High Speed Rail Authority, and California Energy Commission. The few actions that are directly or indirectly associated with local government control are in the transportation sector, which is charged with reducing 4.5 percent of baseline 2020 emissions. Of these actions, only one (GHG reductions through coordinated planning) specifically identifies local governments as the responsible agency.

Table 2.7-2
Emission Reductions Needed to Meet AB 32 Objectives in 2020

Sector	Million Metric Tons of CO_2e Reduction	Percent of Statewide CO_2e Inventory	Summary of Recommended Actions
Energy	-25	-4.9%	Reduce state's electric and energy utility emissions, reduce emissions from large industrial facilities, control fugitive emissions from oil and gas production, reduce leaks from industrial facilities
Transportation	-23	-4.5%	Phase 2 heavy-duty truck GHG standards, ZEV action plan for trucks, construct High Speed rail system from SF to LA, coordinated land use planning, Sustainable Freight Strategy
High Global Warming Potential	-5	-1.0%	Reduce use of high-GWP compounds from refrigeration, air conditioning, aerosols
Waste	-2	-0.4%	Eliminate disposal of organic materials at landfills, in-state infrastructure development, address challenges with composting and anaerobic digestion, additional methane control and landfills
Cap and Trade Reductions	-23	-4.5%	Statewide program that reduces emissions from regulated entities through performance-based targets
Total	-78	-15.3%	

Source: California Environmental Protection Agency, "First Update to the Climate Change Scoping Plan." May 2014.

Cap and Trade

The CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining,

and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program's duration.

Under the Cap-and-Trade Program, covered entities that emit more than 25,000 metric tons CO_2e per year must comply with Program requirements. Triggering of the 25,000 metric tons CO_2e per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule or "MRR"). The CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits.

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate.

In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the state's emissions forecasts and the effectiveness of direct regulatory measures.

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California's GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with the electricity usage of most projects that are subject to CEQA are covered by the Cap-and-Trade Program.

While the 2020 cap would remain in effect post-2020,[32] the Cap-and-Trade Program is not currently scheduled to extend beyond 2020 in terms of additional GHG emissions reductions.[33] However, CARB has expressed its intention to extend the Cap-and-Trade Program beyond 2020 in conjunction with setting a mid-term target. The "recommended action" in the First Update for the Cap-and-Trade Program is: "Develop a plan for a post-2020 Cap-and-Trade Program, including cost containment, to provide market certainty and address a mid-term emissions target."[34] The "expected completion date" for this

---

[32] *California Health & Safety Code § 38551(a) ("The statewide greenhouse gas emissions limit shall remain in effect unless otherwise amended or repealed.")*

[33] *See AB 1288 (Atkins, introduced 2015) that would eliminate the December 31, 2020, limit on the Cap-and-Trade Program.*

[34] *CARB, First Update to the Climate Change Scoping Plan: Building on the Framework, at 98 (May 2014).*

recommended action is 2017.[35] It is therefore reasonable to assume that the Cap-and-Trade Program will extend beyond 2020.

Senate Bill 1368

Senate Bill (SB) 1368, requires the California Public Utilities Commission and the California Energy Commission to establish GHG emissions performance standards for the generation of electricity. These standards also apply to power that is generated outside of California and imported into the state.

Senate Bill 97 & CEQA Guidelines

In August 2007, the California State Legislature adopted Senate Bill 97 (SB 97), requiring the Governor's Office of Planning and Research (OPR) to prepare and transmit new CEQA guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the Resources Agency by July 1, 2009. In response to SB 97, the OPR adopted CEQA guidelines that became effective on March 18, 2010. The amendments provide guidance to public agencies on analysis and mitigation of the effects of GHG emissions in CEQA documents, including the following:

- Lead agencies should quantify all relevant GHG emissions and consider the full range of project features that may increase or decrease GHG emissions as compared to the existing setting;
- Consistency with the CARB Scoping Plan is not a sufficient basis to determine that a project's GHG emissions would not be cumulatively considerable;
- A lead agency may appropriately look to thresholds developed by other public agencies, including the CARB's recommended CEQA thresholds;
- To qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project. General compliance with a plan, by itself, is not mitigation;
- The effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis; and
- Given that impacts resulting from GHG emissions are cumulative, significant advantages may result from analyzing such impacts on a programmatic level. If analyzed properly, later projects may tier, incorporate by reference, or otherwise rely on the programmatic analysis.

[35] *Id.*

Senate Bill 375

On September 30, 2008, SB 375 was instituted to help achieve AB 32 goals through regulation of cars and light trucks. SB 375 aligns three policy areas of importance to local government: (1) regional long-range transportation plans and investments; (2) regional allocation of the obligation for cities and counties to zone for housing; and (3) a process to achieve GHG emissions reductions targets for the transportation sector. It establishes a process for CARB to develop GHG emissions reductions targets for each region (as opposed to individual local governments or households). SB 375 also requires Metropolitan Planning Organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

On October 24, 2008, CARB published draft guidance for setting interim GHG emissions significance thresholds. This was the first step toward developing the recommended statewide interim thresholds of significance for GHG emissions that may be adopted by local agencies for their own use. The guidance does not attempt to address every type of project that may be subject to CEQA, but instead focuses on common project types that are responsible for substantial GHG emissions (i.e., industrial, residential, and commercial projects). CARB's preliminary proposal consisted of a quantitative threshold of 7,000 metric tons (MT) of CO_2e per year for operational emissions (excluding transportation), and performance standards for construction and transportation emissions. Further, CARB's proposal sets forth draft thresholds for industrial projects that have high operational stationary GHG emissions, such as manufacturing plants, or uses that utilize combustion engines.[36] There is currently no timetable for finalized thresholds.

On September 23, 2010, CARB adopted regional targets for the reduction of GHG emissions applying to the years 2020 and 2035.[37] For the area under the Southern California Association of Governments' (SCAG) jurisdiction - including the Project area - CARB adopted Regional Targets for reduction of GHG emissions by 8 percent for 2020 and by 13 percent for 2035. On February 15, 2011, the CARB's Executive Officer approved the final targets.[38]

---

[36] *California Air Resources Board. http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf*

[37] *California Air Resources Board. Notice of Decision: Regional Greenhouse Gas Emissions Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. http://www.arb.ca.gov/cc/sb375/notice%20of%20decision.pdf*

[38] *CARB. 2011. Executive Order No. G-11-024: Relating to Adoption of Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.*

Senate Bill 32

In August 2016, Governor Brown signaled his intent to sign into law a measure that extends AB 32 another 10 years to 2030 and increases the State's objectives. SB 32 calls on Statewide reductions in GHG to 40 percent below 1990 levels by 2030. Further regulatory actions by the State are forthcoming that will further challenge communities to reduce GHG emissions in the future.

Title 24 Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings, located at Title 24, Part 6 of the California Code of Regulations and commonly referred to as "Title 24," were 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.

California Green Building Standards

The California Green Building Standards Code, which is Part 11 of the California Code of Regulations (the "CCR"), is commonly referred to as the CALGreen Code. CALGreen was added to Title 24 to represent base standards for reducing water use, recycling construction waste, and reducing polluting materials in new buildings. In contrast, Title 24 focuses on promoting more energy-efficient buildings and considers the building envelope, heating and cooling, water heating, and lighting restrictions. The first edition of the CALGreen Code in 2008 contained only voluntary standards. The 2010 edition included mandatory requirements for state-regulated buildings and structures throughout California, including requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation and more. The CALGreen Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The CALGreen Code also requires building commissioning which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems are functioning at their maximum efficiency. The current 2013 CALGreen Code became effective January 1, 2014 and includes new requirements for additions to existing residential and non-residential development. The upcoming 2016 CALGreen Code will become effective January 1, 2017.

Regional

South Coast Air Quality Management District Recommendations for Significance Thresholds

The South Coast Air Quality Management District (SCAQMD) convened a GHG CEQA Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Members included government agencies implementing CEQA and representatives from stakeholder groups that will provide input to the SCAQMD staff on developing GHG CEQA significance thresholds. On December 5, 2008, the SCAQMD Governing Board adopted interim GHG significance threshold for projects where the SCAQMD is lead agency. This

threshold uses a tiered approach to determine a project's significance, with 10,000 metric tons of CO_2 equivalent ($MTCO_2e$) as a screening numerical threshold for stationary sources.

The SCAQMD has not adopted guidance for CEQA projects under other lead agencies. In September 2010, the Working Group released additional revisions that recommended a screening threshold of 3,500 $MTCO_2e$ for residential projects, 1,400 $MTCO_2e$ for commercial projects, and 3,000 $MTCO_2e$ for mixed-use projects. In September 2010, the Working Group released additional revisions which recommended a project-level efficiency target of 4.8 $MTCO_2e$ per service population as a 2020 target and 3.0 $MTCO_2e$ per service population as a 2035 target. The recommended area wide or plan-level target for 2020 was 6.6 $MTCO_2e$ and the plan-level target for 2035 was 4.1 $MTCO_2e$. The SCAQMD has not established a timeline for formal consideration of these thresholds.[39] In the meantime, the project level thresholds are used as a non-binding guide; GHG emissions would be considered potentially significant in the absence of mitigation measures.

The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG emissions reductions. However, these rules address boilers and process heaters, forestry, and manure management projects, none of which are proposed or required by the Project.

SCAG Regional Transportation Plan/Sustainable Communities Strategy

SCAG's adopted its 2012-2035 Regional Transportation Plan Sustainable Communities Strategy (the "RTP/SCS") on April 4, 2012. The RTP/SCS plans to concentrate future development and provide higher intensity development, including residential development, in proximity to transit hubs in order to reduce vehicle miles traveled (VMT) and thereby reduce GHG emissions from personal vehicles. It is important to note that there is nothing in SB 375 that requires a city's "land use policies and regulations…to be consistent with the regional transportation plan or an alternative planning strategy."[40]

The RTP/SCS also includes an appendix listing examples of measures that could reduce impacts from planning, development and transportation.[41] It notes, however, that the example measures are "not intended to serve as any kind of checklist to be used on a project-specific basis." Since every project and project setting is different, project-specific analysis is needed to identify applicable and feasible mitigation. These mitigation measures are particularly important where streamlining mechanisms under SB 375 are utilized. Example GHG emissions reduction measures include the following:

- **GHG1**: SCAG member cities and the county governments may adopt and implement Climate Actions Plans (CAPS, also known as Plans for the Reduction of Greenhouse Gas

---

[39] *SCAG, Final PEIR for the 2012-2035 RTP/SCS, Appendix G. Accessible at http://rtpscs, scag.ca.gov/Documents/peir/2012fPEIR_AppendixG_ExampleMeasures.pdf*

[40] *California Gov't. Code §65080(b)(2)(E).*

[41] *SCAG, Final PEIR, 2012-2035 RTP/SCS, Appendix G: http://rtpscs.scag.ca.gov/Documents/peir/2012/final/2012fPEIR_AppendixG_ExampleMeasures.pdf.*

Emissions as described in CEQA Guidelines Section 15183.5 Tiering and Streamlining the Analysis of Greenhouse Gas Emissions).

- **GHG2**: Project sponsors may require Best Available Control Technology (BACT) during construction and operation of projects, including:

    a) Solicit bids that include use of energy and fuel-efficient fleets;

    b) Solicit preference construction bids that use BACT, particularly those seeking to deploy zero- and/or near zero emission technologies;

    c) Employ use of alternative fueled vehicles;

    d) Use lighting systems that are energy efficient, such as LED technology;

    e) Use CEQA Guidelines Appendix F, Energy Conservation, to create an energy conservation plan;

    f) Streamline permitting process to infill, redevelopment, and energy-efficient projects;

    g) Use an adopted emissions calculator to estimate construction-related emissions;

    h) Use the minimum feasible amount of GHG-emitting construction materials that is feasible;

    i) Use of cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;

    j) Use of lighter-colored pavement where feasible;

    k) Recycle construction debris to maximum extent feasible; and

    l) Plant shade trees in or near construction projects where feasible.

- **GHG3**: Local jurisdictions can and may establish a coordinated, creative public outreach activities, including publicizing the importance of reducing GHG emissions and steps community members may take to reduce their individual impacts.

- **GHG4**: Pedestrian and Bicycle Promotion: Local jurisdictions may work with local community groups and business associations to organize and publicize walking tours and bicycle events, and to encourage pedestrian and bicycle modes of transportation.

- **GHG5**: Waste Reduction: Local jurisdictions can and may organize workshops on waste reduction activities for the home or business, such as backyard composting, or office

paper recycling, and may schedule recycling drop-off events and neighborhood chipping/mulching days.

- **GHG6**: Water Conservation: Local jurisdictions may organize support and/or sponsor workshops on water conservation activities, such as selecting and planting drought tolerant, native plants in landscaping, and installing advanced irrigation systems.

- **GHG7**: Energy Efficiency: Local jurisdictions may organize workshops on steps to increase energy efficiency in the home or business, such as weatherizing the home or building envelope, installing smart lighting systems, and how to conduct a self-audit for energy use and efficiency.

- **GHG8**: Schools Programs: Local jurisdictions may develop and implement a program to present information to school children about climate change and ways to reduce GHG emissions, and may support school-based programs for GHG reduction, such as school based trip reduction and the importance of recycling.

On April 6, 2016, SCAG adopted its 2016-2040 RTP/SCS update, calling for a continuation of integrated planning for land use and transportation that will help achieve the State's goal of reducing per capita GHG emissions by eight percent by 2020 compared to 2005 levels, by 18 percent by 2035, and 21 percent by 2040. The Plan calls for public transportation improvements that will reduce GHG emissions per household by up to 30 percent, a one percent reduction in GHG from having zero emission vehicles, neighborhood vehicles, and car sharing/ride sourcing make up two percent of the vehicle fleet by 2040. However, until the 2016-2040 RTP/SCS is incorporated into the region's federally-approved AQMP, the 2012-2035 RTP/SCS is the relevant transportation plan for air quality regulatory purposes.

Local

City of Los Angeles

In May 2007, the City adopted its Green LA Plan that that sets a goal to reduce the generation of GHG emissions 35 percent below 1990 levels by 2030. Key strategies include increasing the generation of renewable energy, improving energy conservation and efficiency, and changing land use patterns to reduce dependence on autos.

The City adopted a Green Building Ordinance in April 2008 that calls for reduction of the use of natural resources for new development.[42] Larger projects must be certified at the Leadership in Energy and Environmental Design (LEED) Certified level. LEED certification generally ensures that projects exceed

[42] *City of Los Angeles, Ordinance No. 179820, added to LAMC as Section 16.10 (Green Building Program).*

Title 24 (2013) standards by at least 10 percent.[43] The City's ordinance affects the following types of development:[44]

- New non-residential building or structure of 50,000 gross square feet or more of floor area;
- New mixed-use or residential building of 50,000 gross square feet or more in excess of six stores;
- New mixed-use or residential building of six or fewer stories consisting of at least 50 dwelling units in a building, which has at least 50,000 gross square feet of floor area, and in which at least 80 percent of the building's floor area is dedicated to residential units;
- The alteration or rehabilitation of 50,000 gross square feet or more of floor area in an existing non-residential building for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building;
- The alteration of at least 50 dwelling units in an existing mixed-use or residential building, which has at least 50,000 gross square feet of floor area, for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building.

The City's Green Building Ordinance has several requirements that call for reductions in GHG emissions from reducing in energy use, water use, and solid waste generation from new low-rise residential buildings, including:

Section 99.04.106.2. Storm Water Drainage and Retention During Construction. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site:

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter, or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the Department, or
3. Compliance with the City of Los Angeles' storm water management ordinance(s).

---

[43] *U.S. Green Building Council, "Interpretation 10396" accessed at http://www.usgbc.org/leed-interpreations?keys=10396 on February 26, 2015.*

[44] *Projects that voluntarily commit to LEED certification at the Silver level or higher received expedited processing from the City.*

Section 99.04.204. Energy Reduction. Prescriptive Approach. Equipment and fixtures shall comply with the following where applicable:

1. Installed gas-fired space heating equipment shall have an Annual Fuel Utilization Ratio (AFUE) of .90 or higher.

2. Installed electric heat pumps shall have a Heating Seasonal Performance Factor (HSPF) of 8.0 or higher.

3. Installed cooling equipment shall have a Seasonal Energy Efficiency Ratio (SEER) higher than 13.0 and an Energy Efficiency Ratio (EER) of at least 11.5.

4. Installed tank type water heaters shall have an Energy Factor (EF) higher than .6.

5. Installed tankless water heaters shall have an Energy Factor (EF) higher than .80.

6. Perform duct leakage testing to verify a total leakage rate of less than 6 percent of the total fan flow.

7. Building lighting in the kitchen and bathrooms within the dwelling units shall consist of at least 90 percent ENERGY STAR qualified hard-wired fixtures (luminaires).

8. Installed swimming pool circulating pump motors shall be multi-speed or variable-speed. The pump motor controls shall have the capability of operating the pump at a minimum of three speeds; low speed, medium speed, and high speed. The daily low speed shall not exceed 300 watts. The daily medium speed shall be adjustable.

Section 99.04.210. Appliances. Appliance Rating. Each appliance provided and installed shall meet ENERGY STAR if an ENERGY STAR designation is applicable for that appliance.

Section 99.04.211. Renewable Energy. Future Access for Electrical Solar System. An electrical conduit shall be provided from the electrical service equipment to an accessible location in the attic or other location suitable for future connection to a solar system. The conduit shall be adequately sized by the designer but shall not be less than one inch. The conduit shall be labeled as per the Los Angeles Fire Department requirements. The electrical panel shall be sized to accommodate the installation of a future electrical solar system. Exception: Buildings designed and constructed with a solar photovoltaic system or an alternate system with means of generating electricity at time of final inspection.

Section 99.04.211.4.1. Space for Future Electrical Solar System Installation. A minimum of 250 square feet of contiguous unobstructed roof area shall be provided for the installation of future photovoltaic or other electrical solar panels. The location shall be suitable for installing future solar panels as determined by the designer.

Section 99.04.303.1. Twenty Percent Savings. A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by at least 20 percent shall be provided.

The reduction shall be based on the maximum allowable water use per plumbing fixture and fitting as required by the California Building Standards Code. The 20 percent reduction in potable water use shall be demonstrated by one of the following methods:

1. Each plumbing fixture and fitting shall meet reduced flow rates specified on Table 4.303.2; or

2. A calculation demonstrating a 20 percent reduction in the building "water use" baseline as established on Table 4.303.1 shall be provided. For low-rise residential occupancies, the calculation shall be limited to the following plumbing fixture and fitting types: water closets, urinals, lavatory faucets, kitchen faucets and showerheads.

Section 99.04.303.2. Multiple Showerheads Serving One Shower. When single shower fixtures are served by more than one showerhead, the combined flow rate of all the showerheads shall not exceed the maximum flow rates specified in the 20 percent reduction column contained on Table 4.303.2 or the shower shall be designed to only allow one showerhead to be in operation at a time. Exception: The maximum flow rate for showerheads when using the calculation method specified in Section 99.04.303.1, Item 2, is 2.5 gpm @ 80 psi.

Section 99.04.304.1. Irrigation Controllers. When automatic irrigation system controllers for landscaping are provided and installed at the time of final inspection, the controllers shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change;

2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor that connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input. Buildings on sites with over 2,500 square feet of cumulative irrigated landscaped areas shall have irrigation controllers that meet the criteria in Section 99.04.304.1.

Section 99.04.406. Enhanced Durability and Reduced Maintenance. Joints and Openings. Openings in the building envelope separating conditioned space from unconditioned space needed to accommodate gas, plumbing, electrical lines and other necessary penetrations must be sealed in compliance with the California Energy Code.

Section 99.05.407.3. Water Resistance and Moisture Management. Flashing Details. Provide flashing details on the building plans which comply with accepted industry standards or manufacturer's instructions around windows and doors, roof valley, and chimneys to roof intersections.

Section 99.04.407.4. Material Protection. Protect building materials delivered to the construction site from rain and other sources of moisture.

Section 99.4.408. Construction Waste Reduction, Disposal And Recycling. Construction Waste Reduction of at Least 50 Percent. Pursuant to Section 66.32 et seq. of the LAMC.

Section 99.04.504.1. Covering of Duct Openings and Protection of Mechanical Equipment During Construction. At the time of rough installation or during storage of the construction site and until final startup of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the Department to reduce the amount of dust or debris which may collect in the system.

Section 99.04.505.2. Interior Moisture Control. Concrete Slab Foundations. Concrete slab foundations required to have a vapor retarder by Los Angeles Building Code, Chapter 19, shall also comply with this section.

Section 99.04.505.2.1. Interior Moisture Control. Capillary Break. A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch (101.6 mm) thick base of ½ inch (12.7 mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used.
2. Other equivalent methods approved by the Department, or
3. A slab design specified by a licensed design professional.

Section 99.04.505.3. Interior Moisture Control. Moisture Content of Building Materials. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed until it is inspected and found to be satisfactory by the building inspector. Insulation materials which are visibly wet or have high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation materials shall follow the manufacturers' drying recommendations prior to enclosure.

Existing Emissions

The Project Site is currently vacant. As such, this analysis assumes there are no emissions of GHG from the existing conditions.

Methodology

The methodology utilized for the following analysis is based on a Technical Advisory released by the OPR on June 19, 2008 titled *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*. Both one-time emissions and indirect emissions are expected to occur each year after build-out of the Project. One-time emissions from construction and vegetation removal were amortized over a 30-year period because no significance threshold has been adopted for such emissions. The Project emission reductions are results of Project's commitments and regulatory changes which include the implementation of the Renewables Portfolio Standard (RPS) of 33 percent, the Pavley regulation and Advanced Clean Cars program mandating higher fuel efficiency standards for light-duty vehicles, and the Low Carbon Fuel Standard (LCFS).

The California Climate Action Registry (Climate Registry) General Reporting Protocol provides basic procedures and guidelines for calculating and reporting GHG emissions from a number of general and industry-specific activities.[45] The General Reporting Protocol is based on the "Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" developed by the World Business Council for Sustainable Development and the World Resources Institute through "a multi-stakeholder effort to develop a standardized approach to the voluntary reporting of GHG emissions."[46] Although no numerical thresholds of significance have been developed, and no specific protocols are available for land use projects, the General Reporting Protocol provides a basic framework for calculating and reporting GHG emissions from the Project. The information provided in this analysis is consistent with the General Reporting Protocol's reporting requirements.

The General Reporting Protocol recommends the separation of GHG emissions into three categories that reflect different aspects of ownership or control over emissions. These categories consist of the following:

Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).

Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.

Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy (e.g., energy used to convey, treat, and distribute water and wastewater).[47]

The General Reporting Protocol provides a range of basic calculations methods. However, the General Reporting Protocol calculations are typically designed for existing buildings or facilities. These retrospective calculation methods are not directly applicable to planning and development situations where buildings do not yet exist.

CARB recommends consideration of indirect emissions to provide a more complete picture of the GHG footprint of a facility. Annually reported indirect energy usage aids the conservation awareness of a facility and provides information to CARB to be considered for future strategies.[48] For example, CARB

---

45 *California Climate Action Registry, General Reporting Protocol Version 3.1, January 2009, www.sfenvironment.org/sites/default/files/fliers/files/ccar_grp_3-1_january2009_sfe-web.pdf, accessed August 1, 2016.*

46 *Ibid.*

47 *Embodied energy is a scientific term that refers to the quantity of energy required to manufacture and supply to the point of use a product, material, or service.*

48 *California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions*

has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, the Office of Planning and Research has noted that lead agencies "should make a good-faith effort, based on available information, to calculate, model, or estimate… GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[49] Therefore, direct and indirect emissions have been calculated for the Project.

GHG emissions were quantified from construction and operation of the Project using SCAQMD's California Emissions Estimator Model (CalEEMod). Operational emissions include both direct and indirect sources including mobile sources, water use, solid waste, area sources, natural gas, and electricity use emissions. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model is considered by the SCAQMD to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.[50]

Thresholds of Significance

As discussed below, there are no adopted federal, State, or local thresholds of significance for judging a project's impact on greenhouse gases and climate change. As a result, this analysis relies on primary direction from the CEQA Guidelines. Pursuant to the OPR's amendments to the CEQA Guidelines for GHGs were adopted by the Resources Agency on December 30, 2009, the Project would have a significant impact if it would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.[51]

Section 15064.4 of the CEQA Guidelines was adopted to assist lead agencies in determining the significance of the impacts of GHGs. It urges the quantification of GHG emissions where possible and includes language necessary to avoid an implication that a "life-cycle" analysis is required. It also

---

Act of 2006 (AB 32), Planning and Technical Support Division Emission Inventory Branch, October 19, 2007, www.arb.ca.gov/regact/2007/ghg2007/isor.pdf , accessed August 1, 2016.

49 *OPR Technical Advisory, p. 5.*

50 *See www.caleemod.com.*

51 *A recent opinion by the California Supreme Court on November 30, 2015 (Center for Biological Diversity v. California Department of Fish and Wildlife) has suggested that environmental analyses need to support its assumptions and provide evidentiary support to find consistency with a "Business as Usual" approach with the AB 32 Scoping Plan.*

recommends considering other qualitative factors that may be used in the determination of significance (i.e., extent to which the project may increase or reduce GHG emissions; whether the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs). Further, it states that:

> 1. A lead agency should consider the following factors, among others, when assessing the significance of greenhouse gas emissions on the environment:
>
>   a. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
>
>   b. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
>
>   c. 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 greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Lead agencies are to establish thresholds in which a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, such as CAPCOA, so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)). The CEQA Guidelines amendments also clarify that the effects of GHG emissions are cumulative. The CEQA Guidelines were amended in response to Senate Bill 97 to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.[52] Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions."[53] Put another way, CEQA Guidelines Section 15064(h)(3) allows

---

[52] *Id.*

[53] *Id. (emphasis added).*

a lead agency to make a finding of non-significance for GHG emissions if a project compiles with the California Cap-and-Trade Program and/or other regulatory schemes to reduce GHG emissions.[54]

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project.[55]

To evaluate a project's potential greenhouse gas emissions under CEQA, a lead agency may adopt a significance criterion of whether the project will be consistent with statewide greenhouse gas emission reduction goals, as set forth in the California Global Warming Solutions Act of 2006 (or "AB 32") and the California Air Resources Board 2008 Climate Change Scoping Plan ("Scoping Plan") that implements A.B. 32. (*Center for Biological Diversity v. Cal. Dept. of Fish and Game* (2015) 62 Cal.4th 204, 220; see also CEQA Guidelines § 15064.4.)

The statewide greenhouse gas reduction goals include cutting greenhouse gas emissions by approximately 30 percent from the BAU emission levels projected for 2020. The Scoping Plan sets forth the BAU projection, which assumes no conservation or regulatory efforts beyond what was in place when the forecast was made. A lead agency may use the BAU projection as the baseline to compare a project's expected greenhouse gas emissions rather than using a baseline of emissions in the existing physical environment. However, the lead agency must provide substantial evidence to show that a project's specific project-level reduction in greenhouse gas emissions as compared to the BAU projection will actually meet the statewide goals of greenhouse gas reductions.

---

[54] *See, for example, San Joaquin Valley Air Pollution Control District, CEQA Determinations of Significance tor Projects Subject to ARB's GHG Cap-and-Trade Regulation, APR—2030 (June 25, 2014), in which the SJVAPCD "determined that GHG emissions increases that are covered under ARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA…" Further, the South Coast Air Quality Management District (SCAQMD) has taken this position in CEQA documents it produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 $MTCO_2e$/yr. significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See: SCAQMD, Final Negative Declaration for: Ultramar Inc. Wilmington Refinery Cogeneration Project, SCH No. 2012041014 (October 2014) (www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2014/ultramar_neg_dec.pdf?sfvrsn=2); SCAQMD, Final Negative Declaration tor Phillips 66 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014) (www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2014/phillips-66-fnd.pdf?sfvrsn=2); Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014) (www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2014/exide-mnd_final.pdf?sfvrsn=2); and Draft Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (April 2014) (www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2015/deir-breitburn-chapters-1-3.pdf?sfvrsn=2).*

[55] *14 CCR § 15064(h)(3).*

There are three ways a lead agency could make that showing. First, a lead agency may evaluate the data behind the Scoping Plan's BAU model to determine how a specific project in a proposed location would contribute to the statewide greenhouse gas reduction goals. Second, a lead agency may assess a project's consistency with AB 32's goals in whole or in part by considering a project's compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities, such as building efficiency and conservation standards. Third, a lead agency may rely on existing numerical thresholds of significance for greenhouse gas emissions reductions.

Thus, in the absence of any adopted, quantitative threshold, the Project would not have a significant effect on the environment if it is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions:

- Executive Orders S-3-05 and B-30-15;
- AB 32 Scoping Plan;
- SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy;
- City of Los Angeles Mobility 2035 Plan;
- City of Los Angeles ClimateLA Implementation Plan; and
- City of Los Angeles Green Building Ordinance.

Section VII(b) provides an extensive discussion of the Project's consistency with these State, regional, and local climate action-related policies. This section focuses on disclosing potential GHG emissions.

Project Impacts

Construction

Construction of the Project would generate GHG emissions through the combustion of fossil fuels by heavy-duty construction equipment and through vehicle trips generated by construction workers and vendors traveling to and from the Project Site. These emissions would vary day to day over the 18-month duration of construction activities. As illustrated on Table 2.7-3, construction emissions of CO_2 would peak in 2018, when up to 47,679 pounds of CO_2e per day are anticipated. These emissions are further incorporated in the assessment of long-term operational impacts by amortizing them over a 30-year period, pursuant to guidance from the State and SCAQMD.

Table 2.7-3
Estimated Construction Emissions

Construction Year	CO_2	CH_4	N_2O	CO_2e
2017	28,554	7	0	28,720
2018	47,382	12	0	47,679
2019	27,911	7	0	28,075
Source: DKA Planning 2016, based on CalEEMod 2016.3.1.				

Operation

GHG emissions were calculated for long-term operations. Both one-time emissions and indirect emissions are expected to occur each year after build-out of the Project. One-time emissions from construction and vegetation removal were amortized over a 30-year period because no significance threshold has been adopted for such emissions. The Project emission reductions are results of Project's commitments and regulatory changes, which include the implementation of the Renewables Portfolio Standard (RPS) of 33 percent, the Pavley regulation and Advanced Clean Cars program mandating higher fuel efficiency standards for light-duty vehicles, and the Low Carbon Fuel Standard (LCFS).

This analysis compares the Project's GHG emissions to the emissions that would be generated by the Project in the absence of any GHG reduction measures (i.e., the No Action Taken ("NAT") Scenario. This approach is consistent with the concepts used in the CARB's *Climate Change Scoping Plan* for the implementation of AB 32. This methodology is used to analyze consistency with applicable GHG reduction plans and policies and demonstrate the efficacy of the measures contained therein, but it is not a threshold of significance.

The analysis in this section includes potential emissions under NAT scenarios and from the Project at build-out based on actions and mandates expected to be in force in 2020. Early-action measures identified in the *Climate Change Scoping Plan* that have not been approved were not credited in this analysis. By not speculating on potential regulatory conditions, the analysis takes a conservative approach that likely overestimates the Project's GHG emissions at build-out.

The NAT scenario is used to establish a comparison with Project-generated GHG emissions. The NAT scenario does not consider site-specific conditions, Project design features, or prescribed mitigation measures. As an example, a NAT scenario would apply a base ITE trip-generation rate for the Project and would not consider site-specific benefits resulting from the proposed mix of uses or close proximity to public transportation. The analysis below establishes NAT as complying with the minimum performance level required under Title 24. The NAT scenario also considers State mandates that were already in place when CARB prepared the *Supplemental FED* (e.g., Pavley I Standards, full implementation of California's Statewide Renewables Portfolio Standard beyond current levels of renewable energy, and the California Low Carbon Fuel Standard).

Emissions calculations for the Project include credits or reductions for the regulatory compliance measures and Project design features set forth throughout this analysis, such as reductions in energy or

water demand. In addition, as mobile source GHG emissions are directly dependent on the number of vehicle trips, a decrease in the number of Project generated trips as a result of project features will provide a proportional reduction in mobile source GHG emissions. This scenario conservatively did not include actions and mandates that are not already in place but are expected to be in force in 2020 (e.g., Pavley II), which could further reduce GHG emissions from use of light-duty vehicles by 2.5 percent.

As shown in Table 2.7-4, the emissions for the Project and its associated CARB 2020 NAT scenario are estimated to be 2,597 and 3,851 $MTCO_2e$ per year, respectively, which shows the Project will reduce emissions by 33 percent from the CARB 2020 NAT scenario. Based on these results, the Project is consistent with the reduction target as a numeric threshold (15.3 percent) set forth in the 2014 Revised AB 32 Scoping Plan.

Table 2.7-4
Estimated Annual CO_2e Greenhouse Gas Emissions (Metric Tons Per Year)

Scenario and Source	NAT Scenario*	As Proposed Scenario	Reduction from NAT Scenario	Change from NAT Scenario
Area Sources	15	15	-	0%
Energy Sources	1,525	884	-640	-42%
Mobile Sources	2,060	1,446	-614	-30%
Waste Sources	37	37	-	0%
Water Sources	131	131	-	0%
Construction	84	84	-	0%
Total Emissions	3,851	2,597	-1,254	-33%
Net Emissions	-	2,597	N/A	N/A

Daily construction emissions amortized over 30-year period pursuant to SCAQMD guidance. Annual construction emissions derived by taking total emissions over duration of activities and dividing by construction period.

** NAT scenario does not assume 30% reduction in in mobile source emissions from Pavley emission standards (19.8%), low carbon fuel standards (7.2%), vehicle efficiency measures 2.8%); does not assume 42% reduction in energy production emissions from the State's renewables portfolio standard (33%), natural gas extraction efficiency measures (1.6%), and natural gas transmission and distribution efficiency measures (7.4%).*

Source: DKA Planning, 2016.

The analysis in this report uses the 2014 Revised AB 32 Scoping Plan's statewide goals as one approach to evaluate the proposed project's impact (i.e., 15.3 percent reduction from NAT). The report's methodology is to compare the Project's emissions as proposed to the Project's emissions if the Project were built using a NAT approach in terms of design, methodology, and technology. This means the Project's emissions were calculated as if it was constructed with project design features to reduce GHG and with several regulatory measures adopted in furtherance of AB 32.

While the AB 32 Scoping Plan's cumulative statewide objectives were not intended to serve as the basis for project-level assessments, this analysis finds that its NAT comparison based on the Scoping Plan is

appropriate because the Project would contribute to statewide GHG reduction goals. Specifically, the Project's location in an existing urban setting provides opportunities to reduce transportation-related emissions by eliminating 15 percent of vehicle trips to and from the Project Site that would be captured by public transit and pedestrian travel instead.

As noted earlier, another method of analyzing the efficacy of, and thereby demonstrating the Project's consistency with, the applicable GHG reduction plans and policies is to compare the Project's emissions to the SCAQMD draft screening threshold of 3,500 $MTCO_2e$ for residential projects. In this case, the Project would emit 2,597 $MTCO_2e$ and would thus be consistent with those thresholds discussed in September 2010.

The Project's profile as an urban infill project with proximity to substantial public transit would produce reductions over land uses that are located in a more typical community that has not coordinated its land use and transportation planning. The projected reductions in vehicle trips and VMT would range up to 15 percent from the substantial mode share from public transit. These would result in reductions in CO_2e emissions that exceed the State's AB 32 Scoping Plan goal of a 4.5 percent reduction from the overall transportation sector by 2020. As such, this analysis concludes that the Project would meet and exceed its contribution to statewide climate change obligations that are under the control of local governments in their decisionmaking.

It should be noted that each source category of GHG emissions from the Project is subject to a number of regulations that directly or indirectly reduce climate change-related emissions:

> *Stationary and area sources*. Emissions from small on-site sources are subject to specific emission reduction mandates and/or are included in the State's Cap and Trade program.
>
> *Transportation*. Both construction and operational activities from the Project site would generate transportation-related emissions from combustion of fossil fuels that are covered in the State's Cap and Trade program.
>
> *Energy Use*. Both construction and operational activities from the Project site would generate energy-related emissions that are covered by the State's renewable portfolio mandates, including SB 350, which requires that at least 50 percent of electricity generated and sold to retail customers from renwable energy sources by December 31, 2030.
>
> *Building structures*. Operational efficiences will be built into the project that reduce energy use and waste, as mandated by CALGreen building codes.
>
> *Water and wastewater use*. The Project would be subject to drought-related water conservation emergency orders and related State Water Quality Control Board restrictions.
>
> *Major appliances*. The Project would include major appliances that are regulated by California Energy Commission requirements for energy efficiency.

Solid waste management. The Project would be subject to solid waste diversion policies administered by CalRecycle that reduce GHG emissions.

In addition to the GHG emission reductions described above, it is important to note that the CO_2 estimates from mobile sources (particularly CO_2, CH_4, and N_2O emissions) are likely much greater than the emissions that would actually occur. The methodology used assumes that all emissions sources are new sources and that emissions from these sources are 100 percent additive to existing conditions. This is a standard approach taken for air quality analyses. In many cases, such an assumption is appropriate because it is impossible to determine whether emissions sources associated with a project move from outside the air basin and are in effect new emissions sources, or whether they are sources that were already in the air basin and just shifted to a new location. Because the effects of GHGs are global, a project that shifts the location of a GHG-emitting activity (e.g., where people live, where vehicles drive, or where companies conduct business) would result in no net change in global GHG emissions levels.

For example, if a substantial portion of California's population migrated from the South Coast Air Basin to the San Joaquin Valley Air Basin, this would likely decrease GHG emissions in the South Coast Air Basin and increase emissions in the San Joaquin Valley Air Basin, but little change in overall global GHG emissions. However, if a person moves from one location where the land use pattern requires auto use (e.g., commuting, shopping) to a new development that promotes shorter and fewer vehicle trips, more walking, and overall less energy usage, then it could be argued that the new development would result in a potential net reduction in global GHG emissions.

As described throughout this analysis, the Project incorporates numerous regulatory compliance measures that would reduce the Project's GHG emissions profile and would represent improvements vis-à-vis the NAT scenario. As a result of this and the analysis of net emissions, the Project's contribution to global climate change is not "cumulatively considerable" and is considered less than significant.

Response b:

Less Than Significant Impact. As discussed below, the Project would be consistent with a number of relevant plans and policies that govern climate change.

Consistency with Executive Orders S-03-05 and B-30-15

The Project is consistent with the State's Executive Orders S-3-05 and B-30-15, which are orders from the State's Executive Branch for the purpose of reducing GHG emissions. These strategies call for developing more efficient land-use patterns to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. The Project includes elements of smart land use as it is located in an urban infill area served by transportation infrastructure that includes public transit provided by Metro.

Although the Project's emissions level in 2050 cannot be reliably quantified, statewide efforts are underway to facilitate the State's achievement of that goal and it is reasonable to expect the Project's emissions profile to decline as the regulatory initiatives identified by CARB in the First Update are

implemented, and other technological innovations occur. Stated differently, the Project's emissions total at build-out presented in this analysis represents the maximum emissions inventory for the Project as California's emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State's environmental policy objectives. As such, given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project is consistent with the Executive Order's horizon-year goal.

Many of the emission reduction strategies recommended by CARB would serve to reduce the Project's post-2020 emissions level to the extent applicable by law and help lay the foundation "…for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," as called for in CARB's First Update to the AB 32 Scoping Plan.[56,57]

As such, the Project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets and Executive Order S-3-05 and B-30-15.

Consistency with the AB 32 Scoping Plan

The AB 32 Scoping Plan provides the basis for policies that will reduce cumulative GHG emissions within California to 1990 levels by 2020. Table 2.7-5 evaluates the Project's consistency with the AB 32 Scoping Plan to determine whether it will result in adverse cumulative impacts to global climate change. The Project is consistent with the AB 32 Scoping Plan's focus on emission reductions from several key sectors:

Energy Sector: Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the Project's emissions level.[58] Additionally, further additions to California's renewable resource portfolio would favorably influence the Project's emissions level.[59]

Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the Project's emissions level.[60]

Water Sector: The Project's emissions level will be reduced as a result of further desired enhancements to water conservation technologies.[61]

---

56 *CARB, First Update, p. 4, May 2014. See also id. at pp. 32–33 [recent studies show that achieving the 2050 goal will require that the "electricity sector will have to be essentially zero carbon; and that electricity or hydrogen will have to power much of the transportation sector, including almost all passenger vehicles."]*

57 *CARB, First Update, Table 6: Summary of Recommended Actions by Sector, pp. 94-99, May 2014.*

58 *CARB, First Update, pp. 37-39, 85, May 2014.*

59 *CARB, First Update, pp. 40-41, May 2014.*

60 *CARB, First Update, pp. 55-56, May 2014.*

Waste Management Sector: Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the Project's emissions level.[62]

Table 2.7-5
Project Consistency With AB 32 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
California Cap-and-Trade Program. Implement a broad-based California cap-and-trade program to provide a firm limit on emissions.	**Not Applicable.** The statewide program is not relevant to the Project.
California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the system. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	**Not Applicable.** The development of standards is not relevant to the Project.
Energy Efficiency. Maximize energy efficiency building and appliance standards and pursue additional efficiency efforts including new technologies, and new policy and mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	**Consistent.** The Project is designed to meet Cal Green building standards by including several measures designed to reduce energy consumption.
Renewables Portfolio Standard. Achieve 33 percent renewable energy mix statewide.	**Consistent.** The Project will utilize energy from the Los Angeles Department of Water and Power, which has goals to diversify its portfolio of energy sources to increase the use of renewable energy.
Low-Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	**Not Applicable.** The statewide program is not relevant to the Project.
Regional Transportation-Related Greenhouse Gases. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.	**Not Applicable.** The development of regional planning goals is not relevant to the Project. The project's infill location near bus routes (i.e., Metro) makes it consistent with the smart growth objectives of the region's Sustainable Communities Strategy (SCS).
Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	**Not Applicable.** State agencies are responsible for implementing efficiency measures.
Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	**Not Applicable.** State agencies are responsible for implementing regulations and promoting efficiency in goods movement.
Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	**Neutral.** The Project does not include solar roofs and is not part of the proposed Statewide initiative.
Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	**Not Applicable.** State agencies are responsible for implementing efficiency measures.
Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission.	**Not Applicable.** This measure addresses industrial facilities.
High Speed Rail. Support implementation of a high speed rail	**Not Applicable.** This calls for the California

[61] *CARB, First Update, p. 65, May 2014.*

[62] *CARB, First Update, p. 69, May 2014.*

Table 2.7-5
Project Consistency With AB 32 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Strategy	Project Consistency
system.	High Speed Rail Authority and stakeholders to develop a statewide rail transportation system.
Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Consistent.** The Project is designed to meet Cal Green building standards and will include several measures designed to reduce energy consumption.
High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	**Not Applicable.** State agencies are responsible for implementing these measures.
Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials and mandate commercial recycling. Move toward zero waste.	**Consistent.** The Project is expected to have minimal impact on solid waste facilities.
Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	**Not Applicable.** Resource Agency departments are responsible for implementing this measure.
Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	**Consistent.** The Project would use water-efficient landscaping.
Agriculture. In the near-term, encourage investment in manure digester and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	**Not Applicable.** The Project does not include agricultural facilities.
Source: DKA Planning, 2016.	

Based on this evaluation, this analysis finds that the Project would be consistent with all feasible and applicable strategies recommended in the AB 32 Scoping Plan.

Consistency with SCAG's 2012-2035 RTP/SCS

At the regional level, the 2012-2035 RTP and Sustainable Communities Strategy represent the region's Climate Action Plan that defines strategies for reducing GHGs. In order to assess the Project's potential to conflict with the RTP/SCS, this section analyzes the Project's land use profiled for consistency with those in the Sustainable Communities Strategy. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as SCAG's Sustainable Communities Strategy, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals.

The Project is an infill development that is consistent with the 2012 RTP/SCS and its focus on integrated land use planning. The Project specifically implements the Plan's "Complete Communities" growth strategy.

Table 2.7-6 demonstrates the Project's consistency with the Actions and Strategies set forth in the 2012–2035 RTP/SCS. The Project would also be consistent with the applicable goals and principles set forth in the 2012–2035 RTP/SCS and the Compass Growth Vision Report. Therefore, the Project would be consistent with the GHG reduction related actions and strategies contained in the 2012–2035 RTP/SCS.

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
Land Use Actions and Strategies		
Coordinate ongoing visioning efforts to build consensus on growth issues among local governments and stakeholders.	SCAG	**Not Applicable.** The responsible party identified in the 2012–2035 RTP/SCS for implementation of this action/strategy is SCAG. Nonetheless, the City, which is the lead agency for the Project, regularly coordinates with SCAG on regional growth issues.
Provide incentives and technical assistance to local governments to encourage projects and programs that balance the needs of the region.	SCAG	**Not Applicable.** The responsible party identified in the 2012–2035 RTP/SCS for implementation of this action/strategy is SCAG. Nonetheless, the City, which is the lead agency for the Project, regularly coordinates with SCAG on its advancement of projects and programs that meet regional needs. Furthermore, the Project would support this measure by providing needed housing.
Collaborate with local jurisdictions and agencies to acquire a regional fair share housing allocation that reflects existing and future needs.	SCAG Local Jurisdictions HCD	**Consistent.** The Project would accommodate regional growth projected by SCAG in the Los Angeles Planning Area by providing needed housing within an infill site that is adjacent to existing, approved, and planned infrastructure, urban services, transportation corridors, transit facilities, and major employment centers, in furtherance of SB 375 policies.
Expand Compass Blueprint program to support member cities in the development of bicycle, pedestrian, Safe Routes to Schools, Safe Routes to Transit, and ADA Transition plans.	SCAG State	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California. The Project would not impair SCAG or the State's expansion of the Compass Blueprint program. The network of streets surrounding the Project Site provide sidewalks connected to transit stops to promote alternative transportation.
Continue to support, through Compass Blueprint, local jurisdictions and sub-regional COGs adopting neighborhood-oriented development, suburban villages, and revitalized main streets as livability strategies in areas not served by high-quality transit.	SCAG State Local Jurisdictions COGs	**Consistent.** The Project contains multi-family residential uses in close proximity to jobs, destinations, and other neighborhood services.
Encourage the use of range-limited battery electric and other alternative fueled vehicles through policies and programs, such as, but not limited to, neighborhood oriented development, complete streets, and Electric (and other alternative fuel) Vehicle Supply Equipment in public parking lots.	Local Jurisdictions COGs SCAG CTCs	**Not Applicable.** While the use of alternatively-fueled vehicles by the Project's future residents and occupants is market driven and beyond the direct control or influence of the Project Applicant, the Project would not impair the City's or SCAG's ability to encourage the use of alternatively-fueled vehicles through various policies and programs.
Continue to support, through Compass Blueprint, planning for new mobility modes such	SCAG State	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California.

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
as range- limited Neighborhood Electric Vehicles (NEVs) and other alternative fueled vehicles.		However, as noted above, the Project would not impair any jurisdiction's ability to encourage the use of alternative-fueled vehicles.
Collaborate with the region's public health professionals to enhance how SCAG addresses public health issues in its regional planning, programming, and project development activities.	SCAG State Local Jurisdictions	**Consistent.** The Project would not impair the City's, SCAG's, or the State's ability to collaborate with the region's public health professionals regarding the integration of public health issues in regional planning. Additionally, the Project would encourage healthy lifestyles through the provision of bicycle parking spaces on-site. The Project would also incorporate measures to reduce air emissions and greenhouse gases, minimize hazards, and ensure water quality.
Support projects, programs, and policies that support active and healthy community environments that encourage safe walking, bicycling, and physical activity by children, including, but not limited to development of complete streets, school siting policies, joint use agreements, and bicycle and pedestrian safety education.	Local Jurisdictions SCAG	**Consistent.** The Project would encourage healthy lifestyles through the provision of bicycle parking spaces.
Seek partnerships with state, regional, and local agencies to acquire funding sources for innovative planning projects.	Local Jurisdictions SCAG State	**Consistent.** The Project would not impair the City's, SCAG's or the State's ability to seek partnerships in furtherance of funding acquisition. Additionally, the Project would support this measure by providing needed housing that would serve not just Project residents but the community at large.
Update local zoning codes, General Plans, and other regulatory policies to accelerate adoption of land use strategies included in the 2012–2035 RTP/SCS Plan Alternative, or that have been formally adopted by any subregional COG that is consistent with regional goals.	Local Jurisdictions	**Consistent.** While not necessarily applicable on a project-specific basis, the Project would support this action/strategy via consistency with SCAG's 2012–2035 RTP/SCS Plan.
Update local zoning codes, General Plans, and other regulatory policies to promote a more balanced mix of residential, commercial, industrial, recreational and institutional uses located to provide options and to contribute to the resiliency and vitality of neighborhoods and districts.	Local Jurisdictions	**Not Applicable.** This measure calls on local governments to update land use regulations and is not necessarily applicable on a project-specific basis.

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
Support projects, programs, policies and regulations that encourage the development of complete communities, which includes a diversity of housing choices and educational opportunities, jobs for a variety of skills and education, recreation and culture, and a full-range of shopping, entertainment and services all within a relatively short distance.	Local Jurisdictions SCAG	**Consistent.** The Project would add multi-family residential in close proximity to jobs, destinations, and other neighborhood services. Additionally, the Project includes a range of residential housing sizes to serve the needs of a growing and increasingly diverse population within the City of Los Angeles.
Pursue joint development opportunities to encourage the development of housing and mixed-use projects around existing and planned rail stations or along high-frequency bus corridors, in transit-oriented development areas, and in neighborhood-serving commercial areas.	Local Jurisdictions CTCs	**Consistent.** The Project would accommodate regional growth projected by SCAG in the Los Angeles Planning Area within an infill site that is adjacent to existing, approved, and planned infrastructure, urban services, transportation corridors, transit facilities, and major employment centers in furtherance of SB 375 policies.
Working with local jurisdictions, identify resources that can be used for employing strategies to maintain and assist in the development of affordable housing.	SCAG Local Jurisdictions	**Consistent.** The Project includes residential housing units to serve the needs of a growing and increasingly diverse population within the City.
Consider developing healthy community or active design guidelines that promote physical activity and improved health.	Local Jurisdictions	**Consistent.** As discussed above, the Project would encourage healthy lifestyles through the provision of bicycle parking.
Support projects, programs, policies, and regulations to protect resources areas, such as natural habitats and farmland, from future development.	Local Jurisdictions SCAG	**Not Applicable.** The Project neither protects nor threatens resource areas from urbanization.
Create incentives for local jurisdictions and agencies that support land use policies and housing options that achieve the goals of SB 375.	State SCAG	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California. In any event, the Project would be consistent with the overarching goal of SB 375 to reduce vehicle miles traveled and the corresponding emission of GHGs.
Continue partnership with regional agencies to increase availability of state funding	State SCAG	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California. The

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
for integrated land use and transportation projects in the region.		Project would not impair the ability of SCAG and the State to increase the availability of funding for certain types of projects.
Engage in a strategic planning process to determine the critical components and implementation steps for identifying and addressing open space resources, including increasing and preserving park space, specifically in park-poor communities.	Local Jurisdictions SCAG	**Consistent.** The Project would not impair the ability of the City and SCAG to engage in strategic planning processes to address recreation/park shortages in existing communities.
Identify and map regional priority conservation areas for potential inclusion in future plans.	SCAG	**Not Applicable.** The responsible party identified in the 2012–2035 RTP/SCS for implementation of this action/strategy is SCAG. The Project would not impair SCAG's ability to implement this action/strategy.
Engage with various partners, including CTCs and local agencies, to determine priority conservation areas and develop an implementable plan.	SCAG CTCs	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and CTCs. The Project would not impair the ability of SCAG and CTCs to engage with various partners on issues pertaining to conservation areas.
Develop regional mitigation policies or approaches for the 2016 RTP.	SCAG CTCs	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and CTCs. The Project would not impair the ability of SCAG and CTCs to develop regional mitigation policies or approaches for the future 2016 RTP.
Transportation Network Actions and Strategies		
Perform and support studies with the goal of identifying innovative transportation strategies that enhance mobility and air quality, and determine practical steps to pursue such strategies, while engaging local communities in planning efforts.	SCAG CTCs	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and CTCs. The Project would not impair the ability of SCAG and CTCs to perform and support various studies.
Cooperate with stakeholders, particularly county transportation commissions and Caltrans, to identify new funding sources and/or increased funding levels for the preservation and maintenance of the existing transportation network.	SCAG CTCs Local Jurisdictions	**Consistent.** While not necessarily applicable on a project-specific basis, the Project would support this action/strategy by providing an on-site circulation network to improve local access, with appropriate design considerations to ensure travel safety and reliability.
Expand the use of transit modes in our subregions such	SCAG CTCs	**Consistent.** The Project would not impair the ability of SCAG, the CTCs, or the City to expand and extend the use of

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
as BRT, rail, limited-stop service, and point-to-point express services utilizing the HOV and HOT lane networks.	Local Jurisdictions	other transit modes to the Project Site.
Encourage transit providers to increase frequency and span of service in TOD/HQTA and along targeted corridors where cost-effective and where there is latent demand for transit usage.	SCAG CTCs	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and CTCs. The Project would not impair the ability of SCAG and CTCs to encourage transit provided to increase the frequency and span of service.
Encourage regional and local transit providers to develop rail interface services at Metrolink, Amtrak, and high-speed rail stations.	SCAG CTCs Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the Project would not impair the ability of SCAG, CTCs, or the City to encourage rail interface services.
Expand the Toolbox Tuesdays program to include bicycle safety design, pedestrian safety design, ADA design, training on how to use available resources that expand understanding of where collisions are happening, and information on available grant opportunities to improve bicycle and pedestrian safety.	SCAG State	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California. However, the Project would neither support nor adversely impact the expansion of Toolbox Tuesday opportunities.
Prioritize transportation investments to support compact infill development that includes a mix of land uses, housing options, and open/park space, where appropriate, to maximize the benefits for existing communities, especially vulnerable populations, and to minimize any negative impacts.	SCAG CTCs Local Jurisdictions	**Consistent.** The Project represents infill development offering a multi-family residential uses in close proximity to jobs, destinations, and other neighborhood services.
Explore and implement innovative strategies and projects that enhance mobility and air quality, including those that increase the walkability of communities and accessibility to transit via non-auto modes, including walking, bicycling, and neighborhood electric vehicles	SCAG CTCs Local Jurisdictions	**Consistent.** The Project is a bicycle-friendly development located near a High Quality Transit Area as designated by the 2012-2035 RTP/SCS. The Project would also provide bicycle parking spaces in accordance with LAMC requirements for Project residents. The Project would serve to reduce vehicle trips and thus vehicle miles traveled, thereby contributing to a reduction in air pollutant emissions.

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
(NEVs) or other alternative fueled vehicles.		
Collaborate with local jurisdictions to plan and develop residential and employment development around current and planned transit stations and neighborhood commercial centers.	SCAG CTCs Local Jurisdictions	**Consistent.** All of the Project's residential units would be located within walking distance of existing and proposed neighborhood commercial centers, thus reducing the number and length of vehicle trips. The Project Site is also located near a High Quality Transit Area as designated by the 2012-2035 RTP/SCS.
Collaborate with local jurisdictions to provide a network of local community circulators that serve new TOD, HQTAs, and neighborhood commercial centers providing an incentive for residents and employees to make trips on transit.	SCAG CTCs Local Jurisdictions	**Consistent.** As discussed above, all of the Project's residential units would be located within walking distance of existing and proposed neighborhood commercial centers.
Similar to SCAG's partnership with the City of Los Angeles and LACMTA, offer to all County Transportation Commissions a mutually funded, joint first mile/last mile study for each region.	SCAG CTCs	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and CTCs. In any event, the Project would not impair SCAG's or the CTCs' ability to offer the mutually-funded study.
Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling, walking, or neighborhood electric vehicle or other ZEV options.	CTCs Local Jurisdictions	**Consistent.** The Project would not impair the CTCs' or the City's ability to develop first-mile/last-mile strategies. In support of this action/strategy, the Project's residential units would be located within walking distance of existing and proposed neighborhood commercial centers.
Encourage transit fare discounts and local vendor product and service discounts for residents and employees of TOD/HQTAs or for a jurisdiction's local residents in general who have fare media.	Local Jurisdictions	**Consistent.** The Project would not impair the City's ability to encourage transit fare and other discounts.
Work with transit properties and local jurisdictions to identify and remove barriers to maintaining on-time performance.	SCAG CTCs Local Jurisdictions	**Consistent.** The Project would not impair the SCAG's, CTCs', or the City's ability to work with transit properties to remove barriers to on-time performance.
Develop policies and prioritize funding for strategies and projects that enhance mobility and air	State	**Not Applicable.** The responsible party identified in the 2012–2035 RTP/SCS for implementation of this action/strategy is the State of California.

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
quality.		
Work with the California High-Speed Rail Authority and local jurisdictions to plan and develop optimal levels of retail, residential, and employment development that fully take advantage of new travel markets and rail travelers.	State	**Not Applicable.** The responsible party identified in the 2012–2035 RTP/SCS for implementation of this action/strategy is the State of California.
Work with state lenders to provide funding for increased transit service in TOD/HQTA in support of reaching SB 375 goals.	SCAG State	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California.
Continue to work with neighboring Metropolitan Planning Organizations to provide alternative modes for interregional travel, including Amtrak and other passenger rail services and an enhanced bikeway network, such as on river trails.	SCAG State	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California.
Encourage the development of new, short haul, cost-effective transit services such as DASH and demand responsive transit (DRT) in order to both serve and encourage development of compact neighborhood centers.	CTCs Municipal Transit Operators	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are CTCs and Municipal Transit Operators.
Work with the state legislature to seek funding for Complete Streets planning and implementation in support of reaching SB 375 goals.	SCAG State	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California.
Continue to support the California Interregional Blueprint as a plan that links statewide transportation goals and regional transportation and land use goals to produce a unified transportation strategy.	SCAG State	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and the State of California. Nonetheless, the Project would integrate land use and transportation concerns via development of residences in close proximity to the regional roadway network.
Transportation Demand Management (TDM) Actions and Strategies		
Examine major projects and strategies that reduce congestion and emissions and	SCAG	**Not Applicable.** The responsible party identified in the 2012–2035 RTP/SCS for implementation of this action/strategy is SCAG.

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
optimize the productivity and overall performance of the transportation system.		
Develop comprehensive regional active transportation network along with supportive tools and resources that can help jurisdictions plan and prioritize new active transportation projects in their cities.	SCAG CTCs Local Jurisdictions	**Consistent.** The Project would promote the development of a comprehensive regional active transportation network by locating more potential bicycle and pedestrians that would travel using non-motorized transportation modes.
Encourage the implementation of a Complete Streets policy that meets the needs of all users of the streets, roads and highways—including bicyclists, children, persons with disabilities, motorists, neighborhood electric vehicle (NEVs) users, movers of commercial goods, pedestrians, users of public transportation and seniors—for safe and convenient travel in a manner that is suitable to the suburban and urban contexts within the region.	Local Jurisdictions COGs SCAG CTCs	**Not Applicable.** While the City would be the implementing agency for any Complete Streets project, the Project would neither benefit nor adversely affect the implementation of infrastructure that benefits alternative transportation modes.
Support work-based programs that encourage emission reduction strategies and incentivize active transportation commuting or ride-share modes.	SCAG Local Jurisdictions	**Not Applicable.** Future tenants could be encouraged to utilize alternative transportation modes. The inclusion of bicycle parking for future residents will help promote active transportation modes.
Develop infrastructure plans and educational programs to promote active transportation options and other alternative fueled vehicles, such as neighborhood electric vehicles (NEVs), and consider collaboration with local public health departments, walking/biking coalitions, and/or Safe Routes to School initiatives, which may already have components of such educational programs in place.	Local Jurisdictions	**Not Applicable.** While local governments are responsible for implementing this, the Project would neither benefit nor adversely impact the City's development of infrastructure and education programs that promote alternative fueled vehicles or other initiatives that reduce congestion and air pollution.
Encourage the development of telecommuting programs by employers through review and	Local Jurisdictions CTCs	**Not Applicable.** While local governments are responsible for implementing this, the Project would neither benefit nor adversely impact the City's development of telecommuting

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
revision of policies that may discourage alternative work options.		programs by employers that reduce congestion and air pollution.
Emphasize active transportation and alternative fueled vehicle projects as part of complying with the Complete Streets Act (AB 1358).	State SCAG Local Jurisdictions	**Not Applicable.** While local governments are responsible for implementing this, the Project would neither benefit nor adversely impact the City's development of active transportation and alternative fuel vehicle programs that promote alternative fueled vehicles or other initiatives that reduce congestion and air pollution.
Transportation System Management (TSM) Actions and Strategies		
Work with relevant state and local transportation authorities to increase the efficiency of the existing transportation system.	SCAG Local Jurisdictions State	**Consistent.** The Project would not impair the ability of SCAG, the City, or the State to work with transportation authorities to increase the efficiency of the existing transportation system. All improvements would be constructed in accordance with LADOT requirements, as appropriate. Further, the Project would mitigate any significant impacts to local and regional roadways to the extent feasible, as required by CEQA.
Collaborate with local jurisdictions and subregional COGs to develop regional policies regarding TSM.	SCAG COGs Local Jurisdictions	**Consistent.** The Project would not impair the ability of SCAG, the COGs, or the City to collaborate on the development of regional TSM policies. All Project transportation-related improvements would be developed in consultation with LADOT and/or transit service providers, as appropriate, and constructed in compliance with their respective standards.
Contribute to and utilize regional data sources to ensure efficient integration of the transportation system.	SCAG CTCs	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG and CTCs. However, the Project traffic analysis is based on a traffic model developed by LADOT as the primary tool for forecasting traffic volumes within the City of Los Angeles. In addition, SCAG's regional data, including population, housing, and employment forecasts are used where appropriate throughout this analysis.
Provide training opportunities for local jurisdictions on TSM strategies, such as Intelligent Transportation Systems (ITS).	SCAG Local Jurisdictions	**Consistent.** While not necessarily applicable on a project-specific basis, the Project would not impair the ability of SCAG or the City to provide TSM strategy training. However, the Project would support transportation system management strategies via the provision of appropriate roadway improvements that meet LADOT requirements, as appropriate.
Collaborate with local jurisdictions and subregional COGs to continually update the ITS inventory.	SCAG COGS Local Jurisdictions	**Consistent.** The Project would not impair the ability of SCAG, the COGs, or the City to collaborate on updates to the ITS inventory. See the discussion above regarding the Project's support of transportation system management strategies.
Collaborate with CTCs to regularly update the county and regional ITS architecture.	SCAG CTCs Local Jurisdictions	**Consistent.** The Project does not impair the ability of SCAG, the CTCs, or the City to collaborate on updates to the ITS architecture.

Table 2.7-6
Project Consistency With SCAG 2012-2035 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
Collaborate with the state and federal Government and subregional COGs to examine potential innovative TDM/TSM strategies.	SCAG State COGs	**Not Applicable.** The responsible parties identified in the 2012–2035 RTP/SCS for implementation of this action/strategy are SCAG, the State of California, and the COGs.
Clean Vehicle Technology Actions and Strategies		
Develop a Regional PEV Readiness Plan with a focus on charge port infrastructure plans to support and promote the introduction of electric and other alternative fuel vehicles in Southern California.	SCAG	**Not Applicable.** The responsible party identified in the 2012–2035 RTP/SCS for implementation of this action/strategy is SCAG.
Support subregional strategies to develop infrastructure and supportive land uses to accelerate fleet conversion to electric or other near zero-emission technologies. The activities committed in the two subregions are put forward as best practices that others can adopt in the future.	SCAG Local Jurisdictions	**Consistent.** While the acceleration of fleet conversion by the Project's future residents is market driven and beyond the direct control or influence of the Project applicant, the Project would not impair the City's or SCAG's ability to support subregional strategies in furtherance of that conversion.

SCAG = Southern California Association of Governments
HCD = California Department of Housing and Community Development
COG = subregional council of governments
CTCs = county transportation commissions
TOD = transit-oriented development
HQTA = High Quality Transit Area
[a] *"Not Applicable" actions/strategies are those that are not identified for implementation by Local Jurisdictions. The Project's consistency with any actions/strategies identified for implementation by the Local Jurisdictions (i.e., the City of Los Angeles) is assessed above.*
Source: SCAG 2012–2035 RTP/SCS, Chapter 4: Sustainable Communities Strategy, Tables 4.3 through 4.7; April 2012.

Consistency with SCAG's 2016-2040 RTP/SCS

As demonstrated in Table 2.7-7, the Project would also be consistent with the 2016-2040 RTP/SCS and its focus on integrated land use planning through its location on a major arterial with substantial north-south and east-west transit service. In addition, the Project would also be consistent with the GHG reduction related actions and strategies contained in the 2016-2040 RTP/SCS.

Table 2.7-7
Project Consistency with SCAG 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
Land Use Strategies		
Reflect the changing population and demands, including combating gentrification and displacement, by increasing housing supply at a variety of affordability levels.	Local jurisdictions	**Consistent.** The Project would include residences that would add to the supply of housing in metropolitan Los Angeles County.
Focus new growth around transit.	Local Jurisdictions	**Consistent.** The Project is an infill development that would be consistent with the 2016 RTP/SCS focus on growing development near transit facilities.
Plan for growth around livable corridors, including growth on the Livable Corridors network.	SCAG, Local Jurisdictions	**Consistent.** The Project is an infill development that would be consistent with the 2016 RTP/SCS focus on growing along the 2,980 miles of Livable Corridors in the region.
Provide more options for short trips through Neighborhood Mobility Areas and Complete Communities.	SCAG, Local Jurisdictions	**Consistent.** The Project would help further jobs/housing balance objectives that can improve the use of Neighborhood Electric Vehicles for short trips.
Support local sustainability planning, including developing sustainable planning and design policies, sustainable zoning codes, and Climate Action Plans.	Local Jurisdictions	**Not Applicable.** While this strategy calls on local governments to adopt General Plan updates, zoning codes, and Climate Action Plans to further sustainable communities, the Project would not interfere with such policymaking and would be consistent with those policy objectives.
Protect natural and farm lands, including developing conservation strategies.	SCAG Local Jurisdictions	**Consistent.** The Project is an infill development that would help reduce demand for growth in urbanizing areas that threaten greenfields and open spaces.
Transportation Strategies		
Preserve our existing transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy calls on investing in the maintenance of our existing transportation system, the Project would not interfere with such policymaking.
Manage congestion through programs like the Congestion Management Program, Transportation Demand Management, and Transportation Systems Management strategies.	County Transportation Commissions Local Jurisdictions	**Consistent.** The Project is an infill development that will minimize congestion impacts on the region because of its proximity to public transit, Complete Communities, and general density of population and jobs.
Promote safety and security in the transportation system.	SCAG County Transportation Commissions	**Not Applicable.** While this strategy aims to improve the safety of the transportation system and protect users from security threats, the Project would not interfere with such policymaking.

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
	Local Jurisdictions	
Complete our transit, passenger rail, active transportation, highways and arterials, regional express lanes, goods movement, and airport ground transportation systems.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** This strategy calls for transportation planning partners to implement major capital and operational projects that are designed to address regional growth. The Project would not interfere with this larger goal of investing in the transportation system.
Technological Innovation and 21st Century Transportation		
Promote zero-emissions vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the Project would include pre-wiring for electric vehicle charging infrastructure.
Promote neighborhood electric vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the Project would include pre-wiring for electric vehicle charging infrastructure.
Implement shared mobility programs.	SCAG Local Jurisdictions	**Not Applicable.** While this strategy is designed to integrate new technologies for last-mile and alternative transportation programs, the Project would not interfere with these emerging programs.
Source: Southern California Association of Governments; 2016–2040 RTP/SCS, Chapter 5: The Road to Greater Mobility and Sustainable Growth; April 2016.		

Consistency with the City of Los Angeles Mobility 2035 Plan

While the Mobility 2035 Plan focuses on developing a multi-modal transportation system, its key policy initiatives include considering the strong link between land use and transportation and targeting GHG through a more sustainable transportation system. The Project is fully consistent with these general objectives, including the most relevant strategy, Program No. D7, which calls for the development of GHG tracking program that would quantify reductions in GHG from reductions in vehicle miles traveled.

Consistency with the City of Los Angeles ClimateLA Plan

Construction of the Project is consistent with the "ClimateLA" plan's goal of reducing or recycling 70 percent of trash (including construction waste) by 2015. The Project would promote this goal by complying with waste reduction measures mandated by CALGreen and City's Green Building Code, as well as solid waste diversion policies administered by CalRecycle that in turn reduce GHG emissions.

Long-term operations of the Project is also consistent with the "ClimateLA" focus on transportation, energy, water use, land use, waste, open space and greening, and economic factors to achieve emissions reductions.

With regard to transportation, the Project is consistent with the Plan's focus on reducing emissions from private vehicle use. Specifically, the Site's infill location with immediate access to significant public

transit, pedestrian, and bicycle facilities results in a transit-oriented development that would reduce auto dependence.

To reduce emissions from energy usage, the Project would be consistent with "ClimateLA" and its focus on increasing the amount of renewable energy provided by the Los Angeles Department of Water and Power; presenting a comprehensive set of green building policies to guide and support private sector development; and helping citizens to use less energy. Both construction and operational activities from the Project Site would generate energy-related emissions that are reduced by the State's renewable portfolio mandates, including SB 350, which requires that at least 50 percent of electricity generated and sold to retail customers come from renewable energy sources by December 31, 2030.

With regard to water, the Project would be consistent with reducing water from growth through water conservation and recycling; reducing per capita water consumption by 20 percent; and implementing the City's water and wastewater integrated resources plan that will increase conservation, and maximize the capture and reuse of storm water. Specifically, the Project would be subject to drought-related water conservation emergency orders and related State Water Quality Control Board restrictions, as well as CALGreen and City Green Building Code that call for water-conserving fixtures and processes. These elements of the Project would be consistent with goals set forth in the "ClimateLA" plan.

As for waste, the Project would be consistent with the "ClimateLA" goal of reducing or recycling 70 percent of trash by 2015. Operational efficiences will be built into the Project that reduce energy use and waste, as mandated by the City's Green Building Code and CALGreen building code. With regard to ongoing operations, the Project would be subject to solid waste diversion policies administered by CalRecycle that reduce GHG emissions.

With regard to open space and greening, the Project would not interfere with "ClimateLA" and its focus on creating 35 new parks; revitalizing the Los Angeles River to create open space opportunities; planting one million trees throughout the City; identifying opportunities to "daylight" streams; identifying promising locations for stormwater infiltration to recharge groundwater aquifers; and collaborating with schools to create more parks in neighborhoods.

Consistency with the City of Los Angeles Green Building Ordinance

The Los Angeles Green Building Ordinance requires that all projects filed on or after January 1, 2014 comply with the Los Angeles Green Building Code as amended to comply with the 2013 CALGreen Code. Mandatory measures under the Green Building Ordinance that would help reduce GHG emissions include short and long term bicycle parking measures; designated parking measure; and electric vehicle supply wiring. The Project would comply with these mandatory measures, as the Project would provide on-site bicycle parking spaces. Furthermore, the Green Building Ordinance includes measures that would increase energy efficiency on the Project Site, including installing Energy Star rated appliances and installation of water-conserving fixtures. Therefore, the Project is consistent with the Los Angeles Green Building Ordinance.

The Project will comply with the City of Los Angeles' Green Building Ordinance standards that compel LEED certification, reduce emissions beyond a NAT scenario, and are consistent with the AB 32 Scoping Plan's recommendation for communities to adopt building codes that go beyond the State's codes. Under the City's Los Angeles Green Building Code, the Project must incorporate several measures and design elements that reduce the carbon footprint of the development:

The Project would include design, construction, maintenance, and operation at the Leadership in Energy & Environmental Design (LEED) certified level. Projects that are LEED certified generally exceed Title 24 (2013) standards by at least 10 percent.[63] As such, it would incorporate several design elements and programs that will reduce the carbon footprint of the development, including:

1. **GHG Emissions Associated with Planning and Design.** The Project must have measures to reduce storm water pollution, provide designated parking for bicycles and low-emission vehicles, have wiring for electric vehicles, reduce light pollution, and design grading and paving to keep surface water from entering buildings. This would include:

    - Reduced parking based on compliance with the City's bicycle parking ordinance.

    - Access to several public transportation lines. The Site is located in an urban area with significant infrastructure to facilities alternative transportation modes, including proximity to bus routes operating by the Los Angeles County Metropolitan Transportation Authority (i.e., Routes 164, 165, 237, 234, 656, 734), LADOT DASH, and the Metro Orange Line station at Erwin and Sepulveda, about 2,000 feet from the Project Site.

    - Located near residential neighborhoods. The Project Site's proximity to medium- and high-density residential neighborhoods increases the likelihood that more travel to and from the development will be made by non-motorized modes that will reduce potential GHG emissions.

2. **GHG Emissions Associated with Energy Demand.** The Project must meet Title 24 2013 standards and include Energy Star appliances, have pre-wiring for future solar facilities, and off-grid pre-wiring for future solar facilities. This includes:

    - Use of low-emitting paints, adhesives, carpets, coating, and other materials.

    - Equipment and fixtures will comply with the following where applicable:

        - Installed gas-fired space heating equipment will have an Annual Fuel Utilization Ratio of .90 or higher.

---

[63] *U.S. Green Building Council. "Interpretation 10396" accessed at http://www.usgbc.org/leed-interpretations?keys=10396 February 26, 2015.*

- Installed electric heat pumps will have a Heating Seasonal Performance Factor of 8.0 or higher.
- Installed cooling equipment will have a Seasonal Energy Efficiency Ratio higher than 13.0 and an Energy Efficiency Ratio of at least 11.5.
- Installed tank type water heaters will have an Energy Factor higher than .6.
- Installed tankless water heaters will have an Energy Factor higher than .80.
- Perform duct leakage testing to verify a total leakage rate of less than 6 percent of the total fan flow.
- Building lighting in the kitchen and bathrooms within the dwelling units will consist of at least 90 percent ENERGY STAR qualified hard-wired fixtures (luminaires).

- An electrical conduit will be provided from the electrical service equipment to an accessible location in the attic or other location suitable for future connection to a solar system. The conduit shall be adequately sized by the designer but shall not be less than one inch. The conduit shall be labeled as per the Los Angeles Fire Department requirements. The electrical panel shall be sized to accommodate the installation of a future electrical solar system.
- A minimum of 250 square feet of contiguous unobstructed roof area will be provided for the installation of future photovoltaic or other electrical solar panels. The location shall be suitable for installing future solar panels as determined by the designer.
- Appliances will meet ENERGY STAR if an ENERGY STAR designation is applicable for that appliance.

3. **GHG Emissions Associated with Water Use.** The Project would be required to provide a schedule of plumbing fixtures and fixture fittings that reduce potable water use within the development by at least 20 percent. It must also provide irrigation design and controllers that are weather- or soil moisture-based and automatically adjust in response to weather conditions and plants' needs. Wastewater reduction measures must be included that help reduce outdoor potable water use. This would include:

   - A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by at least 20 percent shall be provided. The reduction shall be based on the maximum allowable water use per plumbing fixture and fitting as required by the California Building Standards Code. The 20 percent reduction in potable water use shall be demonstrated by one of the following methods:
     - Each plumbing fixture and fitting shall meet reduced flow rates specified on Table 4.303.2; or

- A calculation demonstrating a 20 percent reduction in the building "water use" baseline will be provided.

- When single shower fixtures are served by more than one showerhead, the combined flow rate of all the showerheads will not exceed specified flow rates.

- When automatic irrigation system controllers for landscaping are provided and installed at the time of final inspection, the controllers shall comply with the following:

    - Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change;

    - Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor that connects or communicates with the controller(s).

4. **GHG Emissions Associated with Solid Waste Generation.** The Project is subject to construction waste reduction of at least 50 percent. In addition, Project Site operations are subject to AB 939 requirements to divert 50 percent of solid waste to landfills through source reduction, recycling, and composting. The Project is required by the California Solid Waste Reuse and Recycling Access Act of 1991 to provide adequate storage areas for collection and storage of recyclable waste materials.

5. **GHG Emissions Associated with Environmental Quality.** The Project must meet strict standards for any fireplaces and woodstoves, covering of duct openings and protection of mechanical equipment during constructions, and meet other requirements for reducing emissions from flooring systems, any CFC and halon use, and other project amenities. This would include:

    - Openings in the building envelope separating conditioned space from unconditioned space needed to accommodate gas, plumbing, electrical lines and other necessary penetrations must be sealed in compliance with the California Energy Code.

    - Provide flashing details on the building plans which comply with accepted industry standards or manufacturer's instructions around windows and doors, roof valley, and chimneys to roof intersections.

Taken together, these strategies encourage providing recreational, cultural, and a range of shopping, entertainment and services all within a relatively short distance; providing employment near current and planned transit stations and neighborhood commercial centers; and supporting alternative fueled and electric vehicles. As a result, the Project would be consistent with applicable State, regional and local GHG reduction strategies. Given that the Project would generate GHG emissions that are less than significant, and given that GHG emission impacts are cumulative in nature, the Project's incremental

contribution to cumulatively significant GHG emissions would be less than cumulatively considerable, and impacts would be less than significant.

Cumulative Impacts

The emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. The consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change. The State has mandated a goal of reducing statewide emissions to 1990 levels by 2020, even though statewide population and commerce is predicted to continue to expand. In order to achieve this goal, CARB is in the process of establishing and implementing regulations to reduce statewide GHG emissions. At a minimum, most project-related emissions, such as energy, mobile, and construction, would be covered by the Cap-and-Trade Program.

Currently, there are no applicable CARB, SCAQMD, or City of Los Angeles significance thresholds or specific reduction targets, and no approved policy or guidance to assist in determining significance at the Project or cumulative levels. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Therefore, consistent with CEQA Guideline Section 15064h(3), the City as Lead Agency has determined that the Project's contribution to cumulative GHG emissions and global climate change would be less than significant if the Project is consistent with the applicable regulatory plans and policies to reduce Greenhouse Gas Emissions: Executive Orders S-3-05 and B-30-15; AB 32, the 2012-2035 RTP/SCS and the City of Los Angeles Green Building Ordinance and Mobility 2035 Plan.

The Project's compliance with regulatory requirements, including State mandates, and implementation of Project design features would contribute to GHG reductions. These reductions represent a reduction from NAT and support State goals for GHG emissions reduction. The methods used to establish this relative reduction are consistent with the approach used in the CARB's *Climate Change Scoping Plan* for the implementation of AB 32.

The Project is consistent with the approach outlined in CARB's *Climate Change Scoping Plan*, particularly its emphasis on the identification of emission reduction opportunities that promote economic growth while achieving greater energy efficiency and accelerating the transition to a low-carbon economy. In addition, as recommended by CARB's *Climate Change Scoping Plan*, the Project would use "green building" features as a framework for achieving cross-cutting emissions reductions as new buildings and infrastructure would be designed to achieve the standards of CALGreen.

As part of SCAG's 2012–2035 SCS/RTP, a reduction in VMT within the region is a key component to achieve the 2020 and 2035 GHG emission reduction targets established by CARB. The Project results in significant VMT reduction in comparison to NAT and would be consistent with the SCS/RTP.

The Project also would comply with the City of Los Angeles Green Building Code, which emphasizes improving energy conservation and energy efficiency, increasing renewable energy generation, and changing transportation and land use patterns to reduce auto dependence. The Project's regulatory compliance and Project design features provided above and throughout this analysis would advance these objectives. Further, the related projects would also be anticipated to comply with many of these same emissions reduction goals and objectives (e.g., City of Los Angeles Green Building Code).

Additionally, the Project has incorporated sustainability design features in accordance with regulatory requirements as provided in the regulatory compliance measures throughout this analysis and Project design features to reduce VMT and to reduce the Project's potential impact with respect to GHG emissions. With implementation of these features, the Project results in a 33 percent reduction in GHG emissions from NAT. The Project's GHG reduction measures make the Project consistent with AB 32. In addition, the Project would emit 2,597 $MTCO_2e$ and would be consistent with the SCAQMD's draft threshold for residential projects of 3,500 $MTCO_2e$ discussed in September 2010.

As discussed above, the Project is consistent with the applicable GHG reduction plans and policies. The NAT comparison demonstrates the efficacy of the measures contained in these policies. Moreover, while the Project is not directly subject to the Cap and Program, that Program will indirectly reduce the Project's GHG emissions by regulating "covered entities" that affect the Project's GHG emissions, including energy, mobile, and construction emissions. More importantly, the Cap-and-Trade Program will backstop the GHG reduction plans and policies applicable to the Project in that the Cap-and-Trade Program will be responsible for relatively more emissions reductions should California's direct regulatory measures reduce GHG emissions less than expected. This will ensure that the GHG reduction targets of AB 32 are met.

Thus, given the Project's consistency with State, regional, and City of Los Angeles GHG emission reduction goals and objectives, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. In the absence of adopted standards and established significance thresholds, and given this consistency, it is concluded that the Project's impacts are cumulatively less than significant.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII.	**Hazards and Hazardous Materials.** Would the project:				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	❑	❑	■	❑
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	❑	❑	■	❑
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	❑	❑	■	❑
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	❑	❑	❑	■
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	❑	❑	■	❑
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the area?	❑	❑	■	❑
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	❑	❑	❑	■
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	❑	❑	❑	■

Response a:

Less Than Significant Impact. A significant impact may occur if a project involves use or disposal of hazardous materials as part of its routine operations and would have the potential to generate toxic or

otherwise hazardous emissions that could adversely affect sensitive receptors. The Project includes development of 160 multi-family residential units. The types of hazardous materials that could be used by the future residents of the Project include paints, cleaning supplies, and small amounts of petroleum products. The Project would not require routine transport, use, or disposal of hazardous materials that would create a significant hazard to the public or the environment. Therefore, impacts related to this issue would be less than significant.

Response b:

Less Than Significant Impact. A significant impact may occur if a project could potentially pose a hazard to nearby sensitive receptors by releasing hazardous materials into the environment through accident or upset conditions. The Project includes development of 160 multi-family residential units. The types of hazardous materials that could be used by the future residents of the Project include paints, cleaning supplies, and small amounts of petroleum products. The Project would not require routine transport, use, or disposal of hazardous materials that would create a significant hazard to the public or the environment. Therefore, impacts related to this issue would be less than significant.

Response c:

Less Than Significant Impact. A significant adverse effect may occur if a Project Site is located within one-quarter mile of an existing or proposed school site and is projected to release toxic emissions which pose a health hazard beyond regulatory thresholds. The closest school to the Project Site is the Columbus Avenue School, which is located approximately one-quarter mile from the Site. In addition, as discuss above, the Project would use, at most, minimal amounts of hazardous materials for routine cleaning and maintenance. Therefore, impacts would be less than significant.

Response d:

No Impact. California Government Code Section 65962.5 requires various state agencies to compile lists of hazardous waste disposal facilities, unauthorized releases from underground storage tanks, contaminated drinking water wells and solid waste facilities where there is known migration of hazardous waste and submit such information to the Secretary for Environmental Protection on at least an annual basis. A significant impact may occur if the Project Site is included on any of the above lists and poses an environmental hazard to surrounding sensitive uses. The Project Site is not included on any list compiled pursuant to Government Code Section 65962.5.[64] Thus, the Project would not create a significant hazard

[64] *Department of Toxic Substances Control, http://www.envirostor.dtsc.ca.gov/public/search.asp?page=1&cmd=search&business_name=&main_street_name=&city=&zip=&county=&status=ACT%2CBKLG%2CCOM&branch=&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&npl=&funding=&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST&reporttype=CORTESE&federal_superfund=&state_response=&voluntary_cleanup=&school_cleanup=&operating=&post_closure=&non_operating=&corrective_action=&tiered_permit=&evaluation=&spec_prog=&national_priority_list=&senate=&congress=&assembly=&critical_pol=&business*

to the public or the environment as a result of being listed on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and no impact would occur.

Responses e and f:

Less Than Significant Impact. A significant impact may occur if a project is located within two miles of a public airport, and subject to a safety hazard or within the vicinity of a private airstrip. The Project Site is located less than two miles from the Van Nuys Airport, but would be developed consistent with all FAA requirements related to the proximity to the airport. Therefore, Project impacts would be less than significant.

Response g:

No Impact. A significant impact may occur if a project were to interfere with roadway operations used in conjunction with an emergency response plan or emergency evacuation plan or would generate traffic congestion that would interfere with the execution of such a plan. No aspects of the Project would inhibit access to hospitals, emergency response centers, school locations, communication facilities, highways and bridges, or airports. Further, the Project would comply with all applicable City policies related to disaster preparedness and emergency response. Thus, no impacts related to this issue would occur.

Response h:

No Impact. A significant impact may occur if a project is located in proximity to wildland areas and poses a potential fire hazard, which could affect persons or structures in the area in the event of a fire. The Project Site and surrounding area are developed and are located in a highly urbanized area of the City that is not subject to wildland fires. Therefore, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and no impact would occur.

_type=&case_type=&searchtype=&hwmp_site_type=&cleanup_type=&ocieerp=False&hwmp=False&permitted=&pc_permitted=&inspections=&complaints=&orderby=city, November 30, 2016.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	**Hydrology And Water Quality**. Would the project:				
a.	Violate any water quality standards or waste discharge requirements?	❑	❑	❑	■
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?	❑	❑	■	❑
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	❑	❑	■	❑
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site?	❑	❑	■	❑
e.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	❑	❑	■	❑
f.	Otherwise substantially degrade water quality?	❑	❑	■	❑
g.	Place housing within a 100-year flood plain hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	❑	❑	❑	■
h.	Place within a 100-year flood plain hazard area structures which would impede or redirect flood flows?	❑	❑	❑	■
i.	Expose people or structures to a significant risk of loss, inquiry or death involving flooding, including flooding as a result of the failure of a levee or dam?	❑	❑	❑	■
j.	Inundation by seiche, tsunami, or mudflow?	❑	❑	❑	■

Response a:

No Impact. The Project includes development of a multi-family residential building and would not have any point-source discharges. Therefore, the Project would have no impact on water quality standards or waste discharge and would not violate any water quality standards or waste discharge requirements. (Other water quality impacts of the Project are discussed below.)

Response b:

Less Than Significant Impact. The Project Site is located in a highly urbanized area of the City – an area that is not a significant source of groundwater recharge due to the amount of development and associated impervious surfaces. During a storm event, stormwater encounters the impervious surfaces and flows into the City's storm drain system. The Project Site is currently undeveloped. Therefore, development of the Project would increase the amount of impervious surface at the Project Site compared to the existing undeveloped conditions. As with the greater Project area, the storm water that encounters the Project Site would flow to the City's storm drain system. In addition, because the Project Site and greater Project area are not a significant source of groundwater recharge, the increase in impervious surface at the Project Site due to the Project would not affect groundwater recharge in the Project area. Therefore, Project impacts related to groundwater recharge would be less than significant.

Response c:

Less Than Significant Impact. During the Project's construction phase, the Project developer would be required to implement SCAQMD Rule 403 – Fugitive Dust to minimize wind and water-borne erosion at the site. Also, the Project developer would be required to prepare and implement a SWPPP, in accordance with the NPDES General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during Project construction. The SWPPP would include BMPs and erosion control measures to prevent pollution in storm water discharge. Typical BMPs that could be used during construction include good-housekeeping practices (e.g., street sweeping, proper waste disposal, vehicle and equipment maintenance, concrete washout area, materials storage, minimization of hazardous materials, proper handling and storage of hazardous materials, etc.) and erosion/sediment control measures (e.g., silt fences, fiber rolls, gravel bags, storm water inlet protection, and soil stabilization measures, etc.). The SWPPP would be subject to review and approval by the City for compliance with the City's Development Best Management Practices Handbook, Part A, Construction Activities. Additionally, all Project construction activities would comply with the City's grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Through compliance with these existing regulations, the Project would not result in any significant impacts related to soil erosion and siltation during the construction phase. Additionally, during the Project's operational phase, most of the Project Site would be developed with impervious surface, and all stormwater flows would be directed to storm drainage features and would not

come into contact with bare soil surfaces. Thus, no significant impacts related to erosion and siltation would occur as a result of Project operation.

Response d:

Less Than Significant Impact. As stated previously, given the existing surface site conditions, during storm events, most of the stormwater flows from the Site to the local streets where the runoff enters the City's storm drain system. The Project developer would be required to implement BMPs and to develop appropriate drainage infrastructure on the Site to meet regulatory water quality requirements and to control drainage from the Site to not exceed existing rates. Thus, the Project would not increase the runoff from the Site entering the City's existing storm drain facilities. As such, the Project would not cause flooding on- or off-site. Therefore, Project impacts related to flooding would be less than significant.

Response e:

Less Than Significant Impact. As stated previously, given the existing surface site conditions, during storm events, most of the stormwater flows from the Site to the local streets where the runoff enters the City's storm drain system. The Project developer would be required to implement BMPs and to develop appropriate drainage infrastructure on the Site to meet regulatory water quality requirements and to control drainage from the Site to not exceed existing rates. Thus, the Project would not increase the runoff from the Site entering the City's existing storm drain facilities. As such, the Project would not exceed the capacity of the existing or planning drainage system. Therefore, Project impacts related to storm drain capacity would be less than significant.

Response f:

Less Than Significant Impact. To address water quality during the Project's construction phase, the Project Applicant would be required to prepare and implement a SWPPP, in accordance with the NPDES General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during Project construction. The SWPPP would include BMPs and erosion control measures to prevent pollution in storm water discharge. Typical BMPs that could be used during construction include good-housekeeping practices (e.g., street sweeping, proper waste disposal, vehicle and equipment maintenance, concrete washout area, materials storage, minimization of hazardous materials, proper handling and storage of hazardous materials, etc.) and erosion/sediment control measures (e.g., silt fences, fiber rolls, gravel bags, storm water inlet protection, and soil stabilization measures, etc.). The SWPPP would be subject to review and approval by the City for compliance with the City's Development Best Management Practices Handbook, Part A, Construction Activities. Additionally, all Project construction activities would comply with the City's grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Therefore, through compliance with NPDES requirements and City grading regulations, Project construction impacts related to water quality would be less than significant.

During the Project's construction phase, in accordance with the City's Low Impact Development (LID) Ordinance, the Project Applicant would be required to incorporate appropriate stormwater pollution control measures into the design plans and submit these plans to the City's Department of Public Works, Bureau of Sanitation, Watershed Protection Division (WPD) for review and approval. Upon satisfaction that all stormwater requirements have been met, WPD staff would stamp the plan approved. Through compliance with the City's LID Ordinance, the Project would meet the City's water quality standards. Therefore, Project impacts related to operational water quality would be less than significant.

Response g-h:

No Impact. The Project Site is not located within an area identified by Federal Emergency Management Agency (FEMA) as potentially subject to 100-year floods.[65] As the Site is located in an area of minimal flooding, the Project would not introduce people or structures to an area of high flood risk. Therefore, the Project would not contain any significant risks of flooding and would not have the potential to impede or redirect floodwater flows. No impact would occur.

Response i:

No Impact. A significant impact may occur if a project were located in an area where flooding, including flooding associated with dam or levee failure, would expose people or structures to a significant risk of loss, injury, or death. The Project Site is not located within a potential inundation area resulting from the failure of a dam or levee. As such, no impact would occur.

Response j:

No Impact. A significant impact may occur if a project is sufficiently close to the ocean or other water body to be potentially at risk of the effects of seismically-induced tidal phenomena (i.e., seiche and tsunami) or if the Site is located adjacent to a hillside area with soil characteristics that would indicate potential susceptibility to mudslides or mudflows. The Project Site is not located in a Tsunami Hazard Area and is not near any major water bodies. Therefore, there is no impact associated with seiches or tsunamis at the Site. In addition, the Site is in an urbanized portion of the City of Los Angeles, and is relatively flat, thereby limiting the potential for inundation by mudflow. As such, no impact would occur.

[65] *NavigateLA, FEMA Flood Hazard layer: http://navigatela.lacity.org/navigatela/, October 28, 2016.*

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	**Land Use And Planning**. Would the project:				
a.	Physically divide an established community?	❑	❑	❑	■
b.	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, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	❑	❑	■	❑
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	❑	❑	❑	■

Response a:

No Impact. A significant impact may occur if a project is sufficiently large enough or otherwise configured in such a way as to create a physical barrier within an established community. The Project Site is located in a highly urbanized area of the City and is surrounded by existing established residential and commercial development and roadway infrastructure. In addition, the Project includes development consistent with the existing land use designation for the Project Site. Thus, the Project would not physically divide an established community and no impacts related to this issue would occur.

Response b:

Less Than Significant Impact. The Project Site is located in the Van Nuys – North Sherman Oaks Community Plan (the "Community Plan") (one of 35 community plans that comprise the Land Use Element of the City's General Plan). The land use designation for the Project Site in the Community Plan is High-Medium Residential, which lists the R4 Zone as a corresponding zone. The Project Site is zoned R4-1-RIO, which is consistent with the land use designation.. The R4 zone permits one dwelling unit for every 400 square feet of lot area. Height District 1 in the R4 zone provides no maximum height limit, and instead restricts the floor-area-ratio (FAR) to 3:1.

The Project Site is approximately 53,382 square feet. Therefore, 133 units would be permitted under the existing zoning. Based on the provision of seven very-low income units (five percent of base density), the Project would be entitled to a 20 percent density bonus, permitting a total of 160 units. The Project also includes a request for one on-menu incentive for a 20 percent increase in FAR, which would permit a FAR of 3.6:1 (total Project floor area is 147,165 square feet). Additionally, the Project would provide 21,780 square feet of open space, which exceeds the LAMC requirements, and 274 parking spaces, which exceeds the required parking under density bonus option #1. As such, the Project would not conflict with any land use plan or policy for the Project Site, and impacts would be less than significant.

Response c:

No Impact. A significant impact may occur if a project is inconsistent with policies in any draft or adopted conservation plan. The Project Site is currently developed and is located in an urbanized area. As discussed under Checklist Question IV(f), there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that applies to the Site. Implementation of the Project would not conflict with any habitat conservation plans. Therefore, no impact would occur.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	**Mineral Resources**. Would the project:				
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	❑	❑	❑	■
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	❑	❑	❑	■

Response a:

No Impact. The Project Site is located in an urbanized part of the City. There are no known mineral resources on the Project Site or in the vicinity. In addition, the Project Site is not identified by the City as being located in an oil field or within an oil drilling area. Thus, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, no impacts related to this issue would occur.

Response b:

No Impact. The Project Site is located in an urbanized part of the City. The Project Site is not identified as a mineral resource recovery site. In addition, the Project Site is not identified by the City as being located in an oil field or within an oil drilling area. Thus, the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, no impacts related to this issue would occur.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII.	**Noise.** Would the project result in:				
a.	Exposure of persons to or generation of noise in levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	❑	■	❑	❑
b.	Exposure of people 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?	❑	❑	■	❑
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	❑	❑	❑	■
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	❑	❑	❑	■

The following analysis is based on the Noise Technical Modeling, included as Appendix B to this IS/MND.

Response a:

Less Than Significant With Mitigation Incorporated.

Characteristics of Sound

Sound is technically described in terms of the loudness (amplitude) and frequency (pitch) of the sound. The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The "A-weighted scale," abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. Table 2.12-1 provides examples of A-weighted noise levels from common sources.

Table 2.12-1
A-Weighted Decibel Scale

Typical A-Weighted Sound Levels	Sound Level (dBA, L_{eq})
Threshold of Pain	140
Jet Takeoff at 100 Meters	125
Jackhammer at 15 Meters	95
Heavy Diesel Truck at 15 Meters	85
Conversation at 1 Meter	60
Soft Whisper at 2 Meters	35
Source: United States Occupational Safety & Health Administration, Noise and Hearing Conversation Technical Manual, 1999.	

Noise Definitions

Community Noise Equivalent Level (CNEL): CNEL is an average sound level during a 24-hour period. CNEL is a noise measurement scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. Human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if the sound were actually 5 dBA higher than if it occurred from 7:00 a.m. to 7:00 p.m. From 10:00 p.m. to 7:00 a.m., humans perceive sound as if it were 10 dBA higher due to the lower background level. Hence, the CNEL is obtained by adding an additional 5 dBA to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and 10 dBA to sound levels in the night from 10:00 p.m. to 7:00 a.m. Because CNEL accounts for human sensitivity to sound, the CNEL 24-hour figure is always a higher number than the actual 24-hour average.

Equivalent Noise Level (L_{eq}). L_{eq} is the average noise level on an energy basis for any specific time period. The L_{eq} for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise that has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

Effects of Noise

The degree to which noise can impact the environment ranges from levels that interfere with speech and sleep to levels that cause adverse health effects. Human response to noise is subjective and can vary from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source.

Audible Noise Changes

Small perceptible changes in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and would likely cause some community reaction. A 10-dBA increase is heard as a doubling in loudness and would cause a community response.

Noise levels decrease as the distance from the noise source to the receiver increases. Noise generated by a stationary noise source, or "point source," will decrease by approximately 6 dBA over hard surfaces (e.g., reflective surfaces such as parking lots or smooth bodies of water) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces such as soft dirt, grass, or scattered bushes and trees) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet from the noise source, 77 dBA at a distance of 200 feet, and so on. Noise generated by a mobile source will decrease by approximately 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of the distance.

Noise is most audible when traveling by direct line-of-sight, an unobstructed visual path between noise source and receptor. Barriers, such as walls or buildings that break the line-of-sight between the source and the receiver can greatly reduce noise levels from the source since sound can only reach the receiver by diffraction. Sound barriers can reduce sound levels by up to 20 dBA. However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced.

Regulatory Setting

Federal

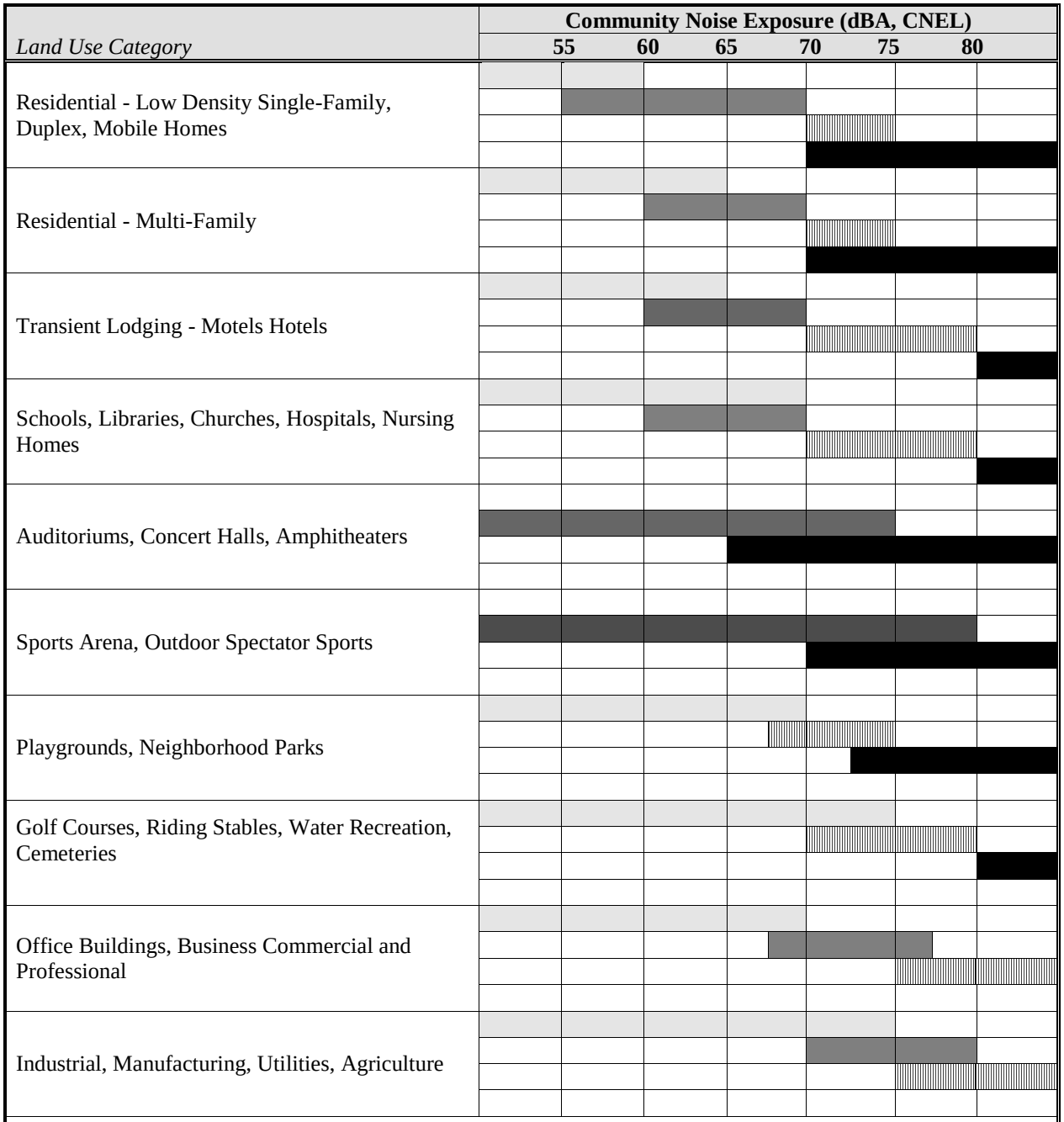
There are no federal noise standards that directly regulate environmental noise related to the construction or operation of the Project, which is a private development in the City. As such, temporary and long-term noise produced by the Project would be largely regulated by and evaluated with respect to State and City of LA standards designated to protect public well-being and health. For the evaluation of construction-related vibration impacts, standards set by the California Department of Transportation (Caltrans) are used given the absence of County and City standards specific to construction activities.

State

State of California 2003 General Plan

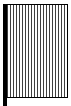
The State's 2003 General Plan Guidelines establish county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. Table 2.12-2 illustrates State compatibility considerations between various land uses and exterior noise levels.

Table 2.12-2
Land-Use Compatibility for Community Noise Environments



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

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



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

Clearly Unacceptable - New construction or development should generally not be undertaken.

Source: California Office of Noise Control, Department of Health Services, Environmental Health Division.

City

Los Angeles Municipal Code

The LAMC contains a number of regulations that would apply to the Project's temporary construction activities and long-term operations. Section 41.40(a) would prohibit Project construction activities from occurring between the hours of 9:00 P.M. and 7:00 A.M., Monday through Friday. Subdivision (c), below, would further prohibit such activities from occurring before 8:00 A.M. or after 6:00 P.M. on any Saturday, or on any Sunday or national holiday.

SEC.41.40. NOISE DUE TO CONSTRUCTION, EXCAVATION WORK—WHEN PROHIBITED.

(a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power drive drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.

(c) No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 A.M. or after 6:00 P.M. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair, or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specific…

Section 112.05 of the LAMC establishes noise limits for powered equipment and hand tools operated within 500 feet of residential zones. Of particular importance to Project construction would be subdivision (a), which institutes a maximum noise limit of 75 dBA for the types of construction vehicles

and equipment that would be necessary for Project demolition and grading, especially. However, the LAMC goes on to note that these limitations would not necessarily apply if proven that the Project's compliance therewith would be technically infeasible despite the use of noise-reducing means or methods.

> *SEC. 112.05. MAXIMUM NOISE LEVEL OF POWERED EQUIPMENT OR POWERED HAND TOOLS*
> *Between the hours of 7:00 A.M. and 10:00 P.M., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:*
>
> *(a) 75 dBA for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;*
>
> *(b) 75 dBA for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;*
>
> *(c) 65 dBA for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors.*
>
> *Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment.*

Section 112.01 of the LAMC would prohibit any amplified noises, especially those from outdoor sources (e.g., outdoor speakers, stereo systems, etc.) from exceeding the ambient noise levels of adjacent properties by more than 5 dBA. Amplified noises would also be prohibited from being audible at any distance greater than 150 feet from the Project's property line.

> *SEC.112.01. RADIOS, TELEVISION SETS, AND SIMILAR DEVICES*
>
> *(a) It shall be unlawful for any person within any zone of the City to use or operate any radio, musical instrument, phonograph, television receiver, or other machine or device for the producing, reproducing or amplification of the human voice, music, or any other sound, in such a manner, as to disturb the peace, quiet, and comfort of neighbor occupants or any reasonable person residing or working in the area.*
>
> *(b) Any noise level caused by such use or operation which is audible to the human ear at a distance in excess of 150 feet from the property line of the noise source, within any*

residential zone of the City or within 500 feet thereof, shall be a violation of the provisions of this section.

(c) Any noise level caused by such use or operation which exceeds the ambient noise level on the premises of any other occupied property, or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, by more than five (5) decibels shall be a violation of the provisions of this section.

Section 112.02(a), below, would prevent Project HVAC systems from elevating ambient noise levels at neighboring residences by more than 5 dBA.

SEC.112.02. AIR CONDITIONING, REFRIGERATION, HEATING, PLUMBING, FILTERING EQUIPMENT

(a) It shall be unlawful for any person, within any zone of the city, to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any noise which would cause the noise level on the premises of any other occupied property … to exceed the ambient noise level by more than five decibels.

L.A. CEQA Thresholds Guide

In 2006, the City released the L.A. CEQA Thresholds Guide to provide further guidance for the determination of significant construction and operational noise impacts. According to the Guide, a Project would, under normal circumstances, have a significant impact if:

- *Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use;*
- *Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or*
- *Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, or at any time on Sunday.*

For a Project's operational impacts:

- *The ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category…*
- *Any 5 dBA or greater noise increase.*

These "normally unacceptable" and "clearly unacceptable" categories refer to those outlined by the State's noise and land-use compatibility chart, shown in Table 2.12-2, above.

Project Impacts

Construction Noise

The Project Site is predominantly surrounded by multi-family residences, institutional land uses, and commercial land uses. The following receptors were chosen specifically for detailed construction noise impact analysis given their potential sensitivities to noise and their proximity to the Project Site:

- Sepulveda Villas, multi-family residences; 6524 Sepulveda Boulevard; 5 feet north of the Project Site.
- Multi-family residences; 6513-6519 Sepulveda Boulevard; 170 feet west of the Project Site.
- Single-family residence; 6517 Columbus Avenue; 155 feet east of the Project Site.
- Berkley Valley Convalescent Hospital; 6600 Sepulveda Boulevard; 485 feet north of the Project Site.

On November 1, 2016, DKA Planning took short-term, 15-minute noise readings at locations surrounding the Project Site to determine these receptors' ambient noise conditions.[66] At all noise monitoring locations, ambient noise levels were primarily a product of vehicular travel along Sepulveda Boulevard. For the residence on Columbus Avenue, the 56.5 dBA L_{eq} ambient noise level was estimated with respect to its distance from Sepulveda Boulevard. This estimation was utilized to more accurately account for this receptor's setback from Sepulveda Boulevard, its primary source of ambient noise. For example, the residence on Columbus Avenue is located over 300 feet from Sepulveda Boulevard; a noise measurement taken along Sepulveda Boulevard and directly applied to this receptor would likely exaggerate its true ambient noise level.

During all Project construction phases, noise-generating activities could occur at the Project Site between the hours of 7:00 AM and 9:00 PM Monday through Friday, in accordance with Section 41.40(a) of the LAMC. On-site activities could include the use of heavy equipment such as excavators and loaders, as well as smaller equipment such as saws, hammers, and pneumatic tools. Off-site, secondary noises could be generated by construction worker vehicles, vendor deliveries, and haul trucks.

Noises from grading activities are typically the foremost concern when evaluating a project's construction noise impacts, as these activities often require the use of heavy-duty, diesel-powered earthmoving equipment. The types of heavy equipment required for these activities may include excavators, bulldozers, front-end loaders, graders, backhoes, and scrapers.

[66] *Noise measurements were taken using a Quest Technologies SoundPro DL Sound Level Meter. The SoundPro meter complies with the American National Standards Institute (ANSI) and International Electrotechnical Commission (IEC) for general environmental noise measurement instrumentation. The meter was equipped with an omni-directional microphone, calibrated before the day's measurements, and set at approximately five feet above the ground.*

For this Project, grading noise impacts were modeled using the noise reference levels of excavators and front-end loaders, as these vehicles would be utilized extensively to grade and excavate for the Project, particularly its underground parking. Excavators can produce average peak noise levels of 81 dBA at a reference distance of 50 feet; front-end loaders, 79 dBA.[67] Compounding their noise impacts is the fact that these vehicles commonly operate in tandem. Excavators remove soils and demolished materials, and front-end loaders transport this matter to on-site stockpiles or haul trucks for off-site export. As a result, excavators and front-end loaders have the greatest potential to cause sustained and significant noise impacts at nearby receptors. The impacts of other construction equipment and vehicles would be neither as loud nor as extensive over the duration of the Project's grading, and other, phases. Therefore, this analysis examines a worst-case-scenario; the noise impacts of all other construction equipment and phases would not exceed the impacts analyzed here. The projected noise impacts from excavators and front-end loaders are shown in Table 2.12-3 and summarized below.

Table 2.12-3
Construction Noise Levels - Unmitigated

Sensitive Receptor	Distance from Site (feet)	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, L_{eq})	New Ambient (dBA, L_{eq})	Increase
6524 Sepulveda Blvd. Residences	5	79.1	75.4	80.7	5.3
6513-6519 Sepulveda Blvd. Residences	170	68.3	66.8	70.6	3.8
6517 Columbus Ave. Residence	155	73.1	56.5	73.2	16.7
Berkley Valley Convalescent Hospital	485	49.9	74.0	74.0	<0.1
Source: DKA Planning, 2016.					

6524 Sepulveda Boulevard Residences

This receptor is projected to experience noise levels of up to 80.7 dBA as a result of the Project's construction activities, an increase of 5.3 dBA over its existing ambient noise conditions. These elevated noise levels would exceed the 5 dBA noise increase threshold considered to be a significant impact by the L.A. CEQA Thresholds Guide for construction activities lasting more than ten days in a three-month period.

6513-6519 Sepulveda Boulevard Residences

This receptor is projected to experience noise levels of up to 70.6 dBA as a result of the Project's construction activities, an increase of 3.8 dBA over its existing ambient noise conditions. These elevated noise levels would not exceed the 5 dBA noise increase threshold considered to be a significant impact by the L.A. CEQA Thresholds Guide for construction activities lasting more than ten days in a three-month period.

[67] *Federal Highway Administration. Construction Noise Handbook, 2006.*

6517 Columbus Avenue Residence

This receptor is projected to experience noise levels of up to 73.2 dBA as a result of the Project's construction activities, an increase of 16.7 dBA over its existing ambient noise conditions. These elevated noise levels would exceed the 5 dBA noise increase threshold considered to be a significant impact by the L.A. CEQA Thresholds Guide for construction activities lasting more than ten days in a three-month period.

Berkley Valley Convalescent Hospital

This receptor is not projected to experience any appreciable increase in noise as a result of the Project's construction activities.

Additionally, the Project's construction noise levels would exceed LAMC Sec.112.05's 75 dBA limit for powered construction equipment operating within 500 feet of residential zones.

These on-site construction noise impacts would be considered potentially significant. However, implementation of Mitigation Measures 12-1 through 12-5 would reduce the Project's contribution to off-site increases in noise levels and would limit construction noise levels to below 75 dBA.

With regard to off-site construction-related noise impacts, the Project would generate a maximum of 50 haul trips per working day to export excavated soils from the Project Site to a regional landfill. While this vehicle activity would marginally increase ambient noise levels along the haul route, it would not be expected to significantly increase ambient noise levels by 5 dBA or greater at any noise sensitive land use. According to the L.A. CEQA Thresholds Guide, a 3 dBA increase in roadside ambient noise levels requires an approximate doubling of traffic levels, assuming that vehicle speeds and fleet mix remain constant. Though the addition of haul vehicles would alter the fleet mix of haul route roadways, their minimal additional to local roads would not nearly double their traffic volumes, let alone augment their traffic to levels capable of generating 5 dBA noise increases. As a result, the Project's off-site construction noise impacts related to haul trucks would be considered less than significant.

Mitigation Measures

12-1: All powered construction equipment shall be equipped with exhaust mufflers or other suitable noise reduction devices capable of achieving a sound attenuation of at least 3 dBA.

12-2: All construction areas for staging and warming-up equipment shall be located as far as feasible from nearby residences.

12-3: Portable noise sheds for smaller, noisy equipment such as air compressors, dewatering pumps, and generators shall be provided as feasible.

12-4: Temporary sound barriers or walls capable of achieving a sound attenuation of at least 12 dBA shall be erected or maintained to obstruct ground-level line of sight noise travel from the Project

Site to the Columbus Avenue Residences. At all other Project boundaries, temporary sound barriers or walls capable of achieving a sound attenuation of at least 5 dBA shall be erected, as feasible.

12-5: Construction and demolition shall be restricted to the hours of 7:00 AM to 6:00 PM Monday through Friday, and 8:00 AM to 6:00 PM Saturday.

Construction Impacts After Mitigation

As shown in Table 2.12-4, implementation of Mitigation Measures 12-1 through 12-5 would minimize Project-related ambient noise level increases at 6524 Sepulveda Boulevard Residences and Columbus Avenue Residences to below the L.A. CEQA Thresholds Guide's 5 dBA threshold of significance for construction activities lasting more than 10 days in a three-month period. These measures would also help reduce the Project's construction noises to below the LAMC's 75 dBA limit for powered equipment operations within 500 feet of residential zones.

Concerning Mitigation Measure 12-4, temporary noise barriers with a transmission loss value of at least 22 dBA (e.g., 1" plywood or aluminum sheets with a thickness of at least 0.0625 inches) would be capable of attenuating on-site construction noises by 12 dBA when fully obstructing line of sight sound travel to Columbus Avenue Residences. These barriers, in conjunction with the mufflers required by Mitigation Measure 12-1, would reduce construction-related noise increases at this receptor to a less than significant degree. However, an existing brick wall currently lines the Project Site's eastern boundary facing the Columbus Avenue Residences. Should this wall remain as a part of the Project, or at least for the duration of construction activities, it would be capable of attenuating construction noises by at least 12 dBA. As a result, the Project would not require a temporary sound barrier to obstruct line of sight noise travel to the Columbus Avenue Residences. Alternatively if this wall were to be demolished, a new wall could be built prior to the commencement of construction activities, provided that it too would be capable of obstructing line of sight to the Columbus Avenue Residences and attenuating noises by at least 12 dBA.

Other barriers with a transmission loss value of at least 15 dBA (e.g., 0.5" plywood) would be capable of attenuating construction noises by 5 dBA, thus reducing the Project's powered equipment noises to below the LAMC's 75 dBA limit. However, obstructing the line of sight travel of these sounds to the 2nd-level units of 6524 Sepulveda Boulevard could be technically infeasible given their height and location immediately abutting the Project Site. If so, the LAMC would not require the Project to comply with this regulation at this particular receptor. In any circumstance, the Project would nonetheless have a less than significant construction noise impact at 6524 Sepulveda Boulevard Residences as a result of Mitigation Measures 12-1 through 12-3.

Given the Project's own height, some construction activities would occur at levels above the temporary sound barriers or walls required by Mitigation Measure 12-4, thus negating their abilities to block line of sight noise travel from the Project to receptors in these instances. However, construction activities at these heights would mainly utilize hand-held tools, pneumatic devices, and other smaller types of equipment

that produce considerably less noise than heavy-duty construction vehicles that operate on the ground. With the incorporation of Mitigation Measures 12-1 through 12-5, impacts would be less than significant.

Table 2.12-4
Construction Noise Levels - Mitigated

Sensitive Receptor	Distance from Site (feet)	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, L_{eq})	New Ambient (dBA, L_{eq})	Increase
6524 Sepulveda Blvd. Residences	5	76.1	75.4	78.8	3.4
6513-6519 Sepulveda Blvd. Residences	170	65.3	66.8	69.1	2.3
6517 Columbus Ave. Residence	155	58.1	56.5	60.4	3.9
Berkley Valley Convalescent Hospital	485	46.9	74.0	74.0	<0.1
Source: DKA Planning, 2016.					

Operational Noise

During Project operations, the development would produce both direct noise impacts on the Site from residential-related activities, as well as indirect noise impacts from vehicles traveling on local roads to access the Site. The direct impacts would include the following:

- Mechanical Equipment: Regulatory compliance with LAMC Sec.112.02 would ultimately ensure that noises from sources such as heating, air conditioning, and ventilation systems not increase ambient noise levels at neighboring occupied properties by more than 5 dBA. Given this regulation, the distance from the Project Site to nearby receptors, ambient noise levels, and the relatively quiet operation of modern HVAC systems, these on-site noise sources would not be capable of causing the ambient noise levels of neighboring properties or uses to increase by 3 dBA CNEL to or within their respective L.A. CEQA Thresholds Guide's "normally unacceptable" or "clearly unacceptable" noise categories, or by 5 dBA or greater overall.

- Auto-Related Activities: Operational noises related to the proposed onsite parking would include intermittent noise events such as door slamming and vehicle engine start-ups. However, these noise events are infrequent and do not substantially increase ambient noise levels, especially considering that the Project is located along a major thoroughfare and in an area with many similar types of multi-family residential land uses and their auto-related noises. Furthermore, the majority of the Project's parking would be underground. Noises from the Project's underground parking level would be inaudible, or at the very least considerably attenuated, at nearby receptors. And as the Project's ground level parking would be internal and covered, noises from this parking area would similarly be either inaudible or greatly reduced.

- Residential Land Uses: There are a variety of recurrent (e.g., consumer electronics, voices) and non-recurrent activities (e.g., social gatherings) that would elevate ambient

noise levels at adjacent noise receptors to differing degrees. The City's noise ordinance provides a means to address these types of nuisances.

These direct sources of on-site noise would generate impacts on a seasonal, irregular, or infrequent bases and would not individually or collectively elevate ambient noise levels substantially at nearby sensitive receptors. The potential noise impact from these on-site operational sources would be less than significant.

The majority of the Project's operational noise impacts would be from off-site mobile sources associated with its estimated 904 net new daily trips.[68] The noise impact of these vehicle trips was modeled using the Federal Highway Administration's (FHWA) Traffic Noise Model 2.5 (TNM 2.5). This noise prediction software uses traffic volumes, vehicle mix, average speeds, roadway geometry, and other inputs to calculate average noise levels in dBA along inputted roadway segments. For this analysis, an "Existing Year (2016) No Project" scenario was compared to an "Existing Year (2016) With Project" scenario. Tables 2.12-5 and 2.12-6 show the Project's projected contributions to ambient noise level increases along modeled roadway segments. As no roadway segment would experience a noise increase of 3 dBA to or within its respective "Normally Unacceptable" or "Cleary Unacceptable" noise category, or a 5 dBA or greater noise increase overall, the Project's off-site operational noise impact would be considered less than significant.

Table 2.12-5
Existing AM Peak Hour Mobile Source Noise Levels

Roadway Segment	Estimated dBA, L_{eq} 1hr			
	No Project (2016)	**With Project (2016)**	**Project Change**	**Significant Impact?**
1. N/B Sepulveda Blvd., S. of Vanowen St.	69.3	69.3	0.0	No
2. S/B Sepulveda Blvd., S. of Vanowen St.	67.6	67.7	0.1	No
3. E/B Victory Blvd., W. of Sepulveda Blvd.	70.1	70.1	0.0	No
4. W/B Victory Blvd., W. of Sepulveda Blvd.	70.0	70.0	0.0	No
Source: DKA Planning, 2016.				

[68] *Overland Traffic Consultants, Inc.; 6500 Sepulveda Boulevard Traffic Impact Analysis; October 2016.*

Table 2.12-6
Existing PM Peak Hour Mobile Source Noise Levels

Roadway Segment	Estimated dBA, L_{eq} 1hr			
	No Project (2016)	With Project (2016)	Project Change	Significant Impact?
1. N/B Sepulveda Blvd., S. of Vanowen St.	70.2	70.2	0.0	No
2. S/B Sepulveda Blvd., S. of Vanowen St.	67.2	67.2	0.0	No
3. E/B Victory Blvd., W. of Sepulveda Blvd.	69.8	69.8	0.0	No
4. W/B Victory Blvd., W. of Sepulveda Blvd.	69.6	69.7	0.1	No
Source: DKA Planning, 2016.				

Response b:

Less Than Significant Impact.

Characteristics of Vibration

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. Unlike noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible. Common sources of vibration include trains, buses, and construction activities.

Vibration Definitions

Peak particle velocity (PPV) can be used to describe vibration impacts to both buildings and humans. PPV represents the maximum instantaneous peak of a vibration signal, and it is usually measured in inches per second.[69]

Effects of Vibration

High levels of vibration may cause physical personal injury or damage to buildings. However, ground-borne vibration levels rarely affect human health. Instead, most people consider ground-borne vibration to be an annoyance that may affect concentration or disturb sleep. In addition, high levels of ground-borne vibration may damage fragile buildings or interfere with equipment that is highly sensitive to ground-borne vibration.

[69] *California Department of Transportation, Transportation and Construction Vibration Guidance Manual, September 2013.*

Perceptible Vibration Changes

Unlike noise, ground-borne vibration is not an environmental issue that most people experience every day. Background vibration velocity levels in residential areas are usually well below the threshold of perception for humans, which is around 0.01 inches per second.[70] Most perceptible indoor vibration is caused by sources within buildings, such as movement of people or slamming of doors. Typical outdoor sources of ground-borne vibration include construction equipment, trains, and traffic on rough roads. Traffic vibration is typically not perceptible on smooth, well-maintained roads.

Applicable Regulations

To counter the effects of ground-borne vibration, the California Department of Transportation (Caltrans) has published guidance relating to structural vibration impacts. According to Caltrans, modern industrial/commercial buildings and new residential structures can be exposed to continuous ground-borne vibration levels of 0.5 inches per second without experiencing structural damage.[71]

Project Impacts

Construction Vibration

As discussed earlier, construction of the Project would require construction equipment such as excavators and loaders. These types of heavy-duty vehicles can produce peak vibration velocities of up to 0.089 inches per second at a distance of 25 feet.[72] Table 2.12-7 shows the Project's projected construction vibration impacts at the nearest off-site structures. Given the distances between the Project Site and neighboring buildings, these receptors would not experience potentially damaging levels of ground-borne vibration from the Project's construction activities. As a result, the Project's construction vibration impacts would be considered less than significant.

---

[70] *Ibid.*

[71] *California Department of Transportation. Transportation and Construction Vibration Guidance Manual, September 2013.*

[72] *Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006.*

Table 2.12-7
Building Damage Vibration Levels at Off-Site Structures

Off-Site Structures	Distance to Project Site (ft.)	Estimated PPV (in/sec)	Structural Significance Threshold (in/sec)	Significant?
6524 Sepulveda Blvd. Residences	5	0.223	0.5	No
6513-6519 Sepulveda Blvd. Residences	170	0.013	0.5	No
6517 Columbus Ave. Residence	155	0.022	0.5	No
Signature Plaza	80	0.028	0.5	No
Source: DKA Planning 2016.				

Operational Vibration

During Project operation, there would be no significant stationary sources of ground-borne vibration, such as heavy equipment or industrial operations. Operational ground-borne vibration in the Project's vicinity would be generated by its related vehicle travel on local roadways. As previously discussed, road vehicles rarely create vibration levels perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps. Project-related traffic would expose nearby land uses and other sensitive receptors to vibrations far below levels associated with human annoyance or land-use disruption. As a result, the Project's long-term vibration impacts would be considered less than significant.

Response c:

Less Than Significant Impact. The majority of the Project's long-term noise impacts would come from traffic traveling to and from the Project. This, the addition of future traffic from any new developments in the Project area, and overall ambient traffic growth would elevate ambient noise levels surrounding local roadways. However, the Project's contribution to permanent off-site ambient noise level increases would be minimal. As shown in Tables 2.12-8 and 2.12-9, future increases in ambient noise levels would be marginal, with or without the addition of Project traffic. Roadside ambient noise levels would not increase by 3 dBA to or within their respective "Normally Unacceptable" or "Clearly Unacceptable" noise categories, or by 5 dBA or greater overall. As a result, the Project's cumulative operational noise impact would be considered less than significant.

Table 2.12-8
Future AM Peak Hour Mobile Source Noise Levels

Roadway Segment	Estimated dBA, L_{eq} 1hr				
	Existing (2016)	No Project (2019)	With Project (2019)	Total Change	Significant Impact?
1. N/B Sepulveda Blvd., S. of Vanowen St.	69.3	69.6	69.7	0.4	No
2. S/B Sepulveda Blvd., S. of Vanowen St.	67.6	68.0	68.0	0.4	No
3. E/B Victory Blvd., W. of Sepulveda Blvd.	70.1	70.4	70.4	0.3	No
4. W/B Victory Blvd., W. of Sepulveda Blvd.	70.0	70.3	70.3	0.3	No
Source: DKA Planning, 2016.					

Table 2.12-9
Future PM Peak Hour Mobile Source Noise Levels

Roadway Segment	Estimated dBA, L_{eq} 1hr				
	Existing (2016)	No Project (2019)	With Project (2019)	Total Change	Significant Impact?
1. N/B Sepulveda Blvd., S. of Vanowen St.	70.2	70.5	70.5	0.3	No
2. S/B Sepulveda Blvd., S. of Vanowen St.	67.2	67.6	67.6	0.4	No
3. E/B Victory Blvd., W. of Sepulveda Blvd.	69.8	70.0	70.0	0.4	No
4. W/B Victory Blvd., W. of Sepulveda Blvd.	70.0	70.3	70.3	0.3	No
Source: DKA Planning, 2016.					

Response d:

Less Than Significant Impact. As discussed above, construction activities would temporarily increase ambient noise levels at nearby receptors, particularly at residences near the Project Site. Moreover, any other future developments that are built concurrently with the Project could further contribute to these temporary increases in ambient noise levels. However, no such developments have been identified within 1,000 feet of the Project Site. Additionally given the relatively high ambient noise levels of the Project area, it is unlikely that construction noises from concurrent developments would be audible at Project receptors, let alone be capable of contributing to cumulatively considerable noise increases. Persistent traffic noise from Sepulveda Boulevard would mask any distant construction sounds in a manner largely

similar to the effects of white noise, and the presence of numerous multi-story structures would further obstruct these sounds' line of sight travel. Given these considerations, the Project's temporary noise impact would be considered less than significant.

Response e:

No Impact. Residential and certain other land uses may not be compatible within the 65 dB CNEL noise contours of airports. Though the Project is located less than two miles from the Van Nuys airport, it is not located within that airport's 65 dB CNEL contour.[73] As a result, the Project would not expose residents or workers at the Project to excessive noise levels from aircraft and no impact would occur.

Response f:

No Impact. The Project Site is not in the vicinity of a private airstrip. As a result, the Project would not expose residents to excessive noise levels from any private airstrip. This would be considered no impact on people residing or working in the Project area.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.	**Population And Housing**. Would the project:				
a.	Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	❑	❑	■	❑
b.	Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?	❑	❑	❑	■
c.	Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	❑	❑	❑	■

Response a:

Less Than Significant Impact. A significant impact may occur if a project would locate new development such as homes, businesses, or infrastructure, with the effect of substantially inducing population growth that would otherwise not have occurred as rapidly or in as great a magnitude. The Project includes development of the Project Site with a 160-unit multi-family residential building, which would include seven very-low-income units, in accordance with a 20 percent Density Bonus allowed

[73] *LAWA Noise Management, California State Airport Noise Standards Quarterly Report (2Q16), July 2016.*

under LAMC Section 12.22(A)(25). The City's 2013-2021 Housing Element identifies the need for approximately 2,542 additional dwelling units in Van Nuys – North Sherman Oaks Community Plan Area. The Community Plan identifies a land use designation of High Medium Residential for the Project Site that corresponds to the Site's zoning of R4. Based on the existing zoning for the Project Site, one unit would be permitted for every 400 square feet of lot area. The Project Site is approximately 53,382 square feet. Therefore, 133 units would be permitted under the existing zoning. Based on the provision of seven very-low income units, the Project would be entitled to a 20 percent density bonus, permitting a total of 160 units. As such, the housing growth (and associated population) would be consistent with projected growth anticipated in the City's General Plan. Thus, the Project would not induce substantial population growth. Therefore, Project impacts related to population and housing would be less than significant.

Response b:

No Impact. A significant impact may occur if a project would result in displacement of a substantial number of existing housing units, necessitating construction of replacement housing elsewhere. The Project would not displace any housing since there is no housing on the Site. Further, the Project would develop residential units. Therefore, no impact would occur.

Response c:

No Impact. A significant impact may occur if a project would result in displacement of existing residents, necessitating the construction of replacement housing elsewhere. The Project would not displace people necessitating the construction of replacement housing elsewhere. There is no housing on the Site. Therefore, no impact would occur.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV.	**Public Services.** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
a.	Fire protection?	❑	❑	■	❑
b.	Police protection?	❑	❑	■	❑
c.	Schools?	❑	❑	■	❑
d.	Parks?	❑	❑	■	❑
e.	Other public facilities?	❑	❑	■	❑

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Response a:

Less Than Significant Impact. The Project includes development of the Site with a 160-unit multi-family residential building, potentially increasing the need for fire protection services at the Project Site. The factors that the Los Angeles Fire Department (LAFD) considers in determining whether fire protection services for a project is adequate include: (1) is within the maximum response distance for the land uses proposed; (2) complies with emergency access requirements; (3) complies with fire-flow requirements; and (4) complies with fire hydrant placement.[74] Pursuant to LAMC Section 57.09.07, the maximum response distance between a high-density residential/commercial neighborhood land use and a LAFD station that houses an engine or truck company is 1.5 miles. If this distance is exceeded, all structures shall be constructed with automatic fire sprinkler systems. As shown in Table 2.14-1, the Project Site is served by Fire Station #39, which is located approximately 1.4 miles driving distance from the Project Site. Since the Project Site is located within the distance identified by LAMC Section 57.09.07, the Project need not be constructed with automatic fire sprinkler systems and any additional fire protection as required by the LAFD Chief, unless other building and safety codes supersede this.

Table 2.14-1
Fire Station Serving the Project Site

No.	Address	Distance from Project Site
39	14415 Sylvan Street	1.4 miles
Source: LAFD, http://www.lafd.org/fire-stations/find-your-station, 2016.		

All ingress/egress associated with the Project would be designed and constructed in conformance to all applicable City Building and Safety Department and LAFD standards and requirements for design and construction. Therefore, the Project would not result in any significant impacts related to emergency access. Final fire-flow demands, fire hydrant placement, and other fire protection equipment would be determined for the Project during LAFD's plan check process. Through compliance with these mandatory requirements, Project impacts related to fire protection services would be less than significant.

Response b:

Less Than Significant Impact. The Project includes development of a 160-unit multi-family residential building at the Project Site, potentially increasing the need for police protection services at the Project

[74] *L.A. CEQA Thresholds Guide, City of Los Angeles, 2006.*

Site. However, in accordance with the City's Standard Condition of Approval, the Project developer would be required to refer to "Design Out Crime Guidelines: Crime Prevention Through Environmental Design," published by the Los Angeles Police Department (LAPD). Contact the Community Relations Division, located at 100 W. 1st Street, #250, Los Angeles, CA 90012; (213) 486-6000. The Project would include standard security measures such as adequate security lighting, controlled residential access, and secure parking facilities. These measures for the Project shall be approved by the LAPD prior to the issuance of building permits. Through compliance with the mandatory requirements of the LAPD, Project impacts related to police protection services would be less than significant.

Response c:

Less Than Significant Impact. The Project includes development of the Site with a 160-unit multi-family residential building. It is possible that because the Project includes residential land uses, the Project could increase the demand for school services in the Project area. However, pursuant to the California Government Code, mandatory payment of the school fees established by the Los Angeles Unified School District (LAUSD) in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law, provide full and complete mitigation for any potential direct and indirect impacts to schools as a result of the Project. Therefore, Project impacts to school facilities would be less than significant.

Response d:

Less Than Significant Impact. The Project includes development of the Site with a 160-unit multi-family residential building, and potentially could increase the demand for parks and recreational services. The Project would be required to provide 17,875 square feet of open space and would provide 21,780 square feet of open space, exceeding the open space requirements for the Project. Additionally, pursuant to the Los Angeles Municipal Code (LAMC) Section 21.10.3(a)(1) (Dwelling Unit Construction Tax) also known as "Parkland Fees," the City imposes a tax of $200 per dwelling unit on all construction of new and modification of existing dwelling units to be paid to the Department of Building and Safety. These Parkland Fees are placed into a "Park and Recreational Sites and Facilities Fund" to be used exclusively for the acquisition and development of park and recreational sites. Therefore, Project impacts related to parks and recreational facilities would be less than significant.

Response e:

Less Than Significant Impact. The Project includes development of the Site with a 160-unit multi-family residential building. Based on the Department of Finance 2016 persons-per-household ratio for the City, the Project would result in an increase of approximately 461 residents at the Project Site. Three libraries are located in the Project area – the Van Nuys Branch Library, the Sherman Oaks Martin Pollard Branch Library, and the Panorama City Branch Library. Although the addition of approximately 461 new residents to the Project Site could increase the demand for services at these libraries (assuming that these 461 residents do not already live in the area), 461 new residents would not cause the need for new or expanded libraries. Therefore, Project impacts related to library services would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Recreation.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	❑	❑	■	❑
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	❑	❑	■	❑

Responses a and b:

Less Than Significant Impact. The Project includes development of the Site with a 160-unit multi-family residential building, and potentially could increase the demand for parks and recreational services. The Project would be required to provide 17,875 square feet of open space and would provide 21,780 square feet of open space, exceeding the open space requirements for the Project. Additionally, pursuant to the Los Angeles Municipal Code (LAMC) Section 21.10.3(a)(1) (Dwelling Unit Construction Tax) also known as "Parkland Fees," the City imposes a tax of $200 per dwelling unit on all construction of new and modification of existing dwelling units to be paid to the Department of Building and Safety. These Parkland Fees are placed into a “Park and Recreational Sites and Facilities Fund” to be used exclusively for the acquisition and development of park and recreational sites. Therefore, Project impacts related to parks and recreational facilities would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Transportation/Traffic.				
Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	❑	■	❑	❑

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	❑	❑	■	❑
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	❑	❑	❑	■
d.	Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	❑	❑	■	❑
e.	Result in inadequate emergency access?	❑	❑	■	❑
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	❑	❑	■	❑

Response a:

Less Than Significant With Mitigation Incorporated. The information in this section is based on the Traffic Impact Analysis for a Residential Apartment Project, Located at 6500 Sepulveda Boulevard, in the City of Los Angeles (Traffic Report) prepared by Overland Traffic Consultants, Inc., in November 2016 (included in Appendix C of this IS/MND). On December 16, 2016, the Los Angeles Department of Transportation (LADOT), Case No. SFV 16-104731, did an assessment of the Traffic Report prepared by Overland Traffic Consultants, Inc., and a detailed analysis on six intersections. Based on LADOT's traffic impact criteria, none of the studied intersections would be significantly impacted by Project-related traffic. In consultation with LADOT, the Traffic Report evaluates traffic conditions at the following study intersections:

1. Southbound I-405 Freeway Ramps (north of Victory Boulevard) and Haskell Avenue;
2. Haskell Avenue and Victory Boulevard;
3. Northbound I-405 Freeway Ramps and Victory Boulevard;
4. Sepulveda Boulevard and Vanowen Street;
5. Sepulveda Boulevard and Victory Boulevard; and,
6. Kester Avenue and Kittridge Street.

The Traffic Report assumes a Project buildout year of 2019. As shown in Table 2.16-1, upon completion, it is estimated that the Project would generate 904 daily trips, including 70 AM peak hour trips and 84 PM peak hour trips.

Table 2.16-1
Estimated Project Traffic Generation

Description	Size	Daily Traffic	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Apartment	160 units	1064	82	16	66	99	64	35
Transit/Walk*	15%	(160)	(12)	(2)	(10)	(15)	(10)	(5)
NET Project		**904**	**70**	**14**	**56**	**84**	**54**	**30**

**Along Sepulveda Blvd with Bus Lane, Rapid Line 734 with stop at Victory – apprx 670 feet and at Vanowen.*
Source: Overland Traffic Consultants, 2016.

The Traffic Report assessed existing (2016) and future (2019) AM and PM peak-hour traffic conditions at the six study intersections in the vicinity of the Project Site. The cumulative traffic conditions with the development of nine potential related projects in the surrounding area were also assessed. Based on LADOT's significance level of service (LOS) criteria, the Project would not result in significant traffic impacts at any of the six study intersections under the existing or future conditions (see Tables 2.16-2 and 2.16-3, respectively). Therefore, Project impacts related to traffic LOS would be less than significant.

Table 2.16-2
Existing (2016) Traffic Conditions With Project

No.	Intersection	Peak Hour	Existing		Existing + Project			Significant Impact
			CMA	LOS	CMA	LOS	Impact	
1	405 Freeway SB Ramps &	AM	0.458	A	0.459	A	+0.001	NO
	Haskell Avenue	PM	0.573	A	0.576	A	+0.003	NO
2	Haskell Avenue &	AM	0.730	C	0.732	C	+0.002	NO
	Victory Boulevard	PM	0.756	C	0.758	C	+0.002	NO
3	405 Freeway NB Ramps &	AM	0.576	A	0.577	A	+0.001	NO
	Victory Boulevard	PM	0.673	B	0.675	B	+0.002	NO
4	Sepulveda Boulevard &	AM	0.867	D	0.875	D	+0.008	NO
	Vanowen Street	PM	0.851	D	0.852	D	+0.001	NO
5	Sepulveda Boulevard &	AM	0.920	E	0.922	E	+0.002	NO
	Victory Boulevard	PM	0.830	D	0.838	D	+0.008	NO
6	Kester Avenue &	AM	0.451	A	0.453	A	+0.002	NO
	Kittridge Street	PM	0.446	A	0.447	A	+0.001	NO

Source: Overland Traffic Consultants, 2016.

Table 2.16-3
Future (2019) Traffic Conditions With Project

No.	Intersection	Peak Hour	Future (2019) Without Project		Future (2019) With Project			Significant Impact
			CMA	LOS	CMA	LOS	Impact	
1	405 Freeway SB Ramps & Haskell Avenue	AM	0.500	A	0.501	A	+0.001	NO
		PM	0.637	B	0.640	B	+0.003	NO
2	Haskell Avenue & Victory Boulevard	AM	0.788	C	0.791	C	+0.003	NO
		PM	0.819	D	0.821	D	+0.002	NO
3	405 Freeway NB Ramps & Victory Boulevard	AM	0.624	B	0.626	B	+0.002	NO
		PM	0.742	C	0.744	C	+0.002	NO
4	Sepulveda Boulevard & Vanowen Street	AM	1.115	F	1.123	F	+0.008	NO
		PM	0.926	E	0.930	E	+0.004	NO
5	Sepulveda Boulevard & Victory Boulevard	AM	1.003	F	1.005	F	+0.002	NO
		PM	0.913	E	0.916	E	+0.003	NO
6	Kester Avenue & Kittridge Street	AM	0.486	A	0.489	A	+0.003	NO
		PM	0.481	A	0.483	A	+0.002	NO

Source: Overland Traffic Consultants, 2016.

Construction Analysis

Project construction will include grading, construction, and finishing work. The Project developer will attempt to park and stage for construction on-site to the maximum extent feasible. If there are periods of time where off-site street surfaces are needed, the developer will submit for review and approval a traffic control plan detailing days, time of day, and safety features. Any off-site construction needs will be minimized and conducted outside of peak traffic times. Deliveries of construction material will be coordinated to non-peak travel periods, to the extent possible. In addition, the Project would be subject to the requirements of Mitigation Measures 16-1 and 16-2, provided below. With implementation of Mitigation Measures 16-1 and 16-2, impacts during construction would be less than significant.

Mitigation Measures

16-1: A construction work site traffic control plan shall be submitted to DOT for review and approval prior to the start of any construction work.

16-2: No hauling shall be done before 9:00 AM or after 3:00 PM.

Response b:

Less Than Significant Impact. The Congestion Management Program (CMP) was adopted to monitor regional traffic growth and related transportation improvements. For purposes of the CMP LOS analysis, an increase in the freeway volume by 150 vehicles per hour during the AM or PM peak hours in any direction requires further analysis. A substantial change in freeway segments is defined as an increase or decrease of 2% in the demand to capacity ratio when at LOS F. For purposes of CMP intersections, an increase of 50 vehicles or more during the AM or PM peak requires further analysis.

In a memo dated December 16, 2016, the Los Angeles Department of Transportation (LADOT) Case No. SFV 16-104731 studied six intersections, including nearby freeway intersections, and determined that none of the study intersections would be significantly impacted by Project-related traffic. The intersection of Victory Boulevard and Sepulveda Boulevard is the nearest CMP intersection and one of the study intersections (# 5 in the list of study intersections). Based on the CMA analysis, Victory Boulevard and Sepulveda Boulevard is currently operating at LOS E during the AM peak hour and LOS D during the PM peak hour. The Project does not increase the LOS in the Existing + Project analysis scenario with a less than 1% impact during both time periods. The LOS is projected to increase to LOS F during the AM peak hour and LOS E during the PM peak hour in the Future without Project scenario. The addition of the Project traffic creates a 0.2 % increase during the AM peak hour and 0.3% increase during the PM peak hour without increasing the LOS. Therefore, no City of Los Angeles or CMP significant impacts are identified with construction of this Project.

The Project volumes on the area freeways would likely use the San Diego Freeway (I-405). Based on the trip distribution patterns in the area, the Project's access and proximity to destination points throughout the City, it is anticipated that up to 10% of the Project volumes will be using any one segment of the freeway. The maximum number of freeway trips on the freeway would therefore be eight vehicles during the peak hours. This amount of traffic is below the threshold needed for further evaluation. Thus, no CMP intersection or freeway impacts are anticipated.

As part of the MOU process with LADOT, a freeway impact analysis screening was conducted to determine whether the Project could create a significant freeway segment or off ramp segment impact and require further analysis beyond the screening in the MOU. The screening criteria are based on an agreement between LADOT and Caltrans established October 2, 2013, which was renewed and modified on December 15, 2015. The Project did not trigger the established impact criteria. Therefore, no additional freeway segment or freeway off ramp analysis was required and the Project would result in less than significant freeway segment or freeway off ramp segment impacts.

Response c:

No Impact. A significant impact would occur if a project included an aviation-related use and would result in safety risks associated with such use. The Project does not include any aviation-related uses and safety risks associated with a change in air traffic patterns would not occur. Therefore, no impact would occur.

Response d:

Less Than Significant. The Project does not include the development of any new roadways or intersections. In a memo dated December 16, 2016, the Los Angeles Department of Transportation (LADOT) Case No. SFV 16-104731 studied six intersections, including nearby freeway intersections, and determined that none of the study intersections would be significantly impacted by project-related traffic. Full vehicular access is proposed to/from Sepulveda Boulevard. Currently, Sepulveda Boulevard is striped with three northbound lanes, a two-way left turn lane, and three southbound lanes along the

Project frontage. The two-way left turn lane will facilitate left turns in and out of the Site. One driveway off of Sepulveda gains access to the ground level of parking with an interior ramp to the basement level of parking. During the grading, demolition, and construction phases of the Project, there is potential for pedestrian pathways to be blocked or closed. However, prior to closure of a sidewalk within the public right-of-way, the closure along the pedestrian protection would be required to be approved by the Bureau of Street Services and the Department of Building and Safety, pursuant to LAMC Section 62.45 and 91.3306. Thus, the Project would not substantially increase hazards due to a design feature and impacts related to this issue would be less than significant.

Response e:

Less Than Significant Impact. All ingress/egress associated with the Project would be designed and constructed in conformance to all applicable Department of Transportation, Building and Safety, and Public Works standards and requirements for design and construction. The Project is subject to the review and approval of the Fire Department, which would ensure standard of safety and adequate emergency access. Therefore, the Project would not result in any significant impacts related to emergency access.

Response f:

Less Than Significant Impact. The Project is forecast to generate approximately 904 weekday daily trips with 70 trips during the AM peak hour and 84 trips during the PM peak hour. As per the CMP 2008 guidelines, person trips can be estimated by multiplying the total trips generated by 1.4. The trips assigned to transit may be calculated by multiplying the person trips generated by 3.5%. The CMP transit trip generation calculation is displayed below in Table 2.16-4. Observations of the transit services near the Project indicate capacity for additional usage. Therefore, the Project's level of transit increase is not expected to adversely affect the current ridership of the transit services in the area.

Table 2.16-4
Transit Trips

	Daily	**AM Peak Hour**	**PM Peak Hour**
PROJECT TRIPS (from Table 2)	904	70	84
PERSON TRIPS (trips X 1.4)	1266	98	118
TRANSIT TRIPS (person trips x 3.55)	**44**	**3**	**4**
Source: Overland Traffic Consultants, 2016.			

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Tribal Cultural Resources: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or	❑	❑	❑	■
b. A resource determine by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	❑	❑	■	❑

Response a:

No Impact. A significant impact would occur if the Project would result in a substantial adverse change in the significance of a tribal cultural resource including, but not limited to: sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe, and that is: listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). The Project Site was previously developed with an apartment building, which has since been demolished. Grading for the Project would consist of the removal of approximately 18,300 cubic feet of dirt. The subject property is not listed in the National Register or California Register, nor is it designated as a Los Angeles Historic-Cultural Monument. Therefore, no impact would occur.

Response b:

Less Than Significant Impact. A significant impact would occur if the Project would result in a substantial adverse change in the significance of a tribal cultural resource including, but not limited to: sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe the presumption that the Project Site is historically or culturally significant as defined in Public Resources Code Section 5024.1. Assembly Bill 52 (AB 52) established a formal

consultation process for California Native American tribes to identify potential significant impacts to Tribal Cultural Resources, as defined in Public Resources Code Section 21074, as part of CEQA. As specified in AB 52, lead agencies must provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a Project if the tribe has submitted a written request to be notified. The Native American Heritage Commission (NAHC) provided a list of Native American groups and individuals who might have knowledge of the religious and/or cultural significance of resources that may be in and near the Project Site. On January 12, 2017, the Department of City Planning mailed notices to 10 tribes which had requested notification pursuant to AB 52. On February 16, 2017, an email was received from the Fernandeno Tataviam Band of Mission Indians (Tribe) requesting a consultation for the Proposed Project. This request was submitted after the 30-day deadline to respond. On February 17, 2017, the Department of City Planning responded to the tribe's request stating that while the consultation request was submitted after the 30-day comment period, the Department would consider documentation that the tribe wanted to submit for consideration of a monitor. As of May 10, 2017, no additional documentation was submitted for consideration by the Department to supplement the Tribe's request for consultation or a monitor. Additionally, the Department of City Planning submitted a Sacred Lands File request with the NAHC. In a memo dated February 24, 2017, the NAHC completed a Sacred Lands File search of the area for potential Project effect with negative results. Therefore, the Department has determined that there is no substantial evidence to support that the Site would be a resource for tribal cultural resources, and impacts would be less than significant.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII.	**Utilities and Service Systems.** Would the project:				
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	❑	❑	■	❑
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❑	❑	■	❑
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❑	❑	■	❑
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	❑	❑	■	❑
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand	❑	❑	■	❑

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	in addition to the provider's existing commitments?				
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	❑	❑	■	❑
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	❑	❑	■	❑

Response a:

Less Than Significant. The Project Site is located within the service area of the Hyperion Treatment Plant (HTP), which has been designed to treat 450 million gallons per day (mgd) to full secondary treatment. Full secondary treatment prevents virtually all particles suspended in effluent from being discharged into the Pacific Ocean and is consistent with the Los Angeles Regional Water Quality Control Board's (LARWQCB) discharge policies for the Santa Monica Bay. The HTP currently treats an average daily flow of approximately 362 mgd. Thus, there is approximately 88 mgd available capacity.

As shown on Table 2.17-1, the Project would generate an increase of approximately 22,200 gallons of wastewater per day (or 0.0222 mgd). With a remaining daily capacity of 88 mgd, the HTP would have adequate capacity to serve the Project. Therefore, Project impacts related to wastewater treatment would be less than significant.

Response b:

Less Than Significant. The Los Angeles Department of Water and Power (LADWP) owns and operates the Los Angeles Aqueduct Filtration Plant (LAAFP) located in the Sylmar community of the City. The LAAFP treats City water prior to distribution throughout LADWP's Central Water Service Area. The designated treatment capacity of the LAAFP is 600 mgd, with an average plant flow of 550 mgd during the summer months and 450 mgd in the non-summer months. Thus, the facility has between approximately 50 to 150 mgd of remaining capacity depending on the season. As shown on Table 2.17-2, the Project would consume an increase of approximately 26,196 gallons of water per day (or 0.026 mgd). With the remaining capacity of approximately 50 to 150 mgd, the LAAFP would have adequate capacity to serve the Project. Prior to any construction activities, the Project Applicant would be required to coordinate with the City of Los Angeles Bureau of Sanitation to determine the exact wastewater conveyance requirements of the Project, and any upgrades to the wastewater lines in the vicinity of the Project Site that are needed to adequately serve the Project. Therefore, Project impacts related to water treatment would be less than significant.

Table 2.17-1
Estimated Wastewater Generation

Land Use	Size	Generation Rate[1]	Total (gallons/day)
Residential - 1 bedroom	85 du	120 gpd/du	10,200
Residential - 2 bedroom	75 du	160 gpd/du	12,000
		Total	**22,200**

du = dwelling unit *gpd = gallon per day*
[1] *Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 20, 2002.*

Table 2.17-2
Estimated Water Consumption

Land Use	Size	Consumption Rate[1]	Total (gallons/day)
Residential - 1 bedroom	85 du	141.6 gpd/du	12,036
Residential - 2 bedroom	75 du	188.8 gpd/du	14,160
		Total	**26,196**

du = dwelling unit *gpd = gallon per day*

[1] *Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 20, 2002. Water consumption rates are assumed to be 118 percent of the wastewater generation rates.*

Response c:

Less Than Significant Impact. As discussed in response to Checklist Question IX(e), the Project would not exceed the capacity of the existing or planning drainage system. Therefore, Project impacts related to storm drain capacity would be less than significant.

Response d:

Less Than Significant Impact. The City receives water from five major sources: 1) the Eastern Sierra Nevada watershed, via the Los Angeles Aqueduct (LAA); 2) the Colorado River, via the Colorado River Aqueduct; 3) the Sacramento-San Joaquin Delta, via the State Water Project (SWP) and the California Aqueduct; 4) local groundwater; and 5) recycled water. The amount of water obtained from these sources varies from year to year and is primarily dependent on weather conditions and demand.

As shown on Table 2.17-2, the Project would consume an increase of approximately 26,196 gallons of water per day. According to LADWP, for any project that is consistent with the City's General Plan, the projected water demand associated with that project is considered to be accounted for in the most recently adopted Urban Water Management Plan (UWMP), which is prepared by the LADWP to ensure that existing and projected water demand within its service area can be accommodated. As discussed previously in response to Checklist Question X(b), the Project is consistent with the City's General Plan land use designation for the Project Site. Additionally, the Project Applicant would be required to comply

with the water efficiency standards outlined in Los Angeles City Ordinance No. 180822 and in the LAGBC to minimize water usage. Further, prior to issuance of a building permit, the Project Applicant would be required to consult with LADWP to determine Project-specific water supply service needs and all water conservation measures that shall be incorporated into the Project. As such, the Project would not require new or additional water supply or entitlements. Therefore, Project impacts related to water supply would be less than significant.

Response e:

Less Than Significant Impact. As discussed in response to Checklist Question XVII(a), with a remaining daily capacity of 88 mgd, the HTP would have adequate capacity to serve the Project. Therefore, Project impacts related to wastewater treatment would be less than significant.

Response f:

Less Than Significant Impact. Most of the solid waste generated in the City is disposed of at the Sunshine Canyon Landfill and Chiquita Canyon Landfill. The Sunshine Canyon Landfill is jointly operated by the City and the County (each operates separate portions of the landfill). The Sunshine Canyon Landfill currently has a remaining capacity of 64,688,021 tons, with a permitted intake of 12,100 tons per day (tpd) and currently accepts an average of 7,582 tpd, resulting in a remaining daily intake availability of 4,518tpd.[75] The Chiquita Canyon Landfill currently has a remaining capacity of 1,833,353 tons, with a permitted intake of 6,000 tpd and currently accepts an average of 3,558 tpd, resulting in a remaining daily intake availability of 2,442 tpd.[76] Thus, the Sunshine Canyon Landfill and the Chiquita Canyon Landfill have a combined remaining permitted daily intake of 6,960 tpd.

As shown on Table 2.17-4, the Project would generate an increase of approximately 0.32 tons of solid waste per day. With a remaining daily capacity of 6,347 tpd, the existing landfill capacity would be adequate to accommodate the Project's solid waste generation. Therefore, Project impacts related to solid waste would be less than significant.

Table 2.17-3
Estimated Solid Waste Generation

Land Use	Size	Generation Rate[1]	Total (tpd)
Multi-Family Residential	160 du	4 lbs/day/du	0.32
		Total	**0.32**

du = dwelling unit *lbs = pounds* *tpd = tons per day*

[1] *Source: CalRecycle website: http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/default.htm. Note: Waste generation includes all materials discarded, whether or not they are later recycled or*

[75] *County of Los Angeles, Countywide Integrated Waste Management Plan, 2014 Annual Report, December 2015.*

[76] *Ibid.*

disposed of in a landfill.

Response g:

Less Than Significant Impact. Solid waste management is guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. The Act requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE). The City of Los Angeles prepared a Solid Waste Management Policy Plan that was adopted by the City Council in 1994. Solid waste generated on-site by the Project would be disposed of in accordance with all applicable federal, state, and local regulations and policies related to solid waste, including (but not limited to) AB 939, the City of Los Angeles Solid Waste Management Policy Plan (CiSWMPP), City of Los Angeles Source Reduction and Recycling Plan (CiSRRE), Ordinance No. 171,687 and the Framework Element of the General Plan. The CiSWMPP, adopted in November 1994, is the City's long-range policy plan that provides direction for solid waste management and serves as an umbrella document for the CiSRRE. Together, the CiSWMPP and CiSRRE specify goals, objectives, and programs for achieving AB 939. The General Plan Framework Element supports AB 939 and its goals and addresses many of the programs the City has implemented to divert waste from disposal facilities such as source reduction programs and recycling programs. Finally, Ordinance No. 171,687 (the "Space Allocation Ordinance") requires the provision of an adequate recycling area or room for collecting and loading recyclable materials for all new construction projects, multi-family residential projects of four or more units where the addition of floor area is 25 percent or more, and other development projects where the addition of floor area is 30 percent or more. The Project would provide clearly marked, durable, source sorted recycling bins throughout the Project Site to facilitate recycling in accordance with Ordinance No. 171,687. The Project would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, impacts to regulations related to solid waste would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. Mandatory Findings Of Significance.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	❑	❑	■	❑
b. Does the project have impacts which are individually	❑	❑	■	❑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).				
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	❑	❑	■	❑

Response a:

Less Than Significant Impact. A significant impact may occur only if a project would have an identified potentially significant impact for any of the above issues. The Project Site is located in an urbanized area of the City. There are no trees or vegetation on the Site. The Project will have no significant impact to historic resources. The Project will have a less than significant impact on archeological resources, paleontological resources, and human remains. The Project will not degrade the quality of the environment, reduce or threaten any fish or wildlife species (endangered or otherwise), or eliminate important examples of the major periods of California history or pre-history. Therefore, impacts from the Project would be less than significant.

Response b:

Less Than Significant Impact. A significant impact may occur if a project, in conjunction with other related projects in the area of the Project Site, would result in impacts that are less than significant when viewed separately, but would be significant when viewed together. The Project will not combine with related projects to create a cumulatively significant impact in any of the environmental issue areas analyzed in the IS/MND.

In accordance with CEQA Guidelines Section 15064(h), this IS/MND includes an evaluation of the Project's cumulative impacts. An adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. (CEQA Guidelines Section 15130(b)(1)(A)-(B). The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence. Accordingly, all proposed, recently approved, under construction, or reasonably foreseeable projects that could produce a related or cumulative impact on the local environment, when considered in conjunction with the Project, were identified for evaluation.

Descriptions of the nine related projects are provided in Table 2.18-1.

Table 2.18-1
Related Project Descriptions

No.	Project	Size	Location
1	Apartments Retail	100 units 13,000 sf	6828 Van Nuys Bl
2	Townhomes Remove Single Homes	85 units 8 homes	15141 Saticoy Street
3	Condominiums Retail	131 units 8,621 sf	5700 Sepulveda Blvd.
4	Medical Office	79,127 sf	15225 Vanowen Street
5	Light Industrial	283,920 sf	7600 Tyrone Avenue
6	Residential	126 units	7121 Woodley Avenue
7	Mixed-Use Project	Not available	6001 Van Nuys Boulevard
8	Single Family Homes	58 units	14700 Sherman Way
9	Apartments Retail	180 units 4,750 sf	7111 Sepulveda Boulevard
Source: Overland Traffic Consultants, 2016.			

Each of these related projects would be subject to their own CEQA analysis (MND or EIR) to evaluate potential impacts and provide mitigation measures where appropriate.

Aesthetics

Development of the Project in conjunction with the related projects would result in an incremental intensification of existing prevailing land uses in an already heavily urbanized area of Los Angeles. With respect to aesthetics and views, none of the related projects are located in close enough proximity to the Project Site such that their development would affect the aesthetic character of the Site or its immediate surroundings. In addition, there are no scenic or protected views in the area. Therefore, cumulative aesthetic impacts would be less than significant.

Agriculture and Forestry Resources

Development of the Project in combination with the related projects would not result in the conversion of State-designated agricultural land from agricultural use to a non-agricultural use, nor result in the loss of forest land or conversion of forest land to non-forest use. The Extent of Important Farmland Map Coverage maintained by the Division of Land Protection indicates that the Project Site and the surrounding area are not included in the Important Farmland category. The Project Site and the surrounding area are highly urbanized area and do not include any State-designated agricultural lands or forest uses. Therefore, no cumulative impact would occur.

Air Quality

The SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified above also would be considered cumulatively considerable. Individual projects that generate

emissions not in excess of SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. As discussed in response to Checklist Question III(b), the Project would not generate emissions in excess of SCAQMD's significance thresholds. As such, the Project would not contribute considerably to any potential cumulative impact. Therefore, cumulative impacts related to air quality would be less than significant.

Biological Resources

The Project would have no impact upon biological resources. Development of the Project in combination with the related projects would not significantly impact wildlife corridors or habitat for any candidate, sensitive, or special status species identified in local plans, policies, or regulations, or by the CDFG or the USFWS. No such habitat occurs in the vicinity of the Project Site or related projects due to the existing urban development. Development of any of the related projects would be subject to the City of Los Angeles Protected Tree Ordinance. Thus, cumulative impacts to biological resources would be considered less than significant.

Cultural Resources

Impacts to cultural resources tend to be site-specific and are assessed on a site-by-site basis. The analysis of the Project's impacts to cultural resources concluded that the Project would have no significant impacts with respect to cultural resources following appropriate mitigation for archaeology, paleontology, and human remains. Therefore, the Project's incremental contribution to a cumulative impact would not be considerable, and cumulative impacts to cultural resources would be less than significant.

Geology and Soils

Geotechnical hazards are site-specific and there is little, if any, cumulative geological relationship between the Project and any of the related projects. Similar to the Project, potential impacts related to geology and soils would be assessed on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement the appropriate mitigation measures. Furthermore, the analysis of the Project's geology and soils impacts concluded that Project impacts would be less than significant. Therefore, the Project would not make a cumulatively considerable contribution to any potential cumulative impacts, and cumulative geology and soil impacts would be less than significant.

Greenhouse Gas Emissions

As described throughout this analysis, the Project contains regulatory compliance measures and Project design features that would reduce the Project's GHG emissions profile and would represent improvements. Thus, the Project's emissions reductions demonstrate consistency with GHG Reduction Plans, Executive Orders S-3-05 and B-30-15, SCAG's Sustainable Communities Strategy, and the City of Los Angeles' Green Building Ordinance. As a result of this and the analysis of net emissions, the Project's contribution to global climate change is not "cumulatively considerable" and is considered less than significant. Project-specific impacts related to the emission of greenhouse gases would be less than significant.

Hazards and Hazardous Materials

Hazards are site-specific and there is little, if any, cumulative hazardous relationship between the Project and any of the related projects. Similar to the Project, potential impacts related to hazards would be assessed on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement the appropriate mitigation measures. Furthermore, the analysis of the Project's hazards and hazardous materials impact concluded that Project impacts would be less than significant. Therefore, the Project would not make a cumulatively considerable contribution to any potential cumulative impacts, and cumulative hazard and hazardous materials impacts would be less than significant.

Hydrology and Water Quality

The Project Site and the surrounding areas are served by the existing City storm drain system. Runoff from the Project Site and adjacent urban uses is typically directed into the adjacent streets, where it flows to the nearest drainage improvements. It is likely that most, if not all, of the related projects would also drain to the surrounding street system. However, little if any additional cumulative runoff is expected from the Project Site and the related projects, since this part of the City is already fully developed. Under the requirements of the Low Impact Development Ordinance, each related project will be required to implement stormwater BMPs to retain or treat the runoff from a storm event producing ¾ inch of rainfall in a 24-hour period. Mandatory structural BMPs in accordance with the NPDES water quality program will therefore result in a cumulative reduction to surface water runoff, as the development in the surrounding area is limited to infill developments and redevelopment of existing urbanized areas. Therefore, the Project would not make a cumulatively considerable contribution to impacting the volume or quality of surface water runoff, and cumulative impacts to the existing or planned stormwater drainage systems would be less than significant. As such, cumulative water quality impacts would be less than significant.

Land Use

None of the related projects would physically divide an established community or conflict with a habitat conservation plan because they are all in urban areas. Compliance with the City's land use standards would ensure that any cumulative impacts related to land use would be less than significant. Further, all related projects would be individually evaluated for consistency with applicable land use standards. Therefore, cumulative land use impacts would be less than significant.

Mineral Resources

Development of the Project in combination with the related projects would not result in the loss of availability of mineral resources. The Project Site and the surrounding area are highly urbanized area and do not include any MRZ zones. Therefore, no cumulative impact would occur.

Noise

None of the related projects shown on Table 2.18-1 are in close proximity to the Project Site. As such, if the construction activities associated with the related projects overlapped with those of the Project, due to distance and location of sensitive receptors, no significant cumulative construction noise impacts would occur. As discussed in response to Checklist Question XII(c), cumulative traffic noise impacts would be less than significant. Therefore, cumulative noise impacts would be less than significant.

Population and Housing

Implementation of the related projects listed in Table 2.18-1 could result in housing and population growth. However, as discussed previously, the Project's housing and population growth would be consistent with the anticipated growth for the Project area and in the General Plan. The Project would not create unplanned growth, and impacts related to population and housing would be less than significant. As such, regardless of whether the related projects would result in unplanned growth, the Project would not have the potential to contribute to any potential cumulative impact.

Public Services

Fire

Implementation of the related projects in Table 2.18-1 could result in a net increase in the number of residents and employees in the Project area and could further increase the demand for fire protection services. Cumulative development requires the LAFD to continually evaluate the need for new or physically altered facilities in order to maintain adequate service ratios. Similar to the Project, the related projects would be subject to the Fire Code and other applicable regulations of the LAMC including, but not limited to, automatic fire sprinkler systems for high-density buildings and/or residential projects located farther than 1.5 miles from the nearest LAFD Engine or Truck Company to compensate for additional response time, and other recommendations made by the LAFD to ensure fire protection safety. Through the process of compliance, the ability of the LAFD to provide adequate facilities to accommodate future growth and maintain acceptable levels of service would be ensured. Furthermore, the increased demands for additional LAFD staffing, equipment, and facilities would be funded via existing mechanisms (e.g., property taxes and government funding) to which the Project and related projects would contribute. Therefore, cumulative impacts related to fire protection services would be less than significant.

Police

Implementation of the related projects listed in Table 2.18-1 could result in a net increase in the number of residents and employees in the Project area and could further increase the demand for police protection services. Cumulative development requires the LAPD to continually evaluate the need for new or physically altered facilities in order to maintain adequate service ratios. Similar to the Project, the related projects would be subject to the site plan review, recommendations of the LAPD related to crime prevention features, and other applicable regulations of the LAMC. Through the process of compliance,

the ability of the LAPD to provide adequate facilities to accommodate future growth and maintain acceptable levels of service would be ensured Furthermore, the increased demands for additional LAPD staffing, equipment, and facilities would be funded via existing mechanisms (e.g., property taxes and government funding) to which the Project and related projects would contribute. Therefore, cumulative impacts related to police protection services would be less than significant.

Schools

The related projects listed in Table 2.18-1 could result in an increase in the number students in the Project area. However, similar to the applicant of the Project, the applicants of all the related projects would be required to pay the applicable school fees to the LAUSD to ensure that no significant impacts to school services would occur. Therefore, cumulative impacts to school services would be less than significant.

Parks and Recreation

The related projects listed in Table 2.18-1 could result in an increase demand for parks and recreational services. However, employees generated by the commercial projects and the commercial portions of mixed-use projects on the related projects list would not typically enjoy long periods of time during the workday to visit parks and/or recreational facilities. Therefore these project-generated employees would not contribute to the future demand on park and recreational facility services. The extent to which the related residential projects include parks/recreational amenities is unknown. However, the applicants of these projects would be subject to the City's parkland fees, similar to the applicant of the Project and to minimum open space requirements, ensuring that any potential impacts to parks and recreational facilities would be less than significant. As stated previously, Project impacts to parks and recreational facilities would be less than significant. Therefore, cumulative impacts to park and recreational facilities would be less than significant.

Other Public Facilities

Implementation of the related projects listed in Table 2.18-1 could increase the demand for library services in the Project area. Similar to the Project, the related residential projects would be subject to the standards to determine demand for library facilities used by the City, and would likely be required to implement mitigation where applicable. As such, the demand for library services created by these residential projects could be accommodated, and impacts would be less than significant. Therefore, cumulative impacts to library services would be less than significant.

Traffic

Cumulative traffic impacts were addressed under future (2019) traffic conditions. As discussed, no significant cumulative impacts would occur.

Utilities and Service Systems

Wastewater

Implementation of the related projects listed in Table 2.18-1 could increase the need for wastewater treatment. The remaining treatment capacity of the HTP (88 mgd) would accommodate the wastewater treatment requirements of the related projects. As discussed previously, the Project would create the need for a fraction of one percent of the remaining capacity of the HTP, and would not result in any significant impacts related to sewer treatment. No new or upgraded treatment facilities would be required. Therefore, cumulative impacts related to wastewater treatment would be less than significant.

Water

Implementation of the related projects listed in Table 2.18-1 could increase the need for water treatment. The remaining treatment capacity of the LAAFP (50 to 150 mgd) would accommodate the wastewater treatment requirements of the related projects. As discussed previously, the Project would create the need for a fraction of one percent of the remaining capacity of the LAAFP, and would not result in any significant impacts related to water treatment. No new or upgraded treatment facilities would be required. Therefore, cumulative impacts related to water treatment would be less than significant.

Implementation of the related projects could also result in a net increase in water consumption within LADWP's service area. Similar to the Project, the water supply needs of those related projects that are consistent with the City's General Plan have been accounted for in the most recently adopted UWMP. However, the applicants of all projects within LADWP's service area would be required to consult with LADWP to determine the specific water supply needs of the project, appropriate water conservation measures to minimize water usage, and LADWP's ability to serve the project. Through this process, cumulative impacts related to water supply would be less than significant.

Solid Waste

Implementation of the related projects listed in Table 2.18-1 could increase the need for landfill capacity. However, all development in the City is required to comply with the City's Curbside Recycling Program and the Construction and Demolition Waste Recycling Ordinance to minimize the amount of solid waste generated by the development and the need for landfill capacity. As discussed previously, the landfills serving the Project area have available capacity. The Project would create a demand for less than a fraction of one percent of the remaining landfill capacity serving the Project area and would not result in any significant impacts. Therefore, cumulative impacts related to landfill capacity would be less than significant.

Response c:

Less Than Significant Impact. A significant impact may occur if a project has the potential to result in significant impacts, as discussed in the preceding sections. As described throughout this environmental impact analysis, with implementation of the recommended mitigation measures, where applicable, the

Project would not result in any unmitigated significant impacts. Thus, the Project would not have the potential to result in substantial adverse effects on human beings and impacts would be less than significant.

Appendix A:

AQ and GHG Modeling

6500 North Sepulveda Boulevard Existing

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	274.00	Space	2.47	109,600.00	0
Apartments Mid Rise	160.00	Dwelling Unit	1.23	147,165.00	458

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LA ZIMAS information

Land Use - Developer information

Construction Phase - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Trips and VMT - Haul trips to East Arrow Landfill in Irwindale 35.2 miles one-way; assumes 10 cubic yard capacity per haul truck

Demolition - Assumes 27.96 tons of waste for existing restaurant (US Green Building Council) and 152.25 tons for removing 7,000 square feet of asphalt at 0.3 feet of depth

Grading - Developer information

Vehicle Trips - Overland Traffic Consultants, Inc. Traffic Study, October 2016

Woodstoves - Developer information

Construction Off-road Equipment Mitigation - Assumes SCAQMD Rule 403 control efficiencies

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	45
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	50.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	30.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	24.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	18.00	99.00
tblConstructionPhase	NumDays	230.00	392.00
tblConstructionPhase	NumDays	8.00	32.00
tblConstructionPhase	NumDays	18.00	45.00
tblFireplaces	NumberGas	136.00	0.00
tblFireplaces	NumberNoFireplace	16.00	160.00
tblFireplaces	NumberWood	8.00	0.00
tblGrading	AcresOfGrading	16.00	1.20
tblGrading	MaterialExported	0.00	20,000.00
tblLandUse	BuildingSpaceSquareFeet	160,000.00	147,165.00
tblLandUse	LandUseSquareFeet	160,000.00	147,165.00
tblLandUse	LotAcreage	4.21	1.23

tblOffRoadEquipment	HorsePower	78.00	231.00
tblOffRoadEquipment	HorsePower	78.00	130.00
tblOffRoadEquipment	HorsePower	221.00	187.00
tblOffRoadEquipment	HorsePower	9.00	84.00
tblOffRoadEquipment	HorsePower	9.00	78.00
tblOffRoadEquipment	HorsePower	81.00	132.00
tblOffRoadEquipment	HorsePower	231.00	247.00
tblOffRoadEquipment	HorsePower	16.00	97.00
tblOffRoadEquipment	HorsePower	402.00	80.00
tblOffRoadEquipment	HorsePower	172.00	97.00
tblOffRoadEquipment	LoadFactor	0.48	0.29
tblOffRoadEquipment	LoadFactor	0.48	0.42
tblOffRoadEquipment	LoadFactor	0.50	0.41
tblOffRoadEquipment	LoadFactor	0.56	0.74
tblOffRoadEquipment	LoadFactor	0.56	0.48
tblOffRoadEquipment	LoadFactor	0.73	0.36
tblOffRoadEquipment	LoadFactor	0.29	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.42	0.37
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripLength	20.00	35.25
tblTripsAndVMT	HaulingTripNumber	2,500.00	2,000.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	35.00	7.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00

tblTripsAndVMT	WorkerTripNumber	163.00	5.00
tblTripsAndVMT	WorkerTripNumber	161.00	25.00
tblTripsAndVMT	WorkerTripNumber	32.00	15.00
tblTripsAndVMT	WorkerTripNumber	60.00	5.00
tblVehicleTrips	WD_TR	6.65	5.65

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	1.5055	15.6407	10.5085	0.0203	0.1489	0.7542	0.9031	0.0670	0.7052	0.7723	0.0000	1,850.3922	1,850.3922	0.4205	0.0000	1,860.9040
2018	3.6035	31.0037	23.7016	0.0458	0.0518	1.4926	1.5445	0.0139	1.3976	1.4115	0.0000	4,101.5396	4,101.5396	0.9981	0.0000	4,126.4930
2019	0.1014	0.9851	0.8595	1.5800e-003	1.7500e-003	0.0480	0.0497	4.7000e-004	0.0449	0.0454	0.0000	139.1855	139.1855	0.0327	0.0000	140.0033
Maximum	**3.6035**	**31.0037**	**23.7016**	**0.0458**	**0.1489**	**1.4926**	**1.5445**	**0.0670**	**1.3976**	**1.4115**	**0.0000**	**4,101.5396**	**4,101.5396**	**0.9981**	**0.0000**	**4,126.4930**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3518	2.9600	12.0764	0.0203	0.0691	0.0846	0.1537	0.0291	0.0820	0.1111	0.0000	1,850.3902	1,850.3902	0.4205	0.0000	1,860.9020

2018	1.1833	4.5495	28.0619	0.0458	0.0321	0.1459	0.1779	9.0700e-003	0.1432	0.1523	0.0000	4,101.5348	4,101.5348	0.9981	0.0000	4,126.4882
2019	0.0238	0.1546	1.0088	1.5800e-003	1.0800e-003	4.5600e-003	5.6500e-003	3.1000e-004	4.5100e-003	4.8200e-003	0.0000	139.1854	139.1854	0.0327	0.0000	140.0032
Maximum	**1.1833**	**4.5495**	**28.0619**	**0.0458**	**0.0691**	**0.1459**	**0.1779**	**0.0291**	**0.1432**	**0.1523**	**0.0000**	**4,101.5348**	**4,101.5348**	**0.9981**	**0.0000**	**4,126.4882**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**70.08**	**83.91**	**-17.33**	**0.00**	**49.49**	**89.76**	**86.49**	**52.71**	**89.30**	**87.97**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2017**	**8-31-2017**	6.4506	1.7822
2	**9-1-2017**	**11-30-2017**	8.0332	1.1360
3	**12-1-2017**	**2-28-2018**	7.2889	1.0951
4	**3-1-2018**	**5-31-2018**	7.0976	1.1033
5	**6-1-2018**	**8-31-2018**	9.6463	1.5429
6	**9-1-2018**	**11-30-2018**	10.8380	1.9829
7	**12-1-2018**	**2-28-2019**	3.4614	0.5514
		Highest	10.8380	1.9829

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6915	0.0272	2.1519	1.6900e-003		0.0891	0.0891		0.0891	0.0891	10.7078	2.7021	13.4098	0.0527	0.0000	14.7279
Energy	9.6300e-003	0.0823	0.0350	5.3000e-004		6.6500e-003	6.6500e-003		6.6500e-003	6.6500e-003	0.0000	882.1110	882.1110	0.0204	5.5900e-003	884.2876
Mobile	0.3684	1.8876	5.1393	0.0157	1.2011	0.0183	1.2194	0.3220	0.0172	0.3392	0.0000	1,443.9443	1,443.9443	0.0848	0.0000	1,446.0632
Waste						0.0000	0.0000		0.0000	0.0000	14.9401	0.0000	14.9401	0.8829	0.0000	37.0136

Water						0.0000	0.0000		0.0000	0.0000	3.3073	116.2684	119.5757	0.3424	8.5900e-003	130.6960
Total	**1.0695**	**1.9971**	**7.3262**	**0.0179**	**1.2011**	**0.1140**	**1.3151**	**0.3220**	**0.1129**	**0.4350**	**28.9551**	**2,445.0259**	**2,473.9810**	**1.3833**	**0.0142**	**2,512.7882**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6915	0.0272	2.1519	1.6900e-003		0.0891	0.0891		0.0891	0.0891	10.7078	2.7021	13.4098	0.0527	0.0000	14.7279
Energy	9.6300e-003	0.0823	0.0350	5.3000e-004		6.6500e-003	6.6500e-003		6.6500e-003	6.6500e-003	0.0000	882.1110	882.1110	0.0204	5.5900e-003	884.2876
Mobile	0.3684	1.8876	5.1393	0.0157	1.2011	0.0183	1.2194	0.3220	0.0172	0.3392	0.0000	1,443.9443	1,443.9443	0.0848	0.0000	1,446.0632
Waste						0.0000	0.0000		0.0000	0.0000	14.9401	0.0000	14.9401	0.8829	0.0000	37.0136
Water						0.0000	0.0000		0.0000	0.0000	3.3073	116.2684	119.5757	0.3424	8.5900e-003	130.6960
Total	**1.0695**	**1.9971**	**7.3262**	**0.0179**	**1.2011**	**0.1140**	**1.3151**	**0.3220**	**0.1129**	**0.4350**	**28.9551**	**2,445.0259**	**2,473.9810**	**1.3833**	**0.0142**	**2,512.7882**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/1/2017	7/15/2017	5	32	
2	Building Construction	Building Construction	7/16/2017	1/15/2019	5	392	
3	Architectural Coating	Architectural Coating	7/1/2018	11/15/2018	5	99	

4	Paving	Paving	10/1/2018	12/1/2018	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.2

Acres of Paving: 2.47

Residential Indoor: 298,009; Residential Outdoor: 99,336; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,576

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Bore/Drill Rigs	1	8.00	187	0.41
Grading	Cranes	1	8.00	247	0.40
Grading	Dumpers/Tenders	50	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Off-Highway Trucks	4	8.00	402	0.38
Grading	Other Construction Equipment	1	8.00	172	0.42
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Air Compressors	10	7.00	231	0.29
Building Construction	Cement and Mortar Mixers	2	8.00	84	0.74
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Off-Highway Tractors	30	8.00	124	0.44
Building Construction	Other Construction Equipment	5	8.00	172	0.42
Building Construction	Other Material Handling Equipment	1	8.00	168	0.40
Building Construction	Pressure Washers	1	8.00	13	0.30
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Rough Terrain Forklifts	1	8.00	100	0.40
Building Construction	Skid Steer Loaders	1	8.00	65	0.37

Building Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Cement and Mortar Mixers	2	6.00	78	0.48
Architectural Coating	Off-Highway Trucks	10	8.00	402	0.38
Architectural Coating	Other Construction Equipment	1	8.00	172	0.42
Architectural Coating	Pressure Washers	1	8.00	13	0.30
Architectural Coating	Pumps	1	8.00	84	0.74
Paving	Air Compressors	1	8.00	130	0.42
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Concrete/Industrial Saws	1	6.00	132	0.36
Paving	Off-Highway Trucks	10	6.00	80	0.38
Paving	Other Construction Equipment	1	8.00	97	0.37
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Pressure Washers	1	8.00	13	0.30
Paving	Pumps	1	8.00	84	0.74
Paving	Skid Steer Loaders	1	8.00	65	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class

Grading	65	5.00	5.00	2,000.00	14.70	6.90	35.25	LD_Mix	HDT_Mix	HHDT
Building Construction	60	25.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	16	15.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	24	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0981	0.0000	0.0981	0.0532	0.0000	0.0532	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1405	1.5890	0.7884	1.7400e-003		0.0716	0.0716		0.0659	0.0659	0.0000	161.3654	161.3654	0.0494	0.0000	162.6015
Total	**0.1405**	**1.5890**	**0.7884**	**1.7400e-003**	**0.0981**	**0.0716**	**0.1697**	**0.0532**	**0.0659**	**0.1191**	**0.0000**	**161.3654**	**161.3654**	**0.0494**	**0.0000**	**162.6015**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0183	0.5549	0.1158	1.3600e-003	0.0303	3.1700e-003	0.0334	8.3100e-003	3.0300e-003	0.0113	0.0000	132.7565	132.7565	8.5700e-003	0.0000	132.9708
Vendor	4.2000e-004	0.0107	3.1100e-003	2.0000e-005	5.0000e-004	9.0000e-005	5.9000e-004	1.5000e-004	8.0000e-005	2.3000e-004	0.0000	2.0285	2.0285	1.5000e-004	0.0000	2.0322
Worker	5.0000e-004	4.4000e-004	4.6700e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8956	0.8956	4.0000e-005	0.0000	0.8965
Total	**0.0192**	**0.5660**	**0.1236**	**1.3900e-003**	**0.0317**	**3.2700e-003**	**0.0349**	**8.6900e-003**	**3.1200e-003**	**0.0118**	**0.0000**	**135.6806**	**135.6806**	**8.7600e-003**	**0.0000**	**135.8995**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0364	0.0000	0.0364	0.0197	0.0000	0.0197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0575	0.5709	0.9075	1.7400e-003		0.0233	0.0233		0.0216	0.0216	0.0000	161.3653	161.3653	0.0494	0.0000	162.6013
Total	**0.0575**	**0.5709**	**0.9075**	**1.7400e-003**	**0.0364**	**0.0233**	**0.0596**	**0.0197**	**0.0216**	**0.0413**	**0.0000**	**161.3653**	**161.3653**	**0.0494**	**0.0000**	**162.6013**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0183	0.5549	0.1158	1.3600e-003	0.0200	3.1700e-003	0.0232	5.8000e-003	3.0300e-003	8.8300e-003	0.0000	132.7565	132.7565	8.5700e-003	0.0000	132.9708
Vendor	4.2000e-004	0.0107	3.1100e-003	2.0000e-005	3.4000e-004	9.0000e-005	4.3000e-004	1.1000e-004	8.0000e-005	1.9000e-004	0.0000	2.0285	2.0285	1.5000e-004	0.0000	2.0322
Worker	5.0000e-004	4.4000e-004	4.6700e-003	1.0000e-005	5.3000e-004	1.0000e-005	5.4000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	0.8956	0.8956	4.0000e-005	0.0000	0.8965

Total	**0.0192**	**0.5660**	**0.1236**	**1.3900e-003**	**0.0209**	**3.2700e-003**	**0.0242**	**6.0600e-003**	**3.1200e-003**	**9.1800e-003**	**0.0000**	**135.6806**	**135.6806**	**8.7600e-003**	**0.0000**	**135.8995**

3.3 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3342	13.4215	9.4926	0.0169		0.6788	0.6788		0.6357	0.6357	0.0000	1,525.9040	1,525.9040	0.3608	0.0000	1,534.9243
Total	**1.3342**	**13.4215**	**9.4926**	**0.0169**		**0.6788**	**0.6788**		**0.6357**	**0.6357**	**0.0000**	**1,525.9040**	**1,525.9040**	**0.3608**	**0.0000**	**1,534.9243**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0560	0.0164	1.1000e-004	2.6500e-003	4.6000e-004	3.1100e-003	7.6000e-004	4.4000e-004	1.2100e-003	0.0000	10.6496	10.6496	7.7000e-004	0.0000	10.6688
Worker	9.4200e-003	8.1800e-003	0.0875	1.9000e-004	0.0164	1.6000e-004	0.0166	4.3700e-003	1.4000e-004	4.5100e-003	0.0000	16.7925	16.7925	7.0000e-004	0.0000	16.8100
Total	**0.0117**	**0.0642**	**0.1039**	**3.0000e-004**	**0.0191**	**6.2000e-004**	**0.0197**	**5.1300e-003**	**5.8000e-004**	**5.7200e-003**	**0.0000**	**27.4421**	**27.4421**	**1.4700e-003**	**0.0000**	**27.4788**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2634	1.7590	10.9415	0.0169		0.0574	0.0574		0.0567	0.0567	0.0000	1,525.9022	1,525.9022	0.3608	0.0000	1,534.9225
Total	**0.2634**	**1.7590**	**10.9415**	**0.0169**		**0.0574**	**0.0574**		**0.0567**	**0.0567**	**0.0000**	**1,525.9022**	**1,525.9022**	**0.3608**	**0.0000**	**1,534.9225**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0560	0.0164	1.1000e-004	1.8000e-003	4.6000e-004	2.2600e-003	5.6000e-004	4.4000e-004	1.0000e-003	0.0000	10.6496	10.6496	7.7000e-004	0.0000	10.6688
Worker	9.4200e-003	8.1800e-003	0.0875	1.9000e-004	0.0100	1.6000e-004	0.0102	2.7900e-003	1.4000e-004	2.9400e-003	0.0000	16.7925	16.7925	7.0000e-004	0.0000	16.8100
Total	**0.0117**	**0.0642**	**0.1039**	**3.0000e-004**	**0.0118**	**6.2000e-004**	**0.0124**	**3.3500e-003**	**5.8000e-004**	**3.9400e-003**	**0.0000**	**27.4421**	**27.4421**	**1.4700e-003**	**0.0000**	**27.4788**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	2.5763	25.4646	20.3075	0.0368		1.2648	1.2648		1.1851	1.1851	0.0000	3,281.8074	3,281.8074	0.7795	0.0000	3,301.2936
Total	**2.5763**	**25.4646**	**20.3075**	**0.0368**		**1.2648**	**1.2648**		**1.1851**	**1.1851**	**0.0000**	**3,281.8074**	**3,281.8074**	**0.7795**	**0.0000**	**3,301.2936**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2800e-003	0.1144	0.0322	2.4000e-004	5.7500e-003	7.9000e-004	6.5500e-003	1.6600e-003	7.6000e-004	2.4200e-003	0.0000	23.0811	23.0811	1.5800e-003	0.0000	23.1207
Worker	0.0181	0.0155	0.1663	3.9000e-004	0.0358	3.3000e-004	0.0361	9.5000e-003	3.0000e-004	9.8000e-003	0.0000	35.5219	35.5219	1.3400e-003	0.0000	35.5553
Total	**0.0224**	**0.1299**	**0.1985**	**6.3000e-004**	**0.0415**	**1.1200e-003**	**0.0426**	**0.0112**	**1.0600e-003**	**0.0122**	**0.0000**	**58.6030**	**58.6030**	**2.9200e-003**	**0.0000**	**58.6760**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5571	3.6760	23.7754	0.0368		0.1154	0.1154		0.1141	0.1141	0.0000	3,281.8035	3,281.8035	0.7795	0.0000	3,301.2896
Total	**0.5571**	**3.6760**	**23.7754**	**0.0368**		**0.1154**	**0.1154**		**0.1141**	**0.1141**	**0.0000**	**3,281.8035**	**3,281.8035**	**0.7795**	**0.0000**	**3,301.2896**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2800e-003	0.1144	0.0322	2.4000e-004	3.9200e-003	7.9000e-004	4.7200e-003	1.2100e-003	7.6000e-004	1.9700e-003	0.0000	23.0811	23.0811	1.5800e-003	0.0000	23.1207
Worker	0.0181	0.0155	0.1663	3.9000e-004	0.0218	3.3000e-004	0.0221	6.0700e-003	3.0000e-004	6.3700e-003	0.0000	35.5219	35.5219	1.3400e-003	0.0000	35.5553
Total	**0.0224**	**0.1299**	**0.1985**	**6.3000e-004**	**0.0257**	**1.1200e-003**	**0.0269**	**7.2800e-003**	**1.0600e-003**	**8.3400e-003**	**0.0000**	**58.6030**	**58.6030**	**2.9200e-003**	**0.0000**	**58.6760**

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1006	0.9800	0.8520	1.5500e-003		0.0479	0.0479		0.0449	0.0449	0.0000	136.7744	136.7744	0.0326	0.0000	137.5894
Total	**0.1006**	**0.9800**	**0.8520**	**1.5500e-003**		**0.0479**	**0.0479**		**0.0449**	**0.0449**	**0.0000**	**136.7744**	**136.7744**	**0.0326**	**0.0000**	**137.5894**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	4.5500e-003	1.2400e-003	1.0000e-005	2.4000e-004	3.0000e-005	2.7000e-004	7.0000e-005	3.0000e-005	1.0000e-004	0.0000	0.9628	0.9628	6.0000e-005	0.0000	0.9644
Worker	6.9000e-004	5.7000e-004	6.2400e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.4484	1.4484	5.0000e-005	0.0000	1.4496
Total	**8.5000e-004**	**5.1200e-003**	**7.4800e-003**	**3.0000e-005**	**1.7500e-003**	**4.0000e-005**	**1.7900e-003**	**4.7000e-004**	**4.0000e-005**	**5.1000e-004**	**0.0000**	**2.4111**	**2.4111**	**1.1000e-004**	**0.0000**	**2.4140**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0229	0.1495	1.0013	1.5500e-003		4.5200e-003	4.5200e-003		4.4700e-003	4.4700e-003	0.0000	136.7743	136.7743	0.0326	0.0000	137.5892
Total	**0.0229**	**0.1495**	**1.0013**	**1.5500e-003**		**4.5200e-003**	**4.5200e-003**		**4.4700e-003**	**4.4700e-003**	**0.0000**	**136.7743**	**136.7743**	**0.0326**	**0.0000**	**137.5892**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	4.5500e-003	1.2400e-003	1.0000e-005	1.7000e-004	3.0000e-005	1.9000e-004	5.0000e-005	3.0000e-005	8.0000e-005	0.0000	0.9628	0.9628	6.0000e-005	0.0000	0.9644

Worker	6.9000e-004	5.7000e-004	6.2400e-003	2.0000e-005	9.2000e-004	1.0000e-005	9.3000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	1.4484	1.4484	5.0000e-005	0.0000	1.4496
Total	**8.5000e-004**	**5.1200e-003**	**7.4800e-003**	**3.0000e-005**	**1.0900e-003**	**4.0000e-005**	**1.1200e-003**	**3.1000e-004**	**4.0000e-005**	**3.5000e-004**	**0.0000**	**2.4111**	**2.4111**	**1.1000e-004**	**0.0000**	**2.4140**

3.4 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4757					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4537	4.7428	2.5780	7.3500e-003		0.1881	0.1881		0.1748	0.1748	0.0000	667.3641	667.3641	0.1981	0.0000	672.3160
Total	**0.9294**	**4.7428**	**2.5780**	**7.3500e-003**		**0.1881**	**0.1881**		**0.1748**	**0.1748**	**0.0000**	**667.3641**	**667.3641**	**0.1981**	**0.0000**	**672.3160**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-004	0.0186	5.2300e-003	4.0000e-005	9.4000e-004	1.3000e-004	1.0600e-003	2.7000e-004	1.2000e-004	3.9000e-004	0.0000	3.7521	3.7521	2.6000e-004	0.0000	3.7585
Worker	4.1100e-003	3.5200e-003	0.0379	9.0000e-005	8.1400e-003	7.0000e-005	8.2100e-003	2.1600e-003	7.0000e-005	2.2300e-003	0.0000	8.0843	8.0843	3.0000e-004	0.0000	8.0919
Total	**4.8100e-003**	**0.0221**	**0.0431**	**1.3000e-004**	**9.0800e-003**	**2.0000e-004**	**9.2700e-003**	**2.4300e-003**	**1.9000e-004**	**2.6200e-003**	**0.0000**	**11.8364**	**11.8364**	**5.6000e-004**	**0.0000**	**11.8504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4757					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0897	0.3920	3.4590	7.3500e-003		0.0125	0.0125		0.0125	0.0125	0.0000	667.3633	667.3633	0.1981	0.0000	672.3152
Total	**0.5654**	**0.3920**	**3.4590**	**7.3500e-003**		**0.0125**	**0.0125**		**0.0125**	**0.0125**	**0.0000**	**667.3633**	**667.3633**	**0.1981**	**0.0000**	**672.3152**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-004	0.0186	5.2300e-003	4.0000e-005	6.4000e-004	1.3000e-004	7.7000e-004	2.0000e-004	1.2000e-004	3.2000e-004	0.0000	3.7521	3.7521	2.6000e-004	0.0000	3.7585
Worker	4.1100e-003	3.5200e-003	0.0379	9.0000e-005	4.9600e-003	7.0000e-005	5.0400e-003	1.3800e-003	7.0000e-005	1.4500e-003	0.0000	8.0843	8.0843	3.0000e-004	0.0000	8.0919
Total	**4.8100e-003**	**0.0221**	**0.0431**	**1.3000e-004**	**5.6000e-003**	**2.0000e-004**	**5.8100e-003**	**1.5800e-003**	**1.9000e-004**	**1.7700e-003**	**0.0000**	**11.8364**	**11.8364**	**5.6000e-004**	**0.0000**	**11.8504**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.0700	0.6437	0.5688	9.2000e-004		0.0384	0.0384		0.0363	0.0363	0.0000	80.7038	80.7038	0.0171	0.0000	81.1310
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0700**	**0.6437**	**0.5688**	**9.2000e-004**		**0.0384**	**0.0384**		**0.0363**	**0.0363**	**0.0000**	**80.7038**	**80.7038**	**0.0171**	**0.0000**	**81.1310**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	5.3000e-004	5.7400e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.2249	1.2249	5.0000e-005	0.0000	1.2261
Total	**6.2000e-004**	**5.3000e-004**	**5.7400e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.2249**	**1.2249**	**5.0000e-005**	**0.0000**	**1.2261**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0330	0.3290	0.5802	9.2000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	80.7037	80.7037	0.0171	0.0000	81.1309
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0330**	**0.3290**	**0.5802**	**9.2000e-004**		**0.0166**	**0.0166**		**0.0154**	**0.0154**	**0.0000**	**80.7037**	**80.7037**	**0.0171**	**0.0000**	**81.1309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	5.3000e-004	5.7400e-003	1.0000e-005	7.5000e-004	1.0000e-005	7.6000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	1.2249	1.2249	5.0000e-005	0.0000	1.2261
Total	**6.2000e-004**	**5.3000e-004**	**5.7400e-003**	**1.0000e-005**	**7.5000e-004**	**1.0000e-005**	**7.6000e-004**	**2.1000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**1.2249**	**1.2249**	**5.0000e-005**	**0.0000**	**1.2261**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3684	1.8876	5.1393	0.0157	1.2011	0.0183	1.2194	0.3220	0.0172	0.3392	0.0000	1,443.9443	1,443.9443	0.0848	0.0000	1,446.0632
Unmitigated	0.3684	1.8876	5.1393	0.0157	1.2011	0.0183	1.2194	0.3220	0.0172	0.3392	0.0000	1,443.9443	1,443.9443	0.0848	0.0000	1,446.0632

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	904.40	1,022.40	937.60	3,164,283	3,164,283
Enclosed Parking with Elevator	0.00	0.00	0.00		
Total	904.40	1,022.40	937.60	3,164,283	3,164,283

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Apartments Mid Rise	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	786.8254	786.8254	0.0186	3.8400e-003	788.4357
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	786.8254	786.8254	0.0186	3.8400e-003	788.4357
NaturalGas Mitigated	9.6300e-003	0.0823	0.0350	5.3000e-004		6.6500e-003	6.6500e-003		6.6500e-003	6.6500e-003	0.0000	95.2857	95.2857	1.8300e-003	1.7500e-003	95.8519

NaturalGas Unmitigated	9.6300e-003	0.0823	0.0350	5.3000e-004		6.6500e-003	6.6500e-003		6.6500e-003	6.6500e-003	0.0000	95.2857	95.2857	1.8300e-003	1.7500e-003	95.8519

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.78559e+006	9.6300e-003	0.0823	0.0350	5.3000e-004		6.6500e-003	6.6500e-003		6.6500e-003	6.6500e-003	0.0000	95.2857	95.2857	1.8300e-003	1.7500e-003	95.8519
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**9.6300e-003**	**0.0823**	**0.0350**	**5.3000e-004**		**6.6500e-003**	**6.6500e-003**		**6.6500e-003**	**6.6500e-003**	**0.0000**	**95.2857**	**95.2857**	**1.8300e-003**	**1.7500e-003**	**95.8519**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.78559e+006	9.6300e-003	0.0823	0.0350	5.3000e-004		6.6500e-003	6.6500e-003		6.6500e-003	6.6500e-003	0.0000	95.2857	95.2857	1.8300e-003	1.7500e-003	95.8519
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**9.6300e-003**	**0.0823**	**0.0350**	**5.3000e-004**		**6.6500e-003**	**6.6500e-003**		**6.6500e-003**	**6.6500e-003**	**0.0000**	**95.2857**	**95.2857**	**1.8300e-003**	**1.7500e-003**	**95.8519**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	674006	375.3956	8.8700e-003	1.8300e-003	376.1639
Enclosed Parking with Elevator	738704	411.4297	9.7200e-003	2.0100e-003	412.2718
Total		**786.8254**	**0.0186**	**3.8400e-003**	**788.4357**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	674006	375.3956	8.8700e-003	1.8300e-003	376.1639
Enclosed Parking with Elevator	738704	411.4297	9.7200e-003	2.0100e-003	412.2718
Total		**786.8254**	**0.0186**	**3.8400e-003**	**788.4357**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Mitigated	0.6915	0.0272	2.1519	1.6900e-003		0.0891	0.0891		0.0891	0.0891	10.7078	2.7021	13.4098	0.0527	0.0000	14.7279
Unmitigated	0.6915	0.0272	2.1519	1.6900e-003		0.0891	0.0891		0.0891	0.0891	10.7078	2.7021	13.4098	0.0527	0.0000	14.7279

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0476					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0540	8.0000e-003	0.4902	1.6000e-003		0.0800	0.0800		0.0800	0.0800	10.7078	0.0000	10.7078	0.0501	0.0000	11.9592
Landscaping	0.0511	0.0192	1.6617	9.0000e-005		9.1000e-003	9.1000e-003		9.1000e-003	9.1000e-003	0.0000	2.7021	2.7021	2.6600e-003	0.0000	2.7687
Total	**0.6915**	**0.0272**	**2.1519**	**1.6900e-003**		**0.0891**	**0.0891**		**0.0891**	**0.0891**	**10.7078**	**2.7021**	**13.4098**	**0.0527**	**0.0000**	**14.7279**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0476					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0540	8.0000e-003	0.4902	1.6000e-003		0.0800	0.0800		0.0800	0.0800	10.7078	0.0000	10.7078	0.0501	0.0000	11.9592

Landscaping	0.0511	0.0192	1.6617	9.0000e-005		9.1000e-003	9.1000e-003		9.1000e-003	9.1000e-003	0.0000	2.7021	2.7021	2.6600e-003	0.0000	2.7687
Total	**0.6915**	**0.0272**	**2.1519**	**1.6900e-003**		**0.0891**	**0.0891**		**0.0891**	**0.0891**	**10.7078**	**2.7021**	**13.4098**	**0.0527**	**0.0000**	**14.7279**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	119.5757	0.3424	8.5900e-003	130.6960
Unmitigated	119.5757	0.3424	8.5900e-003	130.6960

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	10.4246 / 6.57206	119.5757	0.3424	8.5900e-003	130.6960
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**119.5757**	**0.3424**	**8.5900e-003**	**130.6960**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	10.4246 / 6.57206	119.5757	0.3424	8.5900e-003	130.6960
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**119.5757**	**0.3424**	**8.5900e-003**	**130.6960**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.9401	0.8829	0.0000	37.0136
Unmitigated	14.9401	0.8829	0.0000	37.0136

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	73.6	14.9401	0.8829	0.0000	37.0136
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**14.9401**	**0.8829**	**0.0000**	**37.0136**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	73.6	14.9401	0.8829	0.0000	37.0136
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		**14.9401**	**0.8829**	**0.0000**	**37.0136**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

6500 North Sepulveda Boulevard Existing

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	274.00	Space	2.47	109,600.00	0
Apartments Mid Rise	160.00	Dwelling Unit	1.23	147,165.00	458

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LA ZIMAS information

Land Use - Developer information

Construction Phase - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Trips and VMT - Haul trips to East Arrow Landfill in Irwindale 35.2 miles one-way; assumes 10 cubic yard capacity per haul truck

Demolition - Assumes 27.96 tons of waste for existing restaurant (US Green Building Council) and 152.25 tons for removing 7,000 square feet of asphalt at 0.3 feet of depth

Grading - Developer information

Vehicle Trips - Overland Traffic Consultants, Inc. Traffic Study, October 2016

Woodstoves - Developer information

Construction Off-road Equipment Mitigation - Assumes SCAQMD Rule 403 control efficiencies

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	45
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	50.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	30.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	24.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	18.00	99.00
tblConstructionPhase	NumDays	230.00	392.00
tblConstructionPhase	NumDays	8.00	32.00
tblConstructionPhase	NumDays	18.00	45.00
tblFireplaces	NumberGas	136.00	0.00
tblFireplaces	NumberNoFireplace	16.00	160.00
tblFireplaces	NumberWood	8.00	0.00
tblGrading	AcresOfGrading	16.00	1.20
tblGrading	MaterialExported	0.00	20,000.00
tblLandUse	BuildingSpaceSquareFeet	160,000.00	147,165.00
tblLandUse	LandUseSquareFeet	160,000.00	147,165.00
tblLandUse	LotAcreage	4.21	1.23
tblOffRoadEquipment	HorsePower	78.00	231.00
tblOffRoadEquipment	HorsePower	78.00	130.00

tblOffRoadEquipment	HorsePower	221.00	187.00
tblOffRoadEquipment	HorsePower	9.00	84.00
tblOffRoadEquipment	HorsePower	9.00	78.00
tblOffRoadEquipment	HorsePower	81.00	132.00
tblOffRoadEquipment	HorsePower	231.00	247.00
tblOffRoadEquipment	HorsePower	16.00	97.00
tblOffRoadEquipment	HorsePower	402.00	80.00
tblOffRoadEquipment	HorsePower	172.00	97.00
tblOffRoadEquipment	LoadFactor	0.48	0.29
tblOffRoadEquipment	LoadFactor	0.48	0.42
tblOffRoadEquipment	LoadFactor	0.50	0.41
tblOffRoadEquipment	LoadFactor	0.56	0.74
tblOffRoadEquipment	LoadFactor	0.56	0.48
tblOffRoadEquipment	LoadFactor	0.73	0.36
tblOffRoadEquipment	LoadFactor	0.29	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.42	0.37
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripLength	20.00	35.25
tblTripsAndVMT	HaulingTripNumber	2,500.00	2,000.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	35.00	7.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	163.00	5.00
tblTripsAndVMT	WorkerTripNumber	161.00	25.00

tblTripsAndVMT	WorkerTripNumber	32.00	15.00
tblTripsAndVMT	WorkerTripNumber	60.00	5.00
tblVehicleTrips	WD_TR	6.65	5.65

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	22.4289	224.7246	160.0093	0.2870	8.1452	11.3227	12.8227	3.8768	10.6040	10.6910	0.0000	28,553.7325	28,553.7325	6.6558	0.0000	28,720.1275
2018	41.9248	320.9693	235.7368	0.4793	0.5670	15.2118	15.7788	0.1518	14.2410	14.3929	0.0000	47,381.9929	47,381.9929	11.8716	0.0000	47,678.7840
2019	18.4351	179.0810	156.3265	0.2868	0.3243	8.7197	9.0440	0.0870	8.1674	8.2544	0.0000	27,910.7709	27,910.7709	6.5561	0.0000	28,074.6732
Maximum	**41.9248**	**320.9693**	**235.7368**	**0.4793**	**8.1452**	**15.2118**	**15.7788**	**3.8768**	**14.2410**	**14.3929**	**0.0000**	**47,381.9929**	**47,381.9929**	**11.8716**	**0.0000**	**47,678.7840**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.7893	69.6191	184.1565	0.2870	3.5973	1.6580	5.2553	1.6148	1.5442	3.1590	0.0000	28,553.7324	28,553.7324	6.6558	0.0000	28,720.1275
2018	17.4534	52.1229	280.6186	0.4793	0.3497	1.8889	2.2386	0.0985	1.8225	1.9210	0.0000	47,381.9928	47,381.9928	11.8716	0.0000	47,678.7840
2019	4.3164	28.0738	183.4705	0.2868	0.2006	0.8298	1.0303	0.0567	0.8204	0.8771	0.0000	27,910.7709	27,910.7709	6.5561	0.0000	28,074.6732

Maximum	**17.4534**	**69.6191**	**280.6186**	**0.4793**	**3.5973**	**1.8889**	**5.2553**	**1.6148**	**1.8225**	**3.1590**	**0.0000**	**47,381.9928**	**47,381.9928**	**11.8716**	**0.0000**	**47,678.7840**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**67.92**	**79.33**	**-17.42**	**0.00**	**54.10**	**87.59**	**77.36**	**56.99**	**87.32**	**82.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9404	0.7937	52.5101	0.1287		6.4702	6.4702		6.4702	6.4702	944.2621	23.8283	968.0905	4.4377	0.0000	1,079.0336
Energy	0.0528	0.4508	0.1918	2.8800e-003		0.0365	0.0365		0.0365	0.0365		575.5312	575.5312	0.0110	0.0106	578.9513
Mobile	2.3468	10.9064	32.3206	0.0987	7.4298	0.1109	7.5407	1.9887	0.1043	2.0930		10,011.7026	10,011.7026	0.5718		10,025.9982
Total	**10.3399**	**12.1509**	**85.0225**	**0.2302**	**7.4298**	**6.6176**	**14.0474**	**1.9887**	**6.6109**	**8.5997**	**944.2621**	**10,611.0621**	**11,555.3243**	**5.0206**	**0.0106**	**11,683.9832**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9404	0.7937	52.5101	0.1287		6.4702	6.4702		6.4702	6.4702	944.2621	23.8283	968.0905	4.4377	0.0000	1,079.0336
Energy	0.0528	0.4508	0.1918	2.8800e-003		0.0365	0.0365		0.0365	0.0365		575.5312	575.5312	0.0110	0.0106	578.9513
Mobile	2.3468	10.9064	32.3206	0.0987	7.4298	0.1109	7.5407	1.9887	0.1043	2.0930		10,011.7026	10,011.7026	0.5718		10,025.9982

Total	10.3399	12.1509	85.0225	0.2302	7.4298	6.6176	14.0474	1.9887	6.6109	8.5997	944.2621	10,611.0621	11,555.3243	5.0206	0.0106	11,683.9832

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/1/2017	7/15/2017	5	32	
2	Building Construction	Building Construction	7/16/2017	1/15/2019	5	392	
3	Architectural Coating	Architectural Coating	7/1/2018	11/15/2018	5	99	
4	Paving	Paving	10/1/2018	12/1/2018	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.2

Acres of Paving: 2.47

Residential Indoor: 298,009; Residential Outdoor: 99,336; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 6,576

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Bore/Drill Rigs	1	8.00	187	0.41
Grading	Cranes	1	8.00	247	0.40
Grading	Dumpers/Tenders	50	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Off-Highway Trucks	4	8.00	402	0.38
Grading	Other Construction Equipment	1	8.00	172	0.42
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Skid Steer Loaders	1	8.00	65	0.37
Grading	Sweepers/Scrubbers	1	8.00	64	0.46

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Air Compressors	10	7.00	231	0.29
Building Construction	Cement and Mortar Mixers	2	8.00	84	0.74
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Off-Highway Tractors	30	8.00	124	0.44
Building Construction	Other Construction Equipment	5	8.00	172	0.42
Building Construction	Other Material Handling Equipment	1	8.00	168	0.40
Building Construction	Pressure Washers	1	8.00	13	0.30
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Rough Terrain Forklifts	1	8.00	100	0.40
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Cement and Mortar Mixers	2	6.00	78	0.48
Architectural Coating	Off-Highway Trucks	10	8.00	402	0.38
Architectural Coating	Other Construction Equipment	1	8.00	172	0.42
Architectural Coating	Pressure Washers	1	8.00	13	0.30
Architectural Coating	Pumps	1	8.00	84	0.74
Paving	Air Compressors	1	8.00	130	0.42
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Concrete/Industrial Saws	1	6.00	132	0.36
Paving	Off-Highway Trucks	10	6.00	80	0.38
Paving	Other Construction Equipment	1	8.00	97	0.37
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Pressure Washers	1	8.00	13	0.30
Paving	Pumps	1	8.00	84	0.74
Paving	Skid Steer Loaders	1	8.00	65	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	65	5.00	5.00	2,000.00	14.70	6.90	35.25	LD_Mix	HDT_Mix	HHDT
Building Construction	60	25.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	16	15.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	24	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					6.1325	0.0000	6.1325	3.3252	0.0000	3.3252			0.0000			0.0000
Off-Road	8.7816	99.3147	49.2739	0.1087		4.4741	4.4741		4.1162	4.1162		11,117.1842	11,117.1842	3.4063		11,202.3414
Total	**8.7816**	**99.3147**	**49.2739**	**0.1087**	**6.1325**	**4.4741**	**10.6067**	**3.3252**	**4.1162**	**7.4414**		**11,117.1842**	**11,117.1842**	**3.4063**		**11,202.3414**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1356	33.2650	7.1126	0.0852	1.9248	0.1973	2.1221	0.5275	0.1888	0.7163		9,183.7459	9,183.7459	0.5837		9,198.3372
Vendor	0.0261	0.6519	0.1855	1.3300e-003	0.0320	5.4600e-003	0.0375	9.2200e-003	5.2200e-003	0.0144		141.2965	141.2965	9.7700e-003		141.5407
Worker	0.0313	0.0240	0.3078	6.5000e-004	0.0559	5.2000e-004	0.0564	0.0148	4.8000e-004	0.0153		64.4459	64.4459	2.6800e-003		64.5128
Total	**1.1930**	**33.9409**	**7.6059**	**0.0871**	**2.0127**	**0.2033**	**2.2160**	**0.5515**	**0.1945**	**0.7460**		**9,389.4883**	**9,389.4883**	**0.5961**		**9,404.3907**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2721	0.0000	2.2721	1.2320	0.0000	1.2320			0.0000			0.0000
Off-Road	3.5963	35.6782	56.7169	0.1087		1.4547	1.4547		1.3497	1.3497	0.0000	11,117.1842	11,117.1842	3.4063		11,202.3414
Total	**3.5963**	**35.6782**	**56.7169**	**0.1087**	**2.2721**	**1.4547**	**3.7268**	**1.2320**	**1.3497**	**2.5817**	**0.0000**	**11,117.1842**	**11,117.1842**	**3.4063**		**11,202.3414**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1356	33.2650	7.1126	0.0852	1.2694	0.1973	1.4668	0.3666	0.1888	0.5554		9,183.7459	9,183.7459	0.5837		9,198.3372
Vendor	0.0261	0.6519	0.1855	1.3300e-003	0.0218	5.4600e-003	0.0272	6.7000e-003	5.2200e-003	0.0119		141.2965	141.2965	9.7700e-003		141.5407
Worker	0.0313	0.0240	0.3078	6.5000e-004	0.0340	5.2000e-004	0.0345	9.4600e-003	4.8000e-004	9.9300e-003		64.4459	64.4459	2.6800e-003		64.5128
Total	**1.1930**	**33.9409**	**7.6059**	**0.0871**	**1.3252**	**0.2033**	**1.5285**	**0.3828**	**0.1945**	**0.5773**		**9,389.4883**	**9,389.4883**	**0.5961**		**9,404.3907**

3.3 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	22.2360	223.6920	158.2106	0.2819		11.3125	11.3125		10.5943	10.5943		28,033.6880	28,033.6880	6.6288		28,199.4067
Total	**22.2360**	**223.6920**	**158.2106**	**0.2819**		**11.3125**	**11.3125**		**10.5943**	**10.5943**		**28,033.6880**	**28,033.6880**	**6.6288**		**28,199.4067**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0365	0.9127	0.2597	1.8600e-003	0.0448	7.6400e-003	0.0525	0.0129	7.3100e-003	0.0202		197.8151	197.8151	0.0137		198.1570
Worker	0.1563	0.1199	1.5390	3.2400e-003	0.2794	2.6000e-003	0.2820	0.0741	2.4000e-003	0.0765		322.2294	322.2294	0.0134		322.5638
Total	**0.1929**	**1.0326**	**1.7987**	**5.1000e-003**	**0.3243**	**0.0102**	**0.3345**	**0.0870**	**9.7100e-003**	**0.0967**		**520.0444**	**520.0444**	**0.0271**		**520.7208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3903	29.3160	182.3578	0.2819		0.9573	0.9573		0.9450	0.9450	0.0000	28,033.6880	28,033.6880	6.6288		28,199.4067
Total	**4.3903**	**29.3160**	**182.3578**	**0.2819**		**0.9573**	**0.9573**		**0.9450**	**0.9450**	**0.0000**	**28,033.6880**	**28,033.6880**	**6.6288**		**28,199.4067**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0365	0.9127	0.2597	1.8600e-003	0.0304	7.6400e-003	0.0381	9.3800e-003	7.3100e-003	0.0167		197.8151	197.8151	0.0137		198.1570
Worker	0.1563	0.1199	1.5390	3.2400e-003	0.1701	2.6000e-003	0.1727	0.0473	2.4000e-003	0.0497		322.2294	322.2294	0.0134		322.5638

Total	**0.1929**	**1.0326**	**1.7987**	**5.1000e-003**	**0.2006**	**0.0102**	**0.2108**	**0.0567**	**9.7100e-003**	**0.0664**		**520.0444**	**520.0444**	**0.0271**		**520.7208**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	19.7416	195.1313	155.6131	0.2819		9.6919	9.6919		9.0815	9.0815		27,720.8687	27,720.8687	6.5839		27,885.4653
Total	**19.7416**	**195.1313**	**155.6131**	**0.2819**		**9.6919**	**9.6919**		**9.0815**	**9.0815**		**27,720.8687**	**27,720.8687**	**6.5839**		**27,885.4653**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0322	0.8579	0.2346	1.8500e-003	0.0448	6.0500e-003	0.0509	0.0129	5.7800e-003	0.0187		197.1756	197.1756	0.0130		197.5002
Worker	0.1381	0.1042	1.3502	3.1500e-003	0.2794	2.4900e-003	0.2819	0.0741	2.3000e-003	0.0764		313.4225	313.4225	0.0118		313.7163
Total	**0.1703**	**0.9622**	**1.5848**	**5.0000e-003**	**0.3243**	**8.5400e-003**	**0.3328**	**0.0870**	**8.0800e-003**	**0.0951**		**510.5981**	**510.5981**	**0.0247**		**511.2165**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.2688	28.1686	182.1873	0.2819		0.8845	0.8845		0.8742	0.8742	0.0000	27,720.8687	27,720.8687	6.5839		27,885.4653
Total	**4.2688**	**28.1686**	**182.1873**	**0.2819**		**0.8845**	**0.8845**		**0.8742**	**0.8742**	**0.0000**	**27,720.8687**	**27,720.8687**	**6.5839**		**27,885.4653**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0322	0.8579	0.2346	1.8500e-003	0.0304	6.0500e-003	0.0365	9.3800e-003	5.7800e-003	0.0152		197.1756	197.1756	0.0130		197.5002
Worker	0.1381	0.1042	1.3502	3.1500e-003	0.1701	2.4900e-003	0.1726	0.0473	2.3000e-003	0.0496		313.4225	313.4225	0.0118		313.7163
Total	**0.1703**	**0.9622**	**1.5848**	**5.0000e-003**	**0.2006**	**8.5400e-003**	**0.2091**	**0.0567**	**8.0800e-003**	**0.0647**		**510.5981**	**510.5981**	**0.0247**		**511.2165**

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	18.2811	178.1791	154.9061	0.2819		8.7121	8.7121		8.1603	8.1603		27,412.3624	27,412.3624	6.5332		27,575.6916
Total	**18.2811**	**178.1791**	**154.9061**	**0.2819**		**8.7121**	**8.7121**		**8.1603**	**8.1603**		**27,412.3624**	**27,412.3624**	**6.5332**		**27,575.6916**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0291	0.8101	0.2150	1.8300e-003	0.0448	5.1600e-003	0.0500	0.0129	4.9400e-003	0.0178		195.1702	195.1702	0.0125		195.4829
Worker	0.1249	0.0918	1.2054	3.0500e-003	0.2794	2.4100e-003	0.2819	0.0741	2.2200e-003	0.0763		303.2382	303.2382	0.0104		303.4986
Total	**0.1540**	**0.9019**	**1.4204**	**4.8800e-003**	**0.3243**	**7.5700e-003**	**0.3318**	**0.0870**	**7.1600e-003**	**0.0942**		**498.4085**	**498.4085**	**0.0229**		**498.9815**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1624	27.1719	182.0501	0.2819		0.8222	0.8222		0.8133	0.8133	0.0000	27,412.3624	27,412.3624	6.5332		27,575.6916
Total	**4.1624**	**27.1719**	**182.0501**	**0.2819**		**0.8222**	**0.8222**		**0.8133**	**0.8133**	**0.0000**	**27,412.3624**	**27,412.3624**	**6.5332**		**27,575.6916**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0291	0.8101	0.2150	1.8300e-003	0.0305	5.1600e-003	0.0356	9.3800e-003	4.9400e-003	0.0143		195.1702	195.1702	0.0125		195.4829
Worker	0.1249	0.0918	1.2054	3.0500e-003	0.1701	2.4100e-003	0.1725	0.0473	2.2200e-003	0.0495		303.2382	303.2382	0.0104		303.4986
Total	**0.1540**	**0.9019**	**1.4204**	**4.8800e-003**	**0.2006**	**7.5700e-003**	**0.2081**	**0.0567**	**7.1600e-003**	**0.0638**		**498.4085**	**498.4085**	**0.0229**		**498.9815**

3.4 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	9.1663	95.8142	52.0802	0.1484		3.8005	3.8005		3.5319	3.5319		14,861.4746	14,861.4746	4.4109		14,971.7475
Total	**18.7757**	**95.8142**	**52.0802**	**0.1484**		**3.8005**	**3.8005**		**3.5319**	**3.5319**		**14,861.4746**	**14,861.4746**	**4.4109**		**14,971.7475**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0138	0.3677	0.1005	7.9000e-004	0.0192	2.5900e-003	0.0218	5.5300e-003	2.4800e-003	8.0100e-003		84.5038	84.5038	5.5600e-003		84.6429
Worker	0.0829	0.0625	0.8101	1.8900e-003	0.1677	1.4900e-003	0.1692	0.0445	1.3800e-003	0.0458		188.0535	188.0535	7.0500e-003		188.2298
Total	**0.0967**	**0.4302**	**0.9106**	**2.6800e-003**	**0.1869**	**4.0800e-003**	**0.1910**	**0.0500**	**3.8600e-003**	**0.0539**		**272.5573**	**272.5573**	**0.0126**		**272.8727**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.8127	7.9190	69.8779	0.1484		0.2517	0.2517		0.2517	0.2517	0.0000	14,861.4746	14,861.4746	4.4109		14,971.7475
Total	**11.4220**	**7.9190**	**69.8779**	**0.1484**		**0.2517**	**0.2517**		**0.2517**	**0.2517**	**0.0000**	**14,861.4746**	**14,861.4746**	**4.4109**		**14,971.7475**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0138	0.3677	0.1005	7.9000e-004	0.0131	2.5900e-003	0.0156	4.0200e-003	2.4800e-003	6.5000e-003		84.5038	84.5038	5.5600e-003		84.6429
Worker	0.0829	0.0625	0.8101	1.8900e-003	0.1021	1.4900e-003	0.1036	0.0284	1.3800e-003	0.0297		188.0535	188.0535	7.0500e-003		188.2298

Total	**0.0967**	**0.4302**	**0.9106**	**2.6800e-003**	**0.1151**	**4.0800e-003**	**0.1192**	**0.0324**	**3.8600e-003**	**0.0362**		**272.5573**	**272.5573**	**0.0126**		**272.8727**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1128	28.6106	25.2781	0.0407		1.7063	1.7063		1.6153	1.6153		3,953.8097	3,953.8097	0.8372		3,974.7387
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.1128**	**28.6106**	**25.2781**	**0.0407**		**1.7063**	**1.7063**		**1.6153**	**1.6153**		**3,953.8097**	**3,953.8097**	**0.8372**		**3,974.7387**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433
Total	**0.0276**	**0.0209**	**0.2700**	**6.3000e-004**	**0.0559**	**5.0000e-004**	**0.0564**	**0.0148**	**4.6000e-004**	**0.0153**		**62.6845**	**62.6845**	**2.3500e-003**		**62.7433**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4679	14.6221	25.7880	0.0407		0.7396	0.7396		0.6843	0.6843	0.0000	3,953.8097	3,953.8097	0.8372		3,974.7387
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4679**	**14.6221**	**25.7880**	**0.0407**		**0.7396**	**0.7396**		**0.6843**	**0.6843**	**0.0000**	**3,953.8097**	**3,953.8097**	**0.8372**		**3,974.7387**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0276	0.0209	0.2700	6.3000e-004	0.0340	5.0000e-004	0.0345	9.4600e-003	4.6000e-004	9.9100e-003		62.6845	62.6845	2.3500e-003		62.7433
Total	**0.0276**	**0.0209**	**0.2700**	**6.3000e-004**	**0.0340**	**5.0000e-004**	**0.0345**	**9.4600e-003**	**4.6000e-004**	**9.9100e-003**		**62.6845**	**62.6845**	**2.3500e-003**		**62.7433**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3468	10.9064	32.3206	0.0987	7.4298	0.1109	7.5407	1.9887	0.1043	2.0930		10,011.7026	10,011.7026	0.5718		10,025.9982
Unmitigated	2.3468	10.9064	32.3206	0.0987	7.4298	0.1109	7.5407	1.9887	0.1043	2.0930		10,011.7026	10,011.7026	0.5718		10,025.9982

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	904.40	1,022.40	937.60	3,164,283	3,164,283
Enclosed Parking with Elevator	0.00	0.00	0.00		
Total	904.40	1,022.40	937.60	3,164,283	3,164,283

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925
Apartments Mid Rise	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0528	0.4508	0.1918	2.8800e-003		0.0365	0.0365		0.0365	0.0365		575.5312	575.5312	0.0110	0.0106	578.9513
NaturalGas Unmitigated	0.0528	0.4508	0.1918	2.8800e-003		0.0365	0.0365		0.0365	0.0365		575.5312	575.5312	0.0110	0.0106	578.9513

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4892.02	0.0528	0.4508	0.1918	2.8800e-003		0.0365	0.0365		0.0365	0.0365		575.5312	575.5312	0.0110	0.0106	578.9513
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0528**	**0.4508**	**0.1918**	**2.8800e-003**		**0.0365**	**0.0365**		**0.0365**	**0.0365**		**575.5312**	**575.5312**	**0.0110**	**0.0106**	**578.9513**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4.89202	0.0528	0.4508	0.1918	2.8800e-003		0.0365	0.0365		0.0365	0.0365		575.5312	575.5312	0.0110	0.0106	578.9513
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0528**	**0.4508**	**0.1918**	**2.8800e-003**		**0.0365**	**0.0365**		**0.0365**	**0.0365**		**575.5312**	**575.5312**	**0.0110**	**0.0106**	**578.9513**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.9404	0.7937	52.5101	0.1287		6.4702	6.4702		6.4702	6.4702	944.2621	23.8283	968.0905	4.4377	0.0000	1,079.0336
Unmitigated	7.9404	0.7937	52.5101	0.1287		6.4702	6.4702		6.4702	6.4702	944.2621	23.8283	968.0905	4.4377	0.0000	1,079.0336

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					

Architectural Coating	0.2606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4.3183	0.6397	39.2163	0.1280		6.3974	6.3974		6.3974	6.3974	944.2621	0.0000	944.2621	4.4142	0.0000	1,054.6180
Landscaping	0.4088	0.1539	13.2938	7.0000e-004		0.0728	0.0728		0.0728	0.0728		23.8283	23.8283	0.0235		24.4157
Total	**7.9404**	**0.7937**	**52.5101**	**0.1287**		**6.4702**	**6.4702**		**6.4702**	**6.4702**	**944.2621**	**23.8283**	**968.0905**	**4.4377**	**0.0000**	**1,079.0336**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4.3183	0.6397	39.2163	0.1280		6.3974	6.3974		6.3974	6.3974	944.2621	0.0000	944.2621	4.4142	0.0000	1,054.6180
Landscaping	0.4088	0.1539	13.2938	7.0000e-004		0.0728	0.0728		0.0728	0.0728		23.8283	23.8283	0.0235		24.4157
Total	**7.9404**	**0.7937**	**52.5101**	**0.1287**		**6.4702**	**6.4702**		**6.4702**	**6.4702**	**944.2621**	**23.8283**	**968.0905**	**4.4377**	**0.0000**	**1,079.0336**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

6500 North Sepulveda Boulevard
GHG Emissions Impact Compared to "No Action Taken" Scenario

Source	NAT (2019)	As Proposed (2019)	Reduction from NAT	Change from NAT
Area	15	15	-	0%
Energy	1,525	884	(640)	-42%
Mobile	2,060	1,446	(614)	-30%
Waste	37	37	-	0%
Water	131	131	-	0%
Construction	84	84	-	0%
Total Emissions	3,851	2,597	(1,254)	-32.6%

Land Use	NAT	As Proposed	Difference
Land Use	160 DU	160 DU	None
Traffic	904 ADT	904 ADT	None
Area	Project assumptions	Project assumptions	None
Energy	No State measures	See below	State measures
Mobile	No State measures	See below	State measures
Waste	Reduce construction w	Reduce construction wa	None
Water	Project assumptions	Project assumptions	None

Mobile source emissions	Pavley emission standards (19.8% reduction)
	Low carbon fuel standard (7.2% reduction)
	Vehicle efficiency measures (2.8% reduction)
Energy Production Assun	Natural gas transmission and distribution efficiency measures (7.4% reduction)
	Natural gas extraction efficiency measures (1.6% reduction)
	Renewables (electricity) portfolio standard (33% reduction)

Appendix B:

Noise Modeling

6500 Sepulveda – Noise Receptor Map

***Red markers indicate monitoring locations**

A. 6524 Sepulveda Boulevard Residences

B. North Sepulveda Boulevard Residences

C. Berkley Valley Convalescent Hospital

D. Columbus Avenue Residences

Imagery via Google Earth

DKA Planning

Sepulveda Boulevard

11/1/2016

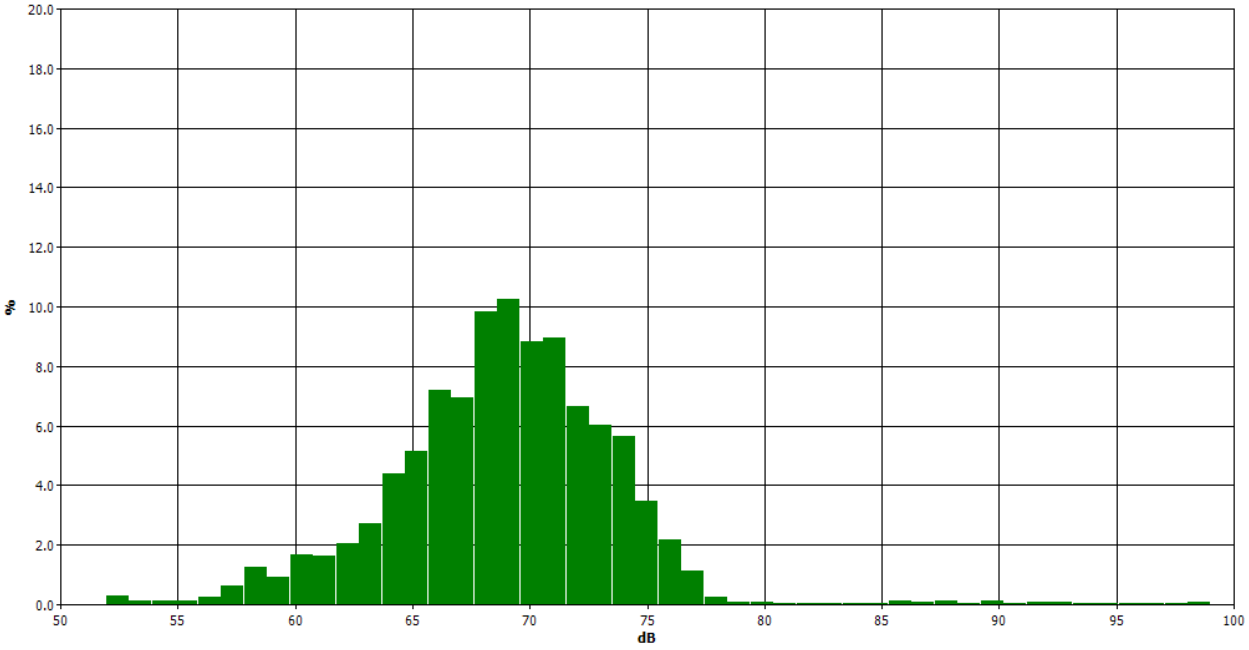
Information Panel

Name	S352_BIJ050019_02112016_110815
Start Time	Monday, November 1, 2016, 12:46pm
Stop Time	Monday, November 1, 2016, 1:01pm
Device Model Type	SoundPro DL

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	75.4dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

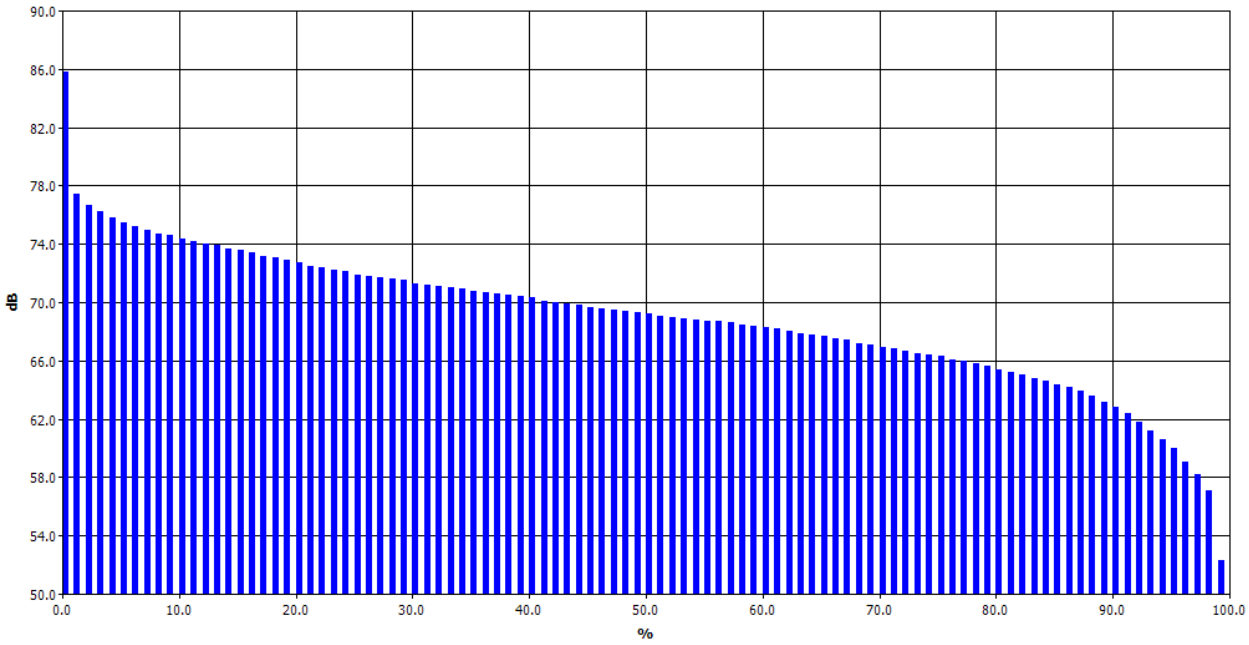
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	0.00	0.00	0.00	0.00	0.01	0.06	0.11	0.05	0.04	0.02	0.27
53	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.13
54	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.12
55	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.11
56	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07	0.08	0.05	0.26
57	0.02	0.06	0.03	0.03	0.07	0.06	0.05	0.06	0.13	0.08	0.61
58	0.08	0.13	0.17	0.14	0.11	0.10	0.17	0.14	0.13	0.11	1.27
59	0.11	0.09	0.10	0.09	0.08	0.08	0.09	0.08	0.08	0.12	0.92
60	0.14	0.20	0.15	0.15	0.15	0.16	0.17	0.20	0.19	0.18	1.69
61	0.19	0.16	0.15	0.14	0.14	0.18	0.14	0.13	0.18	0.20	1.63
62	0.19	0.22	0.16	0.14	0.23	0.20	0.23	0.23	0.19	0.26	2.06
63	0.28	0.30	0.17	0.25	0.24	0.27	0.24	0.30	0.27	0.39	2.72
64	0.33	0.34	0.40	0.35	0.45	0.43	0.42	0.58	0.51	0.58	4.38
65	0.55	0.54	0.44	0.48	0.45	0.49	0.48	0.56	0.57	0.57	5.15
66	0.61	0.67	0.53	0.73	0.71	0.79	0.80	0.75	0.78	0.83	7.20
67	0.72	0.63	0.59	0.74	0.79	0.59	0.62	0.77	0.76	0.74	6.94
68	0.89	0.84	0.78	0.83	0.98	1.02	1.07	1.10	1.24	1.08	9.84
69	1.08	1.21	0.99	1.05	0.98	1.02	0.93	1.00	1.11	0.86	10.23
70	0.86	0.79	0.85	0.83	0.75	0.85	0.82	1.01	1.05	1.02	8.82
71	1.06	1.06	0.90	0.88	0.83	0.90	0.75	0.76	0.90	0.91	8.95
72	0.87	0.78	0.68	0.46	0.64	0.74	0.66	0.67	0.61	0.53	6.64
73	0.50	0.53	0.57	0.57	0.58	0.56	0.60	0.68	0.78	0.63	6.01
74	0.61	0.65	0.54	0.58	0.63	0.52	0.49	0.55	0.58	0.49	5.63
75	0.37	0.48	0.49	0.26	0.32	0.36	0.39	0.37	0.22	0.23	3.49
76	0.24	0.30	0.31	0.24	0.23	0.18	0.24	0.13	0.17	0.13	2.17
77	0.10	0.16	0.17	0.10	0.14	0.10	0.13	0.08	0.09	0.07	1.14
78	0.03	0.03	0.04	0.03	0.04	0.03	0.03	0.01	0.01	0.01	0.26
79	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.08
80	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.07
81	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.05
82	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.03
83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
84	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.05
85	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.06
86	0.00	0.02	0.01	0.04	0.03	0.01	0.02	0.01	0.00	0.00	0.15
87	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.08
88	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.11
89	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.03
90	0.01	0.00	0.00	0.01	0.02	0.01	0.01	0.02	0.05	0.01	0.14
91	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.04
92	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.03	0.02	0.09
93	0.03	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.10
94	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.04
95	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.03
96	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.04
97	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.03
98	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.04
99	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.00	0.00	0.00	0.07
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

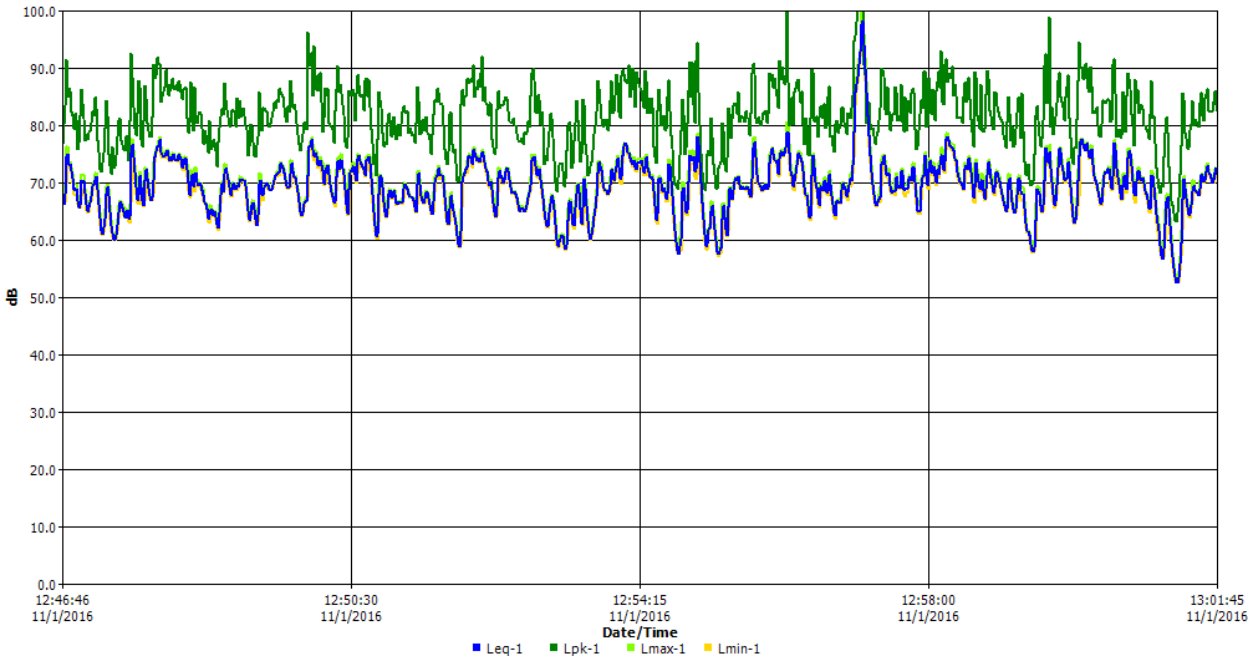
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%		85.8	77.4	76.7	76.2	75.8	75.5	75.2	75	74.7
10%	74.6	74.4	74.2	74	73.9	73.7	73.6	73.4	73.2	73.1
20%	72.9	72.7	72.5	72.4	72.2	72.1	71.9	71.8	71.7	71.6
30%	71.5	71.3	71.2	71.1	71	70.9	70.8	70.7	70.6	70.5
40%	70.4	70.3	70.1	70	69.9	69.8	69.7	69.6	69.5	69.4
50%	69.3	69.2	69.1	69	68.9	68.8	68.7	68.7	68.6	68.5
60%	68.4	68.3	68.2	68	67.9	67.8	67.7	67.5	67.4	67.2
70%	67.1	66.9	66.8	66.7	66.5	66.4	66.3	66.1	66	65.8
80%	65.6	65.4	65.2	65	64.8	64.6	64.4	64.2	63.9	63.6
90%	63.2	62.8	62.4	61.8	61.2	60.6	60	59.1	58.2	57.1
100%	52.3									

Logged Data Chart



N Sepulveda Boulevard

11/1/2016

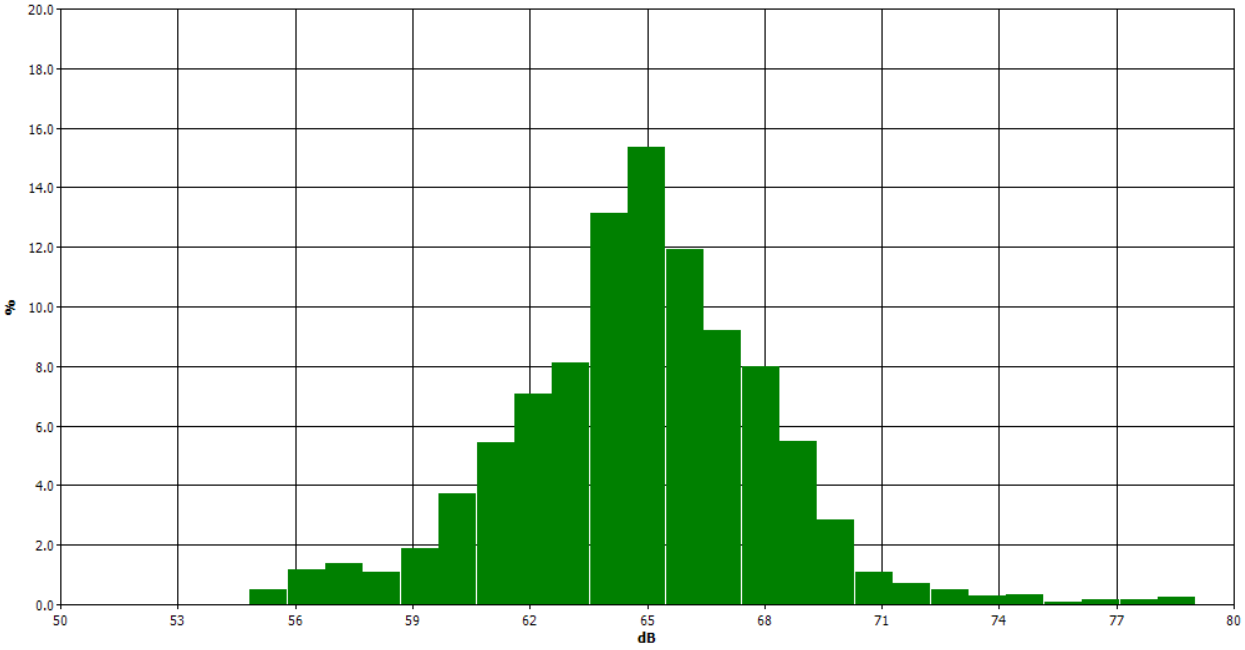
Information Panel

Name	S353_BIJ050019_02112016_110816
Start Time	Monday, November 1, 2016, 1:11pm
Stop Time	Monday, November 1, 2016, 1:26pm
Device Model Type	SoundPro DL

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	66.8dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

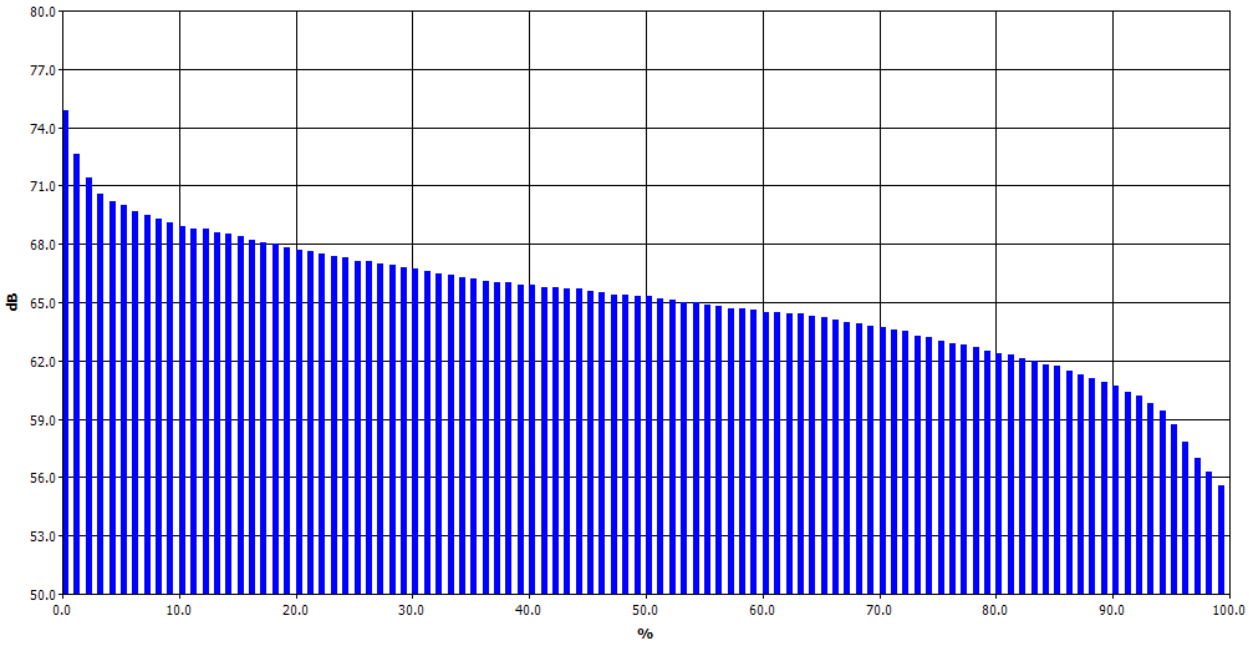
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.19	0.27	0.48
56	0.12	0.14	0.11	0.12	0.22	0.14	0.04	0.05	0.10	0.14	1.18
57	0.16	0.24	0.10	0.08	0.07	0.17	0.16	0.11	0.13	0.13	1.36
58	0.12	0.14	0.11	0.09	0.08	0.08	0.16	0.09	0.10	0.10	1.08
59	0.19	0.20	0.19	0.15	0.12	0.24	0.17	0.20	0.18	0.25	1.90
60	0.26	0.33	0.30	0.42	0.42	0.41	0.27	0.47	0.46	0.39	3.73
61	0.42	0.45	0.54	0.55	0.48	0.45	0.53	0.66	0.63	0.74	5.46
62	0.58	0.59	0.65	0.77	0.99	0.73	0.67	0.65	0.74	0.69	7.06
63	0.91	0.89	0.58	0.78	0.75	0.77	0.94	0.88	0.85	0.78	8.13
64	0.90	0.98	1.29	1.01	1.42	1.56	1.45	1.68	1.44	1.41	13.14
65	1.30	1.29	1.30	1.40	1.58	1.82	1.32	1.44	1.84	2.08	15.37
66	1.68	1.70	1.02	1.30	0.97	0.95	0.91	0.95	1.09	1.36	11.93
67	1.06	1.09	1.07	0.87	0.85	1.11	0.99	0.70	0.61	0.84	9.19
68	0.84	0.71	0.91	0.64	0.51	0.68	0.83	0.85	0.88	1.13	7.99
69	1.04	0.71	0.60	0.58	0.50	0.44	0.40	0.36	0.39	0.45	5.47
70	0.49	0.32	0.32	0.44	0.38	0.29	0.19	0.18	0.14	0.11	2.86
71	0.11	0.12	0.10	0.13	0.13	0.10	0.12	0.10	0.08	0.09	1.07
72	0.08	0.09	0.07	0.04	0.05	0.10	0.06	0.11	0.07	0.07	0.73
73	0.06	0.08	0.06	0.04	0.04	0.05	0.05	0.05	0.05	0.02	0.51
74	0.02	0.03	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.31
75	0.03	0.05	0.06	0.03	0.03	0.04	0.07	0.01	0.01	0.01	0.33
76	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.10
77	0.03	0.02	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.18
78	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.18
79	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.00	0.23
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

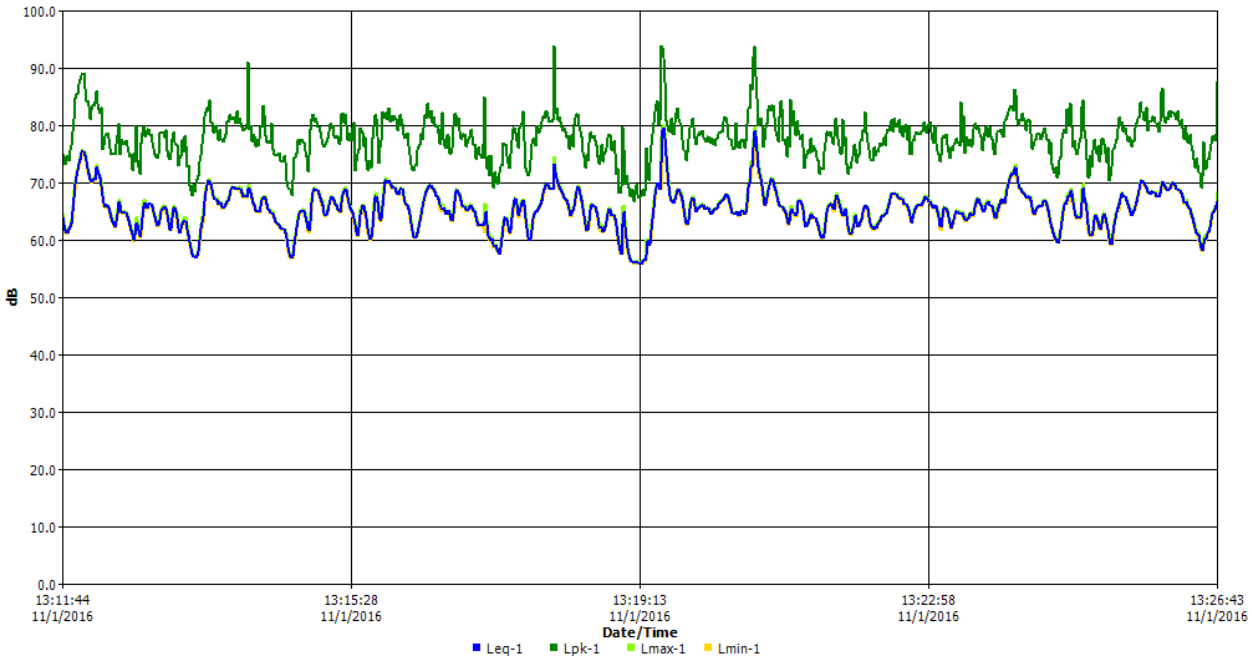
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%		74.9	72.6	71.4	70.6	70.2	70	69.7	69.5	69.3
10%	69.1	68.9	68.8	68.8	68.6	68.5	68.4	68.2	68.1	68
20%	67.8	67.7	67.6	67.5	67.4	67.3	67.1	67.1	67	66.9
30%	66.8	66.7	66.6	66.5	66.4	66.3	66.2	66.1	66	66
40%	65.9	65.9	65.8	65.8	65.7	65.7	65.6	65.5	65.4	65.4
50%	65.3	65.3	65.2	65.1	65	65	64.9	64.8	64.7	64.7
60%	64.6	64.5	64.5	64.4	64.4	64.3	64.2	64.1	64	63.9
70%	63.8	63.7	63.6	63.5	63.3	63.2	63	62.9	62.8	62.7
80%	62.5	62.4	62.3	62.1	62	61.8	61.7	61.5	61.3	61.1
90%	60.9	60.7	60.4	60.2	59.8	59.4	58.7	57.8	57	56.3
100%	55.6									

Logged Data Chart



Berkley Valley Convalescent Hospital

11/1/2016

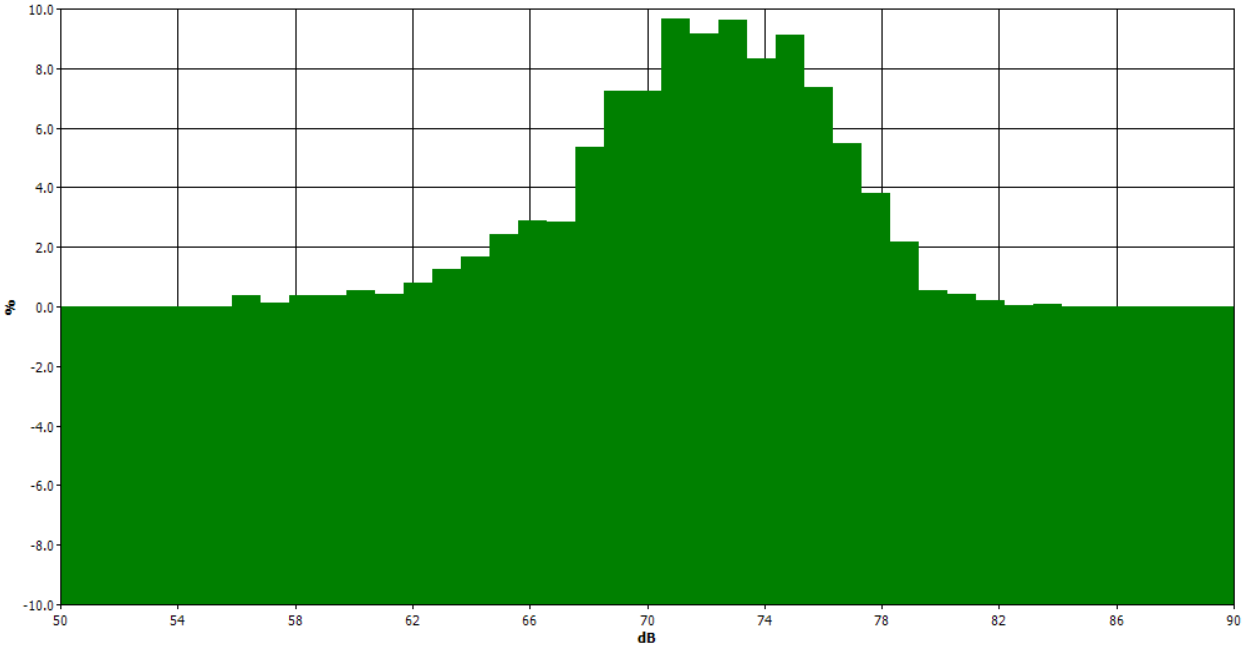
Information Panel

Name	S353_BIJ050019_02112016_110816
Start Time	Monday, November 1, 2016, 2:40pm
Stop Time	Monday, November 1, 2016, 2:55pm
Device Model Type	SoundPro DL

General Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	74.0dB	Exchange Rate	1	3dB
Weighting	1	A	Response	1	SLOW
Bandwidth	1	OFF	Exchange Rate	2	3dB
Weighting	2	C	Response	2	SLOW

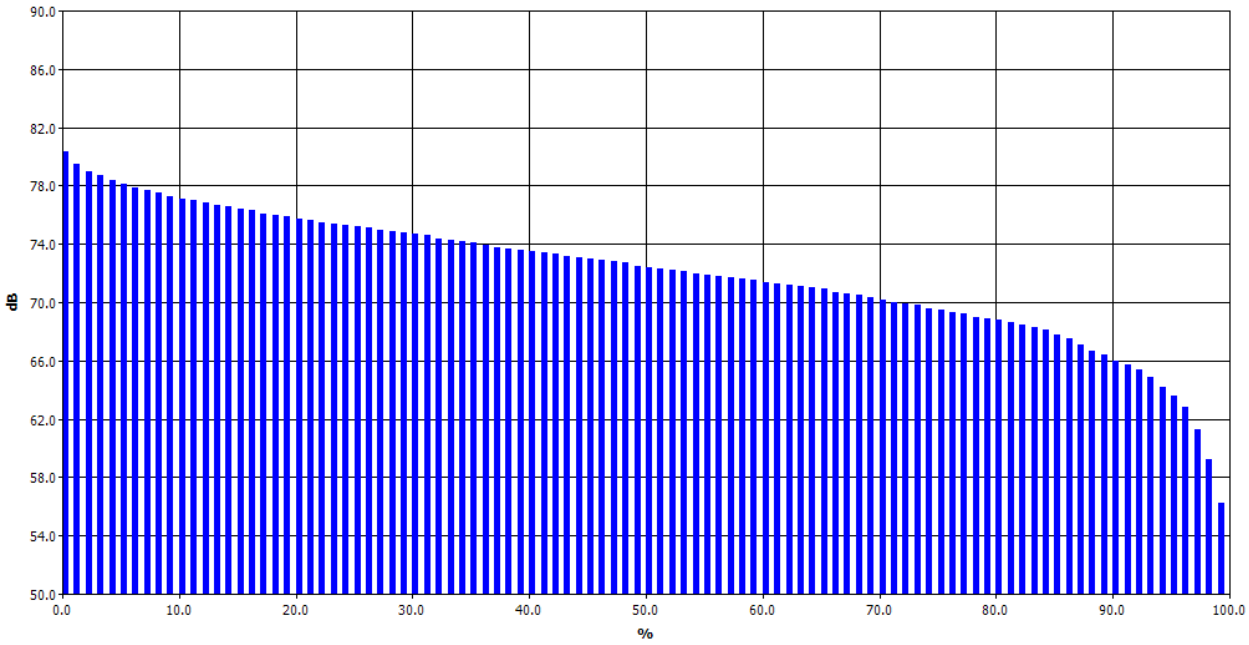
Statistics Chart



Statistics Table

dB	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	0.00	0.00	0.00	0.00	0.04	0.02	0.10	0.13	0.05	0.02	0.36
57	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.13
58	0.02	0.01	0.01	0.03	0.07	0.04	0.03	0.04	0.06	0.08	0.37
59	0.05	0.03	0.03	0.04	0.03	0.03	0.03	0.04	0.03	0.08	0.39
60	0.07	0.05	0.03	0.05	0.05	0.07	0.06	0.05	0.05	0.05	0.53
61	0.05	0.05	0.05	0.04	0.05	0.04	0.04	0.04	0.04	0.05	0.43
62	0.04	0.04	0.05	0.05	0.08	0.07	0.14	0.10	0.08	0.17	0.80
63	0.10	0.14	0.06	0.18	0.17	0.14	0.15	0.12	0.11	0.09	1.26
64	0.17	0.22	0.20	0.18	0.20	0.17	0.12	0.15	0.14	0.12	1.67
65	0.15	0.19	0.18	0.17	0.17	0.24	0.26	0.34	0.38	0.34	2.43
66	0.39	0.35	0.21	0.26	0.27	0.23	0.32	0.33	0.29	0.26	2.90
67	0.27	0.24	0.29	0.25	0.26	0.30	0.35	0.27	0.28	0.35	2.86
68	0.28	0.30	0.35	0.58	0.69	0.63	0.61	0.59	0.60	0.72	5.35
69	0.77	0.84	0.54	0.80	0.70	0.60	0.59	0.85	0.68	0.88	7.25
70	0.71	0.74	0.79	0.64	0.67	0.70	0.75	0.78	0.72	0.74	7.24
71	0.85	0.82	0.96	0.88	1.04	1.08	1.01	1.06	0.96	0.99	9.65
72	1.14	1.16	0.86	0.52	1.01	0.88	0.85	0.83	1.00	0.93	9.18
73	0.97	1.02	1.16	1.03	1.00	0.93	0.96	0.87	0.87	0.81	9.62
74	0.69	0.83	0.87	0.81	0.84	0.76	0.76	0.88	0.91	1.00	8.34
75	0.95	1.01	1.09	0.73	0.96	0.97	0.90	0.79	0.89	0.83	9.13
76	0.83	0.70	0.79	0.69	0.61	0.77	0.73	0.69	0.80	0.74	7.34
77	0.75	0.59	0.53	0.56	0.53	0.57	0.53	0.50	0.43	0.50	5.48
78	0.52	0.46	0.43	0.30	0.40	0.30	0.29	0.34	0.41	0.36	3.80
79	0.29	0.26	0.18	0.24	0.27	0.16	0.18	0.24	0.14	0.23	2.18
80	0.14	0.06	0.05	0.06	0.07	0.05	0.04	0.03	0.03	0.03	0.55
81	0.05	0.04	0.03	0.02	0.04	0.05	0.06	0.06	0.03	0.03	0.41
82	0.05	0.07	0.02	0.02	0.03	0.02	0.00	0.00	0.01	0.00	0.22
83	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.06
84	0.01	0.01	0.01	0.01	0.01	0.04	0.00	0.00	0.00	0.00	0.08
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

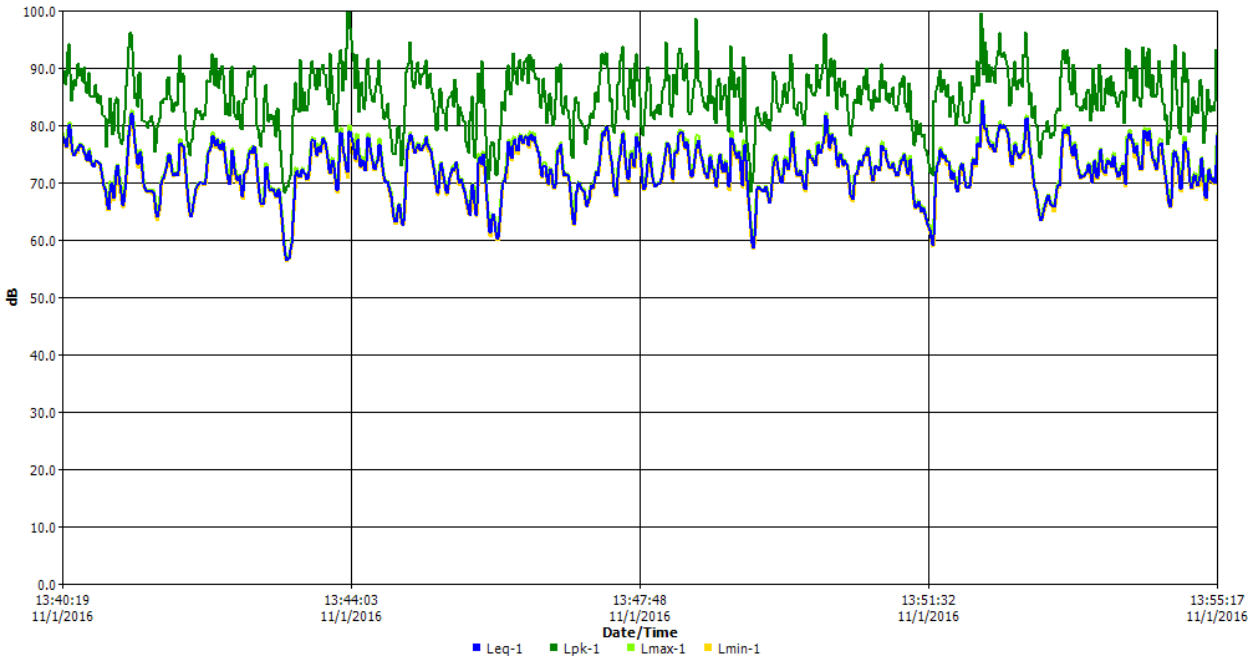
Exceedance Chart



Exceedance Table

	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
0%		80.3	79.5	79	78.7	78.4	78.1	77.9	77.7	77.5
10%	77.3	77.1	77	76.8	76.7	76.6	76.4	76.3	76.1	76
20%	75.9	75.7	75.6	75.5	75.4	75.3	75.2	75.1	75	74.9
30%	74.8	74.7	74.6	74.4	74.3	74.2	74.1	73.9	73.8	73.7
40%	73.6	73.5	73.4	73.3	73.2	73.1	73	72.9	72.8	72.7
50%	72.5	72.4	72.3	72.2	72.1	72	71.9	71.8	71.7	71.6
60%	71.5	71.4	71.3	71.2	71.1	71	70.9	70.7	70.6	70.5
70%	70.3	70.2	70	69.9	69.8	69.6	69.5	69.3	69.2	69
80%	68.9	68.8	68.6	68.5	68.3	68.1	67.8	67.5	67.1	66.7
90%	66.4	66	65.7	65.4	64.9	64.2	63.6	62.8	61.3	59.2
100%	56.2									

Logged Data Chart



6524 Sepulveda Residences: GRADING

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
		Combined dBA	**79.1**

Housing Row Shielding

If gaps in the row of buildings constitute less than 35% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows1)	**0**	

If gaps in the row of buildings constitute between 35-65% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows2)	**0**	

If gaps in the row of buildings constitute more than 65% of the length of the row:		
A(rows3)	**0**	

Tree Zone Shielding

Where at least 100 feet of trees intervene between source and receiver, ***and*** *if no clear line of sight exists between source and receiver,* ***and*** *if the trees extend 15 feet or more above the line of sight:*		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	**0**	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	**0**

6524 Sepulveda Residences: GRADING

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	0
G	0
Distance	10
Unmitigated Construction Noise	**79.1**

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	79.1
Existing Ambient Noise	75.4
Unmitigated Ambient Noise	80.7
Unmitigated Increase	**5.3**

6524 Sepulveda Residences: GRADING

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
		Combined dBA, Mitigated		**76.1**

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	0
Sound Barrier Shielding	0.0
G	0.0
Distance	10
Mitigated Construction Noise	**76.1**

Mitigated Receptor Noise Level

Mitigated Construction Noise	76.1
Existing Ambient Noise	75.4
Mitigated Ambient Noise	78.8
Mitigated Increase	**3.4**

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook* , August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment* , May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol* , September 2013

N Sepulveda Residences: GRADING

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
		Combined dBA	**79.1**

Housing Row Shielding

If gaps in the row of buildings constitute less than 35% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows1)	**0**	

If gaps in the row of buildings constitute between 35-65% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows2)	**0**	

If gaps in the row of buildings constitute more than 65% of the length of the row:		
A(rows3)	**0**	

Tree Zone Shielding

Where at least 100 feet of trees intervene between source and receiver, ***and*** *if no clear line of sight exists between source and receiver,* ***and*** *if the trees extend 15 feet or more above the line of sight:*		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	**0**	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	**0**

N Sepulveda Residences: GRADING

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	0
G	0
Distance	175
Unmitigated Construction Noise	**68.3**

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	68.3
Existing Ambient Noise	66.8
Unmitigated Ambient Noise	70.6
Unmitigated Increase	**3.8**

N Sepulveda Residences: GRADING

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
		Combined dBA, Mitigated		**76.1**

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	0
Sound Barrier Shielding	0.0
G	0.0
Distance	175
Mitigated Construction Noise	**65.3**

Mitigated Receptor Noise Level

Mitigated Construction Noise	65.3
Existing Ambient Noise	66.8
Mitigated Ambient Noise	69.1
Mitigated Increase	**2.3**

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook* , August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment* , May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol* , September 2013

Berkley Valley Convalescent Hospital: GRADING

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
		Combined dBA	**79.1**

Housing Row Shielding

If gaps in the row of buildings constitute less than 35% of the length of the row:		
R	4	*number of rows of houses between source and receiver
A(rows1)	**9.5**	

If gaps in the row of buildings constitute between 35-65% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows2)	**0**	

If gaps in the row of buildings constitute more than 65% of the length of the row:		
A(rows3)	**0**	

Tree Zone Shielding

Where at least 100 feet of trees intervene between source and receiver, ***and*** *if no clear line of sight exists between source and receiver,* ***and*** *if the trees extend 15 feet or more above the line of sight:*		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	**0**	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	9.5
A(rows2)	0
A(trees)	0
A(cumulative)	**9.5**

Berkley Valley Convalescent Hospital: GRADING

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	9.5
G	0
Distance	485
Unmitigated Construction Noise	**49.9**

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	49.9
Existing Ambient Noise	74
Unmitigated Ambient Noise	74.0
Unmitigated Increase	**0.0**

Berkley Valley Convalescent Hospital: GRADING

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
		Combined dBA, Mitigated		**76.1**

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	9.5
Sound Barrier Shielding	0.0
G	0.0
Distance	485
Mitigated Construction Noise	**46.9**

Mitigated Receptor Noise Level

Mitigated Construction Noise	46.9
Existing Ambient Noise	74
Mitigated Ambient Noise	74.0
Mitigated Increase	**0.0**

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook* , August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment* , May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol* , September 2013

Columbus Avenue Residences: GRADING

Construction Noise - Unmitigated

Total Equipment Noise Levels

Source	Emission Level (dBA)	Usage Factor	Adjusted dBA
Excavator	81	0.4	77.0
Loader	79	0.4	75.0
		Combined dBA	**79.1**

Housing Row Shielding

If gaps in the row of buildings constitute less than 35% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows1)	**0**	

If gaps in the row of buildings constitute between 35-65% of the length of the row:		
R	0	*number of rows of houses between source and receiver
A(rows2)	**0**	

If gaps in the row of buildings constitute more than 65% of the length of the row:		
A(rows3)	**0**	

Tree Zone Shielding

Where at least 100 feet of trees intervene between source and receiver, ***and*** *if no clear line of sight exists between source and receiver,* ***and*** *if the trees extend 15 feet or more above the line of sight:*		
W	0	*width of the tree zone along the line of sight between source and receiver, in feet.
A(trees)	**0**	

Cumulative Shielding

Axxx	0
Axxx	0
Axxx	0
A(rows1)	0
A(rows2)	0
A(trees)	0
A(cumulative)	**0**

Columbus Avenue Residences: GRADING

Unmitigated Construction Noise Level

Total Equipment Noise Level	79.1
Cumulative Shielding (A)	0
G	0
Distance	100
Unmitigated Construction Noise	**73.1**

Unmitigated Receptor Noise Level

Unmitigated Construction Noise	73.1
Existing Ambient Noise	56.5
Unmitigated Ambient Noise	73.2
Unmitigated Increase	**16.7**

Estimated Ambient Noise Level at Receptor

Monitored Noise Level	75.4	
Reference Distance	50	*from monitoring location to centerline of Sepulveda Blvd.
G	0	
D	440	*Distance from noise source to receptor
Estimated Noise Level	**56.5**	

Columbus Avenue Residences: GRADING

Construction Noise - Mitigated

Construction Equipment Mitigation

Source	Emission Level (dBA)	Usage Factor	Mitigative Attenuation	Adjusted dBA
Excavator	81	0.4	3	74.0
Loader	79	0.4	3	72.0
		Combined dBA, Mitigated		**76.1**

Mitigated Construction Noise Level

Total Equipment Noise Level	76.1
Cumulative Shielding (A)	0
Sound Barrier Shielding	12.0
G	0.0
Distance	100
Mitigated Construction Noise	**58.1**

Mitigated Receptor Noise Level

Mitigated Construction Noise	58.1
Existing Ambient Noise	56.5
Mitigated Ambient Noise	60.4
Mitigated Increase	**3.9**

Sources

Federal Highway Administration (FHWA), *Construction Noise Handbook* , August 2006

Federal Transit Administration (FTA), *Transit Noise and Vibration Assessment* , May 2006

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol* , September 2013

6500 Sepulveda Project

Construction Vibration - PPV

Receptor: 6524 Sepulveda Boulevard Residences
Equipment: Large Bulldozer

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	10
Unmitigated Vibration Level (in/sec)	**0.223**

Receptor: North Sepulveda Boulevard Residences
Equipment: Large Bulldozer

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	175
Unmitigated Vibration Level (in/sec)	**0.013**

Receptor: Columbus Avenue Residences
Equipment: Large Bulldozer

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	100
Unmitigated Vibration Level (in/sec)	**0.022**

Receptor: Signature Plaza
Equipment: Large Bulldozer

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	80
Unmitigated Vibration Level (in/sec)	**0.028**

Sources

California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual* , September 2013.
Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment* , May 2006

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Sepulveda
RUN: X4: AM Existing + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NB Sepulveda to Vanowen	1	1	0.0	69.3	66	69.3	10	Snd Lvl	69.3	0.0	8	-8.0
SB Sepulveda from Vanowen	2	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Sepulveda
RUN: X4: AM Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NB Sepulveda to Vanowen	1	1	0.0	69.3	66	69.3	10	Snd Lvl	69.3	0.0	8	-8.0
SB Sepulveda from Vanowen	2	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Noise Reduction Avg dB	Noise Reduction Max dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Sepulveda
RUN: X4:AM Future + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NB Sepulveda to Vanowen	1	1	0.0	69.7	66	69.7	10	Snd Lvl	69.7	0.0	8	-8.0
SB Sepulveda from Vanowen	2	1	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Sepulveda
RUN: X4:AM Future
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NB Sepulveda to Vanowen	1	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0
SB Sepulveda from Vanowen	2	1	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Noise Reduction Avg dB	Noise Reduction Max dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Sepulveda
RUN: X4: PM Existing + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NB Sepulveda to Vanowen	1	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
SB Sepulveda from Vanowen	2	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Noise Reduction Avg dB	Noise Reduction Max dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Sepulveda
RUN: X4: PM Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NB Sepulveda to Vanowen	1	1	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
SB Sepulveda from Vanowen	2	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Sepulveda
RUN: X4: PM Future + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NB Sepulveda to Vanowen	1	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
SB Sepulveda from Vanowen	2	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Noise Reduction Avg dB	Noise Reduction Max dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Sepulveda
RUN: X4: PM Future
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
NB Sepulveda to Vanowen	1	1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
SB Sepulveda from Vanowen	2	1	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Noise Reduction Avg dB	Noise Reduction Max dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Van Nuys
RUN: X5: AM Existing + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB Victory to Sepulveda	1	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
WB Victory from Sepulveda	2	1	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min dB	Noise Reduction Avg dB	Noise Reduction Max dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Van Nuys
RUN: X5: AM Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB Victory to Sepulveda	1	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
WB Victory from Sepulveda	2	1	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Van Nuys
RUN: X5: AM Future + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB Victory to Sepulveda	1	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
WB Victory from Sepulveda	2	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Van Nuys
RUN: X5: AM Future
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB Victory to Sepulveda	1	1	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
WB Victory from Sepulveda	2	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Van Nuys
RUN: X5: PM Existing + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB Victory to Sepulveda	1	1	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	8	-8.0
WB Victory from Sepulveda	2	1	0.0	69.7	66	69.7	10	Snd Lvl	69.7	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Van Nuys
RUN: X5: PM Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB Victory to Sepulveda	1	1	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	8	-8.0
WB Victory from Sepulveda	2	1	0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Van Nuys
RUN: X5: PM Future + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB Victory to Sepulveda	1	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
WB Victory from Sepulveda	2	1	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

DKA Planning
Noah Tanski
2 November 2016
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 6500 Van Nuys
RUN: X5: PM Future
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
EB Victory to Sepulveda	1	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0
WB Victory from Sepulveda	2	1	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix C:

Traffic Report

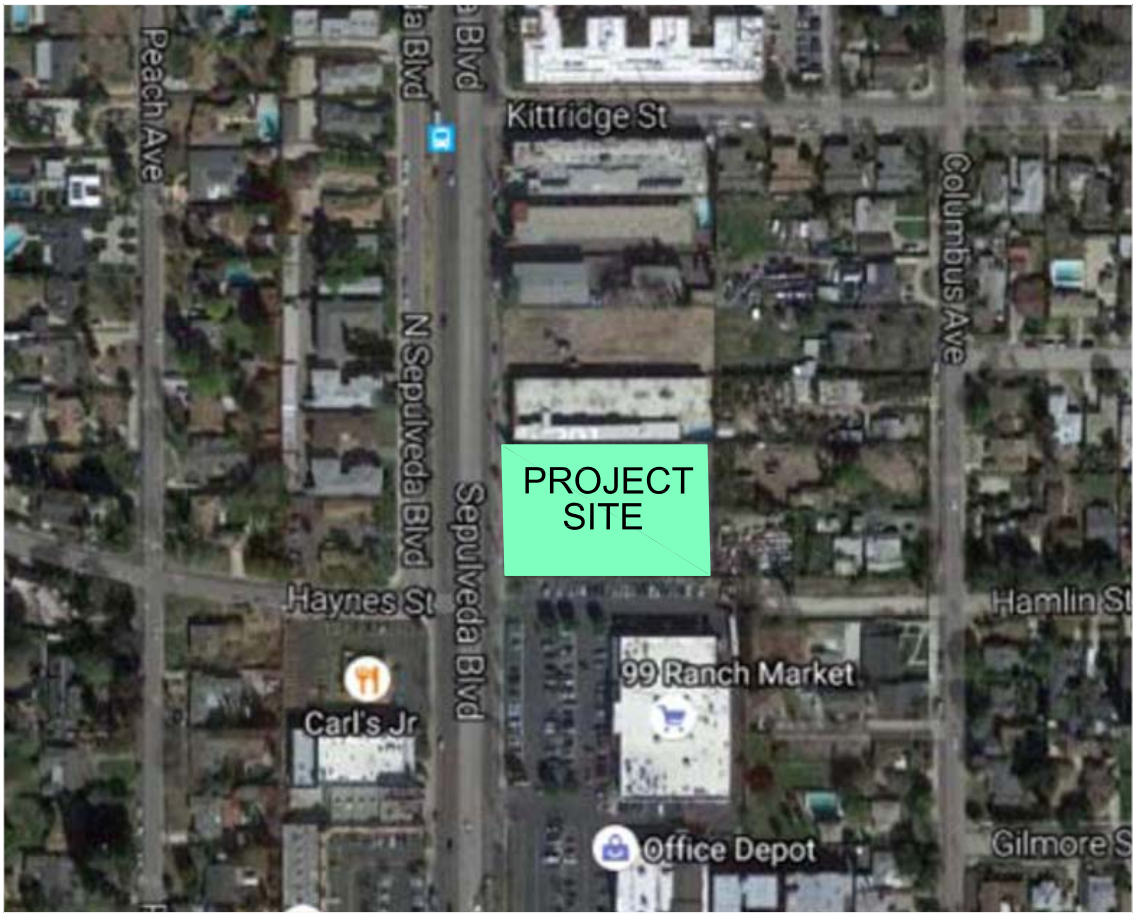
Overland Traffic Consultants, Inc.

TRAFFIC IMPACT ANALYSIS FOR A RESIDENTIAL PROJECT 160-UNIT APARTMENT BUILDING

Located at

6500 Sepulveda Boulevard

in the City of Los Angeles



Prepared by:
Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100
Manhattan Beach, California 90266
(310) 545-1235

November 2016

TRAFFIC IMPACT ANALYSIS FOR A

RESIDENTIAL APARTMENT PROJECT

Located at 6500 Sepulveda Boulevard
in the
City of Los Angeles

Prepared by:

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl., Suite 100
Manhattan Beach, California 90266
(310) 545 – 1235

November 2016

EXECUTIVE SUMMARY

This report documents the results of a study evaluating the potential traffic impacts created by the construction of 160 apartment units on the east side of Sepulveda Boulevard between Haynes Street and Kittridge Street at 6500 Sepulveda Boulevard. Seven of the units will be very low income units. The apartments will be constructed on land that was previously constructed with a motel building that was demolished. The land is currently vacant.

The 160 apartment units will be constructed with vehicular access to the garages off of Sepulveda Boulevard. The Project proposes to provide sufficient on-site parking spaces to meet and exceed City of Los Angeles Municipal Code(LAMC) requirements with allowable Senate Bill 1818 reductions. City of Los Angeles code required parking for bicycles will be provided.

Trip Generation

It is estimated that the development project will be completed in 2019 and will generate an increase of up to 904 daily trips with 70 trips during the am peak hour and 84 trips during the pm peak hour after reductions for residents and visitors that walk or use transit. Transit is readily available on Sepulveda Boulevard with Rapid Line 734 stop at Victory Boulevard and Sepulveda Boulevard approximately 670 feet from the Project.

The trip generation and traffic study locations were determined based upon discussions with the Los Angeles Department of Transportation (LADOT) for the study parameters. A formal Memorandum of Understanding was approved by LADOT for the traffic study and is attached in Appendix A.

Project's Potential Traffic Impacts

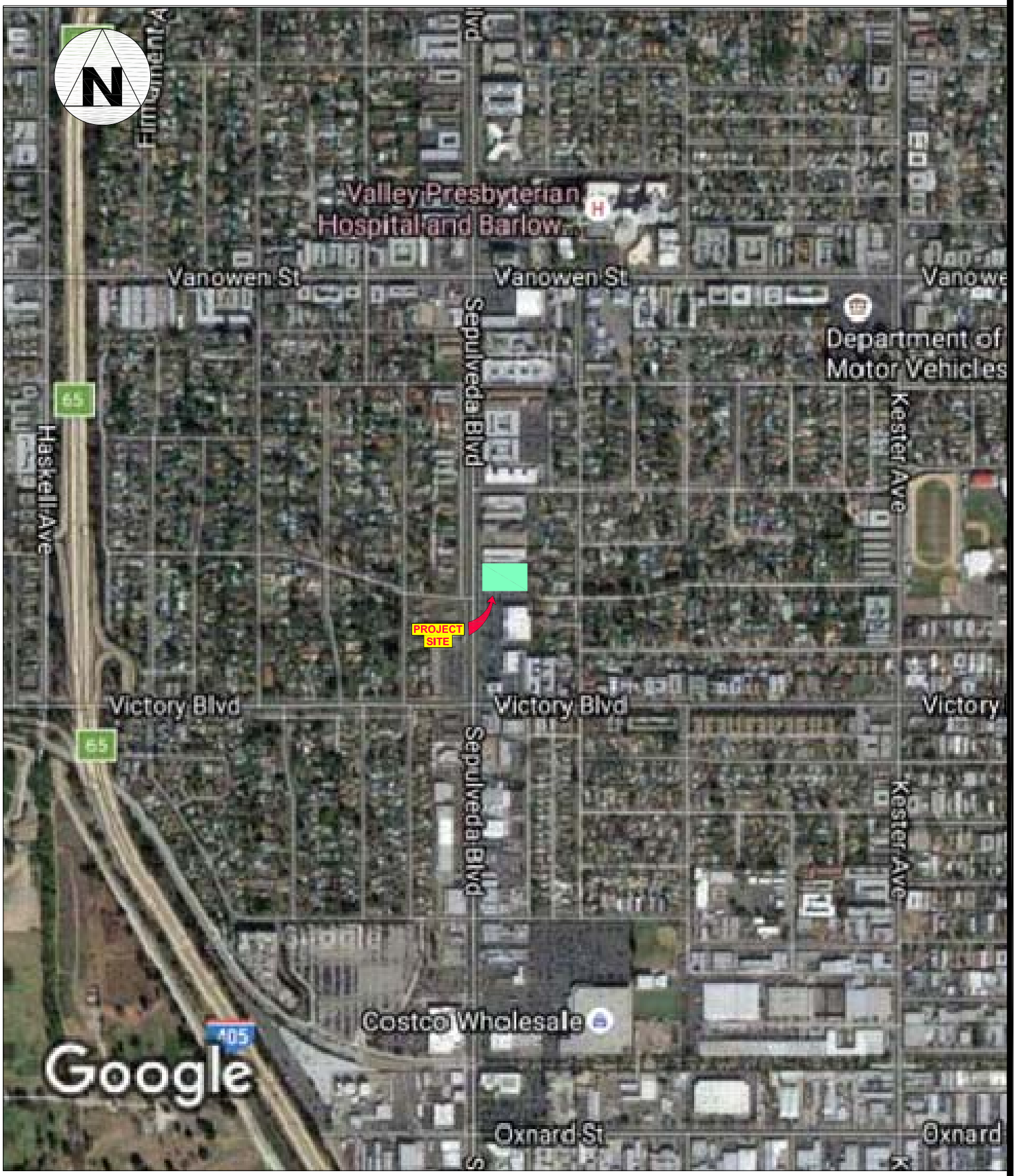
The focus of the traffic study is to evaluate the potential traffic impact created by the development of this Project. This study provides two baseline scenarios to evaluate the project's traffic impacts: (1) existing 2016 traffic conditions plus the project traffic volume (Existing+Project) and (2) future 2019 cumulative traffic conditions plus the project traffic volume (Future with Project).

Using the criteria established by the LADOT and detailed in their Traffic Study Policies and Procedures, August 2014, it has been determined that the added traffic volume generated by the development Project will not significantly impact any of the six study intersections.

Sepulveda Boulevard is designated as a Boulevard II in the City of Los Angeles Mobility Plan 2035. A Boulevard II is required to provide 110-foot right of way with an 80-foot right-of-way with 15-foot sidewalks. Sepulveda Boulevard is currently dedicated with 145 feet of right-of-way. No additional dedication is anticipated along the Project frontage.

Parking - No parking impacts are anticipated with the Project. It is anticipated that 274 parking spaces will be provided which is 39 spaces more than City of Los Angeles code required vehicle parking. Code required bicycle parking of 160 long term and 16 short term spaces will be provided.

No transit, construction, Congestion Management Program, bikeways or freeway significant impacts are anticipated with the Project.



9/2016

SETTING

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235, liz@overlandtraffic.com

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1 INTRODUCTION

As part of the Project's environmental review, an evaluation of the proposed development's potential traffic impacts on the surrounding area is required. The traffic impact analysis in this traffic study has been conducted using the procedures adopted by the City of Los Angeles Department of Transportation (LADOT) Traffic Study Policies and Procedures, August 2014 to analyze the potential traffic impacts of new development projects. The six study intersections were evaluated using the LADOT Critical Movement Analysis (CMA) method. The CMA method calculates the operating conditions of each individual study intersection using a ratio of peak hour traffic volume to the intersection's capacity. Any change to the intersection's peak hour operating condition caused by an increase/decrease in traffic volume can be quantified (i.e. traffic impact) using this analysis method.

Potential traffic impacts caused by a development project that exceeds limits established and identified by the LADOT Traffic Study Policies and Procedures. Any potentially significantly impacted intersections are then evaluated for possible traffic mitigation measures.

Pursuant to the City of Los Angeles traffic impact guidelines, the following steps have been taken to develop the existing and future traffic volume estimate:

(a) Traffic counts were conducted on Wednesday August 24, 2016;

(b) Traffic in (a) + the net Project traffic (existing + Project);

(c) Traffic in (b) + proposed traffic mitigation, if necessary

(d) Existing + ambient growth to 2019 (added additional 2% per year);

(e) Traffic in (d) + related projects (future "without Project" scenario);

(f) Traffic in (e) with the proposed Project traffic (future "with Project" scenario);

(g) Traffic in (f) + the proposed traffic mitigation, if necessary.

A CMA analysis of the existing and future traffic conditions has been completed at those locations expected to have the highest potential for significant traffic impacts. Morning and evening peak hour conditions have been evaluated at six (6) key intersections. A memorandum of understanding (MOU) was prepared and approved by the City of Los Angeles to detail the parameters of the study. A copy of the approved MOU is provided in Appendix A. It should be noted that future traffic conditions include the potential construction of 9 other land development projects (related projects) in the general vicinity of the Project site.

The intersections analyzed in this study are:

1. Southbound I-405 Freeway Ramps (north of Victory Boulevard) and Haskell Avenue;
2. Haskell Avenue and Victory Boulevard;
3. Northbound I-405 Freeway Ramps and Victory Boulevard;
4. Sepulveda Boulevard and Vanowen Street;
5. Sepulveda Boulevard and Victory Boulevard; and,
6. Kester Avenue and Kittridge Street.

CHAPTER 2 PROJECT DESCRIPTION

The Project will construct a new six story 160-unit apartment building with one level of subterranean parking. The ground floor will be constructed with resident amenities (lounge and pool) and parking with all residential units above. The unit mix is currently envisioned with 85 one bedroom/one bath units and 75 two bedroom/two bath units. Seven of the apartments will be provided at very low income levels. The land where the new residential building will be constructed is currently vacant. A previous hotel building on the site has been removed. The Project site is located on the east side of Sepulveda Boulevard. The location of the proposed Project is depicted on Figure 1.

The Project proposes to provide more than City of Los Angeles Municipal Code requirements vehicle parking with 274 spaces. Vehicular access will be from Sepulveda Boulevard. The Project will provide 160 long term bicycle spaces and 16 short term bicycle spaces to meet City requirements

Figure 2 illustrates the Project site plan.

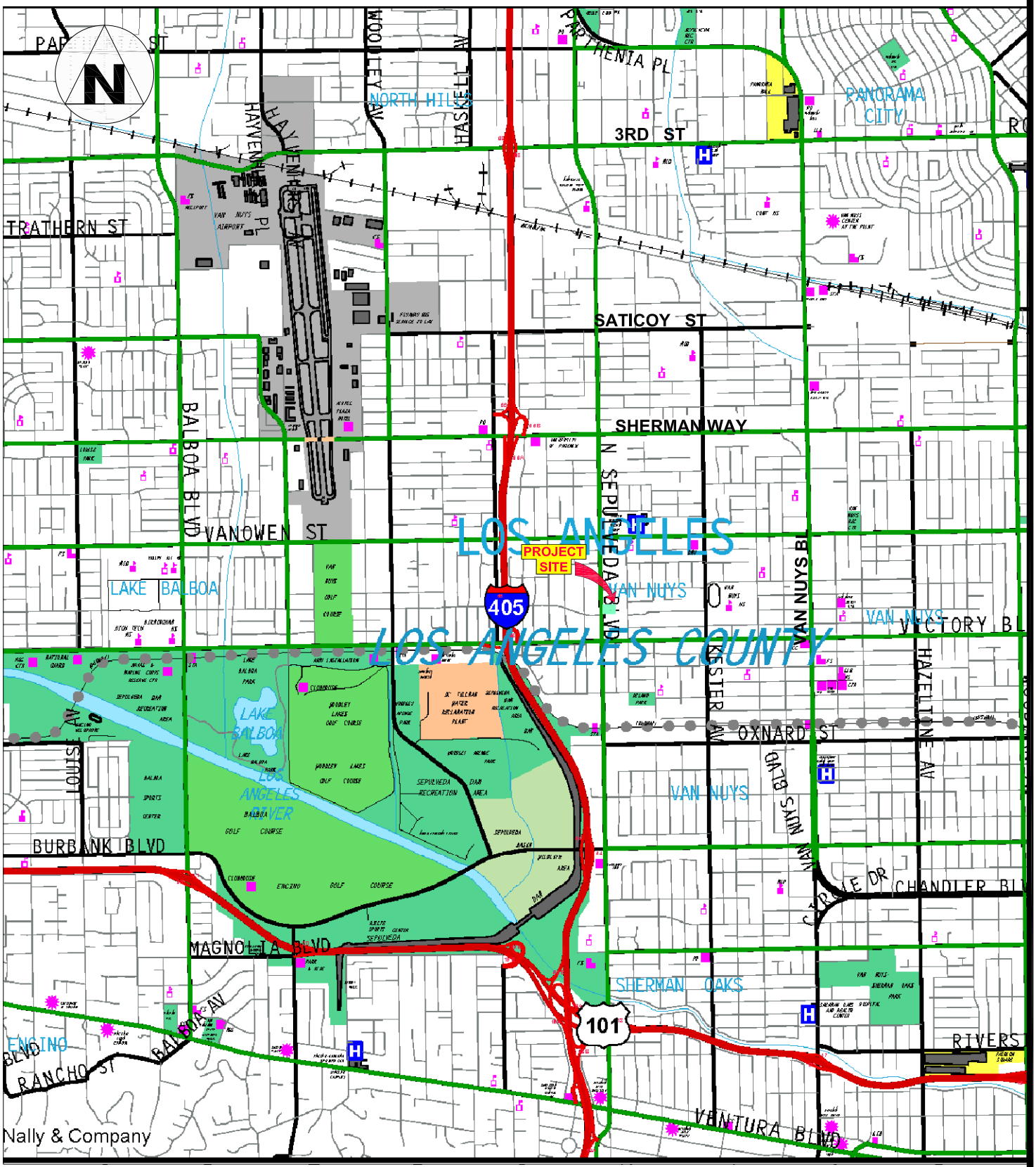
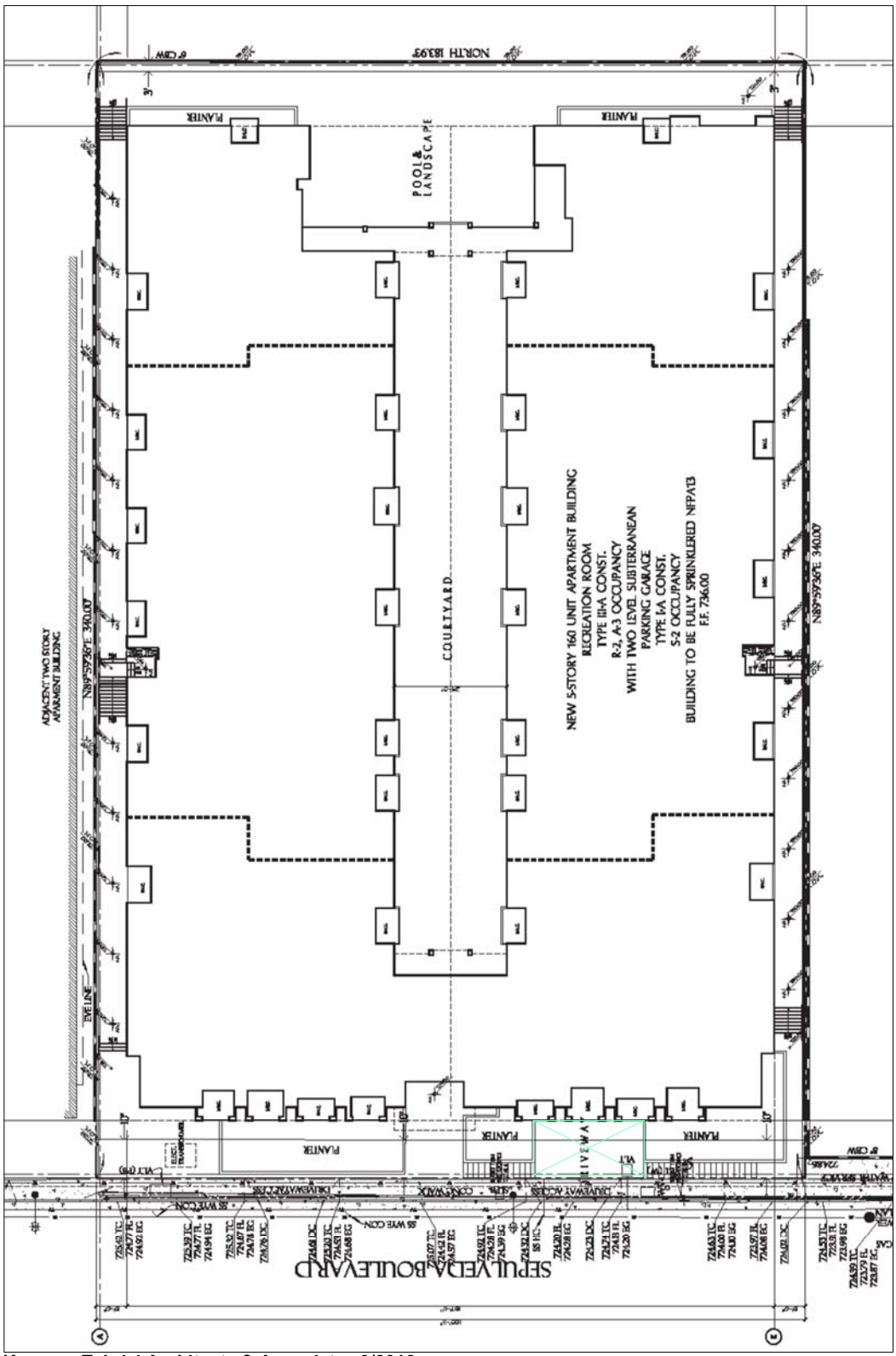


FIGURE 1

9/2016

PROJECT LOCATION STUDY AREA

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235, liz@overlandtraffic.com



Kamran, Tabrizi Architects & Associates 9/2016

FIGURE 1

10/2016

PROJECT SITE PLAN

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235, liz@overlandtraffic.com

CHAPTER 3 ENVIRONMENTAL SETTING

Land Use

The Project is located in the Van Nuys – North Sherman Oaks Community Plan area. The current land use map for the study area is provided in Appendix B. The Community Plan area has a mix of uses including approximately 38.2% single family homes, 15.1% multi-family homes, 7.1 % commercial, 7.4% industrial, 10.4% open space/public facilities, and 21.8% streets.

The City of Los Angeles Mobility Plan 2035 (Mobility Plan) was approved by the City Planning Commission on December 17, 2015 and adopted by City Council on January 20, 2016. The Mobility Plan dictates the street standards and designations within the plan area. The proposed Project will be subject to the Mobility Plan 2035. These elements are provided in Appendix C.

In addition to collecting traffic volume data for this analysis, field surveys were conducted in the study area to determine the current roadway and intersection geometry and traffic signal operations. Figure 3 illustrates the study locations, type of intersection traffic control and lane configurations for the Project impact analysis. A brief description of the effected roadway facilities is provided.

Transportation Facilities

The nearest regional freeway serving the study area is the north-south San Diego Freeway (I-405). This freeway operates predominately in the north-south direction in the project area and extends from the Golden State Freeway in Orange County to the Golden State Freeway in the north San Fernando Valley. The San Diego Freeway is located to the west of the project site. The freeway provides four mixed-flow lanes and carpool lane in each direction. Average daily traffic volume on the I-405 Freeway at Victory Boulevard is approximately 211,000 vehicles per day (ADT) with 14,700 vehicles during the peak hour. Access to the San Diego Freeway for the study area is

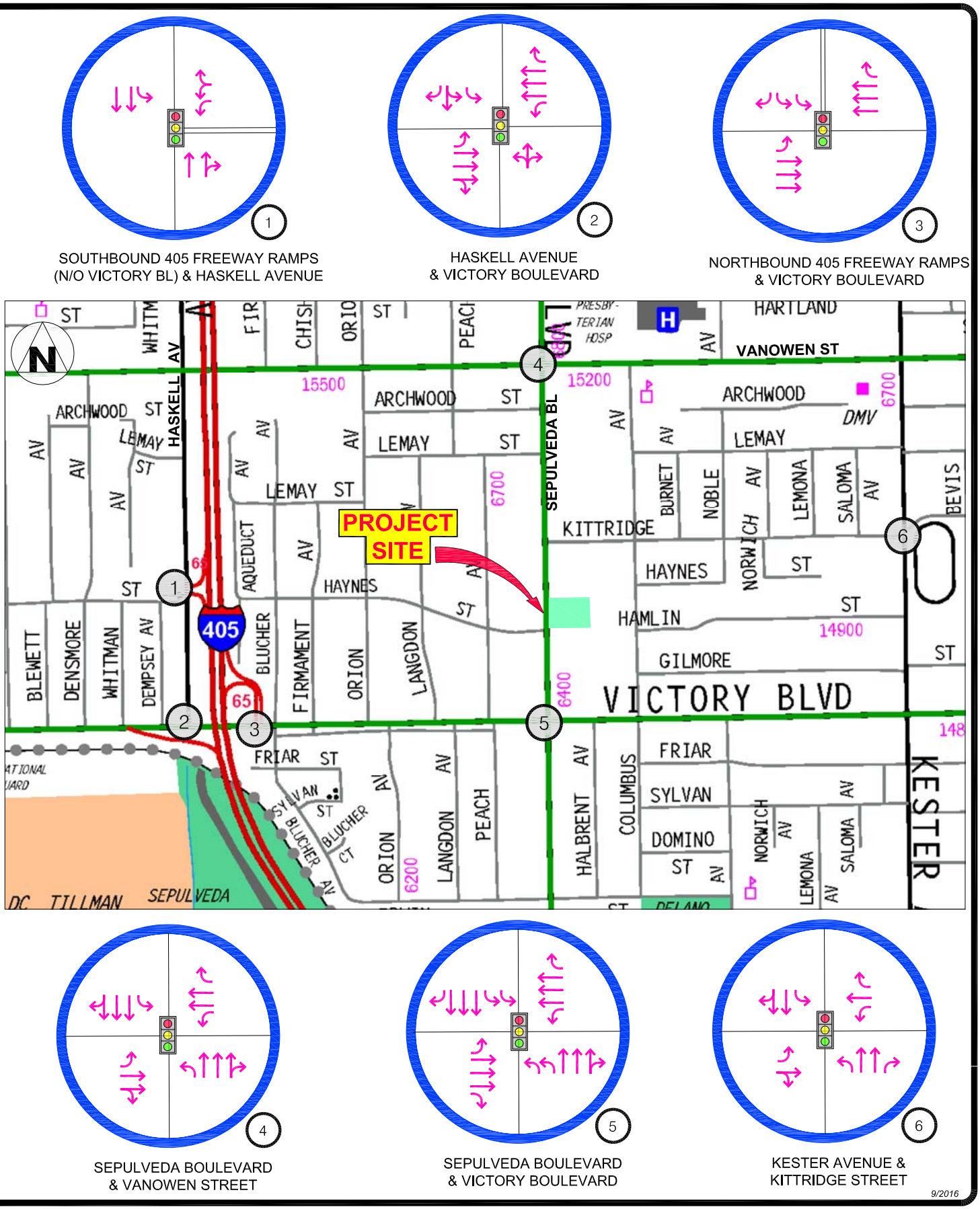


FIGURE 3

PROJECT INTERSECTION CHARACTERISTICS

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com

at Victory Boulevard for northbound traffic and off of Haskell Avenue north of Victory Boulevard for southbound traffic.

Haskell Avenue is a north-south oriented roadway designated as an Avenue II in the City of Los Angeles Mobility Plan 2035. Haskell Avenue is a discontinuous roadway in the San Fernando Valley. The roadway spans from Victory Boulevard to Strathern Street with one to two lanes in each direction in the Project area. Some parking is permitted north of the southbound on/off-ramp to the I-405 freeway.

Kester Avenue is a north-south oriented roadway designated as an Avenue II in the City of Los Angeles Mobility Plan 2035. Kester Avenue spans from Raymer Street to Valley Vista Boulevard with two lanes in each direction provided in the Project area. Parking is permitted along both sides of the street in the Project area.

Kittridge Street is an east-west oriented roadway designated as a Collector Street in the City of Los Angeles Mobility Plan 2035. Kittridge Street is a discontinuous roadway which spans from Sepulveda Boulevard to Mary Ellen Avenue west of Fulton Avenue in the immediate Project area with one lane in each direction. Parking is permitted along Kittridge Street in the area.

Sepulveda Boulevard is a north-south oriented roadway designated as a Boulevard II in the City of Los Angeles Mobility Plan 2035. Sepulveda Boulevard creates the western boundary of the Project site. Sepulveda Boulevard spans from Rinaldi Boulevard in the northern San Fernando Valley to the south bay. Three lanes are provided in each direction with a two-way left turn lane provided in the center of the roadway along the Project frontage. Parking is permitted in the Project area.

Vanowen Street is an east-west oriented roadway designated as an Avenue II in the City of Los Angeles Mobility Plan 2035. Vanowen Streets spans across the San Fernando Valley from west of Valley Circle Boulevard to Buena Vista Street in the City of Burbank with two lanes in each direction in the Project area. Parking is generally permitted in the Project area.

Victory Boulevard is an east-west oriented roadway designated as a Boulevard II in the City of Los Angeles Mobility Plan 2035. Victory Boulevard spans across the San Fernando Valley from the Ventura County line to Burbank Boulevard in the City of Burbank. Three lanes in each direction are provided in the Project area. No peak hour parking is permitted in the Project area.

The roadway designations and aerial plans of the Project study intersections are provided in Appendix C.

Transit Service

Public transportation through the study area is provided by the Metropolitan Transit Authority (Metro) and LADOT DASH. The Orange Line transitway is located south of the Project with a station located off of Erwin Street west of Sepulveda Boulevard approximately 2,000 feet from the Project site. Metro line 234 and Metro Express 734 operate along the Sepulveda Boulevard project frontage. There is a bus stop at Sepulveda and Victory Boulevard and at Sepulveda and Vanowen Street for the Metro Express line 734. Metro line 164 operates along Victory Boulevard south of the Project and Metro lines 237-656 operates as an extension of the Metro Line south of the Project. Metro line 165 operates north of the Project along Vanowen Street. LADOT DASH service is provided along Kester Avenue in the Project area. Additional information for the transit lines is provided below.

Orange Line

The Orange Line transitway provides service along converted rail ways between North Hollywood, Warner Center and Chatsworth. The service connects riders with Metrolink Services, Express Services, multiple transit lines and Burbank airport shuttles. The Sepulveda Station is located off of Erwin Street west of Sepulveda Boulevard approximately 2,000 feet from the Project site.

Sepulveda Boulevard

Metro Line 234 operates between Sylmar, Granada Hills, North Hills, Panorama City, Van Nuys and Sherman Oaks. This line operates along Sepulveda Boulevard in the Project area. Night owl service 734 extends this line to West Los Angeles. There is a stop for line 234 at Kittridge Street and Sepulveda Boulevard approximately 450 feet from the Project site.

Metro Rapid Line 734 operates between Mission Hills, North Hills, Panorama City, Van Nuys, Sherman Oaks, West Los Angeles, Westwood, and to the Expo Line. This rapid

service provides limited stop service for quicker transit times. The line operates along Sepulveda Boulevard in the Project area. There is a stop at Sepulveda Boulevard and Victory Boulevard approximately 650 feet from the Project site.

Victory Boulevard

Metro Line 164 operates between the Burbank Metro Station, North Hollywood, Van Nuys, Reseda, Canoga Park and West Hills. Line 164 operates along Victory Boulevard in the Project vicinity. There is a stop at Sepulveda Boulevard and Victory Boulevard approximately 650 feet from the Project site.

Metro Line 237 and 656 (late night service only) operates between Hollywood and Granada Hills. This line operates along Victory Boulevard in the Project area and there is a stop at Sepulveda Boulevard and Victory Boulevard approximately 650 from the Project site.

Metro Rapid Line 788 operates between Arleta, Panorama City, Van Nuys, Sherman Oaks and West Los Angeles. This rapid service provides limited stop service for quicker transit times. The line operates along Victory Boulevard in the Project area. There is a stop at Sepulveda Boulevard and Victory Boulevard approximately 650 feet from the Project site.

Vanowen Street

Metro Line 165 operates between the Burbank Metro Station, North Hollywood, Van Nuys, Reseda, Canoga Park and West Hills. Line 165 operates along Vanowen Street in the Project vicinity. There is a stop at Sepulveda Boulevard and Vanowen Street approximately 1,000 feet north of the Project site.

Kester Avenue

LADOT DASH Route Panorama City/Van Nuys is a circulator service between the Van Nuys Civic Center, Sepulveda Park and Recreation Center and Amtrak Metrolink Station north west of Saticoy Street and Van Nuys Boulevard. The clockwise and counter clockwise route is essentially along Victory Boulevard from Tyrone Avenue to Kester Avenue north to Saticoy Street west, to Sepulveda Boulevard north to Partenia Street east to Van Nuys Boulevard south to Sherman Way east to Hazeltine Avenue south to Vanowen Street west to Sylmar Avenue south to Sylvan Street east to Tyrone Avenue north. The line operates along Kester Avenue in the Project area with a stop at Kittridge Street and Kester Avenue approximately one half mile from the Project site.

Transfer opportunities are available to/from the Project area from the local and regional lines. The transit metro lines are illustrated in Appendix D.

Project Traffic Generation

Traffic-generating characteristics of many land uses including the proposed residential apartments has been surveyed by the Institute of Transportation Engineers (ITE). The results of the traffic generation studies have been published in a handbook titled Trip Generation, 9th Edition. This publication of traffic generation data has become the industry standard for estimating traffic generation for different land uses.

The ITE studies indicate that the use and the size associated with the proposed Project exhibit the trip-making characteristics as shown by the trip rates in Table 1.

Table 1
Traffic Generation Rates

Description	ITE Code	Daily Traffic	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Apartment	220	6.65	0.51	20%	80%	0.62	65%	35%

Rate are per unit for apartment

The trip generation does not take into consideration the amenities in the area where the project will be constructed. The proposed apartment project is along Sepulveda Boulevard and 650 feet north of Victory Boulevard. These are major City thoroughfares with multiple transit opportunities available to the residents. As approved by LADOT, a 15% transit/walk reduction was incorporated into the analysis. Table 2 displays the estimated Project trip generation.

Table 2
Estimated Project Traffic Generation

Description	Size	Daily Traffic	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Apartment	160 units	1064	82	16	66	99	64	35
Transit/Walk*	15%	(160)	(12)	(2)	(10)	(15)	(10)	(5)
NET Project		**904**	**70**	**14**	**56**	**84**	**54**	**30**

* Along Sepulveda Bl with Bus Lane, Rapid Line 734 with stop at Victory - appx 670 feet and at Vanowen

Trip Distribution and Assignment of Project Traffic

A primary factor affecting a Project's trip direction is the spatial distribution between destination points which would generate Project trip origins and destinations. The estimated Project directional trip distribution is also based on the study area roadway network, freeway locations, traffic flow patterns in and out of this area of the City of Los Angeles and consistency with previously approved traffic studies for this area of Los Angeles.

Figure 4 illustrates the estimated area wide Project traffic distribution percentages. Figure 5 shows the estimated Project traffic percentages detailed at each of the selected study intersections. Using the traffic assignment at each intersection and the estimated peak hour traffic volume as provided in the Table 2, the development's peak hour traffic volumes at each study location have been calculated and are shown in Figure 6. This estimated assignment of the Project traffic flow provides the information necessary to analyze the potential traffic impacts generated by the Project at the study intersections.

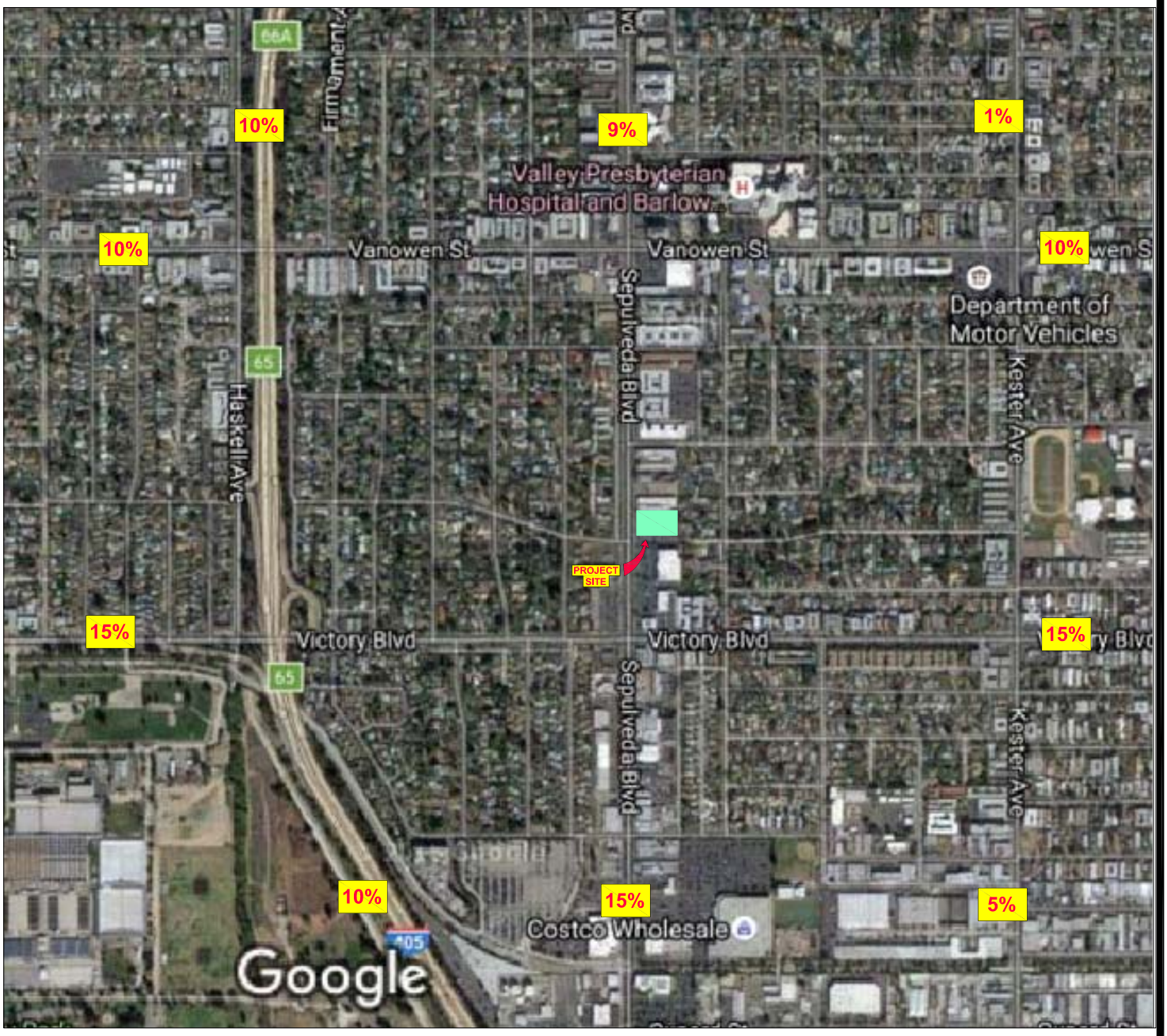


FIGURE 4

9/2016

OVERALL PROJECT TRIP DISTRIBUTION PERCENTAGES

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235, liz@overlandtraffic.com

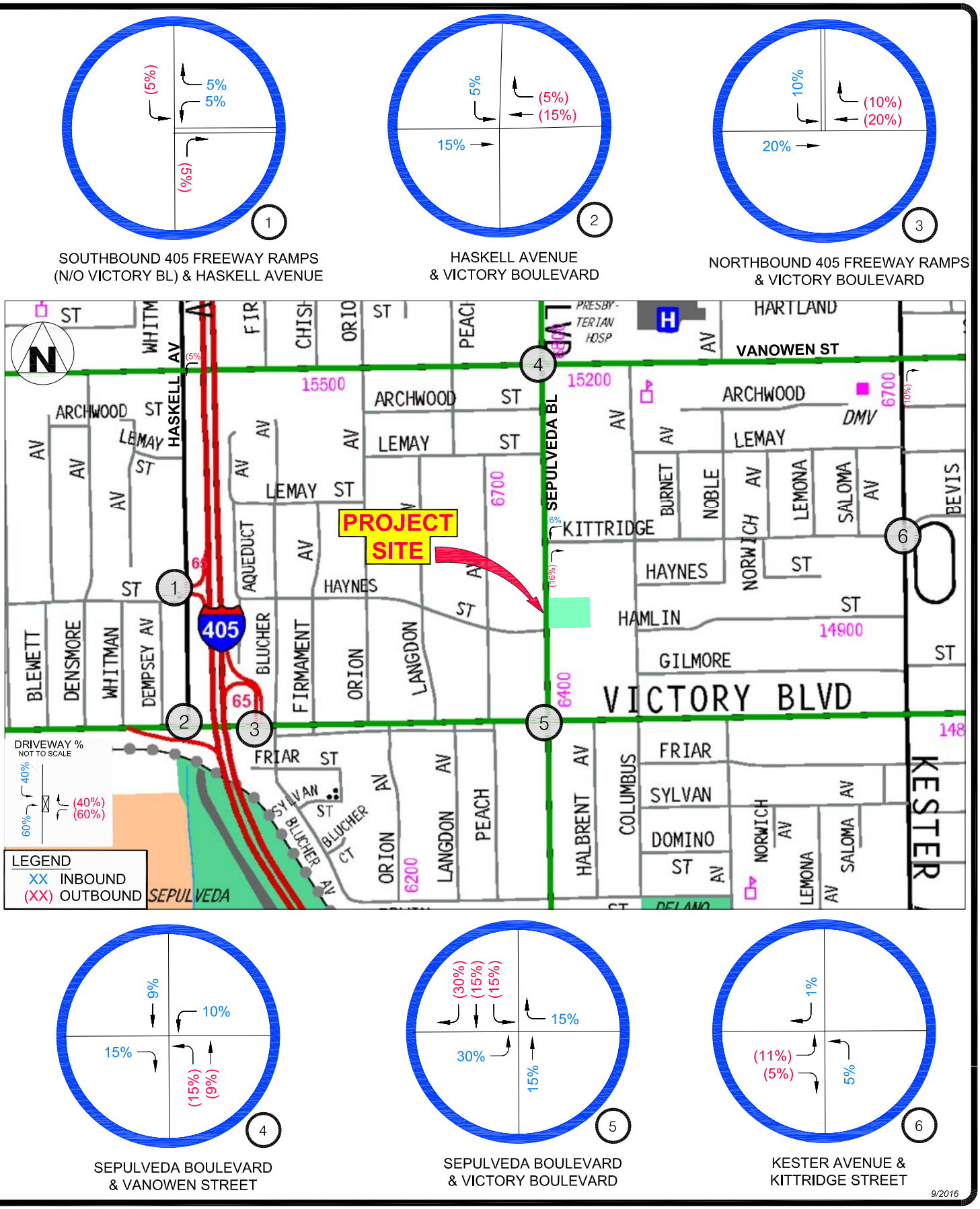
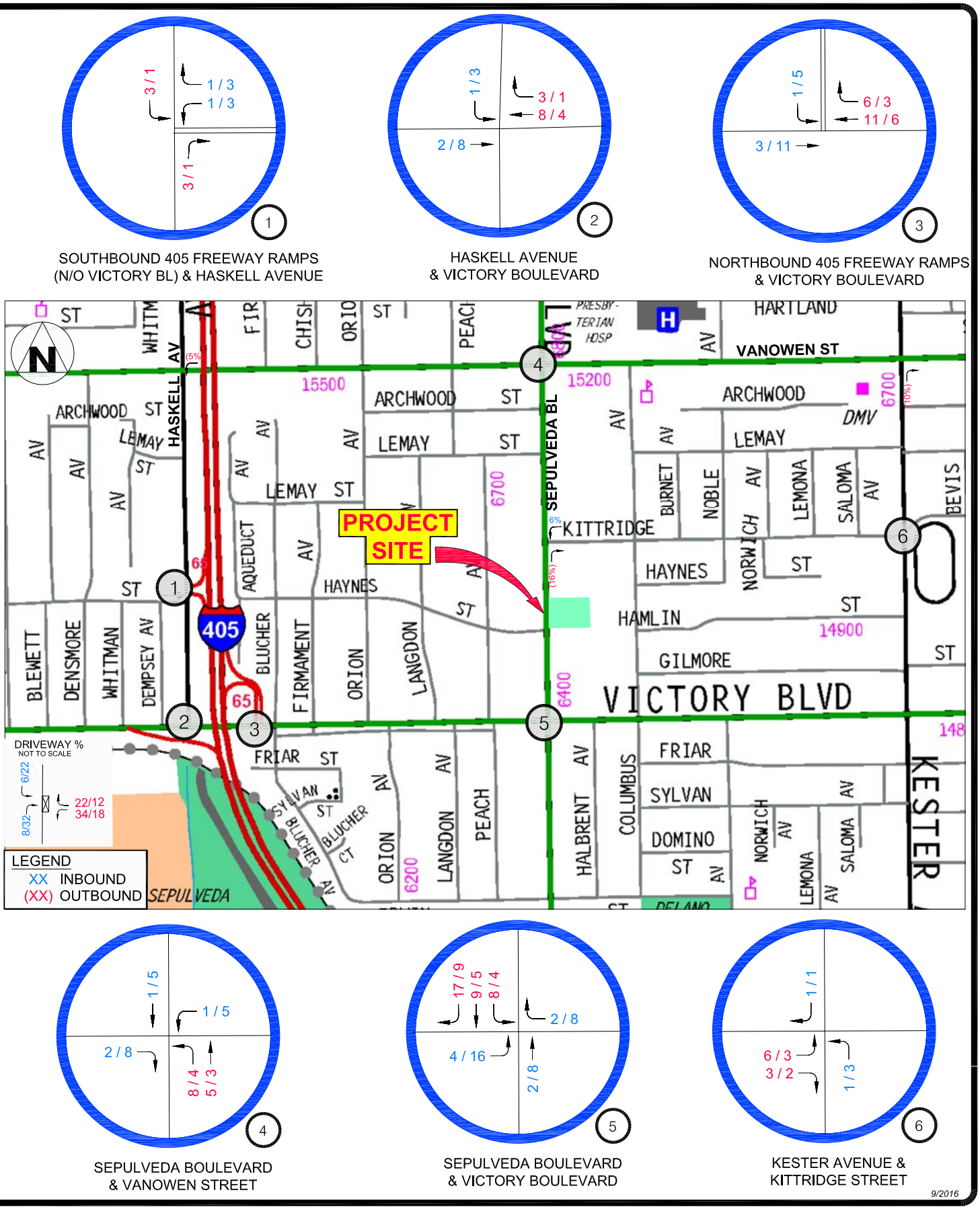


FIGURE 5

PROJECT TRIPS DISTRIBUTION PERCENTAGES

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com



PROJECT ONLY VOLUMES
AM PEAK HOUR/PM PEAK HOUR

FIGURE 6

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com

Parking, Access & Circulation

The Project developer proposes to provide two parking levels for the Project. One level will be subterranean and one at the ground floor level. A total of 274 vehicle parking spaces is proposed. Full vehicular access is proposed to/from Sepulveda Boulevard. Currently, Sepulveda Boulevard is striped with three northbound lanes, a two-way left turn lane and three southbound lanes along the Project frontage. The two-way left turn lane will facilitate left turns in and out of the site. One driveway off of Sepulveda gains access to the ground level of parking with an interior ramp to the basement level of parking.

The project proposes to provide a sufficient number of parking spaces to exceed code requirements. The applicable City of Los Angeles Municipal Code (Section 12.22.A.25) would require parking spaces based on the number of habitable rooms. Residential parking would require one space per studio unit, one space per one-bedroom unit and two spaces per two-bedroom units. In addition, the City of Los Angeles permits residential projects to reduce the number of vehicle spaces by providing replace bicycle parking spaces at a ratio of four bicycle spaces per one vehicle space. Up to 10% of the residential vehicle parking may be replaced by bicycle parking. However, the project will not be reducing the number of vehicle parking spaces through allowable replacement with bicycle parking. Table 3 displays the parking requirements for Project.

Table 3
Los Angeles Municipal Code 12.22.A.25
Required Vehicle Parking

Land Use	Size	Requirement	Required Parking Spaces	Parking Provided	Surplus Parking
1-Bedroom	85 units	One per unit	85		
2-Bedroom	75 units	Two per unit	150		
TOTAL	160 units		235	274	39

The Project will provide over code required parking with 274 parking spaces (39 spaces over requirements). With excess of required parking, no parking impacts are anticipated in association with this Project.

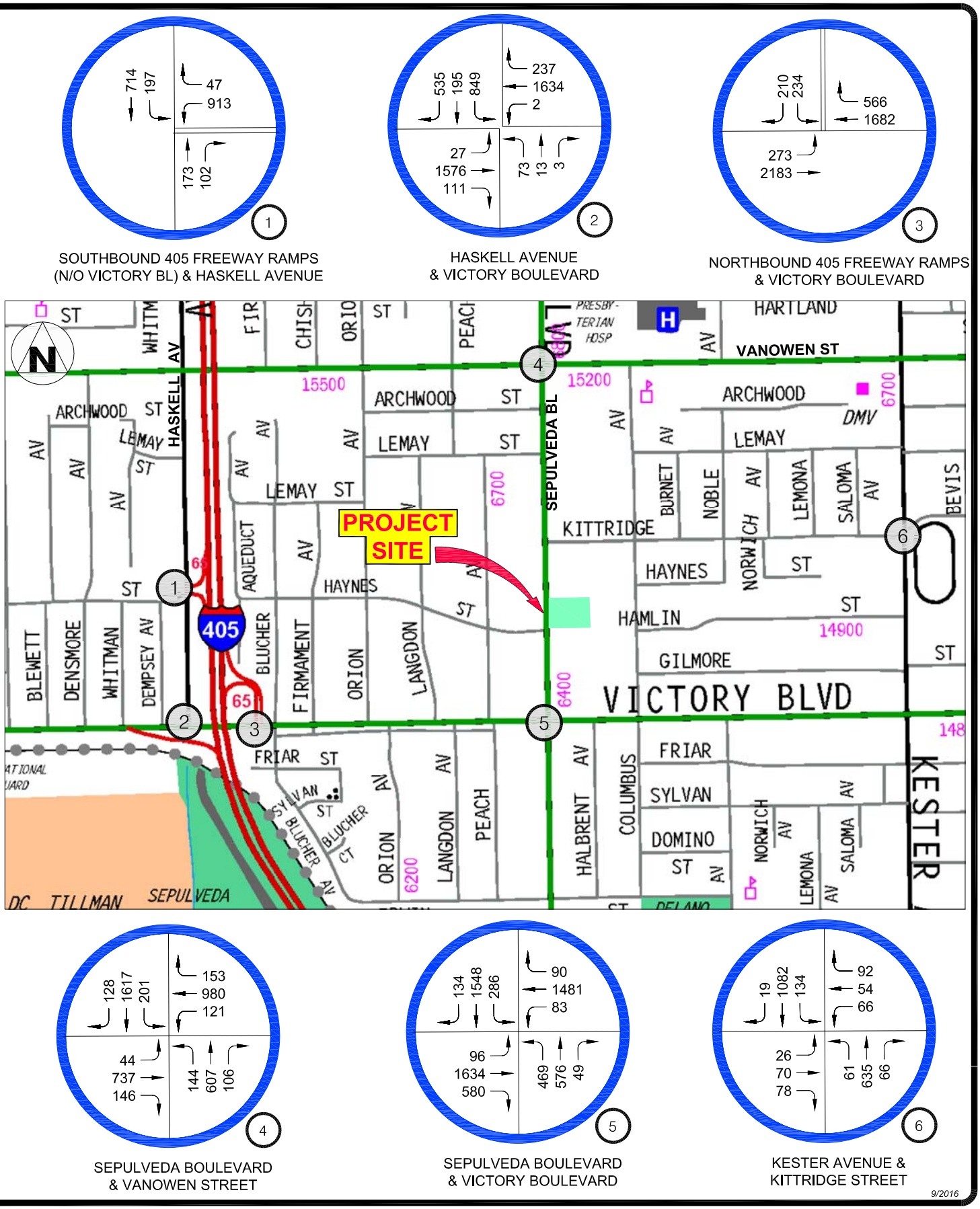
Analysis of Existing Traffic Conditions

Traffic volume data used in the following peak hour intersectional analysis were based on traffic counts conducted by National Data Systems, an independent traffic data collection company. Traffic counts were conducted on Wednesday August 24, 2016. This was a typical weekday when there were no holidays, no rain and schools were in session. Traffic counts were conducted during the morning peak (7AM to 10 AM) and evening peak hours (3PM to 6PM). The highest single hour during each of the peak periods was used in this analysis. Data collection worksheets for the peak hour counts are contained in Appendix E. Existing traffic count data are provided on the following pages in Figure 7 and 8 for the AM and PM peak hours respectively.

The traffic conditions analysis was conducted using the Critical Movement Analysis (CMA) method. The study intersections were evaluated using this methodology pursuant to the criteria established by the City of Los Angeles Department of Transportation for signalized intersections. The existing peak hour traffic counts were used along with intersection lane configurations and traffic controls to determine an intersection's current operating condition.

The CMA procedure uses a ratio of an intersection's traffic volume to its capacity for rating an intersection's congestion level. The highest combinations of conflicting traffic volume (V) at an intersection are divided by the intersection capacity value. Intersection capacity (C) represents the maximum volume of vehicles that have a reasonable expectation of passing through an intersection in one hour under typical traffic flow conditions.

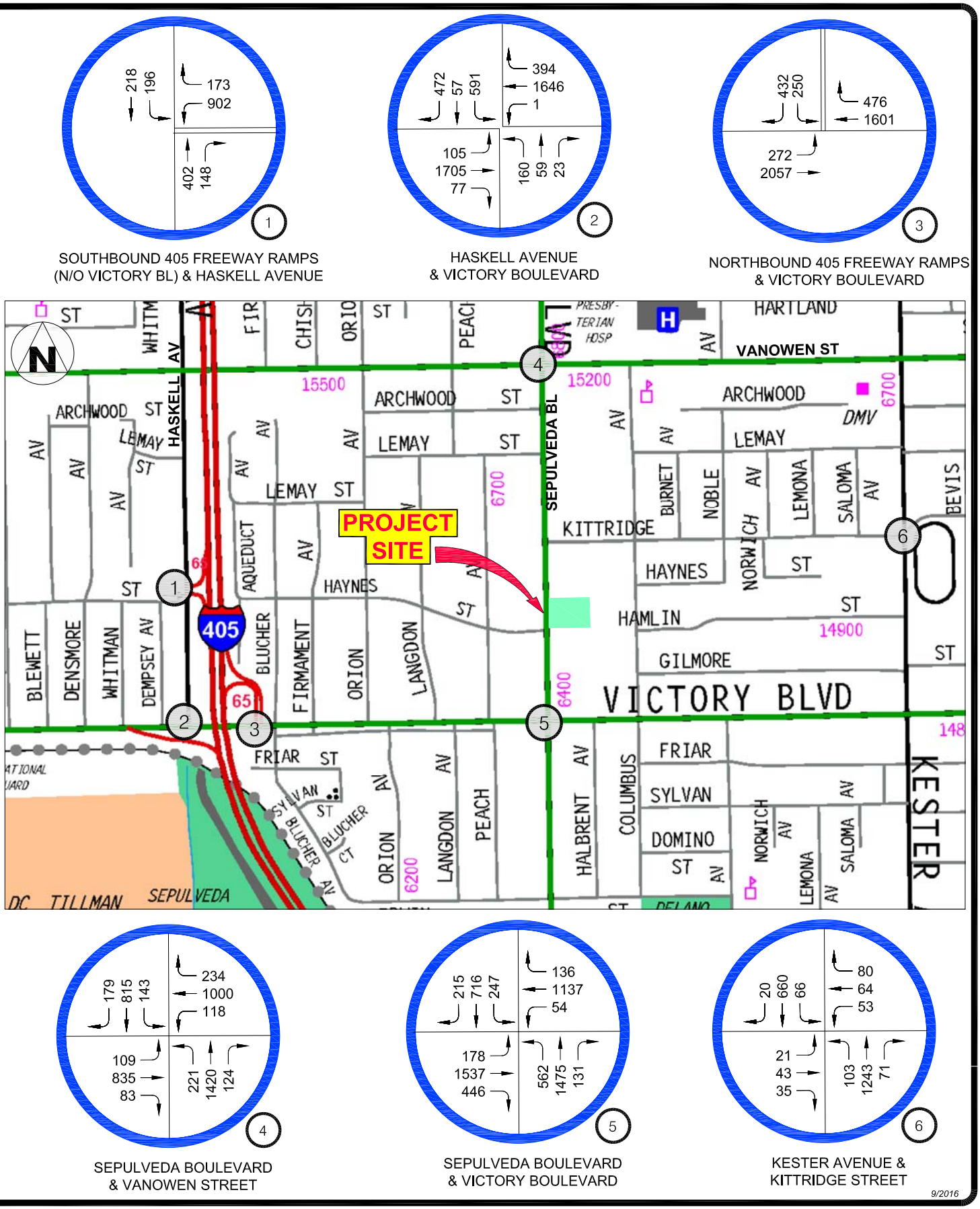
The CMA procedure uses a ratio of the traffic volume to the capacity of an intersection. This volume-to-capacity (V/C) ratio defines the proportion of an hour necessary to accommodate all the traffic moving through the intersection assuming full capacity. V/C ratios provide an ideal means for quantifying intersection operating characteristics. For example, if an intersection has a V/C value of 0.70, the intersection is operating at 70%



EXISTING (2016) TRAFFIC VOLUMES
AM PEAK HOUR

FIGURE 7

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com



EXISTING (2016) TRAFFIC VOLUMES
PM PEAK HOUR

FIGURE 8

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com

capacity with 30% unused capacity.

Once the volume-to-capacity ratio has been calculated, operating characteristics are assigned a level of service grade (A through F) to estimate the level of congestion and stability of the traffic flow. The term "Level of Service" (LOS) is used by traffic engineers to describe the quality of traffic flow. Definitions of the LOS grades are shown in Table 4 on the following page.

Reductions for traffic signal improvements in the area are included in the analysis. The area currently has Automated Traffic Surveillance and Control (ATSAC) systems improvements which increase capacity at the intersection through computer aided signal progression. The City of Los Angeles has determined that this type of improvement increases capacity by approximately 7%. The City has supplemented the signal systems in the area around the Project with an upgrade which includes advance loop detection at the intersections and system wide progression computer programming with system wide interaction between the traffic signals. This system is known as the Adaptive Traffic Control System (ATCS) system. An additional 3% capacity increase is estimated with this signal system. According to LADOT, the Project area has been improved with signal improvements at the study intersections with ATSAC and ATCS capabilities. These capacity improvements have been incorporated into the analysis at the study intersections.

The traffic counts at intersection of Sepulveda Boulevard and Vanowen Street during the AM and PM Peak Hour and at the intersection of Sepulveda Boulevard and Victory Boulevard during the PM Peak Hour indicated high pedestrian volumes. Pedestrians crossing the street in crosswalks may delay right and left turn movements. Therefore, the ATCS 3% capacity increase was not taken Sepulveda Boulevard and Vanowen Street during the AM and PM Peak hour or at Sepulveda Boulevard and Victory Boulevard during the PM Peak Hour to simulate the potential delay created by the pedestrian crossings.

Table 4
Level of Service Definitions

LOS	V/C Ratio	Operating Conditions
A	0.00 – 0.60	At LOS A, there are no cycles that are fully loaded, and few are even close to loaded. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turning movements are easily made, and nearly all drivers find freedom of operation.
B	>0.60 – 0.70	LOS B represents stable operation. An occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel somewhat restricted with platoons of vehicles.
C	>0.70 – 0.80	In LOS C stable operation continues. Full signal cycle loading is still intermittent, but more frequent. Occasionally drivers may have to wait through more than one red signal indication, and back-ups may develop behind turning vehicles.
D	>0.80 – 0.90	LOS D encompasses a zone of increasing restriction, approaching instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive back-ups.
E	>0.90 – 1.00	LOS E represents the most vehicles that any particular intersection approach can accommodate. At capacity (V/C = 1.00) there may be long queues of vehicles waiting upstream of the intersection and delays may be great (up to several signal cycles).
F	>1.00	LOS F represents jammed conditions. Back-ups from location downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration; hence, volumes carried are not predictable. V/C values are highly variable, because full utilization of the approach may be prevented by outside conditions.

By applying the CMA procedures to the intersection data, the V/C values and the corresponding Levels of Service (LOS) for existing traffic conditions were determined at the study intersections. The LOS values for the intersections are summarized in Table 5. Supporting capacity worksheets are contained in Appendix H of this report.

Table 5
Level of Service for Existing Conditions

No.	Intersection	Peak Hour	Existing CMA	Existing LOS
1	405 Freeway SB Ramps &	AM	0.458	A
	Haskell Avenue	PM	0.573	A
2	Haskell Avenue &	AM	0.730	C
	Victory Boulevard	PM	0.756	C
3	405 Freeway NB Ramps &	AM	0.576	A
	Victory Boulevard	PM	0.673	B
4	Sepulveda Boulevard &	AM	0.867	D
	Vanowen Street	PM	0.851	D
5	Sepulveda Boulevard &	AM	0.920	E
	Victory Boulevard	PM	0.830	D
6	Kester Avenue &	AM	0.451	A
	Kittridge Street	PM	0.446	A

Analysis of Existing + Project Conditions

An evaluation has been conducted to determine potential Project impacts to the existing conditions. According to the standards adopted by LADOT and described in the Traffic Study Policies and Procedures, August 2014, a traffic impact is considered significant if the related increase in the V/C value equals or exceeds the thresholds shown in the Table 6.

Table 6
Significant Impact Criteria
City of Los Angeles

LOS	Final V/C Value	Increase in V/C Value
C	0.701 - 0.800	+ 0.040
D	0.801 - 0.900	+ 0.020
E & F	> 0.901	+ 0.010 or more

No significant impacts occur at LOS A or B because intersections operations are good and can accommodate additional traffic growth.

The potential impact for existing plus Project was conducted by adding the Project traffic to the existing traffic. The existing and existing + Project traffic conditions were compared to determine if the thresholds of significance in Table 6 were exceeded. As noted in Table 7, no significant traffic impacts are identified.

Table 7
Traffic Conditions for Existing + Project

No.	Intersection	Peak Hour	Existing CMA	Existing LOS	Existing +Project CMA	Existing +Project LOS	Impact	Significant Impact
1	405 Freeway SB Ramps &	AM	0.458	A	0.459	A	+ 0.001	NO
	Haskell Avenue	PM	0.573	A	0.576	A	+ 0.003	NO
2	Haskell Avenue &	AM	0.730	C	0.732	C	+ 0.002	NO
	Victory Boulevard	PM	0.756	C	0.758	C	+ 0.002	NO
3	405 Freeway NB Ramps &	AM	0.576	A	0.577	A	+ 0.001	NO
	Victory Boulevard	PM	0.673	B	0.675	B	+ 0.002	NO
4	Sepulveda Boulevard &	AM	0.867	D	0.875	D	+ 0.008	NO
	Vanowen Street	PM	0.851	D	0.852	D	+ 0.001	NO
5	Sepulveda Boulevard &	AM	0.920	E	0.922	E	+ 0.002	NO
	Victory Boulevard	PM	0.830	D	0.838	D	+ 0.008	NO
6	Kester Avenue &	AM	0.451	A	0.453	A	+ 0.002	NO
	Kittridge Street	PM	0.446	A	0.447	A	+ 0.001	NO

Analysis of Future Traffic Conditions

Future traffic volume projections have been developed to analyze the traffic conditions after completion of other planned land developments including the proposed Project. Pursuant to the City of Los Angeles traffic impact guidelines, the following steps have been taken to develop the future traffic volume estimate:

(a) Existing traffic 2016 conditions;
(b) Traffic in (a) + ambient growth (2 % per year increase) to year 2019;
(c) Traffic in (b) + related projects (without Project scenario);
(d) Traffic in (c) with the proposed Project traffic (with Project scenario);
(e) Traffic in (d) + the proposed traffic mitigation, if necessary.

The future cumulative analysis includes other reasonably foreseeable development projects located within the study area that are either under construction or brought to the attention of the City as planned for future development. As part of this analysis, the related project information was obtained from the City of Los Angeles Department of Transportation[1] and City of Los Angeles Department of City Planning. It should be noted that this Project or any actions taken by the City regarding this Project, does not have a direct bearing on the other proposed related projects. The locations of the related projects are shown in Figure 9 and described in Table 8. The number of trips added to the area by the related projects alone is displayed in Figure 10.

To evaluate future traffic conditions with the related project, estimates of the peak hour trips generated were developed. The potential net increase in traffic from the related projects is shown in Appendix F.

[1] Data obtained for related projects during August 2016.

The potential traffic growth in the future at the study intersections has been determined by adding the existing traffic volume, ambient traffic growth of 2% per year and traffic from the other related development projects. Future cumulative "without project" peak hour traffic volume estimates are shown in Figure 11 for the AM Peak Hour and Figure 12 for the PM Peak Hour.

Table 8
Related Projects Descriptions

No.	Project	Size		Location
1	Apartments	100	units	6828 Van Nuys Bl
	Retail	13,000	sf	
2	Townhomes	85	units	15141 Saticoy Street
	Remove Single Homes	8	homes	
3	Condominiums	131	units	5700 Sepulveda Bl
	Retail	8,621	sf	
4	Medical Office	79,127	sf	15225 Vanowen Street
5	Light Industrial	283,920	sf	7600 Tyrone Avenue
6	Residentail	126	units	7121 Woodley Avenue
7	Mixed-Use Project	not available		6001 Van Nuys Boulevard
8	Single Family Homes	58	units	14700 Sherman Way
9	Apartments	180 units		7111 Sepulveda Boulevard
	Retail	4,750	sf	

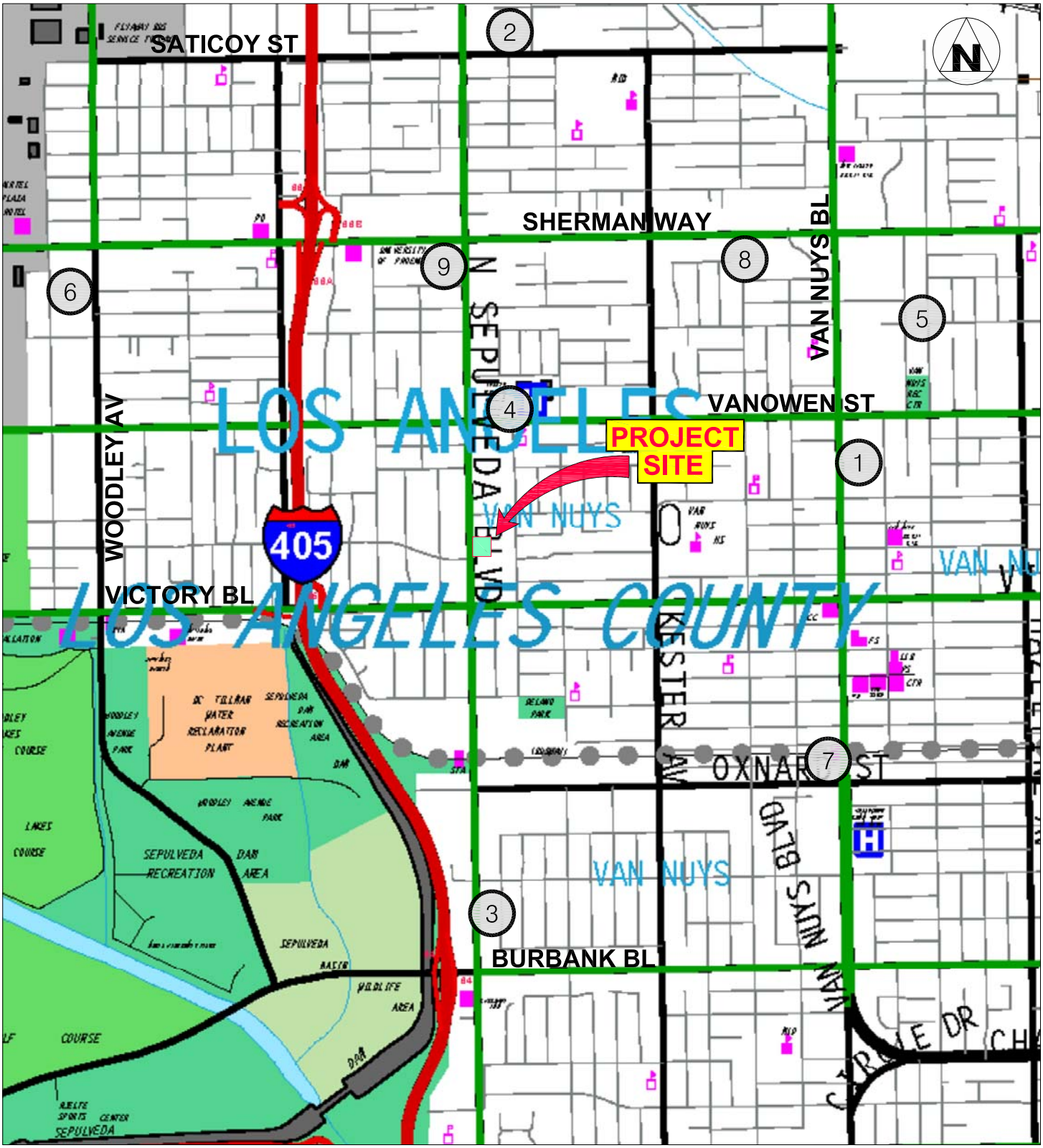
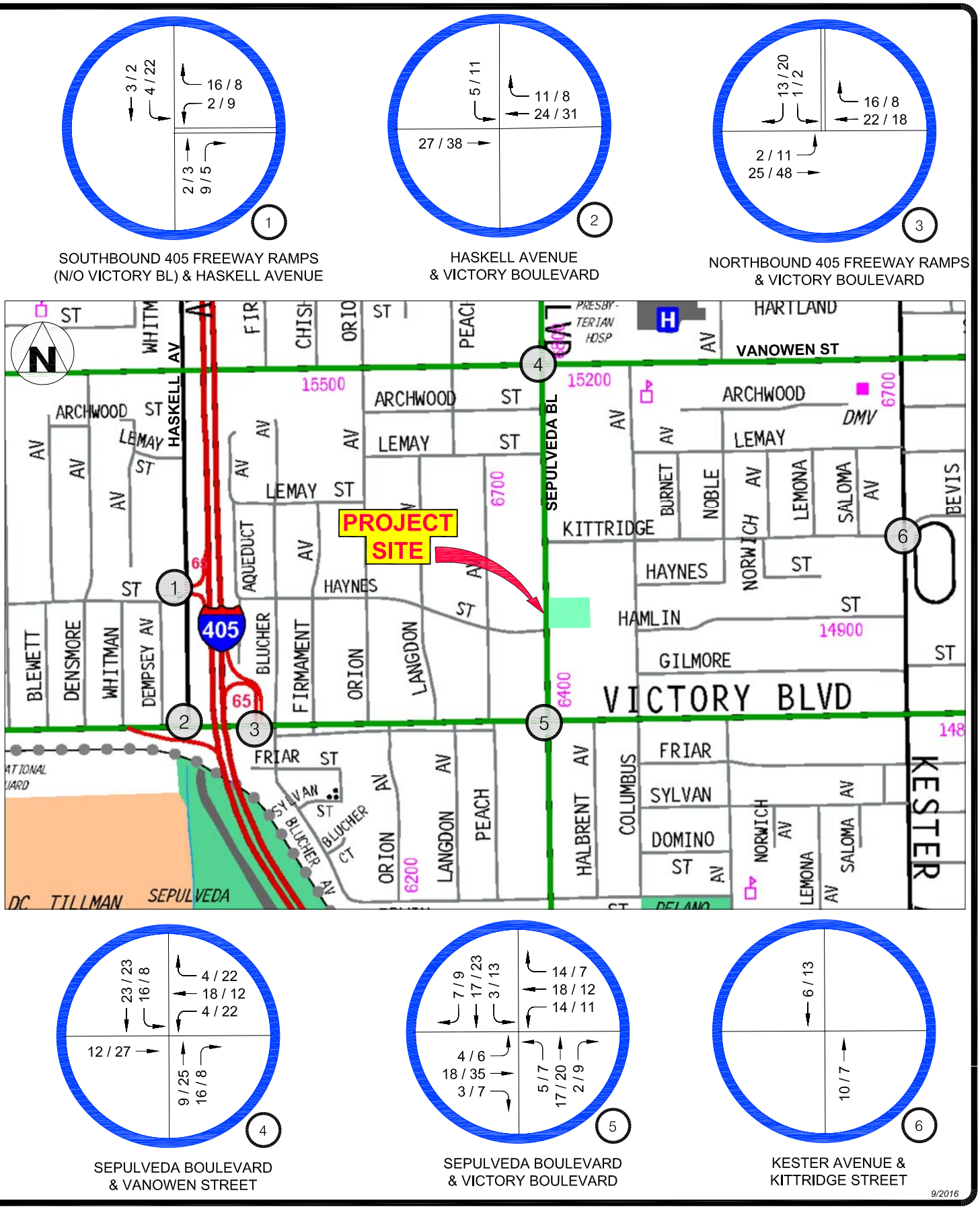


FIGURE 9

9/2016

RELATED PROJECT LOCATION MAP

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235, liz@overlandtraffic.com



RELATED PROJECT ONLY
TRAFFIC VOLUMES
AM PEAK HOUR/PM PEAK HOUR

FIGURE 10

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com

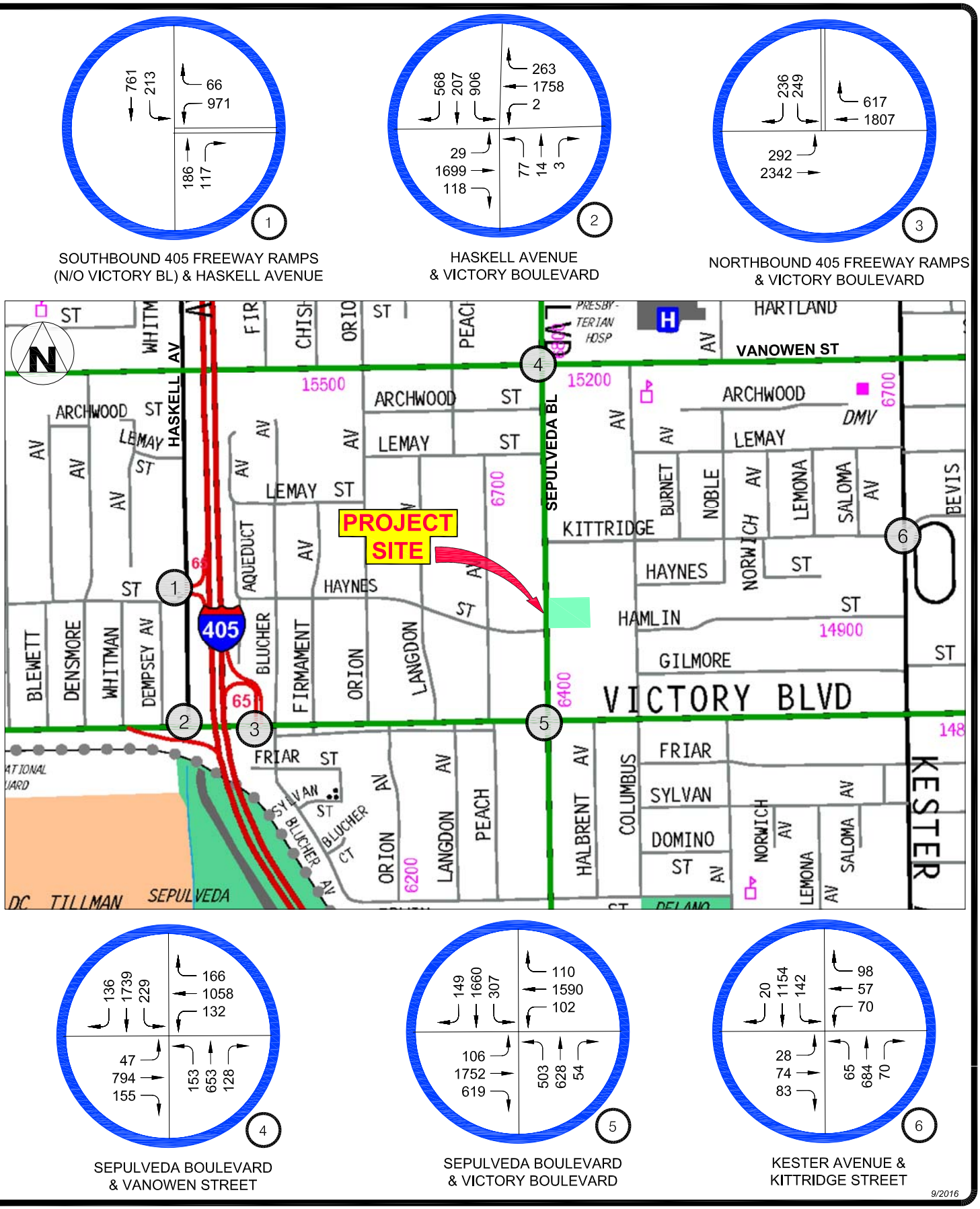
The traffic conditions created by ambient traffic growth plus the other related development projects are shown in Table 9 which demonstrates growth by comparing the existing traffic conditions and the future without Project conditions. Figure 11 displays the future traffic volumes without the project during the AM Peak Hour and Figure 12 displays the future traffic volumes without the project during the PM Peak Hour.

Traffic conditions after completion of the Project have been calculated by adding the Project volume to the future without traffic volume. Comparing the changes in the traffic conditions between the future without Project and future with Project provides the necessary information to determine if the Project's projected traffic increases have the potential to create a significant impact on any of the study intersections. The traffic impact of the added project traffic at the study intersections is shown in Table 10 by comparing the future without Project and future with Project traffic conditions at the study intersections. The significant impact criteria provided in Table 6 was applied to the future traffic conditions. As shown in Table 10, no significant traffic impacts occur at the study intersections.

It should be noted that the impact analysis does not consider any changes to the existing intersection configuration (i.e., future roadway improvements). Future cumulative "with Project" peak hour traffic volumes are shown in Figure 13 for the AM Peak Hour and Figure 14 for the PM Peak Hour.

Table 9
Future (2019) Traffic Conditions
Without Project

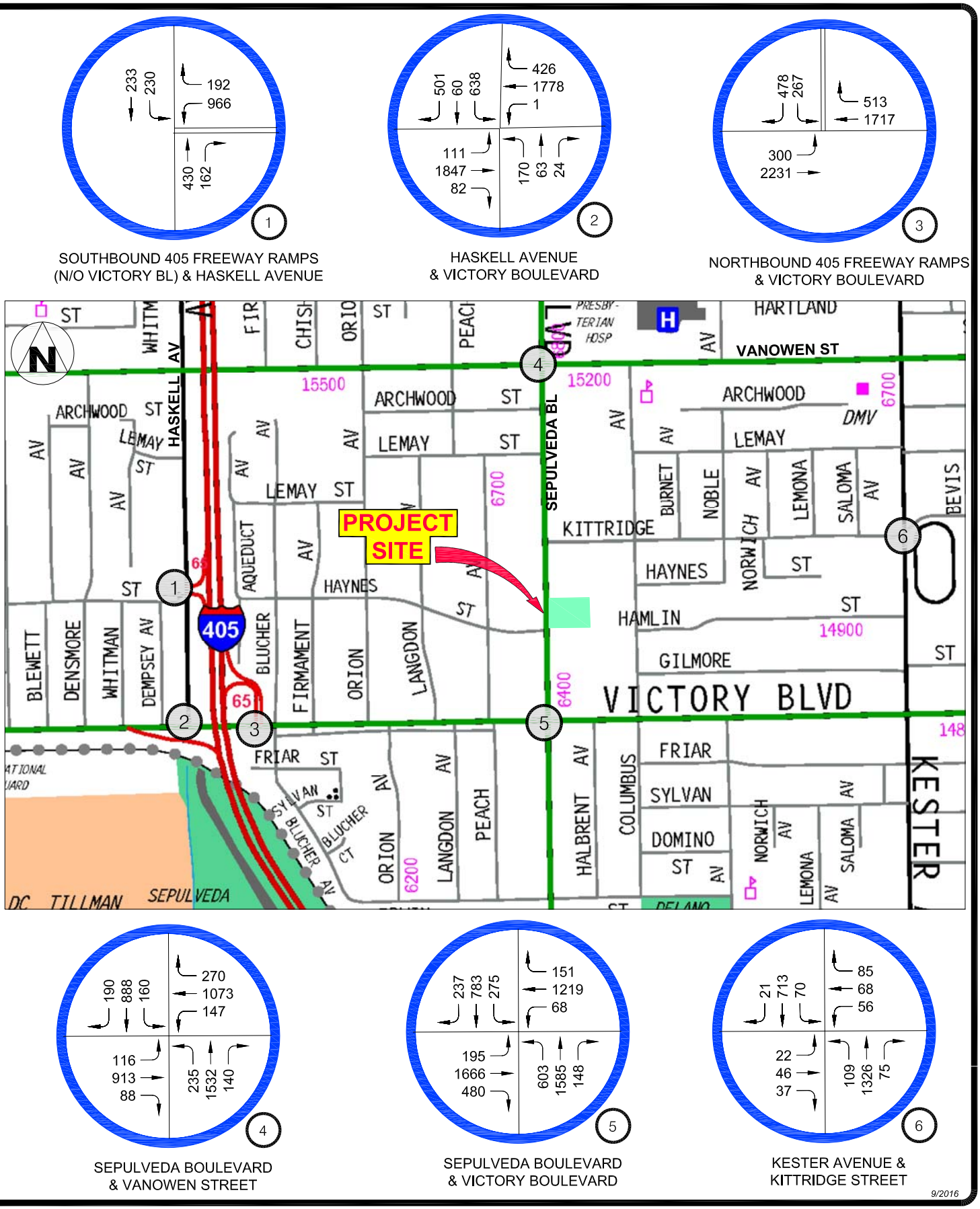
No.	Intersection	Peak Hour	Existing CMA	Existing LOS	Future (2019) Without Project CMA	Future (2019) Without Project LOS	Growth
1	405 Freeway SB Ramps &	AM	0.458	A	0.500	A	+ 0.042
	Haskell Avenue	PM	0.573	A	0.637	B	+ 0.064
2	Haskell Avenue &	AM	0.730	C	0.788	C	+ 0.058
	Victory Boulevard	PM	0.756	C	0.819	D	+ 0.063
3	405 Freeway NB Ramps &	AM	0.576	A	0.624	B	+ 0.048
	Victory Boulevard	PM	0.673	B	0.742	C	+ 0.069
4	Sepulveda Boulevard &	AM	0.867	D	1.115	F	+ 0.248
	Vanowen Street	PM	0.851	D	0.926	E	+ 0.075
5	Sepulveda Boulevard &	AM	0.920	E	1.003	F	+ 0.083
	Victory Boulevard	PM	0.830	D	0.913	E	+ 0.083
6	Kester Avenue &	AM	0.451	A	0.486	A	+ 0.035
	Kittridge Street	PM	0.446	A	0.481	A	+ 0.035



FUTURE TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

FIGURE 11

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com



SOUTHBOUND 405 FREEWAY RAMPS
(N/O VICTORY BL) & HASKELL AVENUE

HASKELL AVENUE
& VICTORY BOULEVARD

NORTHBOUND 405 FREEWAY RAMPS
& VICTORY BOULEVARD

SEPULVEDA BOULEVARD
& VANOWEN STREET

SEPULVEDA BOULEVARD
& VICTORY BOULEVARD

KESTER AVENUE &
KITTRIDGE STREET

9/2016

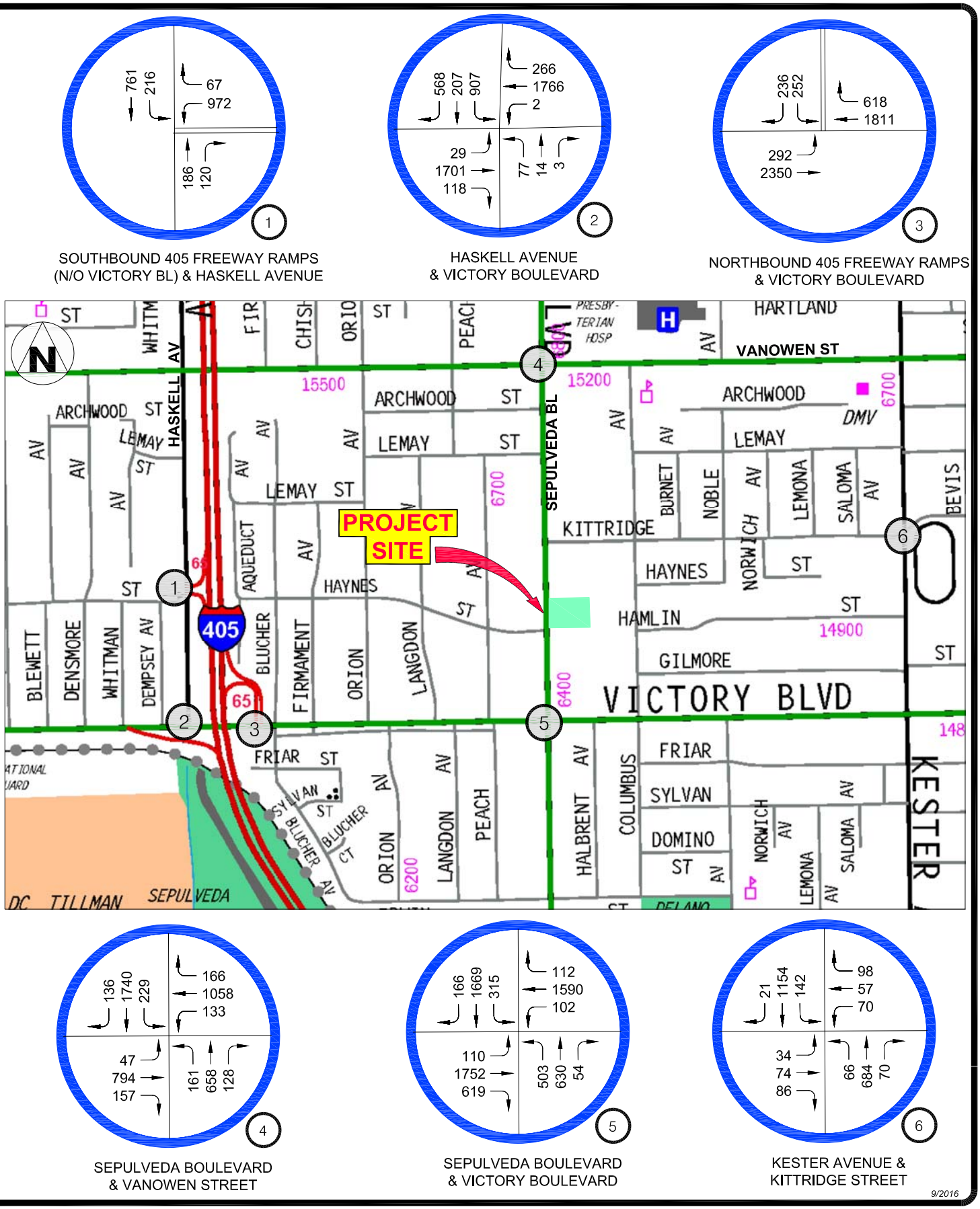
FUTURE TRAFFIC VOLUMES
WITHOUT PROJECT
PM PEAK HOUR

FIGURE 12

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com

Table 10
Future (2019) Traffic Conditions
With Project

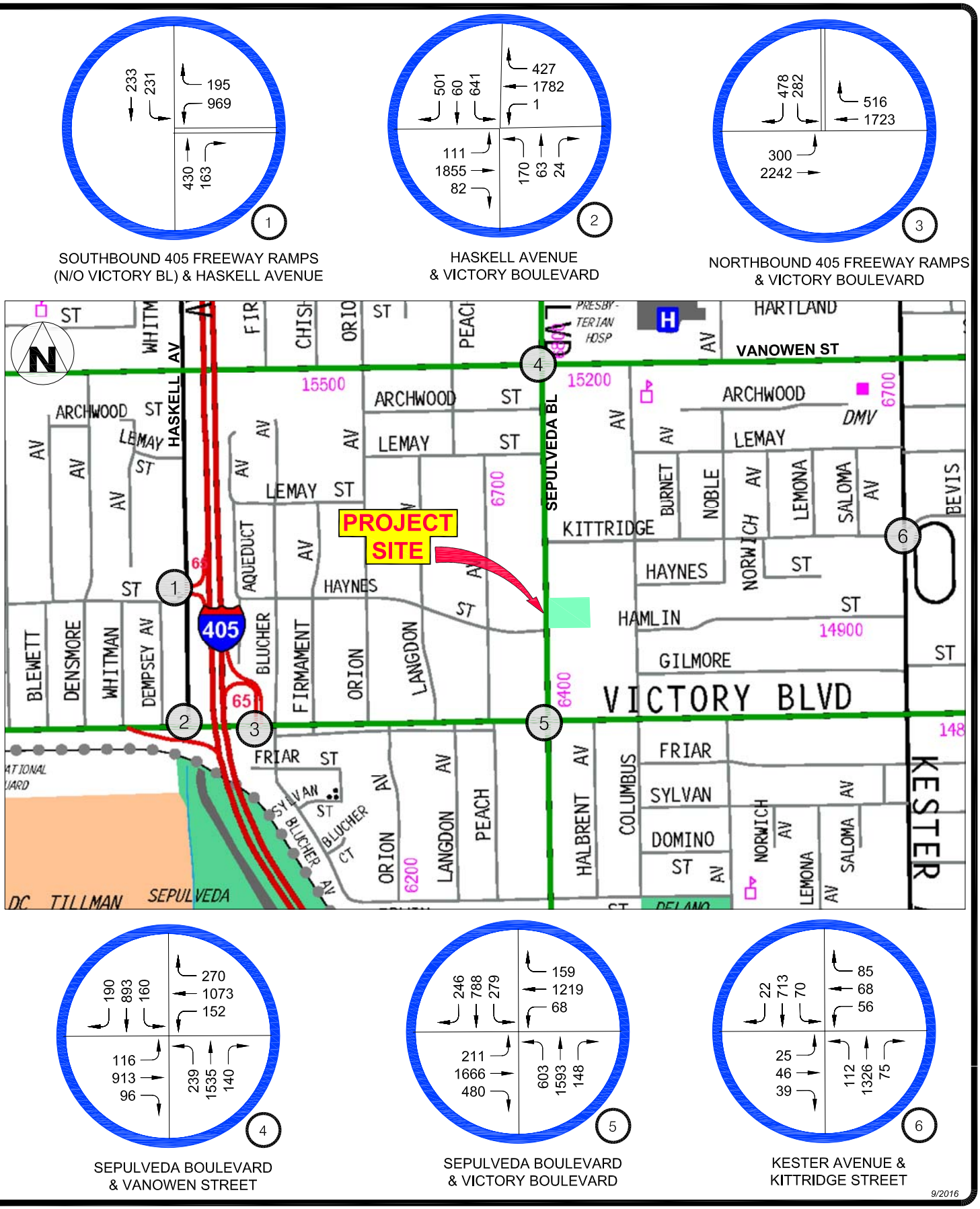
No.	Intersection	Peak Hour	Future (2019) Without Project CMA	LOS	Future (2019) With Project CMA	LOS	IMPACT	Significant Impact
1	405 Freeway SB Ramps &	AM	0.500	A	0.501	A	+ 0.001	NO
	Haskell Avenue	PM	0.637	B	0.640	B	+ 0.003	NO
2	Haskell Avenue &	AM	0.788	C	0.791	C	+ 0.003	NO
	Victory Boulevard	PM	0.819	D	0.821	D	+ 0.002	NO
3	405 Freeway NB Ramps &	AM	0.624	B	0.626	B	+ 0.002	NO
	Victory Boulevard	PM	0.742	C	0.744	C	+ 0.002	NO
4	Sepulveda Boulevard &	AM	1.115	F	1.123	F	+ 0.008	NO
	Vanowen Street	PM	0.926	E	0.930	E	+ 0.004	NO
5	Sepulveda Boulevard &	AM	1.003	F	1.005	F	+ 0.002	NO
	Victory Boulevard	PM	0.913	E	0.916	E	+ 0.003	NO
6	Kester Avenue &	AM	0.486	A	0.489	A	+ 0.003	NO
	Kittridge Street	PM	0.481	A	0.483	A	+ 0.002	NO



FUTURE TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

FIGURE 13

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com



SOUTHBOUND 405 FREEWAY RAMPS
(N/O VICTORY BL) & HASKELL AVENUE

HASKELL AVENUE
& VICTORY BOULEVARD

NORTHBOUND 405 FREEWAY RAMPS
& VICTORY BOULEVARD

SEPULVEDA BOULEVARD
& VANOWEN STREET

SEPULVEDA BOULEVARD
& VICTORY BOULEVARD

KESTER AVENUE &
KITTRIDGE STREET

9/2016

FUTURE TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

FIGURE 14

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com

Bicycle Plan Improvements

The City of Los Angeles adopted a 2010 Bicycle Master Plan to encourage alternative modes of transportation throughout the City of Los Angeles. The Master Plan was developed to provide a network system that is safe and efficient to use in coordination with the vehicle and pedestrian traffic on the City street systems. The Master Plan has mapped out the existing, funded and potential future Bicycle Paths, Bicycle Lanes, and Bicycle Routes. Copies of the Bicycle Plan maps dated 2010 are provided in Appendix G. A brief definition of the bicycle facilities is provided below:

Bicycle Path – A bicycle path is facility that is separated from the vehicular traffic for the exclusive use of the cyclist (although sometimes combined with a pedestrian lane). The designated path can be completely separated from vehicular traffic or cross the vehicular traffic with right-of-way assigned through signals or stop signs.

Bicycle Lane – A bicycle lane is typically provided on street with a designated lane stripped on the street for the exclusive use of the cyclist. The bicycle lanes are occasionally curbside, outside the parking lane, or along a right turn lane at intersections.

Bicycle Route – A bicycle route is a designated route in a cycling system where the cyclist shares the lane with the vehicle. Cyclist would follow the route and share the right-of-way with the vehicle.

The City of Los Angeles Mobility Plan 2035 has identified a Bicycle Enhanced Network. The Mobility Plan indicates that Tier 2 bicycle lanes are more likely to be built by 2035 than Tier 3 lanes. The plan entails roadways be improved with bike detectors at actuated signals. Victory Boulevard between the I-405 and White Oak Avenue has been identified with Bicycle Path in the Bicycle Enhanced Network Map and has an existing bicycle path. The prior City of Los Angeles Bicycle Plan 2010 identified both Sepulveda Boulevard and Kester Street as potential locations for bike lanes. They are not identified as Tier 1 or Tier 2 bike lanes on the 2035 Bicycle Enhanced Network. A copy of the Bicycle

Enhanced Network Map and 2010 City of Los Angeles Bicycle Plan is provided in Appendix G.

Municipal code 12.21 A.16(a)(2) requires new projects to provide bicycle parking spaces. Residential requires one long term bicycle parking space per unit or private unit garage space and one short term bicycle parking space per 10 units for residential units with 3 or more units or that have more than five guest rooms.

Short term bicycle parking shall consist of bicycle racks that support the bicycle frame at two points. Long term bicycle parking shall be secured from the general public and enclosed on all sides and protect bicycles from inclement weather. The proposed Project will provide 160 long term bicycle spaces within the garage and 16 short term spaces. The code required bicycle parking is displayed on Table 11.

Table 11
Required Bicycle Parking

Land Use	Size	Requirement	Number of Long Spaces	Number of Short Spaces
Apartments	160 units	1 long term space per unit & 1 short term space per 10 units	160	16
		TOTAL	160	16

No bicycle parking impact is anticipated.

Transit Analysis

The proposed Project is forecast to generate a net gain of approximately 904 weekday daily trips with 70 trips during the AM Peak Hour and 84 trips during the PM Peak Hour. As per Congestion Management Program (CMP) 2008 guidelines, person trips can be estimated by multiplying the total trips generated by 1.4. The trips assigned to transit may be calculated by multiplying the person trips generated by 3.5%. The CMP Transit trip generation calculation is displayed below in Table 12.

Table 12
Transit Trips

	DAILY	AM PEAK HOUR	PM PEAK HOUR
PROJECT TRIPS (from Table 2)	904	70	84
PERSON TRIPS (trips X 1.4)	1266	98	118
TRANSIT TRIPS (person trips x 3.5%)	**44**	**3**	**4**

Observations of the services near the project indicate capacity for additional usage. The Project's level of transit increase is not expected to adversely affect the current ridership of the transit services in the area.

Construction Analysis

Project construction will include grading, construction, and finishing work. The project developer will attempt to park and stage for construction on-site as much as possible. If there are periods of time where off-site street surfaces are needed, the developer will submit for review and approval a traffic control plan detailing days, time of day, and safety features. Any off-site construction needs will be minimized and conducted outside of peak traffic times. Deliveries of construction material will be coordinated to non-peak travel periods, to the extent possible. No long term construction impacts are anticipated with the Project.

Impacts on Regional Transportation System

The Congestion Management Program (CMP) was adopted to monitor regional traffic growth and related transportation improvements. The CMP designated a transportation network including all state highways and some arterials within the County to be monitored by local jurisdictions. If LOS standards deteriorate on the CMP network, then local jurisdictions must prepare a deficiency plan to be in conformance with the program. Local jurisdictions found to be in nonconformance with the CMP risk the loss of state gas tax funding.

For purposes of the CMP LOS analysis, an increase in the freeway volume by 150 vehicles per hour during the am or pm peak hours in any direction requires further analysis. A substantial change in freeway segments is defined as an increase or decrease of 2% in the demand to capacity ratio when at LOS F. For purposes of CMP intersections, an increase of 50 vehicles or more during the am or pm peak requires further analysis.

The intersections of Victory Boulevard and Sepulveda Boulevard is the nearest CMP intersections and one of the study intersections (# 5 in the list of study intersections). Based on the CMA analysis, Victory Boulevard and Sepulveda Boulevard is currently operating at LOS E during the AM Peak Hour and LOS D during the PM Peak Hour. The Project does not increase the LOS in the Existing + Project analysis scenario with a less than 1% impact during both time periods. The LOS is projected to increase to LOS F during the AM Peak Hour and LOS E during the PM Peak Hour in the future without the Project. The addition of the Project traffic creates a 0.2 % increase during the AM Peak Hour and 0.3% increase during the PM Peak Hour without increasing the LOS. No City of Los Angeles or CMP significant impacts are identified with construction of this project.

The Project volumes on the area freeways would likely use the San Diego Freeway (I-405). Based on the trip distribution patterns in the area, the project's access and proximity to destination points throughout the City, it is anticipated that, up to 10% of the Project volumes will be using any one segment of the freeway. The maximum number of freeway trips on the freeway would then be 8 vehicles during the peak hours. This amount of traffic is below the threshold needed for further evaluation. No CMP intersection or freeway impacts are anticipated.

As part of the MOU process with LADOT, a freeway impact analysis screening was conducted to determine if the Project may create a significant freeway segment or off ramp segment impact and require further analysis beyond the screening in the MOU. The screening criteria is based on an agreement between LADOT and Caltrans established October 2, 2013, which was renewed and modified on December 15, 2015. The Modified Project did not trigger the following established impact criteria:

The project's peak hour trips would result in a 1% or more increase to the freeway mainline capacity of a freeway segment operating at level of service (LOS) E or F (based on an assumed capacity of 2,000 vehicles per hour per lane); or

The project's peak hour trips would result in a 2% or more increase to the freeway mainline capacity of a freeway segment operating at LOS D (based on an assumed capacity of 2,000 vehicles per hour per lane); or

The project's peak hour trips would result in a 1% or more increase to the capacity of a freeway off-ramp operating at level of service (LOS) E or F (based on an assumed capacity of 850 vehicles per hour per lane); or

The project's peak hour trips would result in a 2% or more increase to the capacity of a freeway off-ramp operating at LOS D (based on an assumed capacity of 850 vehicles per hour per lane).

Therefore, no additional freeway segment or freeway off ramp analysis was required and the Project would result in less than significant freeway segment or freeway off ramp segment impacts. The full freeway screening is provided as part of the MOU in Appendix A.

CHAPTER 6 MITIGATION MEASURES

This study has determined that using the criteria established by the City of Los Angeles, that the added traffic volume generated by the residential development project will not significantly impact any of the six study intersections. No traffic mitigation measures are necessary.

Sepulveda Boulevard is designated as a Boulevard II in the City of Los Angeles Mobility Plan 2035. A Boulevard II is required to provide 110-foot right of way with an 80-foot right-of-way with 15-foot sidewalks. Sepulveda Boulevard is currently dedicated with 145 feet of right-of-way. No additional dedication is anticipated along the Project frontage.

Parking - No parking impacts are anticipated with the Project. It is anticipated that 274 parking spaces will be provided by the project. This is in more than the City of Los Angeles Code required 235 vehicle parking spaces. A surplus of 39 vehicle parking spaces over code will be provided by the Project. Code required bicycle parking of 160 long term and 16 short term spaces will be provided.

No transit, construction, Congestion Management Program, bikeways or freeway significant impacts are anticipated with the Project.

APPENDIX A

LADOT MOU

8/19/16

TRAFFIC STUDY - MEMORANDUM OF UNDERSTANDING (MOU)

This MOU acknowledges that the traffic study for the following project will be prepared in accordance with the latest version of LADOT's Traffic Study Policies and Procedures:

Project Name: 6500 SEPULVEDA

Project Address: 6500 Sepulveda Blvd., Van Nuys

Project Description: Construction of a 160-unit apartment complex on vacant land (previous hotel removed)

Geographic Distribution: North 20% South 30% East 25% West 25%

Attach graphic illustrating project trip distribution percentages at the studied intersections
Trip Generation Rate(s): ITE 9th Edition, Trip generation table attached.

	in	out	total
AM Trips	14	56	70
PM Trips	54	30	84

Project Buildout Year: 2019 Ambient or CMP Growth Rate: 2 % Per Yr.

Related Projects: (to be researched by the consultant and approved by LADOT)

Subject to Freeway Impact Analysis Screening review: __YES _X_NO
(freeway analysis screening filter should be included in this MOU; selecting "yes" implies that at least one criteria was satisfied)

Is this project on the High Injury Network? _X_YES __NO

Study Signalized Intersections (Subject to LADOT revision after initial impact analysis)

1. Haskell Av & SB 405 Fwy Ramps	4. Vanowen St & Sepulveda Bl
2. Haskell Av & Victory Bl	5. Victory Bl & Sepulveda Bl
3. Victory Bl & NB 405 Fwy Ramps	6. Kittridge St & Kester Av

Trip Credits: (Exact amount of credit subject to approval by LADOT)

	Yes	No
Transit Usage	X	
Transportation Demand Management		X
Existing Active Land Use		X
Previous Land Use		X
Internal Trip		X
Pass-By Trip		X

*Detailed trip distribution at all studied intersection is required. ✓

Consultant	Developer Representative
Name Liz Culhane-Fleming	imt Capital, LLC
Address 952 Manhattan Bch Bl #100, Manhattan Bch	15303 Ventura Blvd., Suite 200
Phone No. 310.545.1235	Sherman Oaks, CA 91403
E-Mail liz@overlandtraffic.com	

Approved by: [signature] rev 8-16-16 [signature] 8/25/16

Consultant's Representative Date LADOT Representative Date

Trip Generation Rates

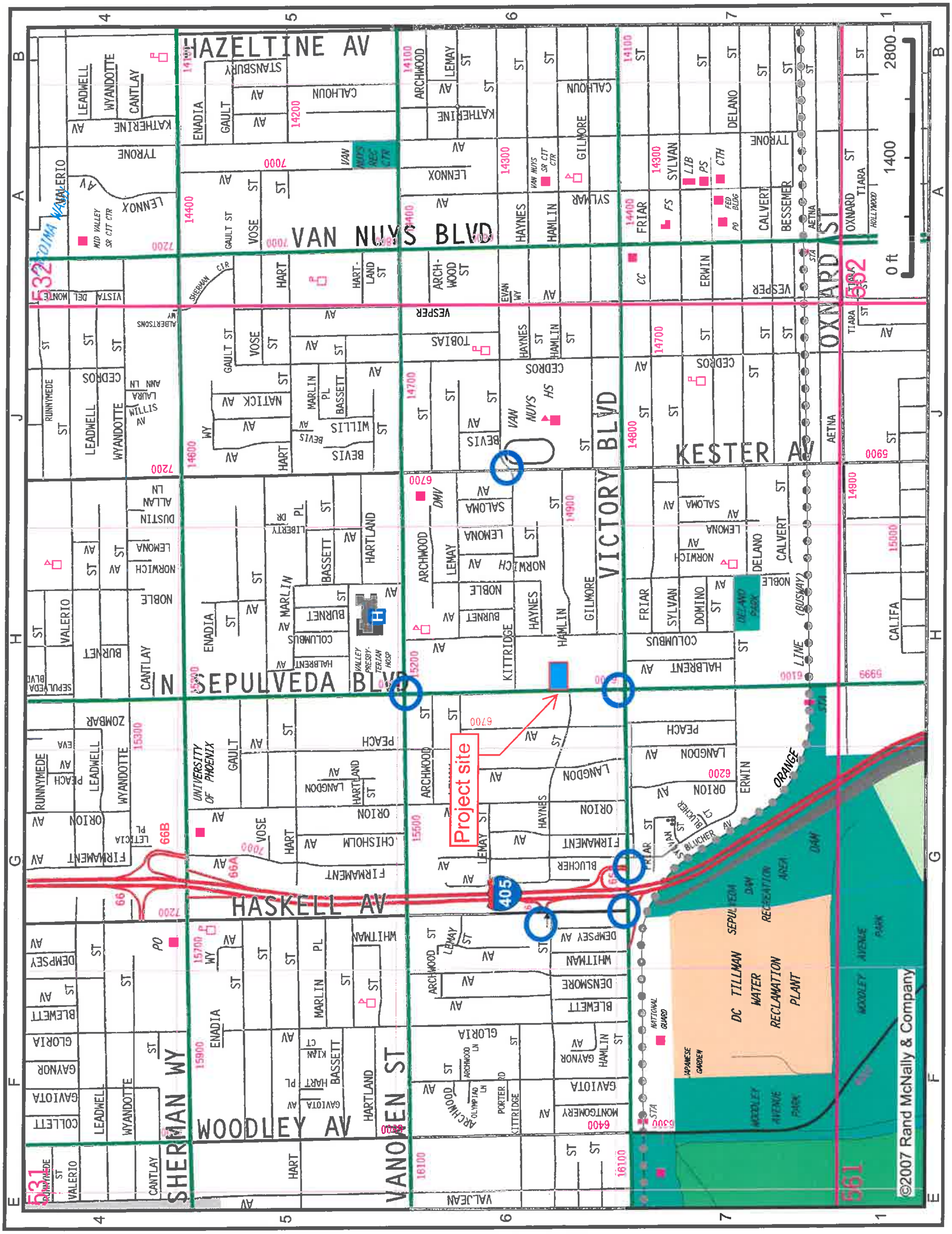
Description	ITE Code	Daily Traffic	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out
Apartment	220	6.65	0.51	20%	80%	0.62	65%	35%

Rate are per unit for apartment

PROJECT TRIPS

Description	Size	Daily Traffic	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out
Apartment	160 units	1064	82	16	66	99	64	35
Transit/Walk	15%	(160)	(12)	(2)	(10)	(15)	(10)	(5)
NET Project		**904**	**70**	**14**	**56**	**84**	**54**	**30**

Along Sepulveda Bl with Bus Lane, Rapid Line 734 with stop at Victory - appx 670 feet and at Vanowen


HAZELTINE AV
VAN NUYS BLVD
N SEPULVEDA BLVD
VICTORY BLVD
KESTER AV
HASKELL AV
SHERMAN WY
WOODLEY AV
VANOWEN ST
OXNARD ST
Project site
405
VAN NUYS HS
VALLEY PRESBY-TERIAN HOSP
UNIVERSITY OF PHOENIX
DMV
VAN NUYS REC CTR
DELANO PARK
SEPULVEDA DAM RECREATION AREA
DC TILLMAN WATER RECLAMATION PLANT
WOODLEY AVENUE PARK
JAPANESE GARDEN
NATIONAL GUARD
ORANGE LINE (BUSWAY)
0 ft 1400 2800
©2007 Rand McNally & Company

Caltrans Freeway Analysis Screening Filter

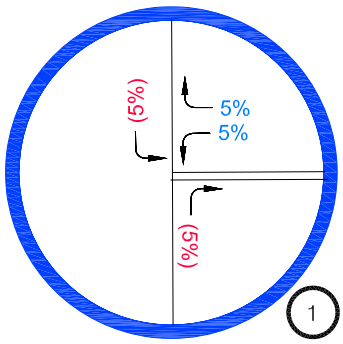
PROJECT: 6500 SEPULVEDA

IMPACT CRITERIA	Yes	No
The project's peak hour trips would result in a 1% or more increase to the freeway mainline capacity of a freeway segment operating at level of service (LOS) E or F (based on an assumed capacity of 2,000 vehicles per hour per lane); or		X
The project's peak hour trips would result in a 2% or more increase to the freeway mainline capacity of a freeway segment operating at LOS D (based on an assumed capacity of 2,000 vehicles per hour per lane); or		X
The project's peak hour trips would result in a 1% or more increase to the capacity of a freeway off-ramp operating at LOS E or F (based on an assumed capacity of 850 vehicles per hour per lane); or		X
The project's peak hour trips would result in a 2% or more increase to the capacity of a freeway off-ramp operating at LOS D (based on an assumed capacity of 850 vehicles per hour per lane); or		X

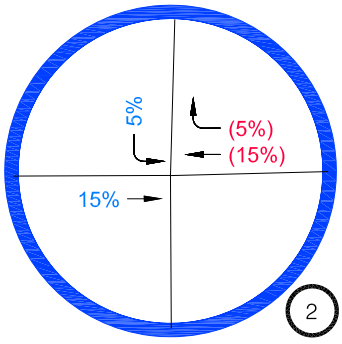
LOCATION	DIR	# of Lanes	Capacity	Project Trips*		% INCREASE	
				AM	PM	AM	PM
FREEWAY SEGMENT (2,000 vehicles per hour per lane)							
405 Freeway north of Sherman Way	NB	4	8,000	11	6	0.1%	0.1%
405 Freeway north of Sherman Way	SB	4	8,000	3	10	0.0%	0.1%
405 Freeway south of Victory Bl	NB	4	8,000	3	10	0.0%	0.1%
405 Freeway south of Victory Bl	SB	4	8,000	11	6	0.1%	0.1%
OFFRAMP SEGMENT (850 vehicles per hour per lane)							
405 Freeway SB Off Ramp to Haskell Av n/o Sherman Way	SB	2	1,700	1	5	0.1%	0.3%
405 Freeway NB Off Ramp to Sherman Way	NB	3	2,550	0	0	0.0%	0.0%
405 Freeway SB Off Ramp to Haskell Av n/o Victory Bl	SB	2	1,700	2	5	0.1%	0.3%
405 Freeway NB Off Ramp to Victory Bl	NB	2	1,700	3	10	0.2%	0.6%

DIR = Direction

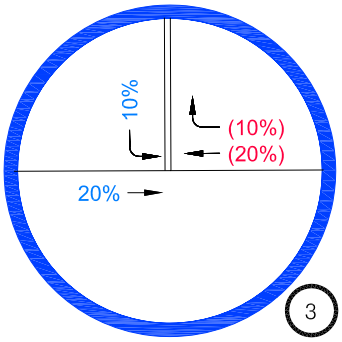
* Estimated up to 20% of project trips to using any of the three Freeways



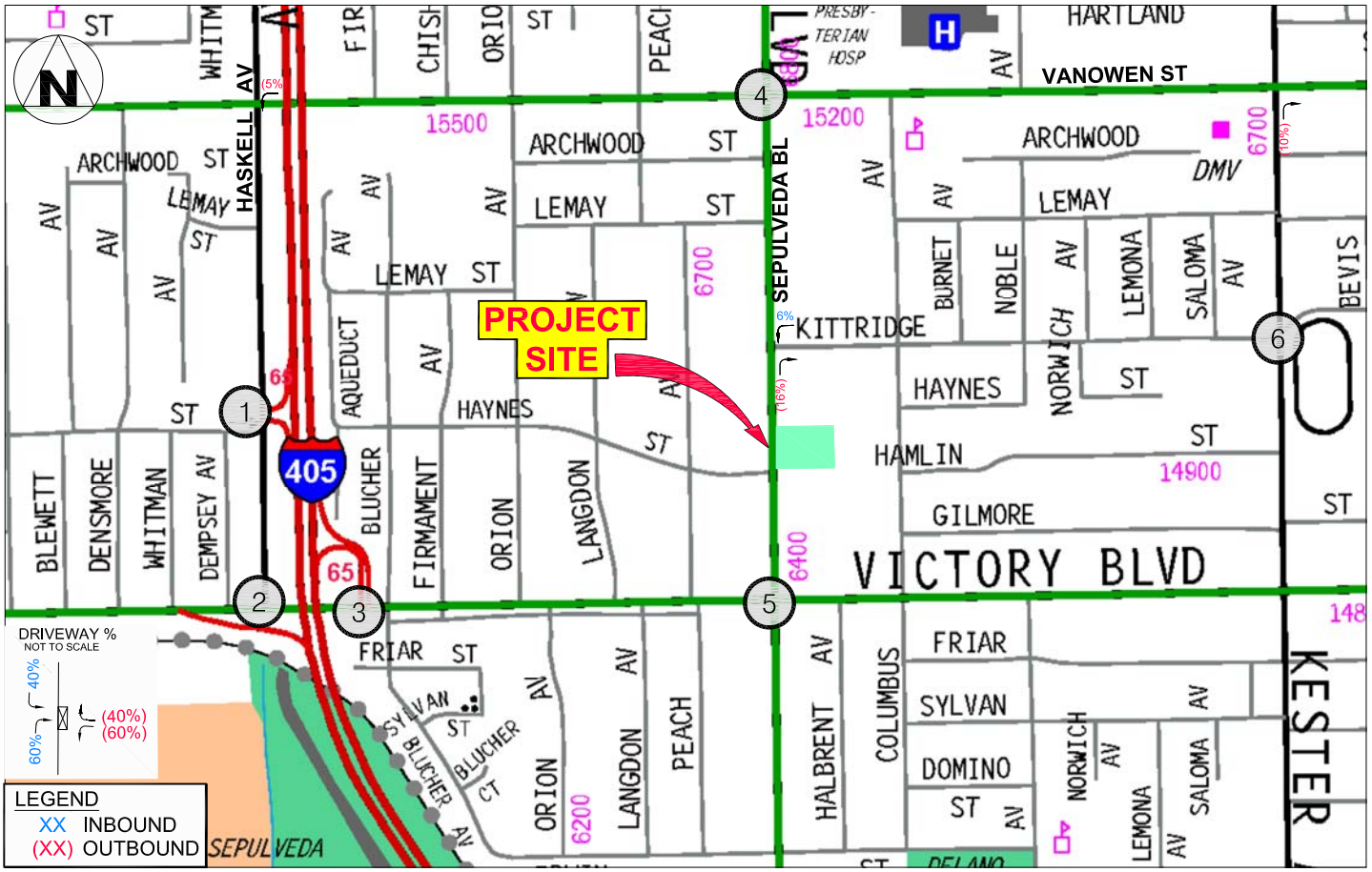
SOUTHBOUND 405 FREEWAY RAMPS
(N/O VICTORY BL) & HASKELL AVENUE

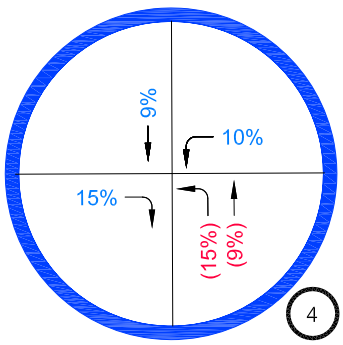


HASKELL AVENUE
& VICTORY BOULEVARD

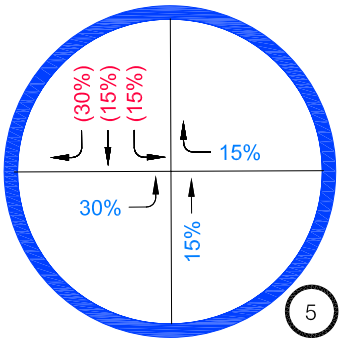


NORTHBOUND 405 FREEWAY RAMPS
& VICTORY BOULEVARD

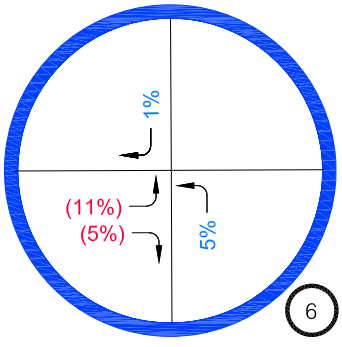




SEPULVEDA BOULEVARD
& VANOWEN STREET



SEPULVEDA BOULEVARD
& VICTORY BOULEVARD



KESTER AVENUE &
KITTRIDGE STREET

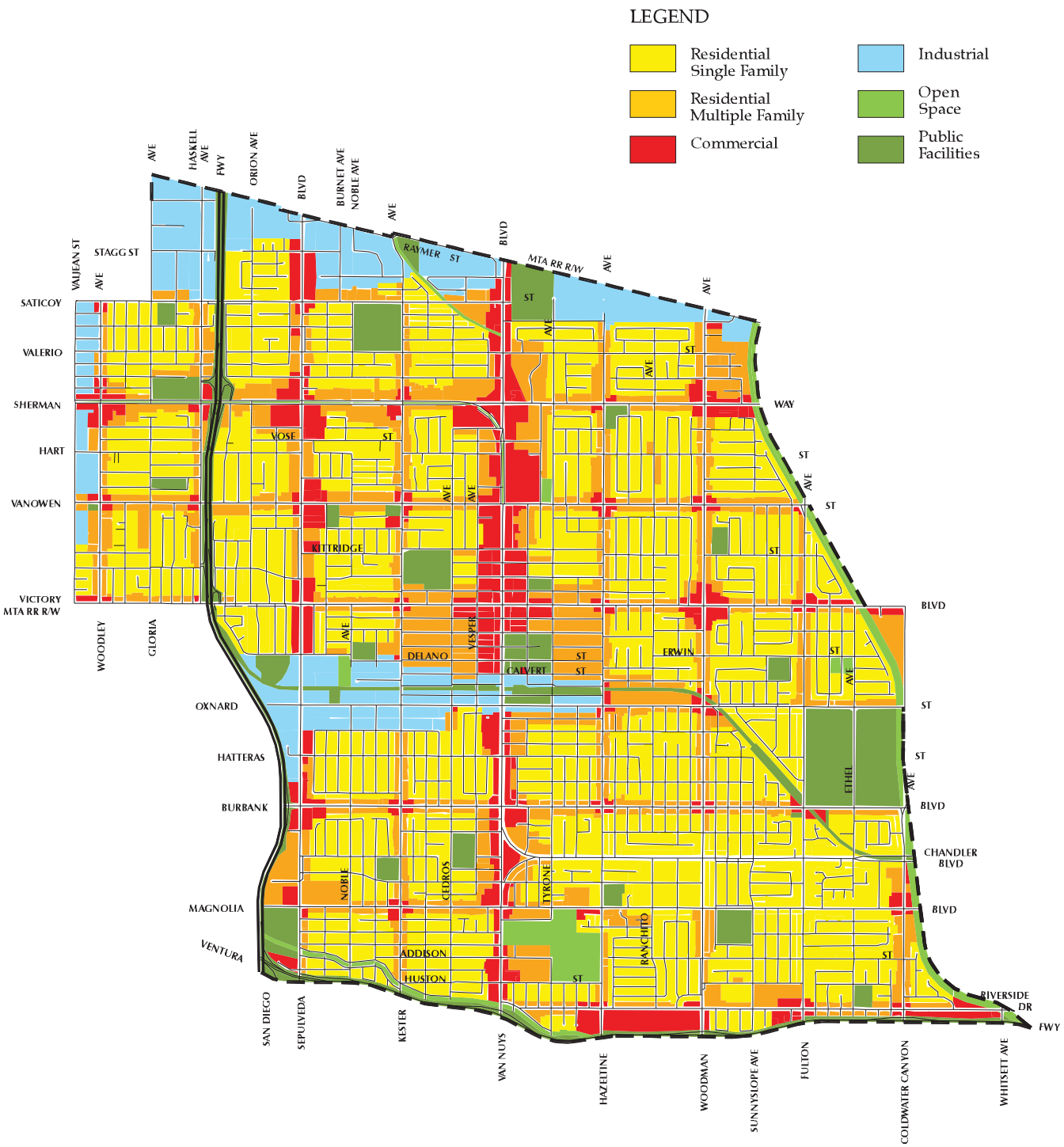
9/2016

PROJECT TRIPS DISTRIBUTION PERCENTAGES

Overland Traffic Consultants, Inc.
952 Manhattan Beach Bl, #100, Manhattan Beach, CA 90266
(310) 545-1235 phone, liz@overlandtraffic.com

APPENDIX B

Land Use Plan Map



GENERALIZED LAND USE
VAN NUYS - NORTH SHERMAN OAKS

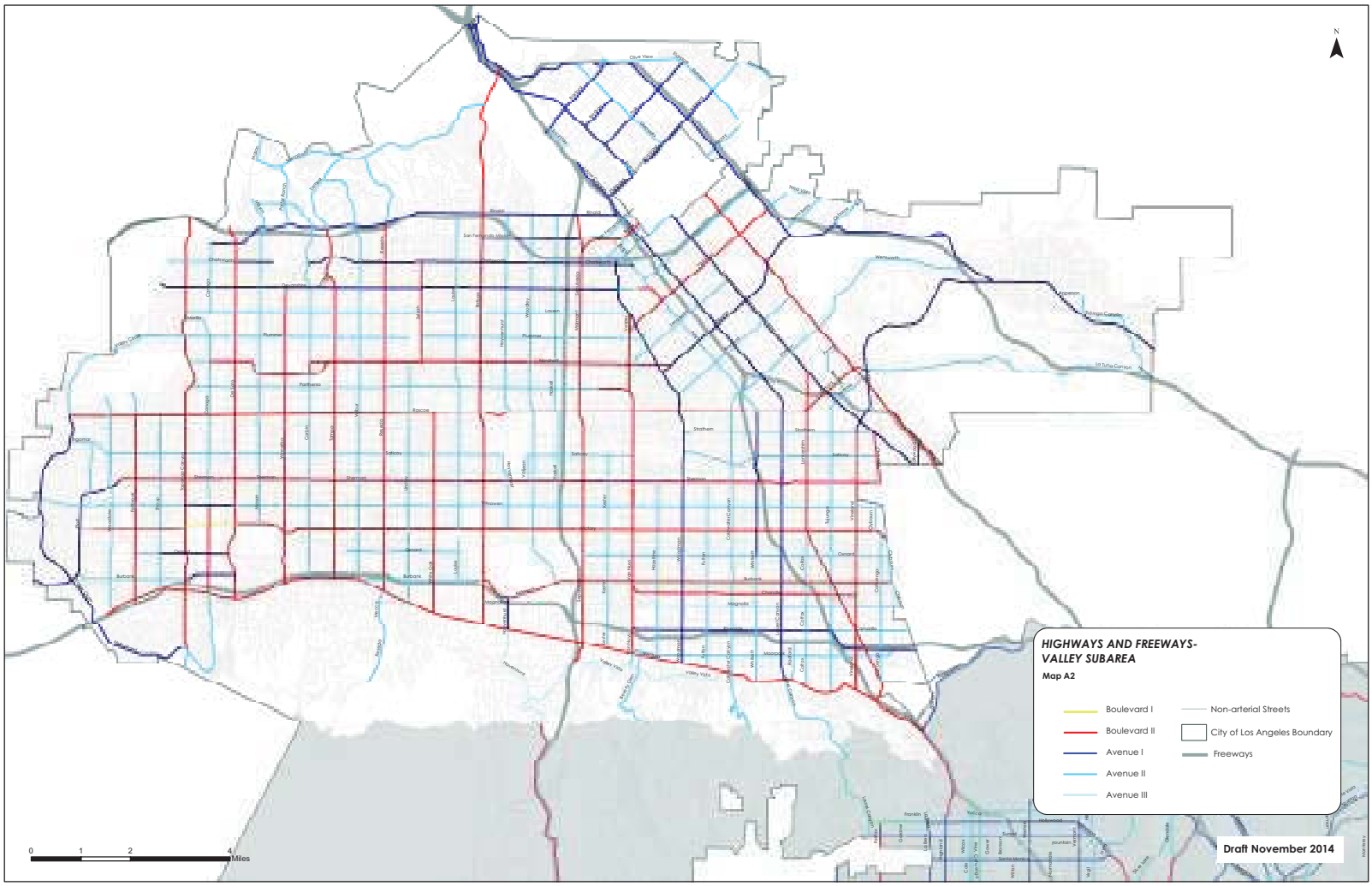
as of January 30 2013-CPC-2012-1225-GPA/ZC(rphld due to db gplu correction(job#242595) per CPC1986-784 adptd (05/6/92) PLT:10/31/13

SUMMARY OF LAND USE

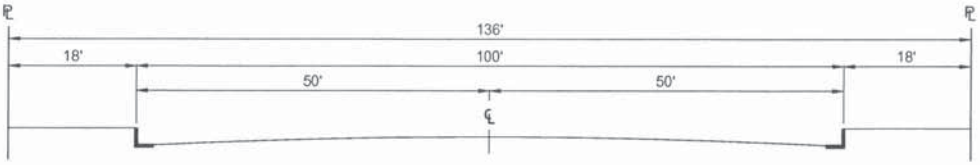
CATEGORY	LAND USE	CORRESPONDING ZONES	NET ACRES	% AREA	TOTAL NET ACRES	TOTAL % AREA
RESIDENTIAL						
Single Family					3,141	38.2
	Very Low	RE20, RA, RE15, RE11	277	3.4		
	Low	RE9, RS, R1, RU, RD6, RD5	2,864	34.8		
Multiple					1,237	15.1
	Low Medium I	R2, RD3, RD4, RZ3, RZ4, RU, RW1	24	0.3		
	Low Medium II	RD1.5, RD2 , RW2, RZ2.5	458	5.6		
	Medium	R3	738	9.0		
	High Medium	R4	17	0.2		
COMMERCIAL					586	7.1
	Neighborhood	C1, C1.5, C2, C4	164	2.0		
	General	CR, C1.5, C2, C4	211	2.5		
	Community	CR, C2, C4	188	2.3		
	Regional	CR, C1.5, C2, C4, R3, R4, R5	23	0.3		
INDUSTRIAL					611	7.4
	Commercial	CM, P	67	0.8		
	Limited	CM, MR1, M1	156	1.9		
	Light	MR2, M2	362	4.4		
	Heavy	M3	26	0.3		
PARKING					1	0.0
	Parking	P, PB	1	0.0		
OPEN SPACE/PUBLIC FACILITIES					850	10.4
	Open Space	OS, A1	169	2.1		
	Public Facilities	PF	681	8.3		
STREETS					1,794	21.8
	Private Streets	-	1	0.0		
	Public Streets	-	1,793	21.8		
TOTAL					8,220	100.0

APPENDIX C

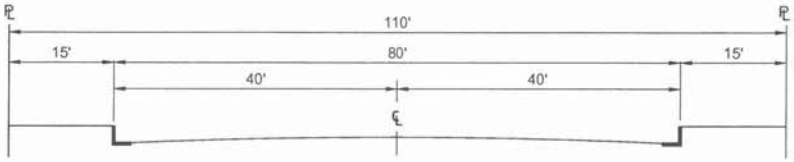
CIRCULATION SYSTEM, STREET STANDARDS, STREET AERIALS


N
HIGHWAYS AND FREEWAYS-
VALLEY SUBAREA
Map A2
Boulevard I
Boulevard II
Avenue I
Avenue II
Avenue III
Non-arterial Streets
City of Los Angeles Boundary
Freeways
0
1
2
4
Miles
Draft November 2014

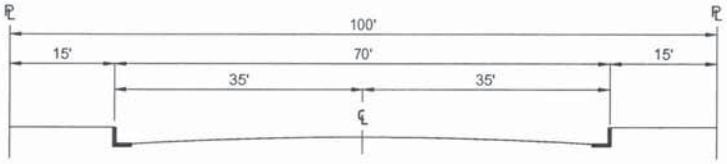
ARTERIAL STREETS



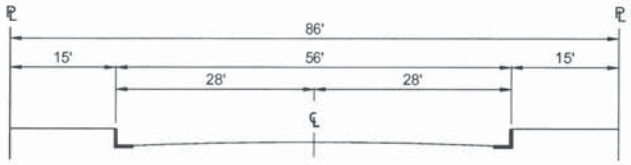
BOULEVARD I (MAJOR HIGHWAY CLASS I)



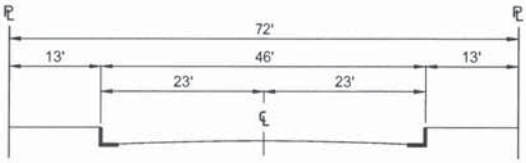
BOULEVARD II (MAJOR HIGHWAY CLASS II)



AVENUE I (SECONDARY HIGHWAY)



AVENUE II (SECONDARY HIGHWAY)



AVENUE III (SECONDARY HIGHWAY)

THIS STANDARD PLAN BECOMES EFFECTIVE CONCURRENT WITH THE ADOPTION OF THE MOBILITY PLAN 2035.

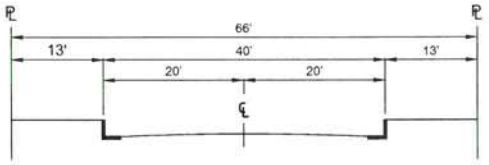
BUREAU OF ENGINEERING — DEPARTMENT OF PUBLIC WORKS — CITY OF LOS ANGELES

--- DRAFT --- STANDARD STREET DIMENSIONS

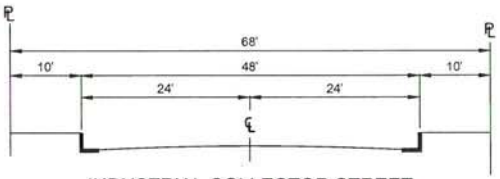
STANDARD PLAN S-470-1

PREPARED	SUBMITTED	APPROVED		SUPERSEDES	REFERENCES
HAMID MADANI, P.E. BUREAU OF ENGINEERING CHECKED RAFFI MASSABKI, P.E. BUREAU OF ENGINEERING	SAMARA ALI-AHMAD, P.E. DATE ENGINEER OF DESIGN BUREAU OF ENGINEERING KENNETH REDD, P.E. DATE DEPUTY CITY ENGINEER	GARY LEE MOORE, P.E., ENV. SP. DATE CITY ENGINEER DEPARTMENT OF TRANSPORTATION DATE GENERAL MANAGER DIRECTOR OF PLANNING DATE	REGISTERED PROFESSIONAL ENGINEER GARY LEE MOORE No. C-49446 Exp. CIVIL STATE OF CALIFORNIA	D-22549 S-470-0	
				VAULT INDEX NUMBER:	
				SHEET 1 OF 4 SHEETS	

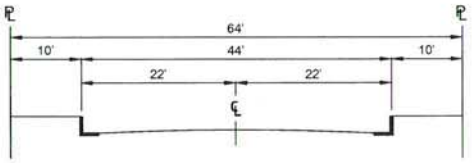
NON-ARTERIAL STREETS



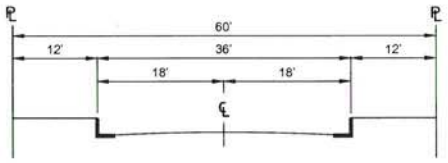
COLLECTOR STREET



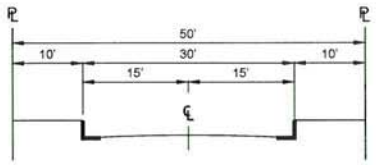
INDUSTRIAL COLLECTOR STREET



INDUSTRIAL LOCAL STREET

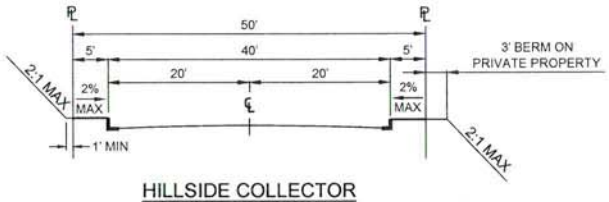


LOCAL STREET - STANDARD

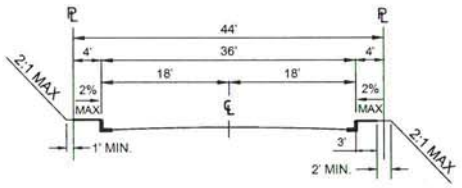


LOCAL STREET - LIMITED

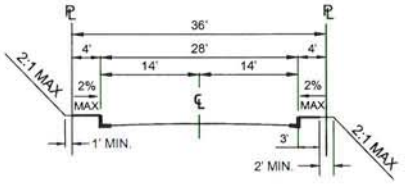
HILLSIDE STREETS



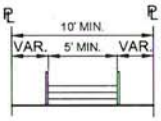
HILLSIDE COLLECTOR



HILLSIDE LOCAL



HILLSIDE LIMITED STANDARD



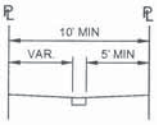
PUBLIC STAIRWAY

CONSTRUCTED IN ACCORDANCE WITH
BUREAU OF ENGINEERING STANDARD PLANS

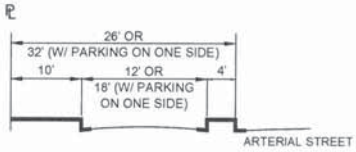
STANDARD PLAN NO. S-470-1	VAULT INDEX NUMBER B-	SHEET 2 OF 4 SHEETS

OTHER PUBLIC RIGHTS-OF-WAY

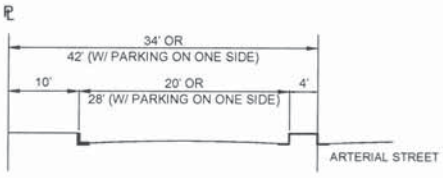
SHARED STREET



PEDESTRIAN WALKWAY

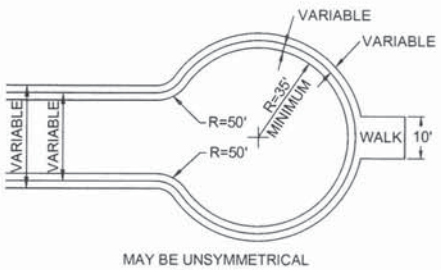


ONE-WAY SERVICE ROAD



BI-DIRECTIONAL SERVICE ROAD

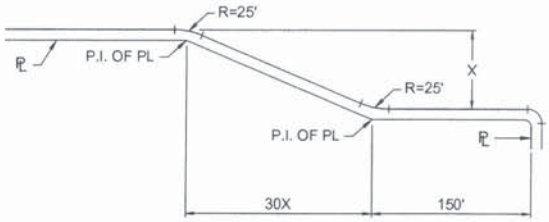
CUL-DE-SAC



MAY BE UNSYMMETRICAL
(PLAN VIEW)

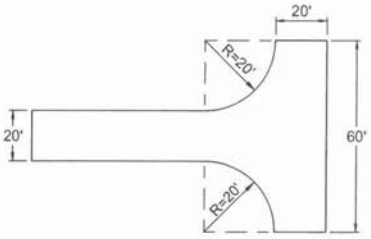
NOTE: FOR FIRE TRUCK CLEARANCE, NO OBSTRUCTION TALLER THAN 6" SHALL BE PERMITTED WITHIN 3FT. OF THE CURB. ON-STREET PARKING SHALL BE PROHIBITED.

TRANSITIONAL EXTENSIONS

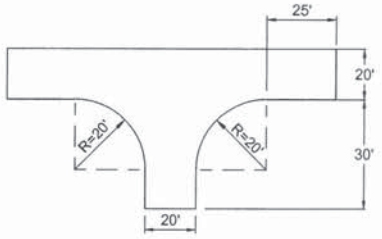


STANDARD FLARE SECTION
(PLAN VIEW)

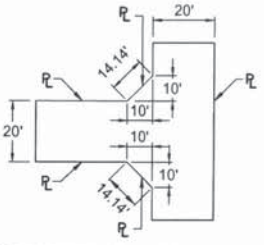
ALLEYS



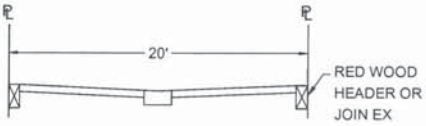
STANDARD TURNING AREA
(PLAN VIEW)



MINIMUM TURNING AREA
(PLAN VIEW)



STANDARD CUT CORNERS
FOR 90° INTERSECTION
(PLAN VIEW)



STANDARD CROSS-SECTION
(PLAN VIEW)

STANDARD PLAN NO. S-470-1	VAULT INDEX NUMBER B-	SHEET 3 OF 4 SHEETS

NOTES

1. CITY COUNCIL MAY, BY ORDINANCE, ADOPT SPECIFIC STANDARDS FOR INDIVIDUAL STREETS THAT DIFFER FROM THESE OFFICIAL STANDARD STREET DIMENSIONS. COMMUNITY PLANS AND SPECIFIC PLANS SHOULD BE REVIEWED FOR FOOTNOTES, INSTRUCTIONS AND/OR MODIFIED STREET DIMENSIONS THAT WOULD REQUIRE STANDARDS DIFFERENT THAN THOSE INDICATED ON THIS STANDARD PLAN.

2. FOR ADDITIONAL GUIDANCE AS TO THE USE OF THE ROADWAY AND SIDEWALK AREA, PLEASE REFER TO THE COMPLETE STREET DESIGN GUIDE AND MANUALS.

3. FOR DISCRETIONARY PROJECTS REQUIRING ACTION FROM THE DEPARTMENT OF CITY PLANNING (PLANNING), PLANNING MAY INCLUDE SPECIFIC INFORMATION AS TO THE DESIGN AND UTILIZATION OF THE SIDEWALK AREA.

4. WHERE A DESIGNATED ARTERIAL CROSSES ANOTHER DESIGNATED ARTERIAL STREET AND THEN CHANGES IN DESIGNATION TO A STREET OF LESSER STANDARD WIDTH, THE ARTERIAL SHALL BE TAPERED IN A STANDARD FLARE SECTION ON BOTH SIDES, AS ON SHEET 3, TO MEET THE WIDTH OF LESSER DESIGNATION AND PROVIDE AN ORDERLY TRANSITION.

5. PRIVATE STREET DEVELOPMENT SHOULD CONFORM TO THE STANDARD PUBLIC STREET DIMENSIONS SHOWN ON THE SHEET, WHERE APPROPRIATE. VARIATIONS MAY BE APPROVED ON A CASE-BY-CASE BASIS BY THE CITY.

6. FIFTY-FOOT CURB RADII (INSTEAD OF THE STANDARD 35' CURB RADII) SHALL BE PROVIDED FOR CUL-DE-SACS IN INDUSTRIAL AREAS. SEE CUL-DE-SAC ILLUSTRATION FOR FURTHER DESIGN STANDARDS.

7. ALLEYS SHALL BE A MINIMUM OF 20' IN WIDTH AND INTERSECTIONS AND/OR DEAD-END TERMINUSES SHALL BE DESIGNED TO CONFORM TO THE ALLEY ILLUSTRATIONS INCLUDED HEREIN.

8. FOR INTERSECTIONS OF STREETS, THE FOLLOWING DEDICATIONS SHALL APPLY;

   A. INTERSECTIONS OF ARTERIAL STREETS WITH ANY OTHER STREET: 15' X 15' CUT CORNER OR 20' CURVED CORNER RADIUS.

   B. INTERSECTIONS ON NON-ARTERIAL AND/OR HILLSIDE STREETS: 10' X 10' CUT CORNER OR 15' CURVED CORNER RADIUS.

9. STREETS THAT ARE ACCOMPANIED BY A PARALLEL FRONTAGE AND/OR SERVICE ROAD ARE DEEMED TO MEET THE STREET STANDARDS SET FORTH HEREIN AND THE DEDICATION REQUIREMENT SHALL BE NO MORE THAN IS NECESSARY TO BRING THE ABUTTING SIDEWALK DIMENSION INTO COMPLIANCE WITH THE STREET STANDARD.

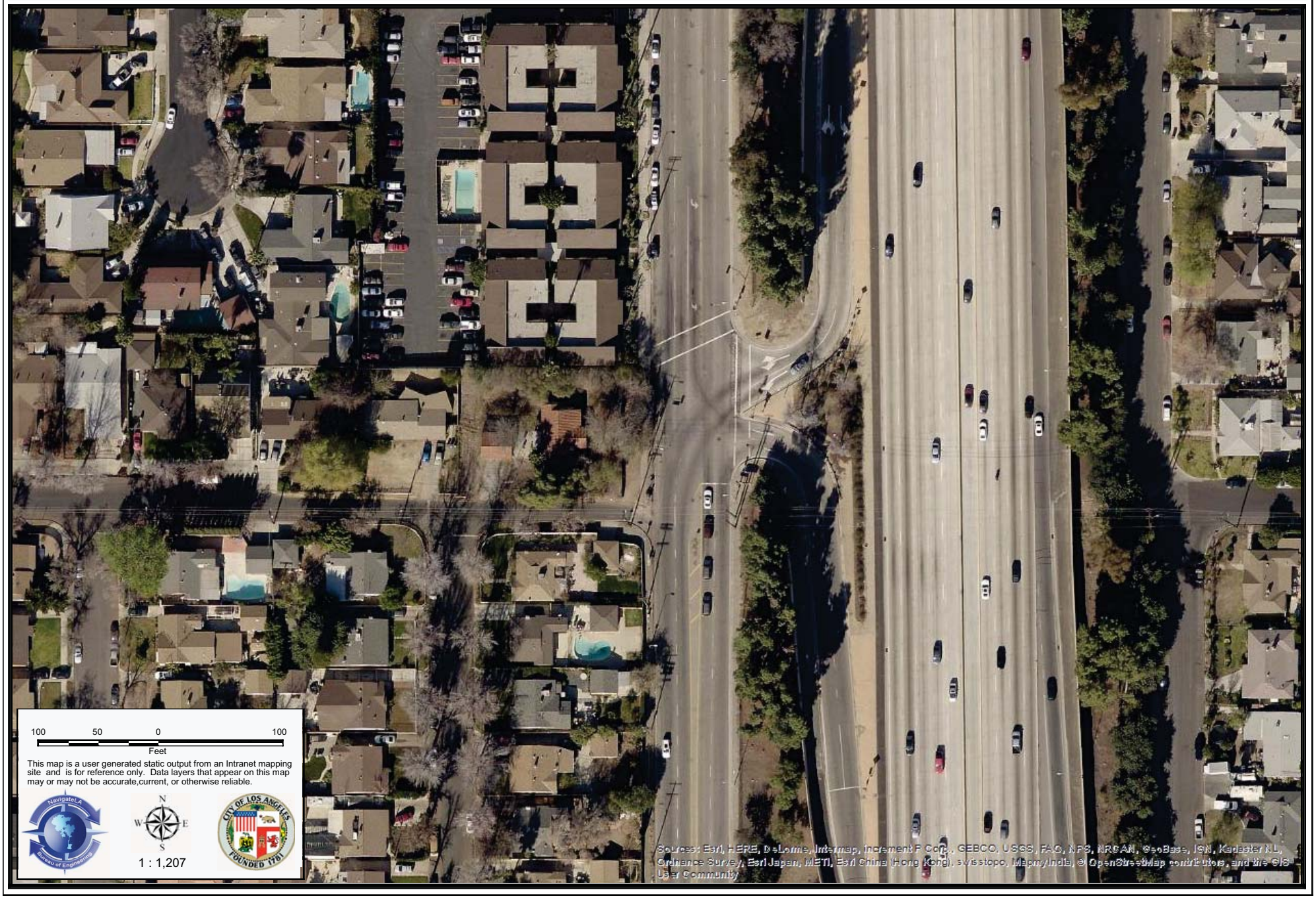
10. DUE TO THEIR UNIQUE CHARACTER AND DIMENSIONS ALL STREETS DESIGNATED AS DIVIDED ARE CONSIDERED TO HAVE MET THEIR STREET STANDARD AND THE DEDICATION SHALL BE NO MORE THAN IS NECESSARY TO BRING THE ABUTTING SIDEWALK DIMENSION COMPLIANT WITH THE STREET STANDARD.

11. THE DIMENSION OF ANY MEDIAN, DIVIDED STRIP AND/OR TRANSIT WAY SHALL BE INCLUDED WHEN DETERMINING THE RIGHT-OF-WAY DIMENSION.

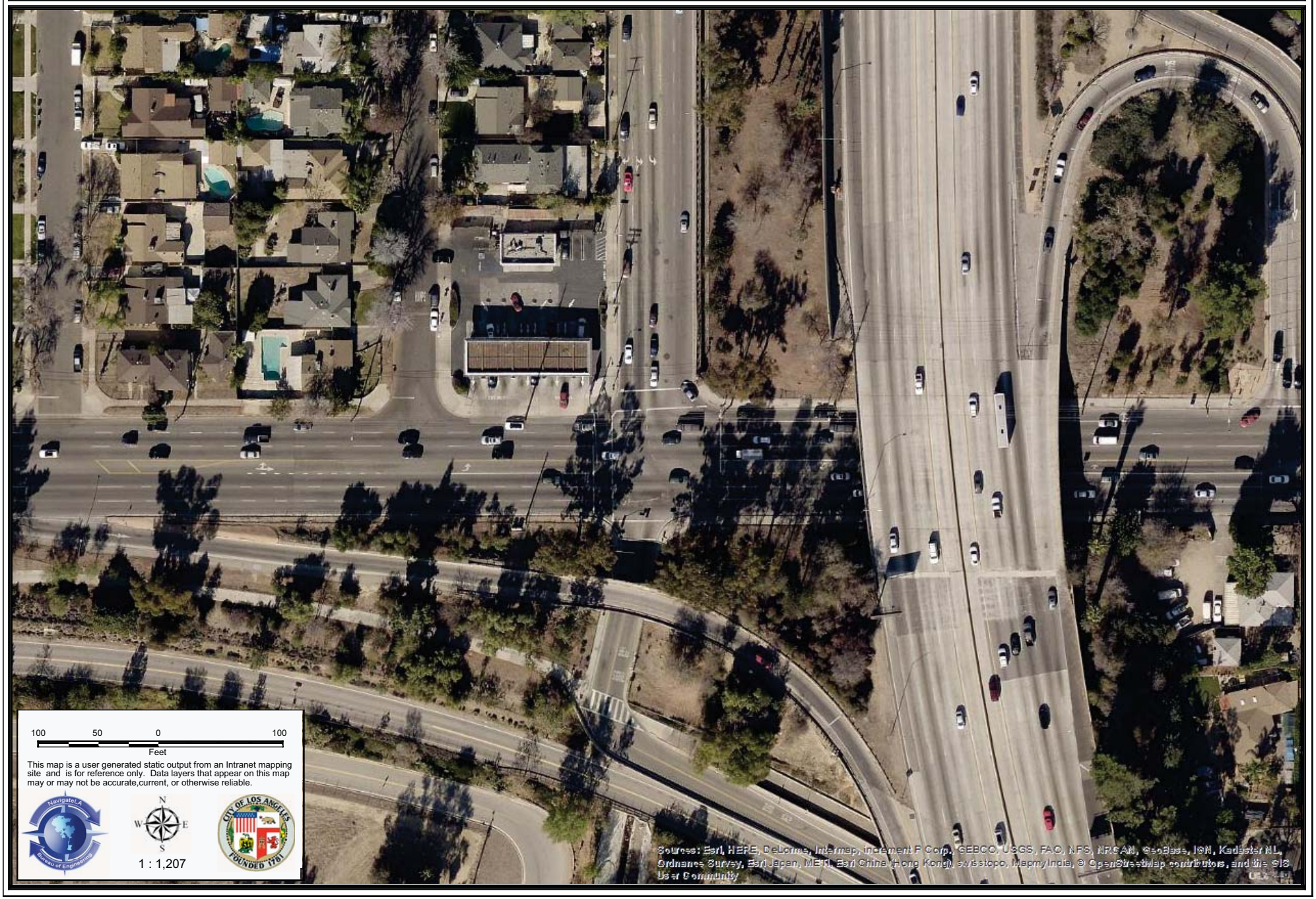
12. THE LOCATION OF THE DRAINAGE GUTTER IS NOT RESTRICTED TO THE CENTER OF THE SHARED STREET AND CAN BE PLACED WHERE NECESSARY AS APPROVED BY THE CITY.

13. A SHARED STREET SHALL PROVIDE A DEDICATED PEDESTRIAN ACCESS ROUTE.

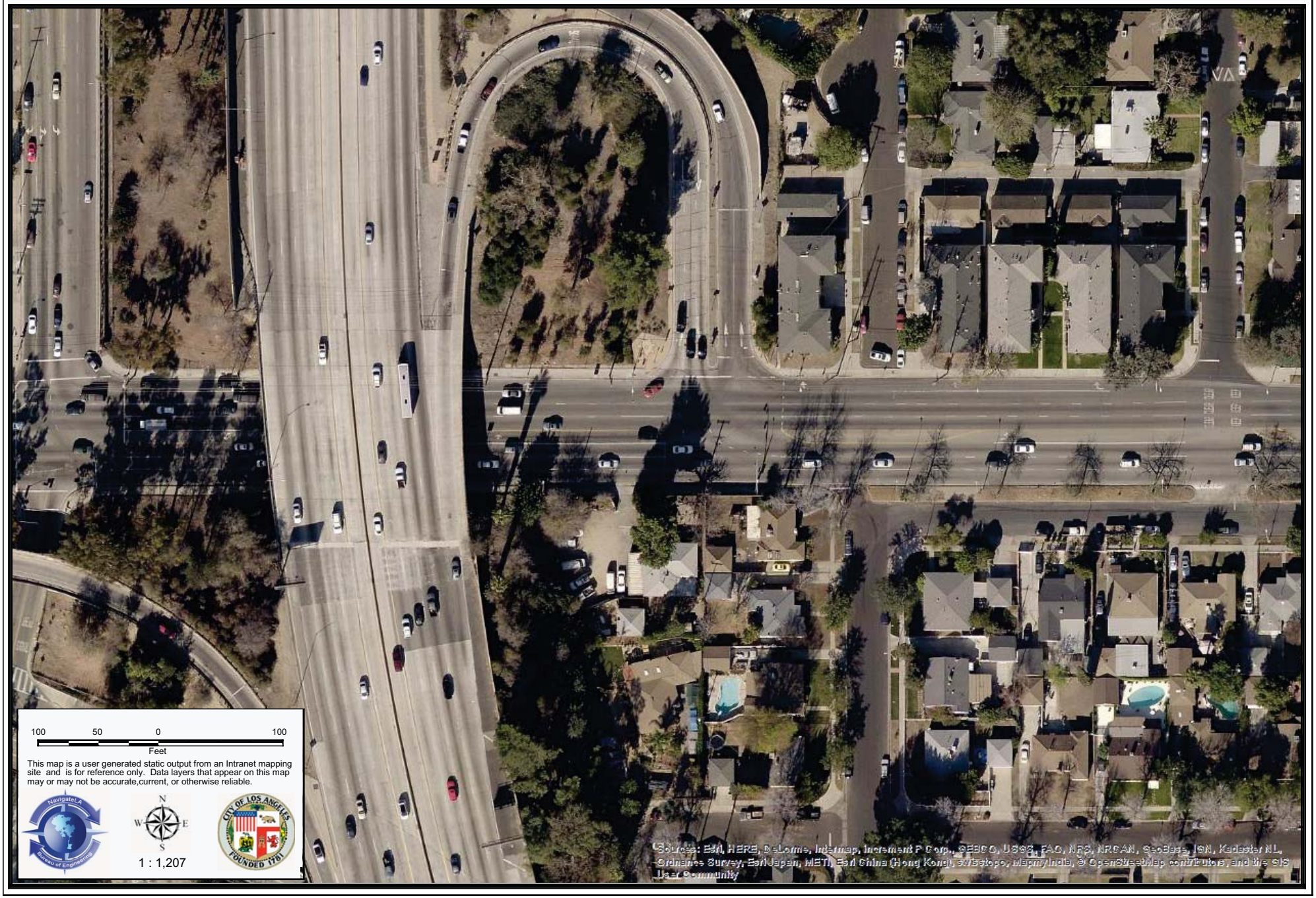
SB 405 FREEWAY RAMPS (N/O VICTORY) & HASKELL AVENUE



HASKELL AVENUE & VICTORY BOULEVARD



NB 405 FREEWAY RAMPS & VICTORY BOULEVARD



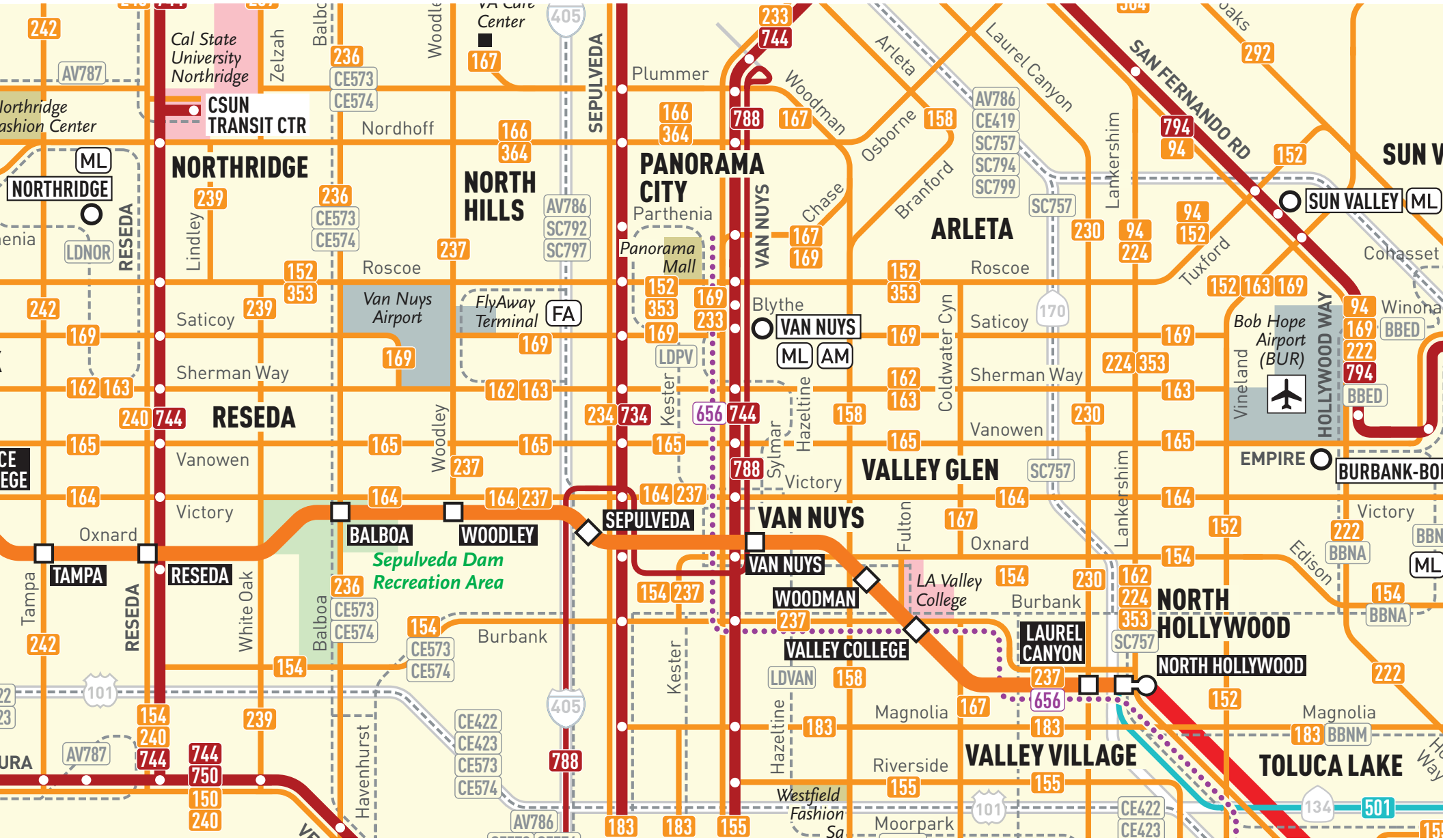
SEPULVEDA BOULEVARD & VANOWEN STREET

SEPULVEDA BOULEVARD & VICTORY BOULEVARD

KESTER AVENUE & KITTRIDGE STREET

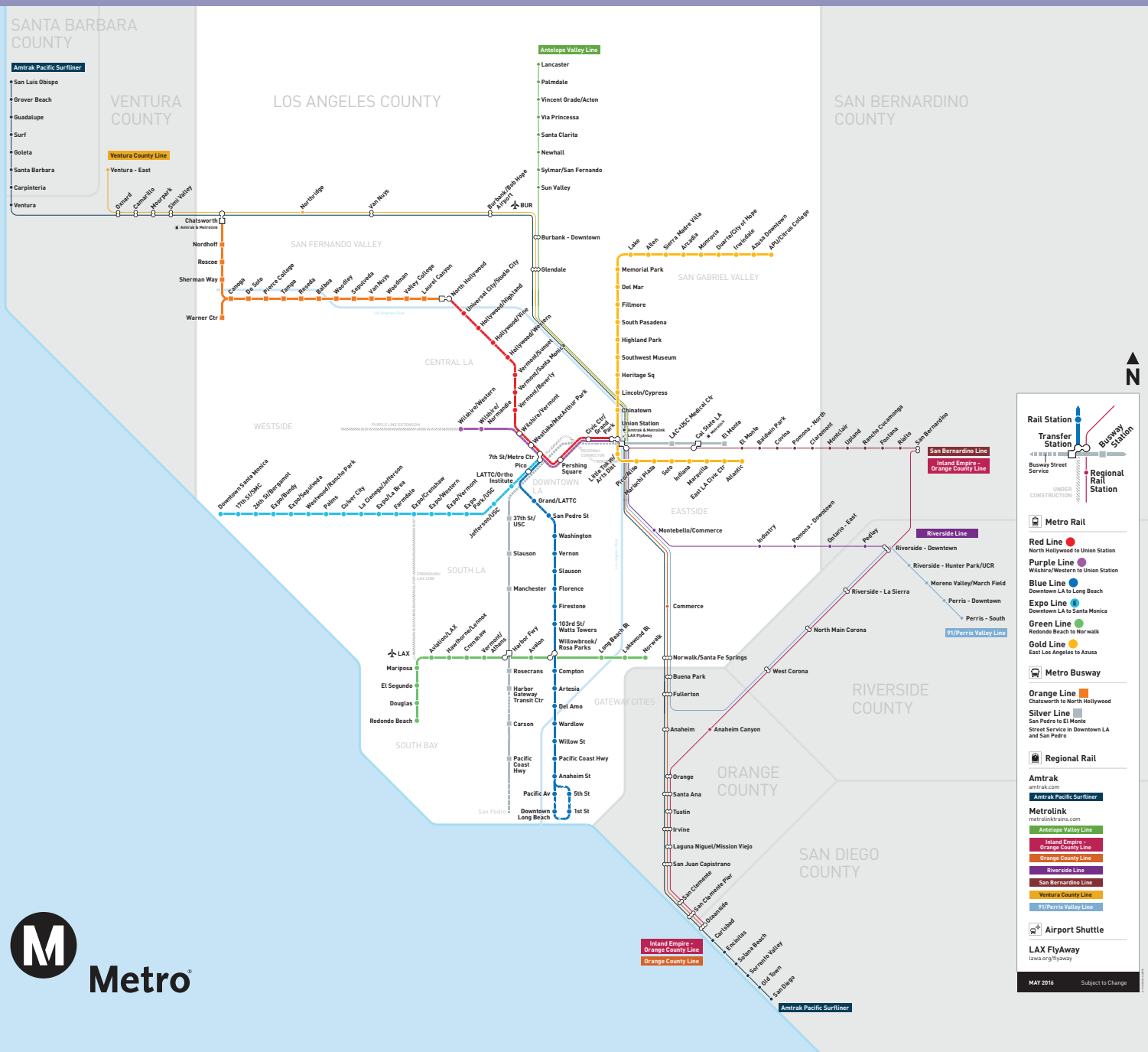
APPENDIX D

TRANSIT ROUTES


Cal State University Northridge
CSUN TRANSIT CTR
NORTHRIDGE
NORTH HILLS
PANORAMA CITY
ARLETA
RESEDA
VAN NUYS
VALLEY GLEN
NORTH HOLLYWOOD
VALLEY VILLAGE
TOLUCA LAKE
SUN VALLEY
EMPIRE
Van Nuys Airport
FlyAway Terminal
Bob Hope Airport (BUR)
Sepulveda Dam Recreation Area
LA Valley College
Westfield Fashion Sq
Panorama Mall
Nordhoff
Roscoe
Saticoy
Sherman Way
Vanowen
Victory
Oxnard
Plummer
Parthenia
Blythe
Lindley
Zelzah
Balboa
Woodley
White Oak
Tampa
Havenhurst
Kester
Coldwater Cyn
Hazeltine
Sylmar
Fulton
Lankershim
Laurel Canyon
Arleta
Woodman
Osborne
Branford
Chase
Tuxford
Vineland
Cohasset
Winona
Edison
Burbank
Magnolia
Riverside
Moorpark
SEPULVEDA
SAN FERNANDO RD
HOLLYWOOD WAY
BALBOA
WOODLEY
TAMPA
LAUREL CANYON
VALLEY COLLEGE
WOODMAN
LDNOR
LDPV
LDVAN
FA
ML
AM
AV786
AV787
CE573
CE574
CE422
CE423
CE419
SC757
SC792
SC794
SC797
SC799
BBED
BBNA
BBNM

Metro & Regional Rail

metro.net
amtrak.com
metrolinktrains.com



Metro®

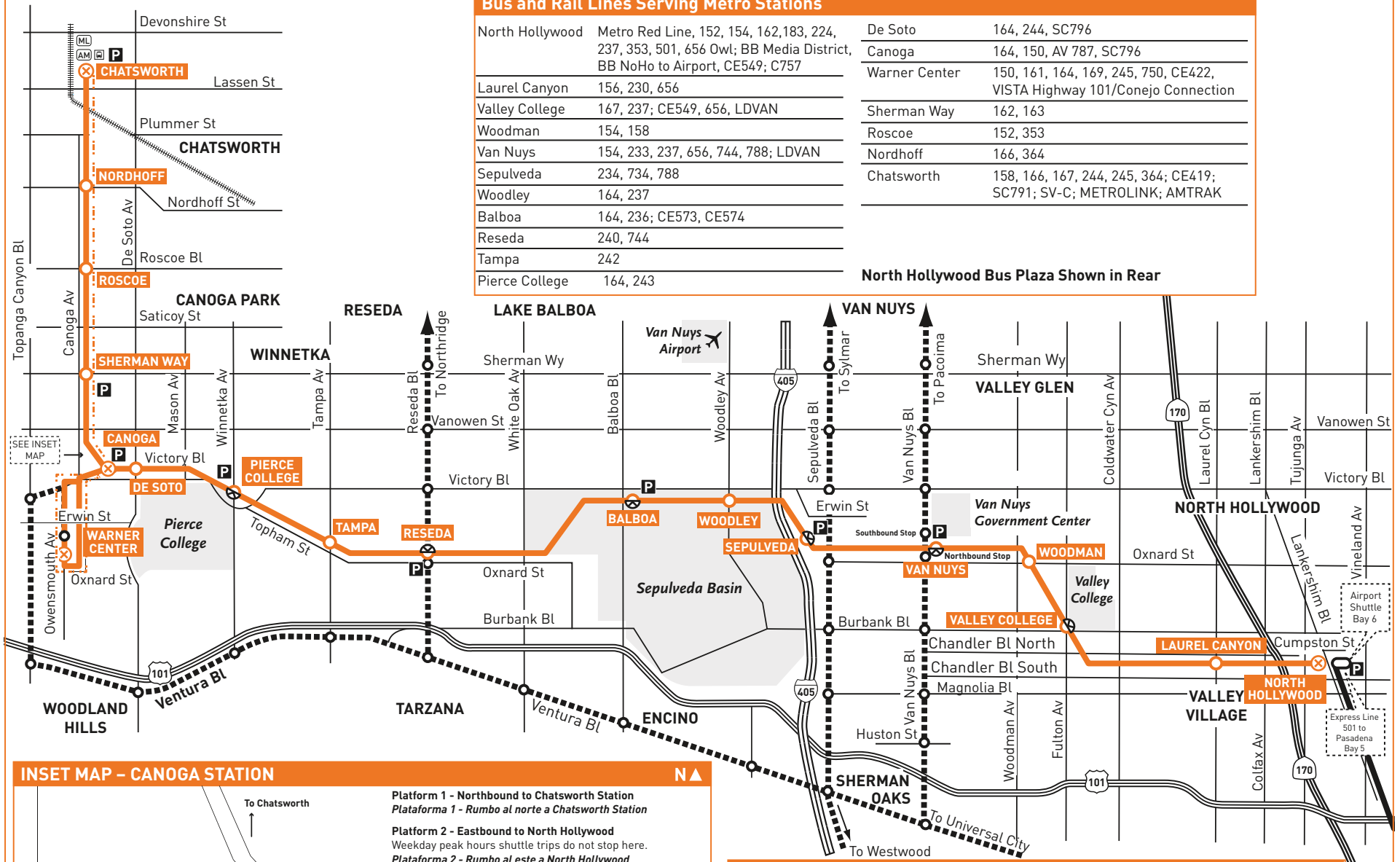
ROUTE MAP

N▲

Bus and Rail Lines Serving Metro Stations

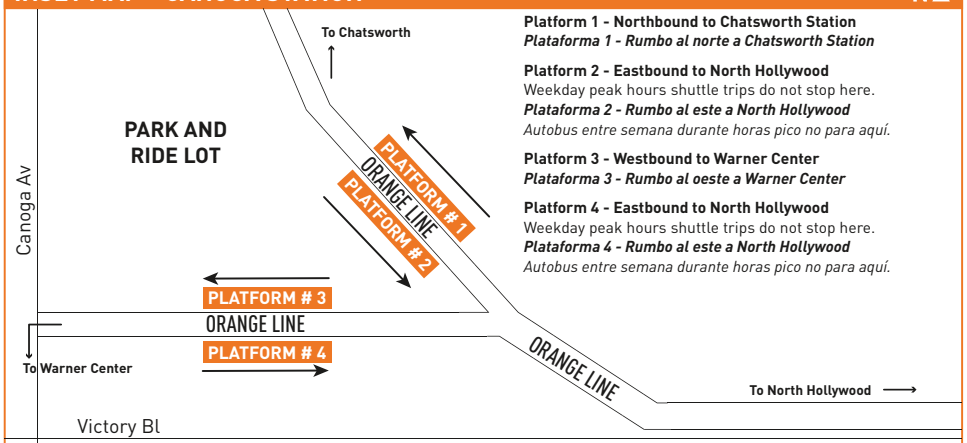
North Hollywood	Metro Red Line, 152, 154, 162,183, 224, 237, 353, 501, 656 Owl; BB Media District, BB NoHo to Airport, CE549; C757
Laurel Canyon	156, 230, 656
Valley College	167, 237; CE549, 656, LDVAN
Woodman	154, 158
Van Nuys	154, 233, 237, 656, 744, 788; LDVAN
Sepulveda	234, 734, 788
Woodley	164, 237
Balboa	164, 236; CE573, CE574
Reseda	240, 744
Tampa	242
Pierce College	164, 243
De Soto	164, 244, SC796
Canoga	164, 150, AV 787, SC796
Warner Center	150, 161, 164, 169, 245, 750, CE422, VISTA Highway 101/Conejo Connection
Sherman Way	162, 163
Roscoe	152, 353
Nordhoff	166, 364
Chatsworth	158, 166, 167, 244, 245, 364; CE419; SC791; SV-C; METROLINK; AMTRAK

North Hollywood Bus Plaza Shown in Rear



INSET MAP – CANOGA STATION

N▲



Platform 1 - Northbound to Chatsworth Station
Plataforma 1 - Rumbo al norte a Chatsworth Station

Platform 2 - Eastbound to North Hollywood
Weekday peak hours shuttle trips do not stop here.
Plataforma 2 - Rumbo al este a North Hollywood
Autobus entre semana durante horas pico no para aquí.

Platform 3 - Westbound to Warner Center
Plataforma 3 - Rumbo al oeste a Warner Center

Platform 4 - Eastbound to North Hollywood
Weekday peak hours shuttle trips do not stop here.
Plataforma 4 - Rumbo al este a North Hollywood
Autobus entre semana durante horas pico no para aquí.

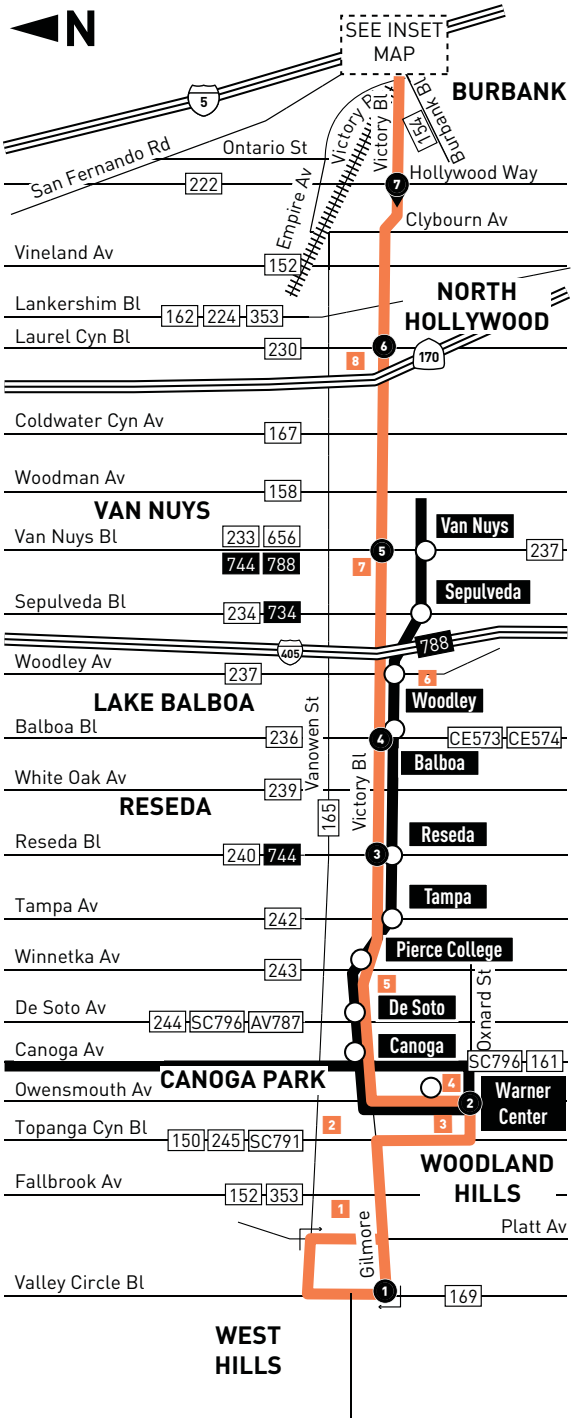
LEGEND

- Metro Orange Line
- Metro Red Line (To Union Station)
- Metro Rapid Lines
- Chatsworth-Warner Ctr Shuttle
- Metrolink/Amtrak
- Metro Rapid Stops
- Metro Orange Line Station
- Westbound only Timepoint
- Eastbound only Timepoint
- Timetable Timepoint
- Parking

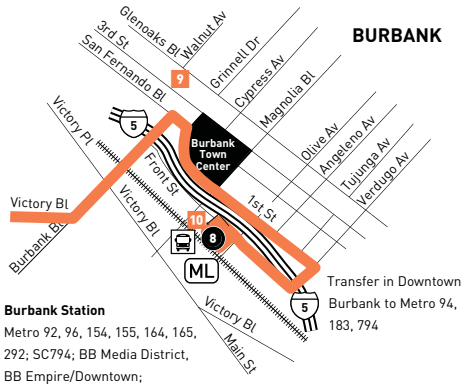
- AM — Amtrak Station
- ML — Metrolink Station
- Transit Center
- AV — Antelope Valley Transit Authority
- BB — Burbank Bus
- CE — LADOT Commuter Express
- LD — LADOT Dash
- SC — Santa Clarita Transit
- SV — Simi Valley Transit
- VISTA — Ventura Intercity Service Transit Authority

178524

ROUTE MAP



INSET MAP



Burbank Station
Metro 92, 96, 154, 155, 164, 165, 292; SC794; BB Media District, BB Empire/Downtown; Metrolink Antelope Valley Line, Ventura County Line.

Transfer in Downtown Burbank to Metro 94, 183, 794

LEGEND

- Line 164
- Metro Orange Line Route
- # Local Stop Timepoint
- # Local Stop Timepoint - Single Direction Only
- Metro Orange Line Station
- AV Antelope Valley Transit Authority
- BB Burbank Bus
- CE LADOT Commuter Express
- SC Santa Clarita Transit

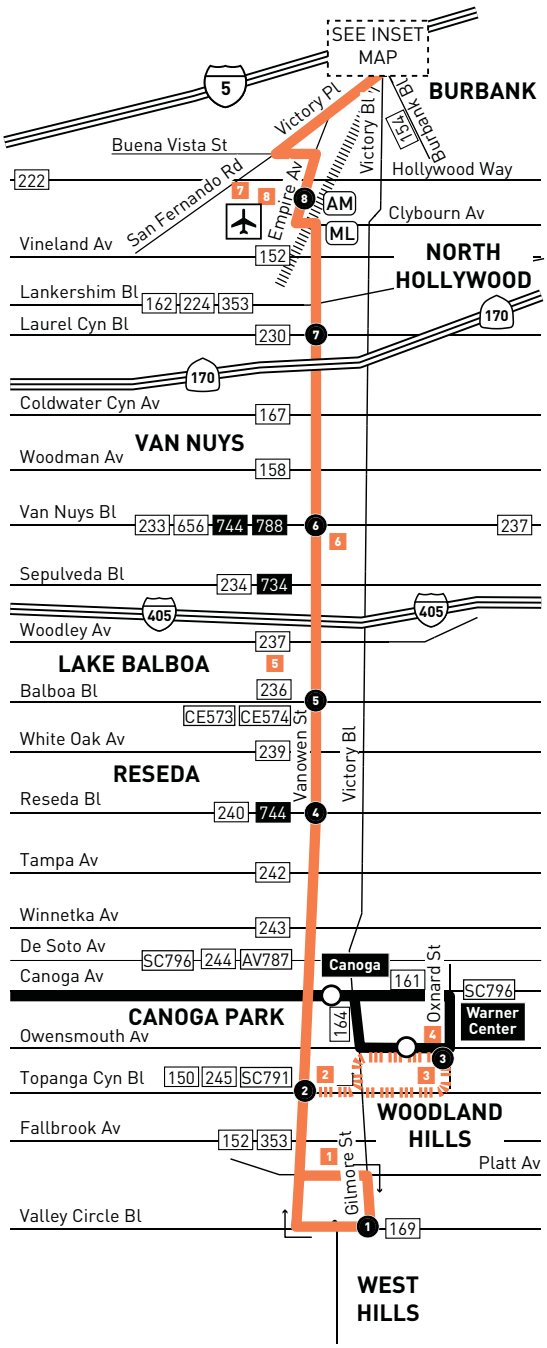
INSET MAP LEGEND

- # Local Stop Timepoint
- Transit Center
- ML Metrolink Station

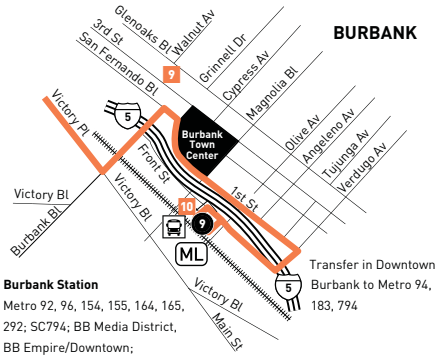
MAP NOTES

1. **Fallbrook Center**
2. **Westfield Topanga**
3. **Westfield Promenade**
4. **Warner Center Transit Hub**
   Metro 161, 164, 169, 245, 750, Metro Orange Line; Nearby transfers to Metro 150; CE422; VISTA Conejo Connection
5. **Pierce College**
6. **Sepulveda Dam Recreation Area**
7. **Van Nuys High School**
8. **Valley Plaza**
9. **Burbank High School**
10. **Burbank Station**
    Metro 92, 96, 154, 155, 164, 165, 292; SC794; BB Media District, Airport/Empire; Megabus; Amtrak; Metrolink Antelope Valley Line, Ventura County Lines

ROUTE MAP



INSET MAP



Burbank Station
Metro 92, 96, 154, 155, 164, 165, 292; SC794; BB Media District, BB Empire/Downtown; Megabus; Metrolink Antelope Valley Line, Ventura County Line.

LEGEND

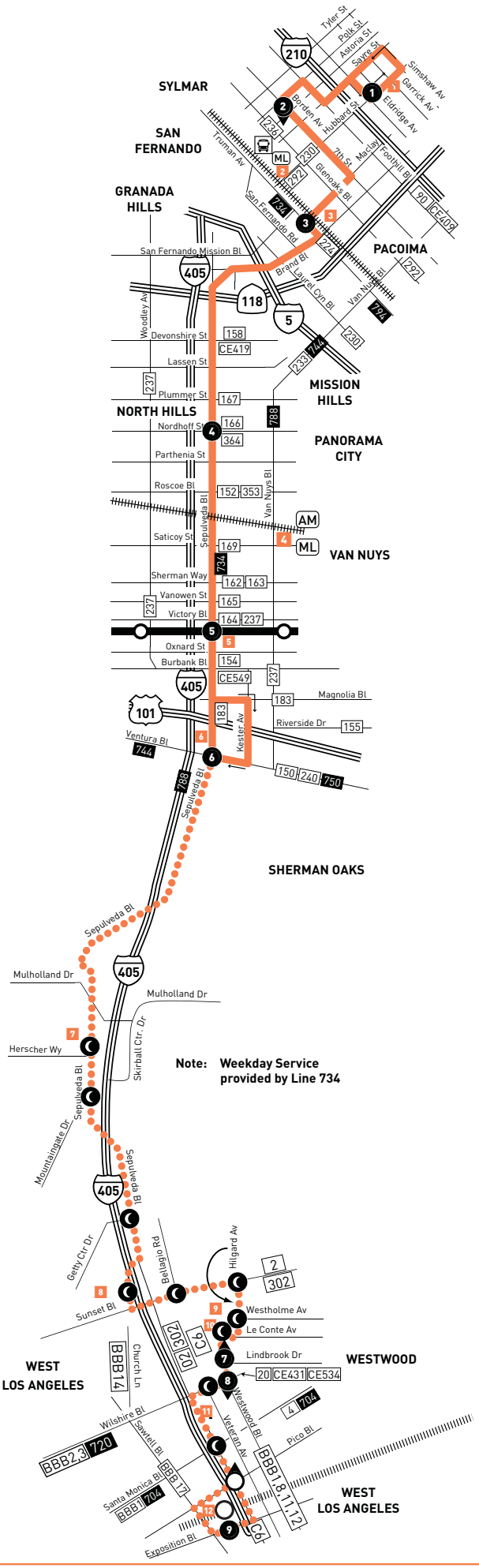
- Line 165
- Line 165 Shortline
- Orange Line Route
- # Local Stop Timepoint
- Metro Orange Line Station
- Transit Center
- AM Amtrak Station
- ML Metrolink Station
- AV Antelope Valley Transit Authority
- BB Burbank Bus
- CE LADOT Commuter Express
- SC Santa Clarita Transit

MAP NOTES

1. **Fallbrook Center**
2. **Westfield Topanga**
3. **Westfield Promenade**
4. **Warner Center Transit Hub**
   Metro 161, 164, 169, 245, 750, Metro Orange Line; nearby transfer to Metro 150; CE422; VISTA Conejo Connection
5. **Van Nuys Airport**
6. **Van Nuys High School**
7. **Bob Hope Airport**
8. **Burbank Regional Intermodal Transportation Center**
   Metro 169, 222; BB Noho / Airport
9. **Burbank High School**
10. **Burbank Station**
    Metro 92, 96, 154, 155, 164, 165, 292; SC794; BB Media District, Airport/Empire; Megabus; Amtrak; Metrolink Antelope Valley Line, Ventura County Lines

Revised Sep 11 2016

ROUTE MAP



N

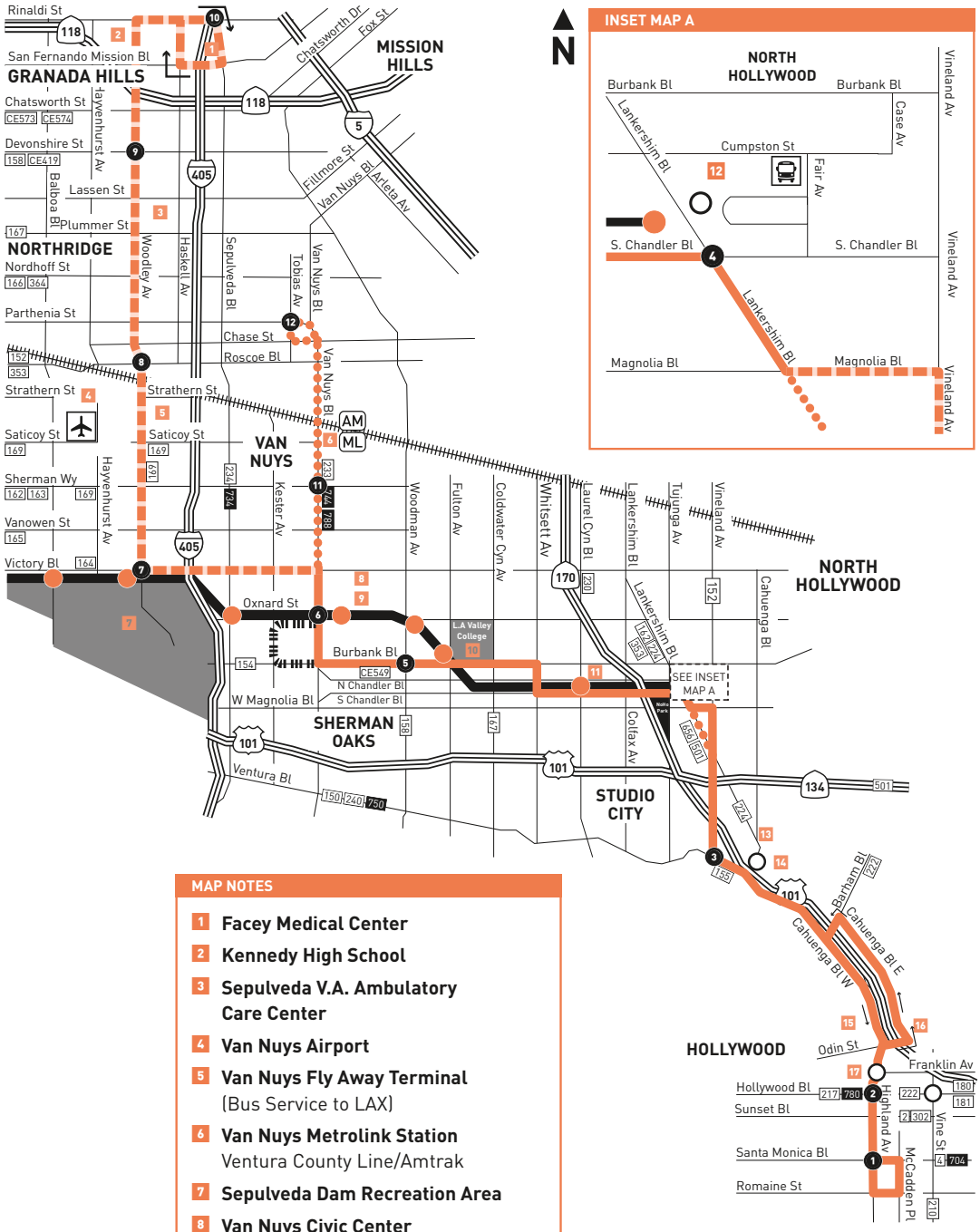
LEGEND

- Route of Line 234
- Route of Orange Line
- Weekend, Early Morning & Late Night route
- Metro Expo Line & Station
- Metrolink
- Local Stop Timepoint
- Local Stop Timepoint - Single Direction Only
- Orange Line Station
- Night Service and Stops via Route of Line 734
- AM Amtrak Station
- ML Metrolink Station
- Transit Center
- CE LADOT Commuter Express

MAP NOTES

1. **Los Angeles Mission College**
2. **Sylmar Station**
   Metro 230, 236, 239, 292, 734, 794 (94 Weekends Only); CE574; Metrolink Antelope Valley Line
3. **Courthouse and City Hall**
4. **Van Nuys Metrolink Station**
   Metro 169, 233, 656, 744, 788; Metrolink Ventura County Line; Amtrak
5. **Sepulved Orange Line Station**
   Metro 234, 734, 788
6. **Sherman Oaks Galleria**
7. **Skirball Cultural Center and Museum**
8. **Getty Center Museum**
9. **UCLA**
10. **Le Conte Av & Westwood Bl**
    Metro 2, 302; BBB1, 2, 3, 8, 11, 12; CE573; SC792, 797
11. **Federal Building**
12. **Sepulveda Expo Line Station**
    Metro 234 (Late night, early mornings, weekends), 734, 788; BBB 7, Rapid 7; Culver City 6; R6

ROUTE MAP



INSET MAP A

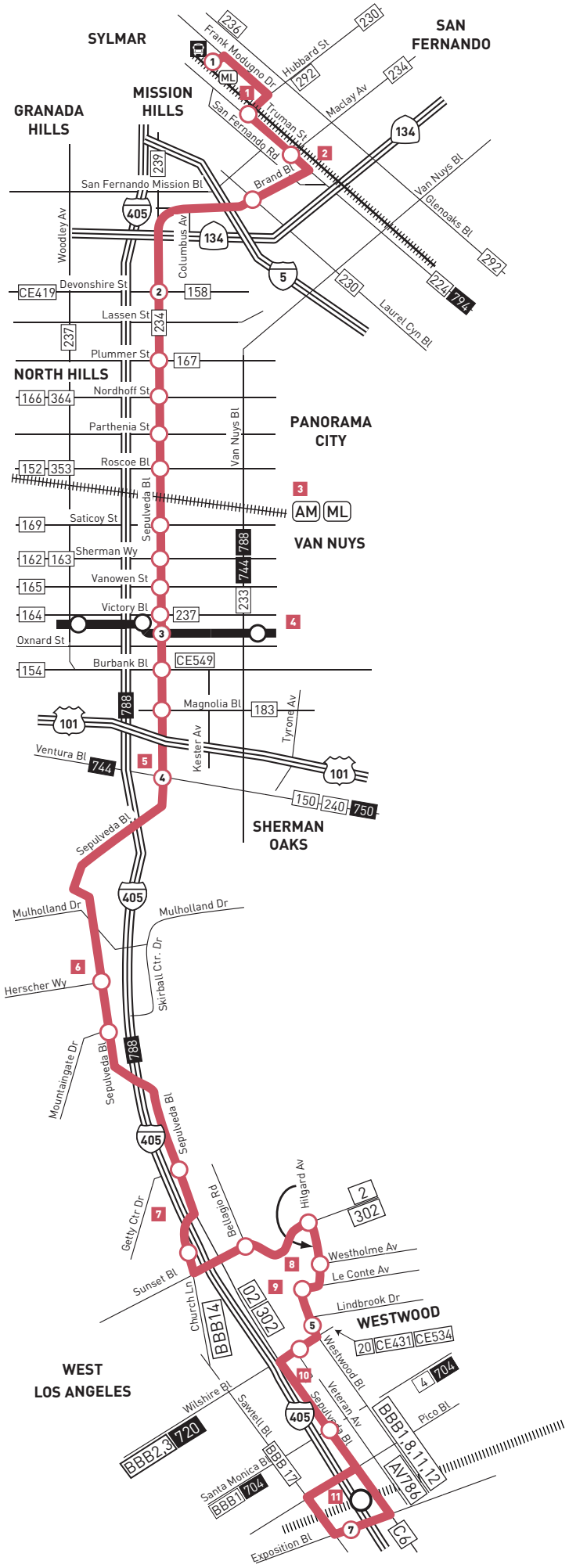
MAP NOTES

1. **Facey Medical Center**
2. **Kennedy High School**
3. **Sepulveda V.A. Ambulatory Care Center**
4. **Van Nuys Airport**
5. **Van Nuys Fly Away Terminal** (Bus Service to LAX)
6. **Van Nuys Metrolink Station** Ventura County Line/Amtrak
7. **Sepulveda Dam Recreation Area**
8. **Van Nuys Civic Center**
9. **Van Nuys Orange Line Station** Metro 154, 233, 237, 656 (Owl), 744, 788; LDVAN
10. **Valley College Station** Metro 167, 237, 656; CE549, LDVAN
11. **Laurel Canyon Station** Metro Lines 230, 237, 656
12. **North Hollywood Red & Orange Line Stations** Metro 152, 154, 162, 183, 224, 237, 353, 501, 656 Owl, Orange Line; BB Media District, NoHo Empire; CE549; SC757
13. **Universal/Studio City Station** Metro 150, 155, 224, 240, 750
14. **Universal Studios**
15. **Hollywood Bowl**
16. **John Anson Ford Theater**
17. **Hollywood/Highland Station** Metro 212, 217, 237, 312, 656, 780, LD-Hollywood

LEGEND

▬▬	Route of Lines 237 and 656
▬ ▬ ▬	Route of Line 237 only
●●●●●	Route of Line 656 Late Night Service Only
▮▮▮▮▮	Short Line Turn-Around
▬▬	Route of Orange Line
▮▮▮▮▮	Metrolink Rail
○	Metro Rail Station
●	Metro Orange Line Station
#	Local Stop Timepoint
AM	Amtrak Station
ML	Metrolink Station
BB	Burbank Bus
CE	LADOT Commuter Express
LD	LADOT Dash
LADVAN	LADOT Dash Van Nuys
SC	Santa Clarita Transit

ROUTE MAP



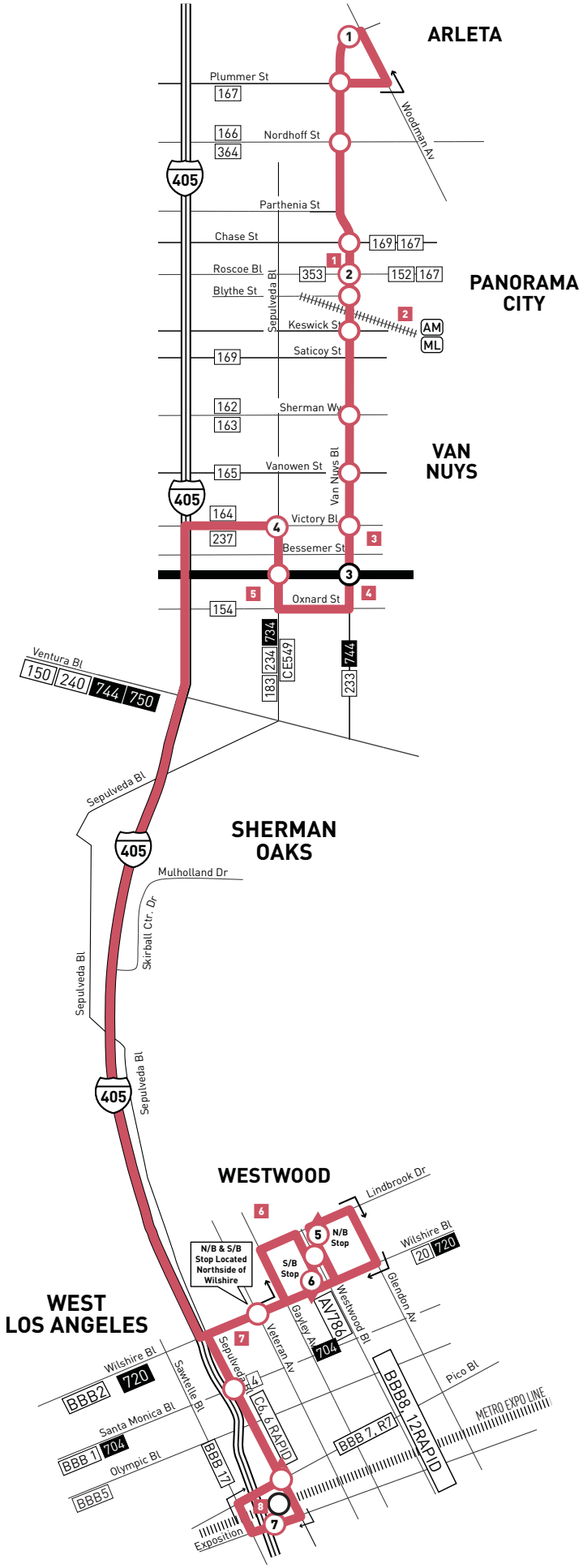
LEGEND

	Line 734 Route
	Orange Line Route
	Metro Expo Line & Station
	Metrolink
#	Rapid Stop Timepoint
	Rapid Stop & Timepoint
	Metro Orange Line Station
AM	Amtrak Station
ML	Metrolink Station
	Transit Center
CE	LADOT Commuter Express
BBB	Big Blue Bus
C	Culver City Transit

MAP NOTES

1. **Sylmar Station**
   Metro 230, 236, 239, 292, 734, 794 (94 Weekends Only); CE574; Metrolink Antelope Valley Line
2. **San Fernando Courthouse & City Hall**
3. **Van Nuys Metrolink Station**
   Metro 169, 233, 656, 744, 788; Metrolink Ventura County Line; Amtrak
4. **Van Nuys Civic Center**
5. **Sherman Oaks Galleria**
6. **Skirball Cultural Center and Museum**
7. **Getty Center Museum**
8. **UCLA**
9. **Le Conte Av & Westwood Bl**
   Metro 2, 302; CE573; BBB1, 2, 3, 8, 11, 12; Super 12; SC792, 797, C6, C6 RAPID
10. **Federal Building**
11. **Sepulveda Expo Line Station**
    Metro 234 (Late night, early mornings, weekends), 734, 788; BBB 7, Rapid 7; Culver City 6; R6

ROUTE MAP



N

LEGEND

- Line 788 Valley-Westside Express Route
- Orange Line Route
- Metro Rail & Station
- Metrolink
- V-W Express Line Timepoint
- V-W Busway Station Timepoint
- V-W Express Line Stop
- Single Direction Timepoint
- AM — Amtrak Station
- ML — Metrolink Station
- AV — Antelope Valley Transit Authority
- C — Culver City Bus
- CE — LADOT Commuter Express
- LD — LADOT DASH
- BBB — Santa Monica's Big Blue Bus

MAP NOTES

1. **Panorama Mall**
2. **Van Nuys Metrolink Station**
   Metro 169, 233, 656 Owl, 744, 788; Metrolink Ventura County Line; Amtrak
3. **Van Nuys Civic Center**
4. **Van Nuys Orange Line Station**
   Metro 154, 233, 237, 656 Owl, 744, 788; LDVAN
5. **Sepulveda Orange Line Station**
   Metro 234, 734, 788
6. **UCLA**
7. **Federal Building**
8. **Sepulveda Expo Line Station**
   Metro 234 (Late night, early mornings, weekends), 734, 788; BBB 7, Rapid 7; Culver City 6; R6

DASH

PANORAMA CITY/VAN NUYS

EFFECTIVE APRIL 27, 2016
A PARTIR DEL 27 DE ABRIL 2016

- DASH Panorama City/Van Nuys - Clockwise Route (Ruta en el Sentido de las Manecillas del Reloj)
- DASH Panorama City/Van Nuys - Counterclockwise Route (Ruta en el Sentido Opuesto de las Manecillas del Reloj)
- DASH Van Nuys/Studio City Route
- Bus Stop (Parada de Autobús)
- Multiple Route Stop (Parada de Rutas Múltiples)
- Points of Interest (Puntos de Interés)
- A Time Point (Punto Clave de Horario)
- T Transfer Point (Punto de Transbordo)
- Amtrak/Metrolink Station (Estación de Amtrak/Metrolink)

LADOT

City of Los Angeles
Department of Transportation

(213, 310, 323 or/o 818) 808-2273
www.ladottransit.com

APPENDIX E

TRAFFIC VOLUME DATA

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Haskell Ave

East/West SB 405 Fwy Ramps

Day: Wednesday Date: August 24, 2016 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	50	75	0	102
BIKES	2	3	0	0
BUSES	15	0	0	1

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	86	8.00	242	8.00	0	0.00	352	9.45
PM PK 15 MIN	149	17.15	115	17.00	0	0.00	282	17.15
AM PK HOUR	286	7.30	911	7.15	0	0.00	1187	9.00
PM PK HOUR	550	17.00	422	16.45	0	0.00	1075	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	150	101	251
8-9	0	157	77	234
9-10	0	110	60	170
15-16	0	304	161	465
16-17	0	349	156	505
17-18	0	402	148	550
TOTAL	0	1472	703	2175

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	186	697	0	883
8-9	169	665	0	834
9-10	82	473	0	555
15-16	196	190	0	386
16-17	174	190	0	364
17-18	196	218	0	414
TOTAL	1003	2433	0	3436

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
1134	0	0	0	0
1068	0	0	0	0
725	0	0	0	0
851	0	0	0	0
869	0	0	0	0
964	0	0	0	0
5611	0	0	0	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
15-16	0	0	0	0
16-17	0	0	0	0
17-18	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	933	0	46	979
8-9	896	0	59	955
9-10	1107	0	80	1187
15-16	733	0	156	889
16-17	771	0	127	898
17-18	902	0	173	1075
TOTAL	5342	0	641	5983

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
979	0	0	0	0
955	0	0	0	0
1187	0	0	0	0
889	0	0	0	0
898	0	0	0	0
1075	0	0	0	0
5983	0	0	0	0

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Haskell Ave and SB 405 Fwy Ramps , San Fernando Valley

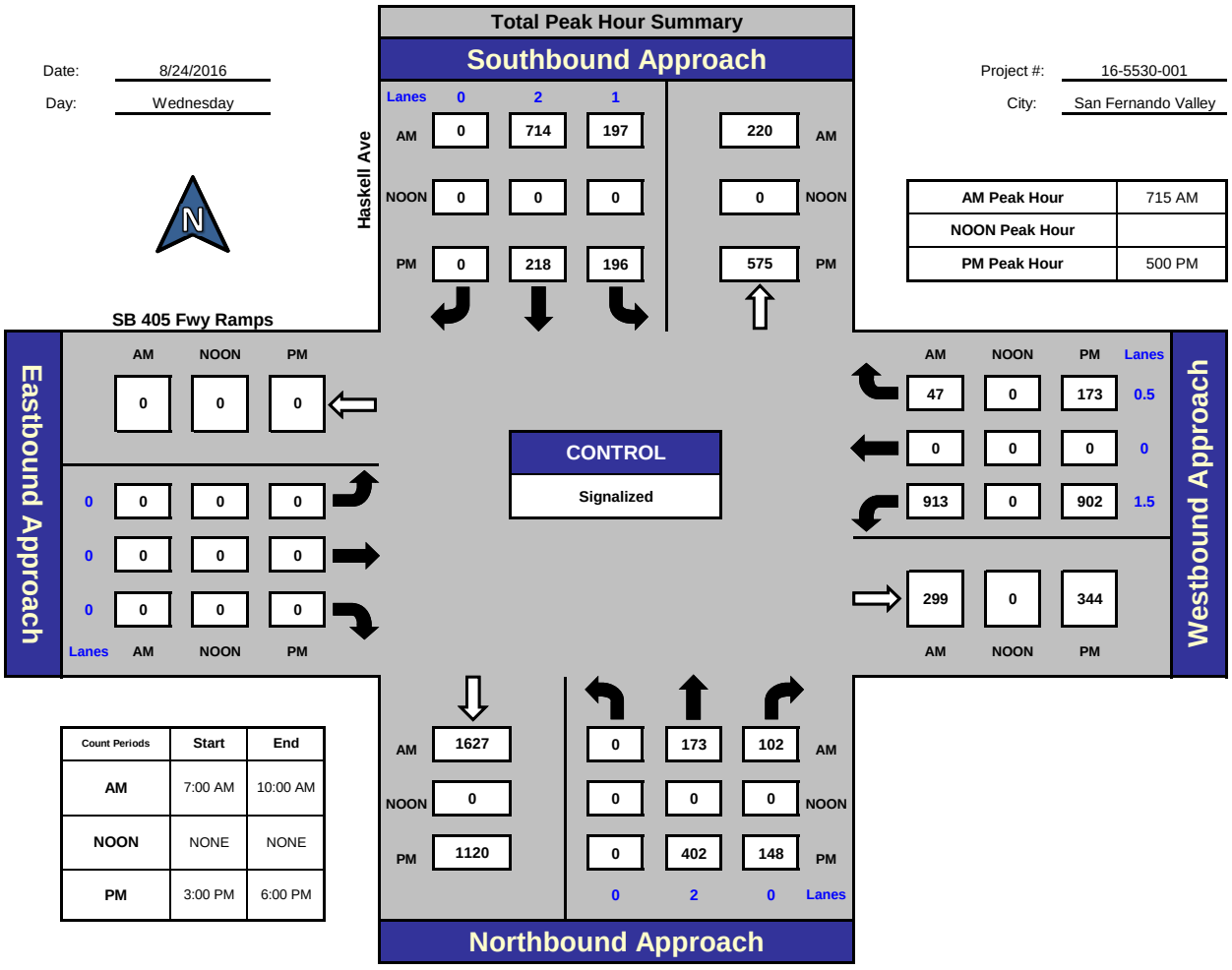
Date: 8/24/2016

Day: Wednesday

Project #: 16-5530-001

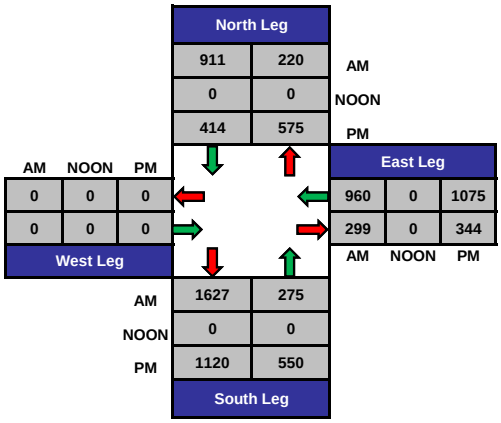
City: San Fernando Valley

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	500 PM

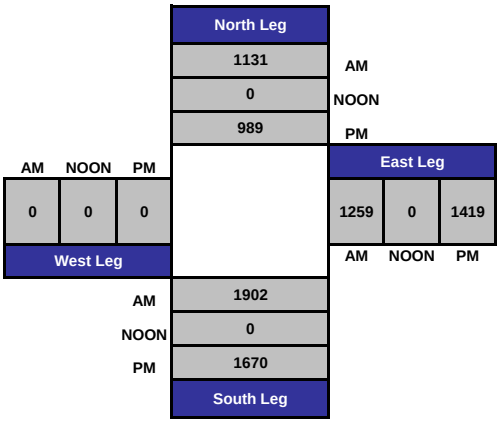


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
7:00 AM	0	31	31	44	170	0	0	0	0	221	0	12	509
7:15 AM	0	22	27	46	184	0	0	0	0	270	0	9	558
7:30 AM	0	45	23	51	171	0	0	0	0	245	0	10	545
7:45 AM	0	52	20	45	172	0	0	0	0	197	0	15	501
8:00 AM	0	54	32	55	187	0	0	0	0	201	0	13	542
8:15 AM	0	44	16	37	175	0	0	0	0	217	0	20	509
8:30 AM	0	27	16	41	172	0	0	0	0	253	0	10	519
8:45 AM	0	32	13	36	131	0	0	0	0	225	0	16	453
9:00 AM	0	23	14	27	155	0	0	0	0	268	0	26	513
9:15 AM	0	31	13	23	111	0	0	0	0	239	0	18	435
9:30 AM	0	28	14	13	106	0	0	0	0	268	0	16	445
9:45 AM	0	28	19	19	101	0	0	0	0	332	0	20	519
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	417	238	437	1835	0	0	0	0	2936	0	185	6048
APPROACH %'s :	0.00%	63.66%	36.34%	19.23%	80.77%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	94.07%	0.00%	5.93%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	173	102	197	714	0	0	0	0	913	0	47	2146
PEAK HR FACTOR :		0.799			0.941			0.000			0.860		0.961

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
3:00 PM	0	69	44	54	51	0	0	0	0	174	0	36	428
3:15 PM	0	74	45	50	40	0	0	0	0	181	0	41	431
3:30 PM	0	72	33	40	53	0	0	0	0	183	0	39	420
3:45 PM	0	89	39	52	46	0	0	0	0	195	0	40	461
4:00 PM	0	92	46	42	50	0	0	0	0	178	0	30	438
4:15 PM	0	86	38	40	40	0	0	0	0	202	0	34	440
4:30 PM	0	90	35	43	50	0	0	0	0	195	0	28	441
4:45 PM	0	81	37	49	50	0	0	0	0	196	0	35	448
5:00 PM	0	97	38	58	57	0	0	0	0	213	0	37	500
5:15 PM	0	112	37	43	56	0	0	0	0	237	0	45	530
5:30 PM	0	102	33	44	65	0	0	0	0	225	0	52	521
5:45 PM	0	91	40	51	40	0	0	0	0	227	0	39	488
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1055	465	566	598	0	0	0	0	2406	0	456	5546
APPROACH %'s :	0.00%	69.41%	30.59%	48.63%	51.37%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	84.07%	0.00%	15.93%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	402	148	196	218	0	0	0	0	902	0	173	2039
PEAK HR FACTOR :		0.923			0.900			0.000			0.953		0.962

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001

Day: Wednesday

CARS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
7:00 AM	0	31	29	43	164	0	0	0	0	216	0	12	495
7:15 AM	0	21	25	42	183	0	0	0	0	266	0	9	546
7:30 AM	0	43	23	46	166	0	0	0	0	241	0	10	529
7:45 AM	0	52	18	41	171	0	0	0	0	196	0	15	493
8:00 AM	0	53	31	54	184	0	0	0	0	197	0	13	532
8:15 AM	0	43	14	37	172	0	0	0	0	215	0	20	501
8:30 AM	0	25	16	39	172	0	0	0	0	246	0	10	508
8:45 AM	0	32	12	33	128	0	0	0	0	221	0	16	442
9:00 AM	0	23	14	27	150	0	0	0	0	260	0	26	500
9:15 AM	0	31	13	23	105	0	0	0	0	230	0	18	420
9:30 AM	0	28	14	12	105	0	0	0	0	262	0	16	437
9:45 AM	0	28	19	17	101	0	0	0	0	323	0	20	508
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	410	228	414	1801	0	0	0	0	2873	0	185	5911
APPROACH %'s :	0.00%	64.26%	35.74%	18.69%	81.31%	0.00%				93.95%	0.00%	6.05%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	169	97	183	704	0	0	0	0	900	0	47	2100
PEAK HR FACTOR :		0.792			0.932			0.000			0.861		0.962

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001 **Day:** Wednesday

CARS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
3:00 PM	0	69	42	53	49	0	0	0	0	167	0	35	415
3:15 PM	0	74	43	48	39	0	0	0	0	179	0	40	423
3:30 PM	0	68	31	39	53	0	0	0	0	181	0	39	411
3:45 PM	0	87	36	52	45	0	0	0	0	192	0	40	452
4:00 PM	0	88	45	41	48	0	0	0	0	174	0	28	424
4:15 PM	0	85	37	40	39	0	0	0	0	198	0	34	433
4:30 PM	0	85	34	42	50	0	0	0	0	194	0	28	433
4:45 PM	0	79	34	49	49	0	0	0	0	191	0	34	436
5:00 PM	0	96	36	58	57	0	0	0	0	212	0	37	496
5:15 PM	0	107	36	43	56	0	0	0	0	236	0	45	523
5:30 PM	0	99	32	43	63	0	0	0	0	224	0	52	513
5:45 PM	0	90	39	50	40	0	0	0	0	223	0	39	481
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1027	445	558	588	0	0	0	0	2371	0	451	5440
APPROACH %'s :	0.00%	69.77%	30.23%	48.69%	51.31%	0.00%				84.02%	0.00%	15.98%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	392	143	194	216	0	0	0	0	895	0	173	2013
PEAK HR FACTOR :		0.935			0.891			0.000			0.950		0.962

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-5530-001
N/S Street: Haskell Ave
E/W Street: SB 405 Fwy Ramps
DATE: 8/24/2016 DAY: Wednesday
CITY: San Fernando Valley

A M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001

Day: Wednesday

BIKES

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :													
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :		0.000			0.000			0.000			0.000		0.000

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
3:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2	0	0	3	0	0	0	0	0	0	0	5
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%							
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	0	0	0	1
PEAK HR FACTOR :		0.000			0.250			0.000			0.000		0.250

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001

Day: Wednesday

BUSES

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	6	0	0	0	0	0	0	0	0	0	6
APPROACH %'s :	0.00%	0.00%	100.00%										
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :		0.750			0.000			0.000			0.000		0.750

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001 **Day:** Wednesday

BUSES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
3:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	1	0	0	0	0	0	0	0	0	1	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	9	0	0	0	0	0	0	0	0	1	10
APPROACH %'s :	0.00%	0.00%	100.00%							0.00%	0.00%	100.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :		0.750			0.000			0.000			0.000		0.750

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001

Day: Wednesday

HEAVY TRUCKS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
7:00 AM	0	0	1	1	6	0	0	0	0	5	0	0	13
7:15 AM	0	1	1	4	1	0	0	0	0	4	0	0	11
7:30 AM	0	2	0	5	5	0	0	0	0	4	0	0	16
7:45 AM	0	0	1	4	1	0	0	0	0	1	0	0	7
8:00 AM	0	1	0	1	3	0	0	0	0	4	0	0	9
8:15 AM	0	1	1	0	3	0	0	0	0	2	0	0	7
8:30 AM	0	2	0	2	0	0	0	0	0	7	0	0	11
8:45 AM	0	0	0	3	3	0	0	0	0	4	0	0	10
9:00 AM	0	0	0	0	5	0	0	0	0	8	0	0	13
9:15 AM	0	0	0	0	6	0	0	0	0	9	0	0	15
9:30 AM	0	0	0	1	1	0	0	0	0	6	0	0	8
9:45 AM	0	0	0	2	0	0	0	0	0	9	0	0	11
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	7	4	23	34	0	0	0	0	63	0	0	131
APPROACH %'s :	0.00%	63.64%	36.36%	40.35%	59.65%	0.00%				100.00%	0.00%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	4	2	14	10	0	0	0	0	13	0	0	43
PEAK HR FACTOR :		0.750			0.600			0.000			0.813		0.672

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-001

Day: Wednesday

HEAVY TRUCKS

City: San Fernando Valley

Date: 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			SB 405 Fwy Ramps			SB 405 Fwy Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	0.5	
3:00 PM	0	0	1	1	2	0	0	0	0	7	0	1	12
3:15 PM	0	0	1	2	1	0	0	0	0	2	0	0	6
3:30 PM	0	4	2	1	0	0	0	0	0	2	0	0	9
3:45 PM	0	2	2	0	1	0	0	0	0	3	0	0	8
4:00 PM	0	4	0	1	2	0	0	0	0	4	0	2	13
4:15 PM	0	1	1	0	1	0	0	0	0	4	0	0	7
4:30 PM	0	5	0	1	0	0	0	0	0	1	0	0	7
4:45 PM	0	2	2	0	1	0	0	0	0	5	0	1	11
5:00 PM	0	1	1	0	0	0	0	0	0	1	0	0	3
5:15 PM	0	5	0	0	0	0	0	0	0	1	0	0	6
5:30 PM	0	3	1	1	2	0	0	0	0	1	0	0	8
5:45 PM	0	1	0	1	0	0	0	0	0	4	0	0	6
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	28	11	8	10	0	0	0	0	35	0	4	96
APPROACH %'s :	0.00%	71.79%	28.21%	44.44%	55.56%	0.00%				89.74%	0.00%	10.26%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	10	2	2	2	0	0	0	0	7	0	0	23
PEAK HR FACTOR :		0.600			0.333			0.000			0.438		0.719

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Haskell Ave

East/West Victory Blvd

Day: Wednesday Date: August 24, 2016 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	1	144	161	162
BIKES	6	5	7	7
BUSES	0	0	29	43

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	27	7.30	437	8.30	502	8.45	494	8.00
PM PK 15 MIN	65	17.00	301	17.15	479	17.30	522	17.45
AM PK HOUR	92	7.30	1649	8.15	1896	8.30	1873	7.15
PM PK HOUR	242	17.00	1120	17.00	1887	17.00	2041	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	60	15	4	79
8-9	38	16	4	58
9-10	26	10	2	38
15-16	61	33	3	97
16-17	101	33	20	154
17-18	160	59	23	242
TOTAL	446	166	56	668

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	836	196	546	1578
8-9	899	223	494	1616
9-10	865	140	551	1556
15-16	581	37	303	921
16-17	552	51	349	952
17-18	591	57	472	1120
TOTAL	4324	704	2715	7743

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
1657	2	0	4	1
1674	1	0	0	0
1594	1	0	5	0
1018	1	0	2	0
1106	5	0	2	0
1362	1	0	0	0
8411	11	0	13	1

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	24	1546	101	1671
8-9	20	1659	111	1790
9-10	23	1678	82	1783
15-16	76	1502	42	1620
16-17	75	1608	47	1730
17-18	105	1705	77	1887
TOTAL	323	9698	460	10481

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	3	1570	216	1789
8-9	1	1450	197	1648
9-10	2	983	130	1115
15-16	3	1491	340	1834
16-17	0	1511	394	1905
17-18	1	1646	394	2041
TOTAL	10	8651	1671	10332

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
3460	4	0	0	0
3438	1	0	0	0
2898	5	0	0	0
3454	8	0	0	0
3635	5	0	0	0
3928	6	0	0	0
20813	29	0	0	0

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Haskell Ave and Victory Blvd , San Fernando Valley

Date: 8/24/2016

Day: Wednesday

Project #: 16-5530-002

City: San Fernando Valley

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Total Peak Hour Summary

Southbound Approach (Haskell Ave)

Lanes	1	0.5	1.5	
AM	535	195	849	277 AM
NOON	0	0	0	0 NOON
PM	472	57	591	558 PM

Eastbound Approach (Victory Blvd)

Lanes	AM	NOON	PM
	2242	0	2278
1	27	0	105
3	1576	0	1705
0	111	0	77

Westbound Approach

Lanes	AM	NOON	PM
1	237	0	394
3	1634	0	1646
1	2	0	1
	2428	0	2319

Northbound Approach

AM	308	73	13	3 AM
NOON	0	0	0	0 NOON
PM	135	160	59	23 PM
Lanes		0	1	0 Lanes

CONTROL: Signalized

Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs

	AM	NOON	PM
North Leg	1579	0	1120
	277	0	558
East Leg	1873	0	2041
	2428	0	2319
South Leg	308	0	135
	89	0	242
West Leg	2242	0	2278
	1714	0	1887

Total Volume Per Leg

	AM	NOON	PM
North Leg	1856	0	1678
East Leg	4301	0	4360
South Leg	397	0	377
West Leg	3956	0	4165

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
7:00 AM	7	6	2	189	47	137	5	361	18	1	354	55	1182
7:15 AM	10	0	1	212	51	170	5	401	18	0	436	39	1343
7:30 AM	21	5	1	227	41	154	8	399	29	0	364	59	1308
7:45 AM	22	4	0	208	57	85	6	385	36	2	416	63	1284
8:00 AM	20	4	1	202	46	126	8	391	28	0	418	76	1320
8:15 AM	6	7	1	233	64	130	3	367	19	0	398	47	1275
8:30 AM	9	1	2	258	55	124	4	437	31	0	345	42	1308
8:45 AM	3	4	0	206	58	114	5	464	33	1	289	32	1209
9:00 AM	9	5	0	234	49	124	3	423	37	1	238	33	1156
9:15 AM	4	2	1	206	39	126	9	428	22	0	241	28	1106
9:30 AM	5	1	0	201	24	133	5	418	13	1	258	37	1096
9:45 AM	8	2	1	224	28	168	6	409	10	0	246	32	1134
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	124	41	10	2600	559	1591	67	4883	294	6	4003	543	14721
APPROACH %'s :	70.86%	23.43%	5.71%	54.74%	11.77%	33.49%	1.28%	93.12%	5.61%	0.13%	87.94%	11.93%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	73	13	3	849	195	535	27	1576	111	2	1634	237	5255
PEAK HR FACTOR :		0.824			0.912			0.983			0.948		0.978

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
3:00 PM	6	8	2	133	12	70	18	322	9	1	345	87	1013
3:15 PM	16	9	0	143	4	84	20	372	13	1	379	82	1123
3:30 PM	22	9	0	148	11	75	15	393	7	0	399	79	1158
3:45 PM	17	7	1	157	10	74	23	415	13	1	368	92	1178
4:00 PM	20	8	4	124	14	76	17	402	14	0	353	112	1144
4:15 PM	24	6	4	159	14	86	16	405	10	0	372	99	1195
4:30 PM	32	12	4	134	13	92	22	412	12	0	378	88	1199
4:45 PM	25	7	8	135	10	95	20	389	11	0	408	95	1203
5:00 PM	44	15	6	132	18	102	25	413	18	0	388	97	1258
5:15 PM	46	12	3	161	20	120	32	430	14	0	412	102	1352
5:30 PM	33	17	8	157	11	117	27	436	16	1	420	99	1342
5:45 PM	37	15	6	141	8	133	21	426	29	0	426	96	1338
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	322	125	46	1724	145	1124	256	4815	166	4	4648	1128	14503
APPROACH %'s :	65.31%	25.35%	9.33%	57.60%	4.84%	37.55%	4.89%	91.94%	3.17%	0.07%	80.42%	19.52%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	160	59	23	591	57	472	105	1705	77	1	1646	394	5290
PEAK HR FACTOR :		0.931			0.930			0.985			0.977		0.978

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002

Day: Wednesday

CARS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
7:00 AM	7	6	2	182	47	133	5	352	18	1	341	54	1148
7:15 AM	10	0	1	211	51	167	5	396	18	0	423	36	1318
7:30 AM	21	5	1	221	41	154	6	396	29	0	354	59	1287
7:45 AM	22	4	0	205	57	83	6	378	36	2	409	61	1263
8:00 AM	20	4	1	198	46	124	8	388	28	0	412	74	1303
8:15 AM	6	7	1	231	64	127	2	364	19	0	390	45	1256
8:30 AM	9	1	2	252	55	121	4	426	31	0	342	39	1282
8:45 AM	3	4	0	202	58	111	5	459	33	1	284	31	1191
9:00 AM	9	5	0	228	49	119	3	407	37	1	232	32	1122
9:15 AM	4	2	1	195	39	120	9	414	22	0	233	28	1067
9:30 AM	5	1	0	195	24	129	5	410	13	1	257	37	1077
9:45 AM	8	2	1	220	28	165	6	399	10	0	242	32	1113
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	124	41	10	2540	559	1553	64	4789	294	6	3919	528	14427
APPROACH %'s :	70.86%	23.43%	5.71%	54.60%	12.02%	33.38%	1.24%	93.04%	5.71%	0.13%	88.01%	11.86%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	73	13	3	835	195	528	25	1558	111	2	1598	230	5171
PEAK HR FACTOR :		0.824			0.908			0.983			0.941		0.981

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002 **Day:** Wednesday

CARS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
3:00 PM	6	8	2	126	12	69	18	317	9	1	337	85	990
3:15 PM	16	9	0	138	4	84	20	356	13	1	371	80	1092
3:30 PM	22	9	0	146	11	74	15	381	7	0	393	73	1131
3:45 PM	17	7	1	154	10	74	23	405	13	1	360	87	1152
4:00 PM	20	7	4	120	14	75	15	392	14	0	351	109	1121
4:15 PM	24	6	4	153	14	86	15	397	10	0	364	97	1170
4:30 PM	32	12	4	134	13	91	21	408	12	0	372	83	1182
4:45 PM	25	7	8	129	10	95	20	382	11	0	403	91	1181
5:00 PM	44	15	6	132	18	101	25	408	18	0	386	94	1247
5:15 PM	46	12	3	160	20	120	32	427	14	0	410	97	1341
5:30 PM	33	17	8	155	11	116	27	431	16	1	414	95	1324
5:45 PM	37	15	6	137	8	133	21	422	29	0	424	94	1326
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	322	124	46	1684	145	1118	252	4726	166	4	4585	1085	14257
APPROACH %'s :	65.45%	25.20%	9.35%	57.14%	4.92%	37.94%	4.90%	91.87%	3.23%	0.07%	80.81%	19.12%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	160	59	23	584	57	470	105	1688	77	1	1634	380	5238
PEAK HR FACTOR :		0.931			0.926			0.986			0.972		0.977

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-5530-002
N/S Street: Haskell Ave
E/W Street: Victory Blvd
DATE: 8/24/2016 DAY: Wednesday
CITY: San Fernando Valley

A M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	1	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	1
7:30 AM	1	0	1	0	0	0	0	1
7:45 AM	1	1	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	1	0	0	0	0
9:00 AM	1	0	0	1	0	0	1	2
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	1	0	0	0	0	0	1	0
9:45 AM	1	2	0	0	0	0	1	0
TOTALS	**6**	**3**	**1**	**3**	**0**	**0**	**4**	**6**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	2	0
3:30 PM	2	0	0	1	0	0	3	0
3:45 PM	0	0	0	0	0	0	3	0
4:00 PM	1	0	1	0	0	0	2	0
4:15 PM	0	0	1	1	0	0	0	0
4:30 PM	0	0	0	1	0	0	1	1
4:45 PM	1	0	0	1	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	1	0	0	1	1
5:45 PM	0	0	0	0	0	0	2	0
TOTALS	**4**	**0**	**2**	**5**	**0**	**0**	**15**	**4**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	2	0	0	0	0	0	0	1	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	0	0	1	1	0	0	4	0	0	3	0	11
APPROACH %'s :	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	2	0	0	0	0	0	0	1	0	0	1	0	4
PEAK HR FACTOR :	0.250			0.000			0.250			0.250			0.333

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
3:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	2
3:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	1	0	0	0	0	0	1	1	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	1	0	0	2	0	0	1	0	4
4:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2	2	0	3	0	0	3	0	0	3	1	14
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	75.00%	25.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	0	0	0	1
PEAK HR FACTOR :		0.000			0.250			0.000			0.000		0.250

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002

Day: Wednesday

BUSES

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
7:00 AM	0	0	0	0	0	0	0	1	0	0	1	1	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	1	3
7:30 AM	0	0	0	0	0	0	0	2	0	0	1	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	1	3
8:00 AM	0	0	0	0	0	0	0	1	0	0	2	1	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	2
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	1	3
9:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
9:15 AM	0	0	0	0	0	0	0	2	0	0	2	0	4
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	10	0	0	15	6	31
APPROACH %'s :							0.00%	100.00%	0.00%	0.00%	71.43%	28.57%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	3	0	0	7	3	13
PEAK HR FACTOR :		0.000			0.000			0.375			0.833		0.813

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002 **Day:** Wednesday

BUSES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
3:00 PM	0	0	0	0	0	0	0	1	0	0	1	1	3
3:15 PM	0	0	0	0	0	0	0	3	0	0	1	1	5
3:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
3:45 PM	0	0	0	0	0	0	0	2	0	0	1	1	4
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	1	3
4:15 PM	0	0	0	0	0	0	0	1	0	0	3	0	4
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	2
4:45 PM	0	0	0	0	0	0	0	2	0	0	1	1	4
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	1	3
5:15 PM	0	0	0	0	0	0	0	1	0	0	1	1	3
5:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	1	0	0	2	1	4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	19	0	0	13	9	41
APPROACH %'s :							0.00%	100.00%	0.00%	0.00%	59.09%	40.91%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	5	0	0	5	3	13
PEAK HR FACTOR :		0.000			0.000			0.625			0.667		0.813

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
7:00 AM	0	0	0	7	0	4	0	8	0	0	12	0	31
7:15 AM	0	0	0	1	0	3	0	5	0	0	11	2	22
7:30 AM	0	0	0	6	0	0	2	1	0	0	9	0	18
7:45 AM	0	0	0	3	0	2	0	7	0	0	5	1	18
8:00 AM	0	0	0	4	0	2	0	2	0	0	4	1	13
8:15 AM	0	0	0	2	0	3	1	3	0	0	7	1	17
8:30 AM	0	0	0	6	0	3	0	9	0	0	3	3	24
8:45 AM	0	0	0	4	0	3	0	5	0	0	3	0	15
9:00 AM	0	0	0	6	0	5	0	15	0	0	5	1	32
9:15 AM	0	0	0	11	0	6	0	12	0	0	6	0	35
9:30 AM	0	0	0	6	0	4	0	8	0	0	1	0	19
9:45 AM	0	0	0	4	0	3	0	9	0	0	3	0	19
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	60	0	38	3	84	0	0	69	9	263
APPROACH %'s :				61.22%	0.00%	38.78%	3.45%	96.55%	0.00%	0.00%	88.46%	11.54%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	14	0	7	2	15	0	0	29	4	71
PEAK HR FACTOR :		0.000			0.875			0.607			0.635		0.807

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-002 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Haskell Ave			Haskell Ave			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	3	1	
3:00 PM	0	0	0	7	0	1	0	4	0	0	7	1	20
3:15 PM	0	0	0	5	0	0	0	13	0	0	7	1	26
3:30 PM	0	0	0	2	0	1	0	10	0	0	5	6	24
3:45 PM	0	0	0	3	0	0	0	8	0	0	7	4	22
4:00 PM	0	1	0	4	0	1	2	8	0	0	2	2	20
4:15 PM	0	0	0	6	0	0	1	7	0	0	5	2	21
4:30 PM	0	0	0	0	0	1	1	3	0	0	6	4	15
4:45 PM	0	0	0	6	0	0	0	5	0	0	4	3	18
5:00 PM	0	0	0	0	0	1	0	4	0	0	1	2	8
5:15 PM	0	0	0	1	0	0	0	2	0	0	1	4	8
5:30 PM	0	0	0	2	0	1	0	3	0	0	5	4	15
5:45 PM	0	0	0	4	0	0	0	3	0	0	0	1	8
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1	0	40	0	6	4	70	0	0	50	34	205
APPROACH %'s :	0.00%	100.00%	0.00%	86.96%	0.00%	13.04%	5.41%	94.59%	0.00%	0.00%	59.52%	40.48%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	7	0	2	0	12	0	0	7	11	39
PEAK HR FACTOR :		0.000			0.563			0.750			0.500		0.650

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South NB 405 Fwy Ramps

East/West Victory Blvd

Day: Wednesday Date: August 24, 2016 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	80	255	164
BIKES	0	0	7	7
BUSES	0	16	29	43

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	0.00	129	8.00	717	8.30	584	7.15
PM PK 15 MIN	0	0.00	189	15.30	598	17.15	540	17.15
AM PK HOUR	0	0.00	472	8.00	2646	8.30	2248	7.15
PM PK HOUR	0	0.00	727	15.15	2329	17.00	2091	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
15-16	0	0	0	0
16-17	0	0	0	0
17-18	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	181	0	213	394
8-9	257	0	215	472
9-10	188	0	191	379
15-16	299	0	427	726
16-17	274	0	401	675
17-18	250	0	432	682
TOTAL	1449	0	1879	3328

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
394	0	0	5	0
472	0	0	0	0
379	0	0	6	0
726	0	0	2	0
675	0	0	2	0
682	0	0	0	0
3328	0	0	15	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	316	2102	0	2418
8-9	179	2372	0	2551
9-10	291	2250	0	2541
15-16	230	1860	0	2090
16-17	269	1909	0	2178
17-18	272	2057	0	2329
TOTAL	1557	12550	0	14107

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	1615	589	2204
8-9	0	1395	478	1873
9-10	0	933	382	1315
15-16	0	1406	489	1895
16-17	0	1524	464	1988
17-18	0	1601	476	2077
TOTAL	0	8474	2878	11352

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
4622	0	0	0	0
4424	0	0	0	0
3856	0	0	0	0
3985	0	0	0	0
4166	0	0	0	0
4406	0	0	0	0
25459	0	0	0	0

ITM Peak Hour Summary

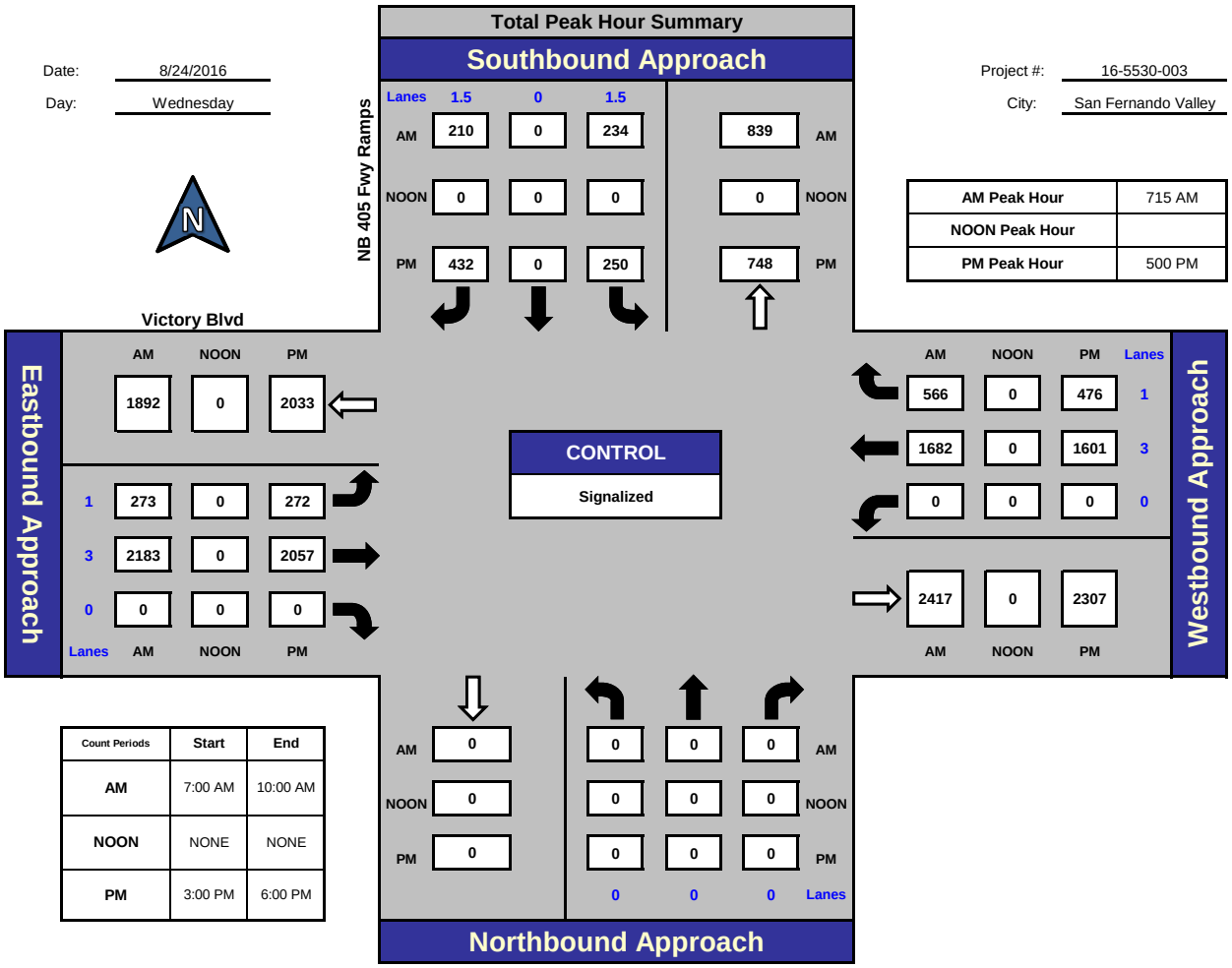
Prepared by:

National Data & Surveying Services

NB 405 Fwy Ramps and Victory Blvd , San Fernando Valley

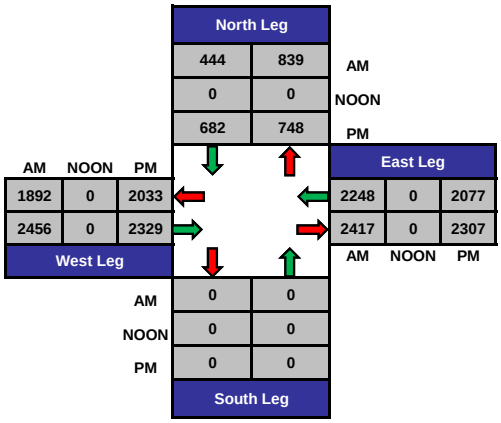
Date: 8/24/2016
Day: Wednesday
Project #: 16-5530-003
City: San Fernando Valley

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	500 PM

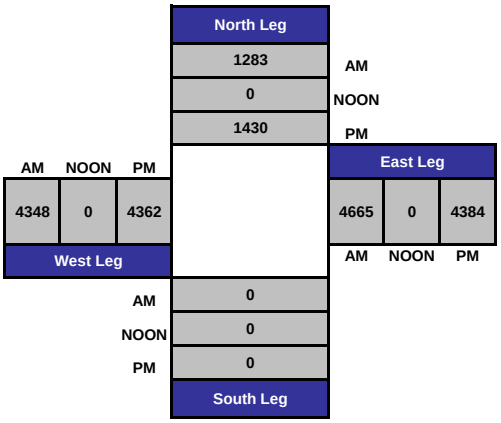


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003 **Day:** Wednesday

TOTALS

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
7:00 AM	0	0	0	23	0	56	92	476	0	0	359	145	1151
7:15 AM	0	0	0	58	0	54	96	501	0	0	434	150	1293
7:30 AM	0	0	0	55	0	50	73	572	0	0	409	161	1320
7:45 AM	0	0	0	45	0	53	55	553	0	0	413	133	1252
8:00 AM	0	0	0	76	0	53	49	557	0	0	426	122	1283
8:15 AM	0	0	0	68	0	55	35	550	0	0	371	119	1198
8:30 AM	0	0	0	57	0	54	56	661	0	0	331	130	1289
8:45 AM	0	0	0	56	0	53	39	604	0	0	267	107	1126
9:00 AM	0	0	0	50	0	44	61	607	0	0	233	79	1074
9:15 AM	0	0	0	43	0	42	65	553	0	0	228	86	1017
9:30 AM	0	0	0	55	0	47	79	554	0	0	243	116	1094
9:45 AM	0	0	0	40	0	58	86	536	0	0	229	101	1050
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	626	0	619	786	6724	0	0	3943	1449	14147
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	50.28%	0.00%	49.72%	10.47%	89.53%	0.00%	0.00%	73.13%	26.87%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	234	0	210	273	2183	0	0	1682	566	5148
PEAK HR FACTOR :		0.000			0.860			0.952			0.962		0.975

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

PM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
3:00 PM	0	0	0	83	0	105	54	384	0	0	318	139	1083
3:15 PM	0	0	0	76	0	94	55	472	0	0	370	100	1167
3:30 PM	0	0	0	76	0	113	64	482	0	0	370	126	1231
3:45 PM	0	0	0	64	0	115	57	522	0	0	348	124	1230
4:00 PM	0	0	0	84	0	105	81	456	0	0	358	120	1204
4:15 PM	0	0	0	61	0	106	61	509	0	0	377	106	1220
4:30 PM	0	0	0	73	0	100	70	478	0	0	368	132	1221
4:45 PM	0	0	0	56	0	90	57	466	0	0	421	106	1196
5:00 PM	0	0	0	55	0	115	73	480	0	0	387	137	1247
5:15 PM	0	0	0	72	0	96	71	527	0	0	408	132	1306
5:30 PM	0	0	0	60	0	120	68	528	0	0	391	107	1274
5:45 PM	0	0	0	63	0	101	60	522	0	0	415	100	1261
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	823	0	1260	771	5826	0	0	4531	1429	14640
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	39.51%	0.00%	60.49%	11.69%	88.31%	0.00%	0.00%	76.02%	23.98%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	250	0	432	272	2057	0	0	1601	476	5088
PEAK HR FACTOR :		0.000			0.947			0.974			0.962		0.974

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003

Day: Wednesday

CARS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
7:00 AM	0	0	0	22	0	55	92	463	0	0	347	143	1122
7:15 AM	0	0	0	57	0	50	96	493	0	0	421	147	1264
7:30 AM	0	0	0	53	0	50	73	562	0	0	399	160	1297
7:45 AM	0	0	0	44	0	51	51	546	0	0	407	133	1232
8:00 AM	0	0	0	73	0	52	49	550	0	0	419	119	1262
8:15 AM	0	0	0	64	0	54	33	546	0	0	363	116	1176
8:30 AM	0	0	0	55	0	50	54	645	0	0	327	123	1254
8:45 AM	0	0	0	53	0	52	37	599	0	0	262	106	1109
9:00 AM	0	0	0	46	0	43	57	589	0	0	227	79	1041
9:15 AM	0	0	0	41	0	42	64	530	0	0	220	83	980
9:30 AM	0	0	0	54	0	47	77	542	0	0	242	109	1071
9:45 AM	0	0	0	38	0	58	82	526	0	0	225	98	1027
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	600	0	604	765	6591	0	0	3859	1416	13835
APPROACH %'s :				49.83%	0.00%	50.17%	10.40%	89.60%	0.00%	0.00%	73.16%	26.84%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	227	0	203	269	2151	0	0	1646	559	5055
PEAK HR FACTOR :		0.000			0.860			0.953			0.971		0.974

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003 **Day:** Wednesday

CARS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
3:00 PM	0	0	0	83	0	103	53	373	0	0	311	135	1058
3:15 PM	0	0	0	76	0	90	54	452	0	0	365	100	1137
3:30 PM	0	0	0	71	0	110	62	472	0	0	361	125	1201
3:45 PM	0	0	0	62	0	112	56	509	0	0	337	122	1198
4:00 PM	0	0	0	82	0	105	79	444	0	0	354	116	1180
4:15 PM	0	0	0	60	0	103	59	497	0	0	370	106	1195
4:30 PM	0	0	0	71	0	95	69	474	0	0	362	130	1201
4:45 PM	0	0	0	55	0	87	56	454	0	0	416	102	1170
5:00 PM	0	0	0	53	0	114	71	478	0	0	384	137	1237
5:15 PM	0	0	0	70	0	92	69	524	0	0	404	132	1291
5:30 PM	0	0	0	59	0	114	68	522	0	0	386	106	1255
5:45 PM	0	0	0	61	0	100	60	512	0	0	411	98	1242
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	803	0	1225	756	5711	0	0	4461	1409	14365
APPROACH %'s :				39.60%	0.00%	60.40%	11.69%	88.31%	0.00%	0.00%	76.00%	24.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	243	0	420	268	2036	0	0	1585	473	5025
PEAK HR FACTOR :		0.000			0.958			0.971			0.960		0.973

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-5530-003
N/S Street: NB 405 Fwy Ramps
E/W Street: Victory Blvd
DATE: 8/24/2016 DAY: Wednesday
CITY: San Fernando Valley

A M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	2	0	0	0	0	0	0	0
7:45 AM	1	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	1	1	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	1	0	0	0	0	0	0	0
9:45 AM	1	2	0	0	0	0	0	0
TOTALS	**7**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	1	0	0	0	0	0	0	0
3:45 PM	1	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	3	0	0	3	0	6
APPROACH %'s :							0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	1	0	0	1	0	2
PEAK HR FACTOR :		0.000			0.000			0.250			0.250		0.500

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
4:45 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	4	0	0	4	0	8
APPROACH %'s :							0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :		0.000			0.000			0.000			0.000		0.000

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003 **Day:** Wednesday

BUSES

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
7:00 AM	0	0	0	1	0	0	0	1	0	0	2	0	4
7:15 AM	0	0	0	1	0	0	0	0	0	0	3	0	4
7:30 AM	0	0	0	1	0	0	0	2	0	0	1	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	3
8:00 AM	0	0	0	1	0	0	0	1	0	0	3	0	5
8:15 AM	0	0	0	1	0	0	0	0	0	0	2	0	3
8:30 AM	0	0	0	1	0	0	0	2	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	3
9:00 AM	0	0	0	1	0	0	0	1	0	0	1	0	3
9:15 AM	0	0	0	1	0	0	0	2	0	0	2	0	5
9:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	9	0	0	0	10	0	0	21	0	40
APPROACH %'s :				100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	3	0	0	0	3	0	0	10	0	16
PEAK HR FACTOR :		0.000			0.750			0.375			0.833		0.800

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003 **Day:** Wednesday

BUSES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
3:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	3
3:15 PM	0	0	0	0	0	0	0	3	0	0	2	0	5
3:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
3:45 PM	0	0	0	1	0	0	0	2	0	0	2	0	5
4:00 PM	0	0	0	1	0	0	0	2	0	0	1	0	4
4:15 PM	0	0	0	1	0	0	0	1	0	0	3	0	5
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
4:45 PM	0	0	0	1	0	0	0	2	0	0	2	0	5
5:00 PM	0	0	0	1	0	0	0	1	0	0	2	0	4
5:15 PM	0	0	0	1	0	0	0	1	0	0	2	0	4
5:30 PM	0	0	0	1	0	0	0	1	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	2	0	0	3	0	5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	7	0	0	0	19	0	0	22	0	48
APPROACH %'s :				100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	3	0	0	0	5	0	0	8	0	16
PEAK HR FACTOR :		0.000			0.750			0.625			0.667		0.800

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
7:00 AM	0	0	0	0	0	1	0	12	0	0	10	2	25
7:15 AM	0	0	0	0	0	4	0	8	0	0	10	3	25
7:30 AM	0	0	0	1	0	0	0	8	0	0	9	1	19
7:45 AM	0	0	0	1	0	2	4	7	0	0	3	0	17
8:00 AM	0	0	0	2	0	1	0	6	0	0	4	3	16
8:15 AM	0	0	0	3	0	1	2	4	0	0	6	3	19
8:30 AM	0	0	0	1	0	4	2	14	0	0	4	7	32
8:45 AM	0	0	0	3	0	1	2	5	0	0	2	1	14
9:00 AM	0	0	0	3	0	1	4	17	0	0	5	0	30
9:15 AM	0	0	0	1	0	0	1	21	0	0	6	3	32
9:30 AM	0	0	0	0	0	0	2	12	0	0	1	7	22
9:45 AM	0	0	0	2	0	0	4	9	0	0	3	3	21
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	17	0	15	21	123	0	0	63	33	272
APPROACH %'s :				53.13%	0.00%	46.88%	14.58%	85.42%	0.00%	0.00%	65.63%	34.38%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	4	0	7	4	29	0	0	26	7	77
PEAK HR FACTOR :	0.000			0.688			0.750			0.635			0.770

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-003 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	NB 405 Fwy Ramps			NB 405 Fwy Ramps			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1.5	1	3	0	0	3	1	
3:00 PM	0	0	0	0	0	2	1	10	0	0	5	4	22
3:15 PM	0	0	0	0	0	4	1	17	0	0	3	0	25
3:30 PM	0	0	0	5	0	3	2	8	0	0	8	1	27
3:45 PM	0	0	0	1	0	3	1	11	0	0	9	2	27
4:00 PM	0	0	0	1	0	0	2	10	0	0	3	4	20
4:15 PM	0	0	0	0	0	3	2	11	0	0	4	0	20
4:30 PM	0	0	0	2	0	5	1	3	0	0	5	2	18
4:45 PM	0	0	0	0	0	3	1	10	0	0	3	4	21
5:00 PM	0	0	0	1	0	1	2	1	0	0	1	0	6
5:15 PM	0	0	0	1	0	4	2	2	0	0	2	0	11
5:30 PM	0	0	0	0	0	6	0	5	0	0	4	1	16
5:45 PM	0	0	0	2	0	1	0	8	0	0	1	2	14
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	13	0	35	15	96	0	0	48	20	227
APPROACH %'s :				27.08%	0.00%	72.92%	13.51%	86.49%	0.00%	0.00%	70.59%	29.41%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	4	0	12	4	16	0	0	8	3	47
PEAK HR FACTOR :		0.000			0.667			0.625			0.550		0.734

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Sepulveda Blvd

East/West Vanowen St

Day: Wednesday Date: August 24, 2016 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	137	163	108	123
BIKES	23	43	21	22
BUSES	36	34	27	31

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	242	7.45	512	7.15	304	9.15	337	7.15
PM PK 15 MIN	481	16.30	314	17.00	279	16.45	368	17.15
AM PK HOUR	857	7.15	1988	7.00	1087	8.30	1254	7.15
PM PK HOUR	1776	16.30	1157	16.15	1048	15.30	1366	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	134	561	94	789
8-9	121	523	120	764
9-10	83	602	140	825
15-16	196	1259	134	1589
16-17	215	1394	144	1753
17-18	239	1408	124	1771
TOTAL	988	5747	756	7491

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	170	1700	118	1988
8-9	214	1483	127	1824
9-10	201	1314	107	1622
15-16	148	821	146	1115
16-17	158	792	171	1121
17-18	134	838	171	1143
TOTAL	1025	6948	840	8813

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
2777	98	46	79	2
2588	78	4	49	0
2447	56	0	55	0
2704	87	19	47	0
2874	118	7	54	0
2914	85	10	42	0
16304	522	86	326	2

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	50	754	169	973
8-9	51	794	149	994
9-10	73	830	152	1055
15-16	121	792	98	1011
16-17	107	820	82	1009
17-18	103	841	82	1026
TOTAL	505	4831	732	6068

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	96	956	135	1187
8-9	121	821	146	1088
9-10	114	612	154	880
15-16	131	842	229	1202
16-17	118	983	222	1323
17-18	120	972	237	1329
TOTAL	700	5186	1123	7009

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
2160	117	0	50	14
2082	78	0	54	1
1935	67	0	51	1
2213	86	1	69	6
2332	118	0	63	3
2355	82	0	37	0
13077	548	1	324	25

ITM Peak Hour Summary

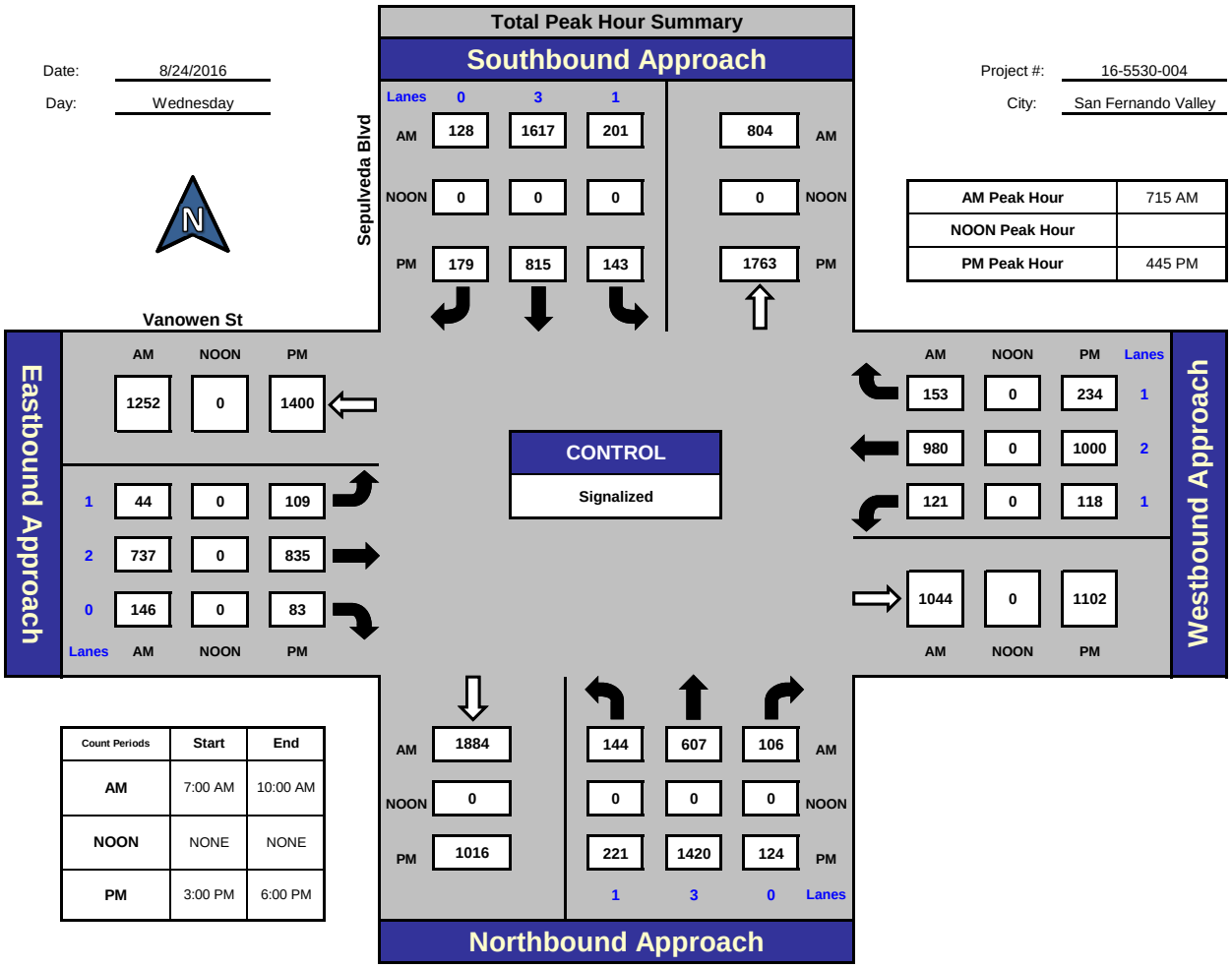
Prepared by:

National Data & Surveying Services

Sepulveda Blvd and Vanowen St , San Fernando Valley

Date: 8/24/2016
Day: Wednesday

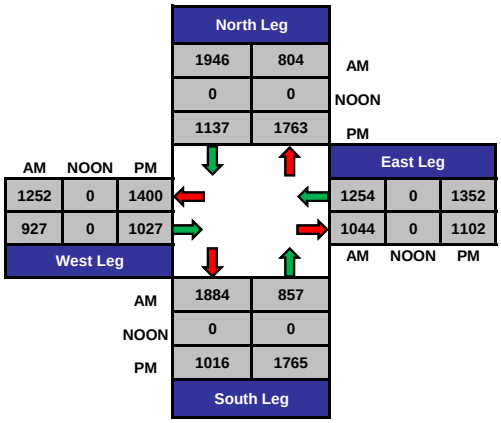
Project #: 16-5530-004
City: San Fernando Valley



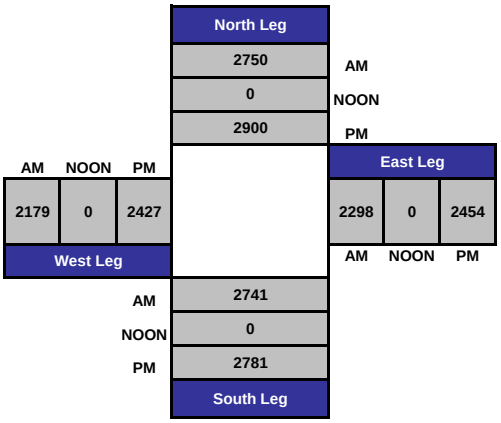
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
7:00 AM	27	112	16	23	442	26	17	175	51	17	203	30	1139
7:15 AM	34	136	19	43	434	35	9	220	50	18	286	33	1317
7:30 AM	32	135	36	47	434	26	17	166	37	31	229	36	1226
7:45 AM	41	178	23	57	390	31	7	193	31	30	238	36	1255
8:00 AM	37	158	28	54	359	36	11	158	28	42	227	48	1186
8:15 AM	31	121	32	53	369	26	13	213	31	28	224	33	1174
8:30 AM	29	133	33	46	378	37	12	213	44	23	190	32	1170
8:45 AM	24	111	27	61	377	28	15	210	46	28	180	33	1140
9:00 AM	24	152	30	52	389	28	6	204	33	29	165	28	1140
9:15 AM	19	148	36	51	299	21	22	241	41	20	150	41	1089
9:30 AM	13	153	30	46	322	30	25	185	44	32	144	39	1063
9:45 AM	27	149	44	52	304	28	20	200	34	33	153	46	1090

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	338	1686	354	585	4497	352	174	2378	470	331	2389	435	13989
APPROACH %'s :	14.21%	70.90%	14.89%	10.77%	82.76%	6.48%	5.76%	78.69%	15.55%	10.49%	75.72%	13.79%	

PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	144	607	106	201	1617	128	44	737	146	121	980	153	4984
PEAK HR FACTOR :		0.885			0.950			0.831			0.930		0.946

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
3:00 PM	44	315	37	35	210	31	24	183	19	33	203	65	1199
3:15 PM	56	295	28	38	204	31	39	188	25	39	231	57	1231
3:30 PM	45	359	35	42	219	40	29	204	24	21	185	50	1253
3:45 PM	51	290	34	33	188	44	29	217	30	38	223	57	1234
4:00 PM	48	344	45	37	198	43	31	193	14	28	213	65	1259
4:15 PM	59	321	31	46	203	36	22	234	21	23	258	59	1313
4:30 PM	65	376	40	37	206	45	21	172	22	38	248	42	1312
4:45 PM	43	353	28	38	185	47	33	221	25	29	264	56	1322
5:00 PM	51	353	34	40	227	47	23	194	16	26	235	60	1306
5:15 PM	70	335	28	30	182	47	29	217	25	32	269	67	1331
5:30 PM	57	379	34	35	221	38	24	203	17	31	232	51	1322
5:45 PM	61	341	28	29	208	39	27	227	24	31	236	59	1310
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	650	4061	402	440	2451	488	331	2453	262	369	2797	688	15392
APPROACH %'s :	12.71%	79.42%	7.86%	13.02%	72.54%	14.44%	10.87%	80.53%	8.60%	9.57%	72.57%	17.85%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	221	1420	124	143	815	179	109	835	83	118	1000	234	5281
PEAK HR FACTOR :		0.939			0.905			0.920			0.918		0.992

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004

Day: Wednesday

CARS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
7:00 AM	27	108	15	23	426	25	17	171	51	15	193	29	1100
7:15 AM	33	132	18	42	428	34	9	218	50	18	282	32	1296
7:30 AM	31	129	35	47	431	26	15	163	35	28	221	34	1195
7:45 AM	40	173	22	52	382	29	7	190	31	30	231	35	1222
8:00 AM	36	151	28	54	350	36	11	157	28	40	224	48	1163
8:15 AM	31	116	32	53	361	26	12	209	29	28	216	33	1146
8:30 AM	29	129	33	46	362	35	11	207	43	22	184	31	1132
8:45 AM	23	108	27	59	370	27	15	203	45	28	174	32	1111
9:00 AM	24	144	30	52	376	27	6	198	30	28	160	26	1101
9:15 AM	19	140	35	46	283	21	22	234	40	19	142	38	1039
9:30 AM	13	145	28	45	310	30	23	181	42	32	140	37	1026
9:45 AM	27	145	42	51	302	27	20	197	34	33	152	46	1076
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	333	1620	345	570	4381	343	168	2328	458	321	2319	421	13607
APPROACH %'s :	14.49%	70.50%	15.01%	10.77%	82.75%	6.48%	5.69%	78.81%	15.50%	10.49%	75.76%	13.75%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	140	585	103	195	1591	125	42	728	144	116	958	149	4876
PEAK HR FACTOR :		0.881			0.948			0.825			0.921		0.941

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004 **Day:** Wednesday

CARS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
3:00 PM	43	308	37	34	205	30	23	177	18	32	200	63	1170
3:15 PM	55	290	27	38	199	31	35	181	25	39	230	56	1206
3:30 PM	45	352	34	40	213	39	28	196	23	21	179	48	1218
3:45 PM	50	283	34	33	184	44	29	213	30	38	220	56	1214
4:00 PM	47	337	45	37	191	42	29	188	14	28	207	62	1227
4:15 PM	58	315	31	46	199	36	21	229	21	23	255	58	1292
4:30 PM	64	367	40	36	202	44	21	169	22	38	245	41	1289
4:45 PM	42	347	28	38	183	47	33	217	25	29	260	55	1304
5:00 PM	51	344	33	40	224	46	23	190	16	26	227	59	1279
5:15 PM	70	326	28	30	179	47	29	213	25	32	266	67	1312
5:30 PM	57	373	34	35	218	38	24	201	16	31	231	50	1308
5:45 PM	61	337	27	29	206	39	27	224	24	30	233	59	1296
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	643	3979	398	436	2403	483	322	2398	259	367	2753	674	15115
APPROACH %'s :	12.81%	79.26%	7.93%	13.12%	72.34%	14.54%	10.81%	80.50%	8.69%	9.67%	72.56%	17.76%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	220	1390	123	143	804	178	109	821	82	118	984	231	5203
PEAK HR FACTOR :		0.934			0.907			0.920			0.913		0.991

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-5530-004
N/S Street: Sepulveda Blvd
E/W Street: Vanowen St
DATE: 8/24/2016 DAY: Wednesday
CITY: San Fernando Valley

A M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	9	3	9	7	2	8	8	12
7:15 AM	14	8	9	3	3	8	21	14
7:30 AM	8	4	20	4	5	6	6	27
7:45 AM	26	7	36	10	9	9	12	17
8:00 AM	2	9	15	13	6	5	15	15
8:15 AM	4	6	12	11	12	6	11	10
8:30 AM	11	6	7	5	7	1	4	7
8:45 AM	6	5	13	2	13	4	6	10
9:00 AM	7	6	8	9	10	5	8	6
9:15 AM	9	3	6	7	3	7	10	11
9:30 AM	12	9	7	5	7	6	9	7
9:45 AM	1	8	6	8	5	8	5	11
TOTALS	**109**	**74**	**148**	**84**	**82**	**73**	**115**	**147**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	0	5	0	1	2	0	0
7:30 AM	2	0	11	0	1	5	0	0
7:45 AM	0	0	27	2	1	4	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	1	0	1	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	1	0	0	0
TOTALS	**2**	**0**	**45**	**5**	**4**	**12**	**0**	**0**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	6	7	12	5	7	13	10
3:15 PM	9	11	21	11	15	12	15	5
3:30 PM	2	9	6	11	6	6	10	9
3:45 PM	4	6	11	8	9	9	11	13
4:00 PM	6	6	12	16	4	9	23	13
4:15 PM	8	12	20	9	14	13	20	7
4:30 PM	3	9	10	14	7	5	21	7
4:45 PM	6	4	20	17	7	4	14	13
5:00 PM	3	7	6	17	4	10	11	9
5:15 PM	4	8	10	11	3	6	8	5
5:30 PM	1	6	7	10	2	4	9	12
5:45 PM	3	10	8	16	6	2	21	7
TOTALS	**49**	**94**	**138**	**152**	**82**	**87**	**176**	**110**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	1	3	1	0	0	0
3:15 PM	0	0	2	2	1	3	0	0
3:30 PM	0	0	0	7	0	1	0	0
3:45 PM	0	0	4	0	0	0	1	0
4:00 PM	0	0	2	2	0	0	0	0
4:15 PM	0	0	0	0	0	2	0	0
4:30 PM	0	0	0	2	1	0	0	0
4:45 PM	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	4	3	0	0	0	0
5:45 PM	0	0	0	3	0	0	0	0
TOTALS	**0**	**0**	**13**	**23**	**3**	**6**	**1**	**0**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004

Day: Wednesday

BIKES

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
7:00 AM	0	3	0	0	3	0	0	0	0	0	2	0	8
7:15 AM	0	1	0	0	2	0	0	1	0	1	0	0	5
7:30 AM	0	1	0	0	2	0	0	1	0	0	1	0	5
7:45 AM	0	1	0	0	1	0	0	2	0	0	1	0	5
8:00 AM	0	0	0	0	2	0	0	0	0	0	1	1	4
8:15 AM	0	1	0	0	1	0	0	0	0	1	0	0	3
8:30 AM	0	0	0	0	1	0	0	0	1	0	0	0	2
8:45 AM	0	0	0	0	2	0	0	1	0	0	0	1	4
9:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
9:15 AM	0	0	0	0	1	0	0	1	0	0	1	0	3
9:30 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
9:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	9	0	0	17	0	0	9	1	2	7	2	47
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	90.00%	10.00%	18.18%	63.64%	18.18%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	3	0	0	7	0	0	4	0	1	3	1	19
PEAK HR FACTOR :		0.750			0.875			0.500			0.625		0.950

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
3:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
3:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
3:45 PM	0	1	0	0	2	0	0	0	0	1	1	0	5
4:00 PM	0	2	0	0	0	0	0	1	0	0	0	0	3
4:15 PM	0	3	0	0	3	0	0	1	0	1	1	0	9
4:30 PM	0	2	0	0	2	0	0	1	0	0	1	0	6
4:45 PM	0	2	0	0	1	1	0	0	0	0	2	0	6
5:00 PM	0	0	0	0	0	0	0	2	0	0	1	0	3
5:15 PM	0	3	0	2	4	0	0	2	0	0	0	0	11
5:30 PM	0	1	0	0	5	0	0	2	0	0	2	0	10
5:45 PM	0	0	0	0	2	0	0	1	0	0	1	0	4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	14	0	2	23	1	0	11	0	2	9	0	62
APPROACH %'s :	0.00%	100.00%	0.00%	7.69%	88.46%	3.85%	0.00%	100.00%	0.00%	18.18%	81.82%	0.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	6	0	2	10	1	0	6	0	0	5	0	30
PEAK HR FACTOR :		0.500			0.542			0.750			0.625		0.682

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004

Day: Wednesday

BUSES

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
7:00 AM	0	0	0	0	3	0	0	1	0	0	5	0	9
7:15 AM	0	2	0	0	1	0	0	0	0	0	2	0	5
7:30 AM	0	2	0	0	1	0	0	1	0	0	3	0	7
7:45 AM	0	1	0	0	2	0	0	1	0	0	3	0	7
8:00 AM	0	1	0	0	2	0	0	0	0	0	1	0	4
8:15 AM	0	2	0	0	1	0	0	1	0	0	3	0	7
8:30 AM	0	1	0	0	1	0	0	0	0	0	1	0	3
8:45 AM	0	1	0	0	2	0	0	2	0	0	1	0	6
9:00 AM	0	2	0	0	2	0	0	1	0	0	0	0	5
9:15 AM	0	1	0	0	1	0	0	1	0	0	1	0	4
9:30 AM	0	2	0	0	1	0	0	1	0	0	1	0	5
9:45 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	17	0	0	18	0	0	9	0	0	21	0	65
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	6	0	0	6	0	0	2	0	0	9	0	23
PEAK HR FACTOR :		0.750			0.750			0.500			0.750		0.821

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004 **Day:** Wednesday

BUSES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
3:00 PM	0	1	0	0	1	0	0	1	0	0	0	0	3
3:15 PM	0	2	0	0	1	0	0	4	0	0	0	0	7
3:30 PM	0	2	0	0	2	0	0	2	0	0	0	0	6
3:45 PM	0	1	0	0	1	0	0	0	0	0	2	0	4
4:00 PM	0	2	0	0	2	0	0	1	0	0	2	0	7
4:15 PM	0	1	0	0	0	0	0	3	0	0	1	0	5
4:30 PM	0	1	0	0	2	0	0	1	0	0	1	0	5
4:45 PM	0	2	0	0	1	0	0	2	0	0	1	0	6
5:00 PM	0	3	0	0	2	0	0	0	0	0	1	0	6
5:15 PM	0	1	0	0	1	0	0	2	0	0	0	0	4
5:30 PM	0	2	0	0	2	0	0	1	0	0	1	0	6
5:45 PM	0	1	0	0	1	0	0	1	0	0	1	0	4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	19	0	0	16	0	0	18	0	0	10	0	63
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	8	0	0	6	0	0	5	0	0	3	0	22
PEAK HR FACTOR :		0.667			0.750			0.625			0.750		0.917

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
7:00 AM	0	4	1	0	13	1	0	3	0	2	5	1	30
7:15 AM	1	2	1	1	5	1	0	2	0	0	2	1	16
7:30 AM	1	4	1	0	2	0	2	2	2	3	5	2	24
7:45 AM	1	4	1	5	6	2	0	2	0	0	4	1	26
8:00 AM	1	6	0	0	7	0	0	1	0	2	2	0	19
8:15 AM	0	3	0	0	7	0	1	3	2	0	5	0	21
8:30 AM	0	3	0	0	15	2	1	6	1	1	5	1	35
8:45 AM	1	2	0	2	5	1	0	5	1	0	5	1	23
9:00 AM	0	6	0	0	11	1	0	5	3	1	5	2	34
9:15 AM	0	7	1	5	15	0	0	6	1	1	7	3	46
9:30 AM	0	6	2	1	11	0	2	3	2	0	3	2	32
9:45 AM	0	2	2	1	1	1	0	3	0	0	1	0	11
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	5	49	9	15	98	9	6	41	12	10	49	14	317
APPROACH %'s :	7.94%	77.78%	14.29%	12.30%	80.33%	7.38%	10.17%	69.49%	20.34%	13.70%	67.12%	19.18%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	4	16	3	6	20	3	2	7	2	5	13	4	85
PEAK HR FACTOR :		0.821			0.558			0.458			0.550		0.817

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-004 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Vanowen St			Vanowen St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	1	
3:00 PM	1	6	0	1	4	1	1	5	1	1	3	2	26
3:15 PM	1	3	1	0	4	0	4	3	0	0	1	1	18
3:30 PM	0	5	1	2	4	1	1	6	1	0	6	2	29
3:45 PM	1	6	0	0	3	0	0	4	0	0	1	1	16
4:00 PM	1	5	0	0	5	1	2	4	0	0	4	3	25
4:15 PM	1	5	0	0	4	0	1	2	0	0	2	1	16
4:30 PM	1	8	0	1	2	1	0	2	0	0	2	1	18
4:45 PM	1	4	0	0	1	0	0	2	0	0	3	1	12
5:00 PM	0	6	1	0	1	1	0	4	0	0	7	1	21
5:15 PM	0	8	0	0	2	0	0	2	0	0	3	0	15
5:30 PM	0	4	0	0	1	0	0	1	1	0	0	1	8
5:45 PM	0	3	1	0	1	0	0	2	0	1	2	0	10
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	7	63	4	4	32	5	9	37	3	2	34	14	214
APPROACH %'s :	9.46%	85.14%	5.41%	9.76%	78.05%	12.20%	18.37%	75.51%	6.12%	4.00%	68.00%	28.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	1	22	1	0	5	1	0	9	1	0	13	3	56
PEAK HR FACTOR :		0.750			0.750			0.625			0.500		0.667

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Sepulveda Blvd

East/West Victory Blvd

Day: Wednesday Date: August 24, 2016 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	185	163	249	98
BIKES	28	35	13	14
BUSES	52	34	45	28

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	302	8.00	559	7.30	662	8.15	425	7.45
PM PK 15 MIN	583	17.30	310	15.15	600	17.45	383	17.15
AM PK HOUR	1100	7.30	2051	7.00	2492	8.15	1654	7.15
PM PK HOUR	2168	17.00	1178	17.00	2161	17.00	1401	16.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	419	520	39	978
8-9	406	520	61	987
9-10	299	519	81	899
15-16	473	1210	130	1813
16-17	545	1413	153	2111
17-18	562	1475	131	2168
TOTAL	2704	5657	595	8956

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	276	1621	154	2051
8-9	271	1446	106	1823
9-10	263	1408	76	1747
15-16	210	754	150	1114
16-17	230	722	128	1080
17-18	247	716	215	1178
TOTAL	1497	6667	829	8993

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
3029	32	0	27	0
2810	22	0	31	0
2646	30	0	19	0
2927	34	0	32	0
3191	47	0	45	0
3346	51	1	19	0
17949	216	1	173	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	95	1568	580	2243
8-9	75	1704	625	2404
9-10	108	1670	645	2423
15-16	159	1396	442	1997
16-17	161	1484	464	2109
17-18	178	1537	446	2161
TOTAL	776	9359	3202	13337

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	86	1462	73	1621
8-9	95	1209	118	1422
9-10	106	849	129	1084
15-16	80	1174	130	1384
16-17	75	1196	130	1401
17-18	54	1137	136	1327
TOTAL	496	7027	716	8239

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
3864	47	0	37	0
3826	55	0	29	0
3507	39	4	37	0
3381	47	1	58	0
3510	59	1	68	0
3488	45	0	70	0
21576	292	6	299	0

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Sepulveda Blvd and Victory Blvd , San Fernando Valley

Date: 8/24/2016

Day: Wednesday

Project #: 16-5530-005

City: San Fernando Valley

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Total Peak Hour Summary

Southbound Approach

Sepulveda Blvd

Lanes	1	3	2		
AM	134	1548	286	762	AM
NOON	0	0	0	0	NOON
PM	215	716	247	1789	PM

Victory Blvd

Eastbound Approach

Lanes	AM	NOON	PM
	2084	0	1914
1	96	0	178
3	1634	0	1537
1	580	0	446
Lanes	AM	NOON	PM

Westbound Approach

AM	NOON	PM	Lanes
90	0	136	1
1481	0	1137	3
83	0	54	1
1969	0	1915	
AM	NOON	PM	

CONTROL

Signalized

Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Northbound Approach

AM	2211	469	576	49	AM
NOON	0	0	0	0	NOON
PM	1216	562	1475	131	PM
		2	3	0	Lanes

Total Ins & Outs

	North Leg		
	1968	762	AM
	0	0	NOON
	1178	1789	PM

West Leg			East Leg		
AM	NOON	PM			
2084	0	1914	1654	0	1327
2310	0	2161	1969	0	1915
			AM	NOON	PM

	South Leg	
AM	2211	1094
NOON	0	0
PM	1216	2168

Total Volume Per Leg

North Leg		
2730		AM
0		NOON
2967		PM

West Leg			East Leg		
AM	NOON	PM			
4394	0	4075	3623	0	3242
			AM	NOON	PM

South Leg	
AM	3305
NOON	0
PM	3384

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005 **Day:** Wednesday

TOTALS

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
7:00 AM	76	104	6	73	440	43	18	299	137	28	320	14	1558
7:15 AM	113	118	14	63	395	37	19	414	135	16	388	18	1730
7:30 AM	109	139	13	70	446	43	25	416	152	15	381	16	1825
7:45 AM	121	159	6	70	340	31	33	439	156	27	373	25	1780
8:00 AM	126	160	16	83	367	23	19	365	137	25	339	31	1691
8:15 AM	116	119	16	67	319	22	30	453	179	22	310	27	1680
8:30 AM	85	130	14	63	407	32	15	421	140	21	285	26	1639
8:45 AM	79	111	15	58	353	29	11	465	169	27	275	34	1626
9:00 AM	51	125	27	85	434	16	16	436	157	17	212	33	1609
9:15 AM	84	125	13	56	303	18	28	438	167	27	209	39	1507
9:30 AM	81	133	26	71	375	26	29	389	155	30	202	22	1539
9:45 AM	83	136	15	51	296	16	35	407	166	32	226	35	1498
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1124	1559	181	810	4475	336	278	4942	1850	287	3520	320	19682
APPROACH %'s :	39.25%	54.43%	6.32%	14.41%	79.61%	5.98%	3.93%	69.90%	26.17%	6.95%	85.29%	7.75%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	469	576	49	286	1548	134	96	1634	580	83	1481	90	7026
PEAK HR FACTOR :		0.906			0.880			0.920			0.973		0.962

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
3:00 PM	114	300	39	45	170	50	33	278	105	18	267	28	1447
3:15 PM	110	284	26	69	206	35	46	364	109	21	311	37	1618
3:30 PM	135	330	36	53	186	35	43	332	114	22	280	29	1595
3:45 PM	114	296	29	43	192	30	37	422	114	19	316	36	1648
4:00 PM	152	360	38	52	181	33	34	312	121	33	265	28	1609
4:15 PM	101	326	35	58	169	31	49	409	118	12	319	38	1665
4:30 PM	163	380	37	53	197	34	46	341	115	17	280	33	1696
4:45 PM	129	347	43	67	175	30	32	422	110	13	332	31	1731
5:00 PM	170	365	25	58	169	62	40	324	94	16	251	22	1596
5:15 PM	125	347	29	66	176	58	49	408	120	16	320	47	1761
5:30 PM	150	387	46	53	181	46	41	369	116	15	272	31	1707
5:45 PM	117	376	31	70	190	49	48	436	116	7	294	36	1770
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1580	4098	414	687	2192	493	498	4417	1352	209	3507	396	19843
APPROACH %'s :	25.94%	67.27%	6.80%	20.37%	65.01%	14.62%	7.95%	70.48%	21.57%	5.08%	85.29%	9.63%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	562	1475	131	247	716	215	178	1537	446	54	1137	136	6834
PEAK HR FACTOR :		0.930			0.953			0.900			0.866		0.965

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005

Day: Wednesday

CARS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
7:00 AM	71	99	6	72	426	41	17	293	131	28	313	14	1511
7:15 AM	108	111	13	63	388	35	19	405	131	16	380	17	1686
7:30 AM	103	133	12	70	439	43	25	410	150	15	376	16	1792
7:45 AM	119	154	6	70	332	31	32	435	150	27	367	25	1748
8:00 AM	122	156	16	82	358	22	18	363	133	25	336	31	1662
8:15 AM	111	116	16	65	315	22	30	445	176	22	305	27	1650
8:30 AM	81	126	14	61	391	30	15	409	135	21	277	26	1586
8:45 AM	77	106	15	57	344	28	11	460	165	26	272	33	1594
9:00 AM	50	117	25	85	422	15	15	427	153	16	207	33	1565
9:15 AM	81	119	12	52	292	18	28	424	156	27	202	37	1448
9:30 AM	78	128	26	69	357	25	27	381	149	29	200	21	1490
9:45 AM	83	131	15	48	293	16	34	401	160	32	219	34	1466
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1084	1496	176	794	4357	326	271	4853	1789	284	3454	314	19198
APPROACH %'s :	39.33%	54.28%	6.39%	14.50%	79.55%	5.95%	3.92%	70.20%	25.88%	7.01%	85.24%	7.75%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	452	554	47	285	1517	131	94	1613	564	83	1459	89	6888
PEAK HR FACTOR :		0.895			0.875			0.920			0.973		0.961

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005 **Day:** Wednesday

CARS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
3:00 PM	109	297	39	44	167	50	33	271	102	18	261	26	1417
3:15 PM	108	276	24	68	200	35	46	352	100	21	306	37	1573
3:30 PM	129	323	34	52	183	34	42	323	111	22	277	28	1558
3:45 PM	107	289	29	43	185	30	37	408	112	19	312	36	1607
4:00 PM	150	352	36	52	176	33	34	306	115	33	260	27	1574
4:15 PM	97	317	35	57	165	31	49	399	113	12	314	37	1626
4:30 PM	160	372	35	53	195	34	45	335	114	17	276	31	1667
4:45 PM	125	344	43	66	174	29	32	418	102	13	328	31	1705
5:00 PM	168	357	25	58	165	62	40	323	93	16	249	22	1578
5:15 PM	123	341	28	66	173	58	46	405	118	15	320	47	1740
5:30 PM	147	382	46	53	176	46	41	364	112	15	269	31	1682
5:45 PM	114	372	30	70	187	49	46	428	115	7	292	36	1746
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1537	4022	404	682	2146	491	491	4332	1307	208	3464	389	19473
APPROACH %'s :	25.78%	67.45%	6.78%	20.55%	64.66%	14.79%	8.01%	70.67%	21.32%	5.12%	85.30%	9.58%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	552	1452	129	247	701	215	173	1520	438	53	1130	136	6746
PEAK HR FACTOR :		0.927			0.950			0.904			0.863		0.966

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-5530-005
N/S Street: Sepulveda Blvd
E/W Street: Victory Blvd
DATE: 8/24/2016 DAY: Wednesday
CITY: San Fernando Valley

A M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	7	1	8	4	6	10
7:15 AM	4	3	2	5	3	6	7	6
7:30 AM	5	3	7	2	4	7	4	1
7:45 AM	5	4	4	4	4	1	10	3
8:00 AM	5	6	4	7	4	4	11	10
8:15 AM	4	4	2	2	2	7	3	4
8:30 AM	3	0	2	2	2	5	10	8
8:45 AM	5	4	3	0	4	1	5	4
9:00 AM	2	2	4	5	4	6	5	3
9:15 AM	3	3	4	2	8	6	1	6
9:30 AM	2	3	5	3	3	2	8	4
9:45 AM	2	2	5	2	8	0	5	7
TOTALS	**41**	**36**	**49**	**35**	**54**	**49**	**75**	**66**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	2	0
9:15 AM	0	0	0	0	0	0	1	0
9:30 AM	0	0	0	0	0	0	1	0
9:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	5	5	2	1	4	9	0	6
3:15 PM	2	2	8	7	4	9	3	7
3:30 PM	2	1	6	3	7	5	6	3
3:45 PM	9	6	5	2	14	6	12	10
4:00 PM	5	3	14	1	14	9	8	7
4:15 PM	8	5	9	3	7	6	3	9
4:30 PM	9	4	7	2	10	3	16	7
4:45 PM	6	5	8	3	11	8	5	4
5:00 PM	1	1	8	3	14	10	6	5
5:15 PM	3	2	7	7	8	8	12	3
5:30 PM	1	0	8	4	12	5	4	3
5:45 PM	5	6	12	2	9	4	4	8
TOTALS	**56**	**40**	**94**	**38**	**114**	**82**	**79**	**72**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
7:00 AM	0	4	0	0	2	0	0	1	0	0	0	0	7
7:15 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
8:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
8:15 AM	0	2	0	0	2	0	0	0	0	0	2	0	6
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	1	0	0	0	1	0	0	1	0	0	1	0	4
9:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
9:45 AM	0	0	0	0	1	0	0	2	0	0	0	0	3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	10	0	0	18	0	0	4	0	0	3	0	36
APPROACH %'s :	9.09%	90.91%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	3	0	0	8	0	0	0	0	0	0	0	11
PEAK HR FACTOR :		0.750			0.667			0.000			0.000		0.917

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
3:00 PM	0	0	0	0	1	0	0	1	0	0	0	1	3
3:15 PM	0	0	0	0	0	0	0	1	0	0	2	0	3
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
3:45 PM	2	0	0	0	1	0	0	0	0	0	2	0	5
4:00 PM	0	1	0	0	4	0	0	0	0	0	1	0	6
4:15 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
4:30 PM	0	2	0	0	1	0	0	0	0	0	1	0	4
4:45 PM	0	1	0	0	0	0	0	2	0	0	1	0	4
5:00 PM	0	2	0	0	2	0	0	0	0	0	2	0	6
5:15 PM	0	2	2	0	2	0	1	1	0	0	0	0	8
5:30 PM	0	2	0	0	3	0	0	1	1	0	0	0	7
5:45 PM	0	0	0	0	2	0	0	1	0	0	0	0	3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	13	2	0	17	0	1	7	1	1	9	1	54
APPROACH %'s :	11.76%	76.47%	11.76%	0.00%	100.00%	0.00%	11.11%	77.78%	11.11%	9.09%	81.82%	9.09%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	6	2	0	9	0	1	3	1	0	2	0	24
PEAK HR FACTOR :		0.500			0.750			0.625			0.250		0.750

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005

Day: Wednesday

BUSES

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
7:00 AM	1	0	0	0	2	0	0	0	1	0	2	0	6
7:15 AM	1	2	0	0	2	0	0	1	1	0	1	0	8
7:30 AM	0	2	0	0	1	0	0	2	0	0	1	0	6
7:45 AM	1	2	0	0	2	0	0	0	1	0	2	0	8
8:00 AM	1	0	0	0	2	0	0	1	1	0	2	0	7
8:15 AM	1	2	0	0	1	0	0	0	1	0	1	0	6
8:30 AM	0	1	0	0	1	0	0	2	1	0	1	0	6
8:45 AM	1	1	0	0	2	0	0	0	0	0	1	0	5
9:00 AM	0	2	0	0	2	0	0	1	1	0	1	0	7
9:15 AM	0	2	0	0	0	0	0	2	1	0	2	0	7
9:30 AM	0	1	0	0	2	0	0	0	1	0	0	0	4
9:45 AM	0	2	0	0	1	0	0	1	0	0	1	0	5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	17	0	0	18	0	0	10	9	0	15	0	75
APPROACH %'s :	26.09%	73.91%	0.00%	0.00%	100.00%	0.00%	0.00%	52.63%	47.37%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	3	6	0	0	7	0	0	4	3	0	6	0	29
PEAK HR FACTOR :		0.750			0.875			0.875			0.750		0.906

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005 **Day:** Wednesday

BUSES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
3:00 PM	1	1	0	0	1	0	0	1	0	0	1	0	5
3:15 PM	1	2	0	0	1	0	0	2	0	0	2	0	8
3:30 PM	0	2	0	0	1	0	0	3	0	0	0	0	6
3:45 PM	1	1	0	0	2	0	0	2	1	0	1	0	8
4:00 PM	1	2	0	0	2	0	0	1	1	0	0	0	7
4:15 PM	1	2	0	0	0	0	0	2	1	0	3	0	9
4:30 PM	1	1	0	0	2	0	0	1	0	0	0	0	5
4:45 PM	0	1	0	0	1	0	0	2	1	0	1	0	6
5:00 PM	1	3	0	0	2	0	0	1	1	0	2	0	10
5:15 PM	1	1	0	0	1	0	0	2	0	0	0	0	5
5:30 PM	1	3	0	0	2	0	0	1	1	0	1	0	9
5:45 PM	0	1	0	0	1	0	0	2	0	0	2	0	6
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	20	0	0	16	0	0	20	6	0	13	0	84
APPROACH %'s :	31.03%	68.97%	0.00%	0.00%	100.00%	0.00%	0.00%	76.92%	23.08%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	3	8	0	0	6	0	0	6	2	0	5	0	30
PEAK HR FACTOR :		0.688			0.750			1.000			0.625		0.750

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
7:00 AM	4	5	0	1	12	2	1	6	5	0	5	0	41
7:15 AM	4	5	1	0	5	2	0	8	3	0	7	1	36
7:30 AM	6	4	1	0	6	0	0	4	2	0	4	0	27
7:45 AM	1	3	0	0	6	0	1	4	5	0	4	0	24
8:00 AM	3	4	0	1	7	1	1	1	3	0	1	0	22
8:15 AM	4	1	0	2	3	0	0	8	2	0	4	0	24
8:30 AM	4	3	0	2	15	2	0	10	4	0	7	0	47
8:45 AM	1	4	0	1	7	1	0	5	4	1	2	1	27
9:00 AM	1	6	2	0	10	1	1	8	3	1	4	0	37
9:15 AM	3	4	1	4	11	0	0	12	10	0	5	2	52
9:30 AM	3	4	0	2	16	1	2	8	5	1	2	1	45
9:45 AM	0	3	0	3	2	0	1	5	6	0	6	1	27
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	34	46	5	16	100	10	7	79	52	3	51	6	409
APPROACH %'s :	40.00%	54.12%	5.88%	12.70%	79.37%	7.94%	5.07%	57.25%	37.68%	5.00%	85.00%	10.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	14	16	2	1	24	3	2	17	13	0	16	1	109
PEAK HR FACTOR :		0.727			0.778			0.727			0.531		0.757

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-005 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Sepulveda Blvd			Sepulveda Blvd			Victory Blvd			Victory Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	2	3	1	1	3	1	1	3	1	
3:00 PM	4	2	0	1	2	0	0	6	3	0	5	2	25
3:15 PM	1	6	2	1	5	0	0	10	9	0	3	0	37
3:30 PM	6	5	2	1	2	1	1	6	3	0	3	1	31
3:45 PM	6	6	0	0	5	0	0	12	1	0	3	0	33
4:00 PM	1	6	2	0	3	0	0	5	5	0	5	1	28
4:15 PM	3	7	0	1	4	0	0	8	4	0	2	1	30
4:30 PM	2	7	2	0	0	0	1	5	1	0	4	2	24
4:45 PM	4	2	0	1	0	1	0	2	7	0	3	0	20
5:00 PM	1	5	0	0	2	0	0	0	0	0	0	0	8
5:15 PM	1	5	1	0	2	0	3	1	2	1	0	0	16
5:30 PM	2	2	0	0	3	0	0	4	3	0	2	0	16
5:45 PM	3	3	1	0	2	0	2	6	1	0	0	0	18
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	34	56	10	5	30	2	7	65	39	1	30	7	286
APPROACH %'s :	34.00%	56.00%	10.00%	13.51%	81.08%	5.41%	6.31%	58.56%	35.14%	2.63%	78.95%	18.42%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	7	15	2	0	9	0	5	11	6	1	2	0	58
PEAK HR FACTOR :		0.857			0.750			0.611			0.375		0.806

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Kester Ave

East/West Kittridge St

Day: Wednesday Date: August 24, 2016 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	103	128	12	10
BIKES	15	19	2	4
BUSES	13	20	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	225	7.45	349	7.15	62	7.15	81	7.30
PM PK 15 MIN	377	17.15	194	16.00	33	17.30	80	15.00
AM PK HOUR	773	7.30	1235	7.15	174	7.00	214	7.00
PM PK HOUR	1417	16.45	748	16.30	103	15.00	212	15.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	55	548	69	672
8-9	25	589	18	632
9-10	21	420	22	463
15-16	84	940	75	1099
16-17	70	1123	44	1237
17-18	111	1213	75	1399
TOTAL	366	4833	303	5502

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	139	1059	17	1215
8-9	39	1174	11	1224
9-10	21	906	9	936
15-16	67	564	17	648
16-17	50	678	10	738
17-18	78	643	24	745
TOTAL	394	5024	88	5506

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
1887	12	71	22	0
1856	3	3	1	0
1399	3	1	1	1
1747	4	33	24	0
1975	3	6	9	0
2144	5	5	1	0
11008	30	119	58	1

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	28	70	76	174
8-9	9	18	65	92
9-10	9	16	63	88
15-16	20	38	45	103
16-17	16	33	40	89
17-18	17	43	42	102
TOTAL	99	218	331	648

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	68	48	98	214
8-9	32	23	31	86
9-10	29	8	22	59
15-16	63	47	102	212
16-17	51	43	65	159
17-18	50	62	74	186
TOTAL	293	231	392	916

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
388	7	11	41	1
178	4	2	7	1
147	10	0	6	1
315	12	6	23	2
248	5	3	7	0
288	6	3	4	0
1564	44	25	88	5

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Kester Ave and Kittridge St , San Fernando Valley

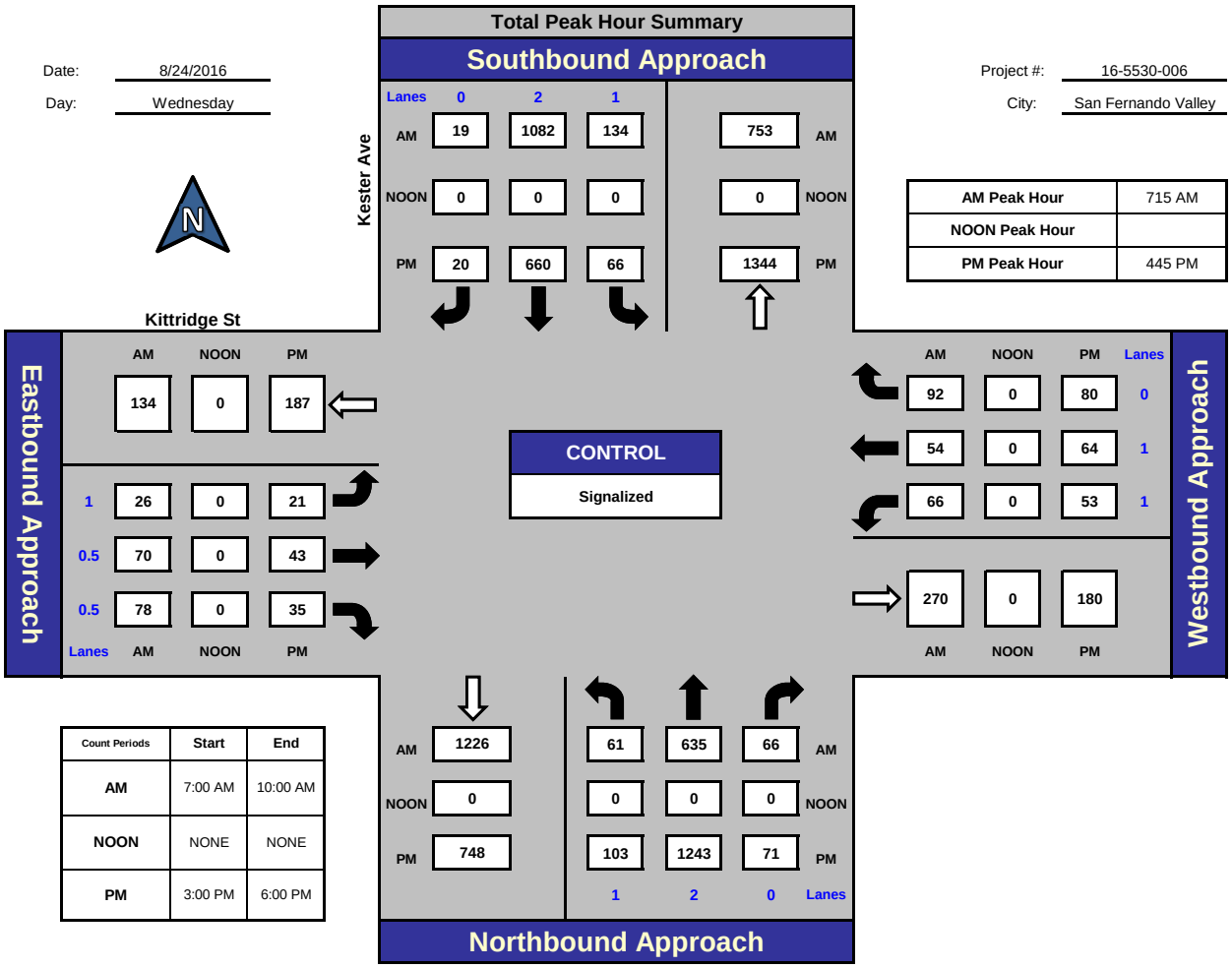
Date: 8/24/2016

Day: Wednesday

Project #: 16-5530-006

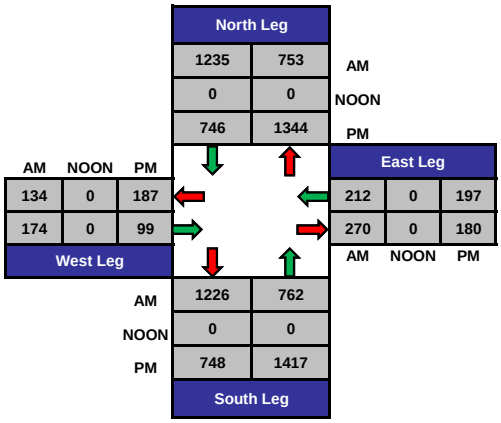
City: San Fernando Valley

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	445 PM

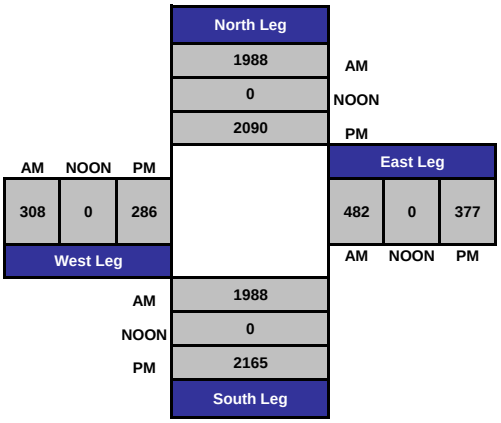


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006

Day: Wednesday

TOTALS

City: San Fernando Valley

Date: 8/24/2016

AM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
7:00 AM	6	82	11	21	240	1	3	5	15	8	2	15	409
7:15 AM	16	113	22	40	304	5	7	25	30	15	15	27	619
7:30 AM	16	156	25	50	266	4	10	26	22	25	19	37	656
7:45 AM	17	197	11	28	249	7	8	14	9	20	12	19	591
8:00 AM	12	169	8	16	263	3	1	5	17	6	8	9	517
8:15 AM	7	154	1	10	294	2	3	2	12	8	5	10	508
8:30 AM	3	132	5	7	284	2	2	8	19	10	2	7	481
8:45 AM	3	134	4	6	333	4	3	3	17	8	8	5	528
9:00 AM	6	96	9	6	233	1	2	8	19	6	0	7	393
9:15 AM	5	101	3	7	248	3	3	5	22	9	3	2	411
9:30 AM	4	107	7	6	228	4	3	1	7	11	5	5	388
9:45 AM	6	116	3	2	197	1	1	2	15	3	0	8	354
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	101	1557	109	199	3139	37	46	104	204	129	79	151	5855
APPROACH %'s :	5.72%	88.12%	6.17%	5.90%	93.01%	1.10%	12.99%	29.38%	57.63%	35.93%	22.01%	42.06%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	61	635	66	134	1082	19	26	70	78	66	54	92	2383
PEAK HR FACTOR :		0.847			0.885			0.702			0.654		0.908

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006 **Day:** Wednesday

TOTALS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
3:00 PM	15	208	23	28	154	4	3	10	14	28	6	46	539
3:15 PM	29	216	18	10	128	3	4	10	10	15	21	15	479
3:30 PM	19	251	21	14	124	5	8	11	12	10	9	22	506
3:45 PM	21	265	13	15	158	5	5	7	9	10	11	19	538
4:00 PM	19	268	13	11	180	3	5	7	8	8	10	13	545
4:15 PM	26	286	12	14	158	3	1	8	11	13	10	14	556
4:30 PM	11	253	8	13	176	3	4	7	13	13	10	21	532
4:45 PM	14	316	11	12	164	1	6	11	8	17	13	17	590
5:00 PM	29	320	19	22	160	8	7	6	6	12	14	15	618
5:15 PM	34	321	22	16	163	10	4	5	13	11	17	24	640
5:30 PM	26	286	19	16	173	1	4	21	8	13	20	24	611
5:45 PM	22	286	15	24	147	5	2	11	15	14	11	11	563
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	265	3276	194	195	1885	51	53	114	127	164	152	241	6717
APPROACH %'s :	7.10%	87.71%	5.19%	9.15%	88.46%	2.39%	18.03%	38.78%	43.20%	29.44%	27.29%	43.27%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	103	1243	71	66	660	20	21	43	35	53	64	80	2459
PEAK HR FACTOR :		0.940			0.982			0.750			0.864		0.961

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006 **Day:** Wednesday

CARS

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
7:00 AM	6	79	8	17	238	1	3	4	15	8	2	15	396
7:15 AM	16	110	20	36	302	5	7	24	28	15	15	27	605
7:30 AM	16	156	24	48	260	4	10	26	22	25	19	36	646
7:45 AM	17	192	11	28	244	7	8	13	9	20	12	19	580
8:00 AM	12	168	8	16	259	3	1	4	17	6	8	9	511
8:15 AM	7	151	1	10	292	2	3	2	12	8	5	10	503
8:30 AM	3	128	5	7	280	2	2	8	19	10	2	7	473
8:45 AM	3	130	4	6	323	3	3	2	17	8	8	5	512
9:00 AM	6	93	9	6	225	1	2	8	19	6	0	7	382
9:15 AM	5	95	3	7	230	3	3	4	22	9	3	2	386
9:30 AM	4	102	7	6	203	3	3	1	7	11	5	5	357
9:45 AM	6	114	3	2	190	1	1	2	15	3	0	7	344
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	101	1518	103	189	3046	35	46	98	202	129	79	149	5695
APPROACH %'s :	5.87%	88.15%	5.98%	5.78%	93.15%	1.07%	13.29%	28.32%	58.38%	36.13%	22.13%	41.74%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	61	626	63	128	1065	19	26	67	76	66	54	91	2342
PEAK HR FACTOR :		0.852			0.883			0.716			0.659		0.906

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006 **Day:** Wednesday

CARS

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
3:00 PM	14	204	23	26	149	4	3	10	14	28	6	46	527
3:15 PM	28	210	15	10	124	2	4	10	10	15	21	14	463
3:30 PM	18	244	21	13	122	5	8	11	11	10	9	22	494
3:45 PM	20	259	12	14	153	5	5	6	9	10	10	19	522
4:00 PM	19	260	12	9	176	3	5	7	8	8	10	13	530
4:15 PM	26	281	12	14	155	3	1	8	11	13	10	14	548
4:30 PM	11	246	8	13	174	3	4	7	13	13	10	20	522
4:45 PM	14	311	11	11	163	1	6	11	7	16	11	17	579
5:00 PM	29	317	19	20	160	8	7	6	6	12	14	15	613
5:15 PM	34	318	20	16	160	10	4	4	13	10	17	24	630
5:30 PM	26	284	19	16	172	1	4	21	8	13	19	24	607
5:45 PM	22	282	15	24	144	5	2	11	15	14	11	11	556
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	261	3216	187	186	1852	50	53	112	125	162	148	239	6591
APPROACH %'s :	7.12%	87.77%	5.10%	8.91%	88.70%	2.39%	18.28%	38.62%	43.10%	29.51%	26.96%	43.53%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	103	1230	69	63	655	20	21	42	34	51	61	80	2429
PEAK HR FACTOR :		0.942			0.976			0.735			0.857		0.964

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-5530-006
N/S Street: Kester Ave
E/W Street: Kittridge St
DATE: 8/24/2016 DAY: Wednesday
CITY: San Fernando Valley

A M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	4	0	1
7:15 AM	2	0	2	1	1	10	1	2
7:30 AM	14	4	2	0	3	16	0	0
7:45 AM	2	0	5	1	0	6	0	3
8:00 AM	1	0	1	0	1	0	0	0
8:15 AM	0	0	0	0	1	2	2	0
8:30 AM	0	0	0	1	0	1	0	1
8:45 AM	0	0	1	0	1	1	1	0
9:00 AM	0	1	1	0	0	2	1	0
9:15 AM	0	0	0	2	0	0	2	0
9:30 AM	0	0	0	0	1	1	3	1
9:45 AM	0	0	0	0	1	1	0	3
TOTALS	**19**	**5**	**13**	**5**	**10**	**44**	**10**	**11**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	4	0	0	0	0	3
7:15 AM	0	0	17	0	0	0	2	1
7:30 AM	0	0	42	0	0	1	1	0
7:45 AM	0	0	8	0	0	0	1	3
8:00 AM	0	0	1	0	0	0	0	1
8:15 AM	0	0	1	0	0	0	1	0
8:30 AM	0	0	0	1	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	1	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	1	0	0	0	0	1	0	0
TOTALS	**1**	**0**	**74**	**1**	**0**	**3**	**5**	**8**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	2	11	1	1	17	0	0	1
3:15 PM	1	3	0	0	3	0	1	0
3:30 PM	1	2	0	2	0	0	1	5
3:45 PM	2	2	0	0	3	0	4	0
4:00 PM	0	2	0	0	3	0	1	0
4:15 PM	0	3	0	0	1	1	0	0
4:30 PM	0	0	0	1	2	0	1	1
4:45 PM	2	2	0	2	0	0	0	2
5:00 PM	0	1	0	1	1	0	0	1
5:15 PM	0	0	0	0	1	0	0	2
5:30 PM	0	0	1	0	1	0	0	0
5:45 PM	0	0	0	3	1	0	0	3
TOTALS	**8**	**26**	**2**	**10**	**33**	**1**	**8**	**15**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	1	24	1	0	1	1
3:15 PM	0	0	0	6	0	0	2	0
3:30 PM	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	2	0	0	1	0
4:00 PM	0	0	3	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	2	0
4:30 PM	0	0	0	2	0	0	0	0
4:45 PM	0	0	0	1	0	0	1	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	2	1	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	0	1	1
TOTALS	**0**	**0**	**6**	**38**	**1**	**1**	**8**	**4**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
7:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	2	0	0	2	0	0	0	0	1	0	0	5
7:45 AM	0	0	0	0	2	0	0	0	0	1	0	0	3
8:00 AM	0	1	0	0	2	1	0	0	0	0	0	0	4
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	2
9:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	2

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	6	1	0	9	2	1	0	0	2	0	0	22
APPROACH %'s :	12.50%	75.00%	12.50%	0.00%	81.82%	18.18%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	

PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	1	3	0	0	6	1	0	0	0	2	0	0	13
PEAK HR FACTOR :		0.500			0.583			0.000			0.500		0.650

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006 **Day:** Wednesday

BIKES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
3:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	0	2	0	0	3	0	0	0	0	0	0	1	6
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	1	0	0	0	0	0	1	0	3
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	7	0	0	8	0	0	1	0	0	1	1	18
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	2	0	0	3	0	0	0	0	0	1	0	6
PEAK HR FACTOR :		0.500			0.750			0.000			0.250		0.500

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006 **Day:** Wednesday

BUSES

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
9:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
9:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	10	0	0	9	0	0	0	0	0	0	0	19
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%							
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	3	0	0	3	0	0	0	0	0	0	0	6
PEAK HR FACTOR :		0.750			0.375			0.000			0.000		0.750

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006 **Day:** Wednesday

BUSES

City: San Fernando Valley **Date:** 8/24/2016

PM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
3:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
3:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
3:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3	0	0	11	0	0	0	0	0	0	0	14
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%							
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	0	0	0	2	0	0	0	0	0	0	0	2
PEAK HR FACTOR :		0.000			0.500			0.000			0.000		0.500

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006 **Day:** Wednesday

HEAVY TRUCKS

City: San Fernando Valley **Date:** 8/24/2016

AM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
7:00 AM	0	1	3	4	2	0	0	1	0	0	0	0	11
7:15 AM	0	2	2	4	2	0	0	1	2	0	0	0	13
7:30 AM	0	0	1	2	4	0	0	0	0	0	0	1	8
7:45 AM	0	4	0	0	4	0	0	1	0	0	0	0	9
8:00 AM	0	0	0	0	4	0	0	1	0	0	0	0	5
8:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
8:30 AM	0	3	0	0	3	0	0	0	0	0	0	0	6
8:45 AM	0	4	0	0	9	1	0	1	0	0	0	0	15
9:00 AM	0	2	0	0	8	0	0	0	0	0	0	0	10
9:15 AM	0	5	0	0	17	0	0	1	0	0	0	0	23
9:30 AM	0	4	0	0	24	1	0	0	0	0	0	0	29
9:45 AM	0	2	0	0	6	0	0	0	0	0	0	1	9
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	29	6	10	84	2	0	6	2	0	0	2	141
APPROACH %'s :	0.00%	82.86%	17.14%	10.42%	87.50%	2.08%	0.00%	75.00%	25.00%	0.00%	0.00%	100.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	6	3	6	14	0	0	3	2	0	0	1	35
PEAK HR FACTOR :		0.563			0.833			0.417			0.250		0.673

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5530-006

Day: Wednesday

HEAVY TRUCKS

City: San Fernando Valley

Date: 8/24/2016

PM

NS/EW Streets:	Kester Ave			Kester Ave			Kittridge St			Kittridge St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	0.5	0.5	1	1	0	
3:00 PM	1	4	0	2	4	0	0	0	0	0	0	0	11
3:15 PM	1	6	3	0	3	1	0	0	0	0	0	1	15
3:30 PM	1	6	0	1	1	0	0	0	1	0	0	0	10
3:45 PM	1	5	1	1	4	0	0	1	0	0	1	0	14
4:00 PM	0	8	1	2	3	0	0	0	0	0	0	0	14
4:15 PM	0	5	0	0	2	0	0	0	0	0	0	0	7
4:30 PM	0	6	0	0	1	0	0	0	0	0	0	1	8
4:45 PM	0	5	0	1	0	0	0	0	1	1	2	0	10
5:00 PM	0	3	0	2	0	0	0	0	0	0	0	0	5
5:15 PM	0	3	2	0	2	0	0	1	0	1	0	0	9
5:30 PM	0	2	0	0	1	0	0	0	0	0	1	0	4
5:45 PM	0	4	0	0	1	0	0	0	0	0	0	0	5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	4	57	7	9	22	1	0	2	2	2	4	2	112
APPROACH %'s :	5.88%	83.82%	10.29%	28.13%	68.75%	3.13%	0.00%	50.00%	50.00%	25.00%	50.00%	25.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	13	2	3	3	0	0	1	1	2	3	0	28
PEAK HR FACTOR :		0.750			0.750			0.500			0.417		0.700

CONTROL : Signalized

APPENDIX F

RELATED PROJECT TRIP GENERATION

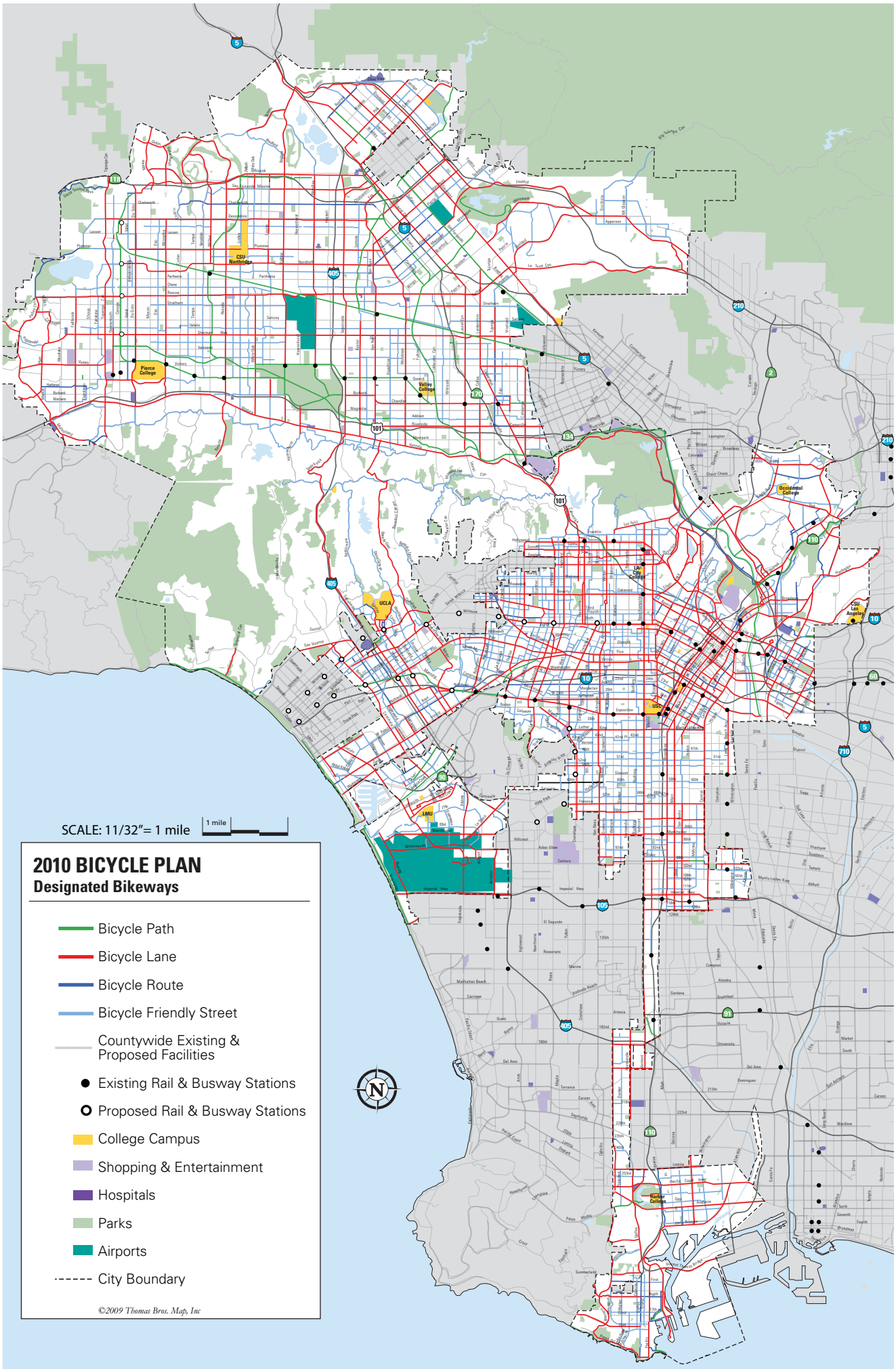
RELATED PROJECT LIST

6500 Sepulveda Boulevard

No.	Project	Size	Location	Daily Traffic	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
1	Apartments Retail	100 units 13,000 sf	6828 Van Nuys Bl	1,123	17	45	62	52	58	90
2	Townhomes Remove Single Homes	85 units 8 homes	15141 Saticoy Street	402	12	35	47	31	23	54
3	Condominiums Retail	97 units 34,775 sf	5700 Sepulveda Bl	1,813	27	42	69	62	61	123
4	Medical Office	79,127 sf	15225 Vanowen Street	2,898	157	42	199	80	218	298
5	Light Industrial	283,920 sf	7600 Tyrone Avenue	753	9	67	76	9	105	114
6	Residentail	126 units	7121 Woodley Avenue	796	12	48	60	48	26	74
7	Mixed-Use Project	not available	6001 Van Nuys Boulevard	1,793	20	129	149	122	44	166
8	Single Family Homes	58 units	14700 Sherman Way	580	11	32	43	37	21	58
9	Apartments & Retail	not available	7111 Sepulveda Boulevard	634	15	79	94	43	11	54

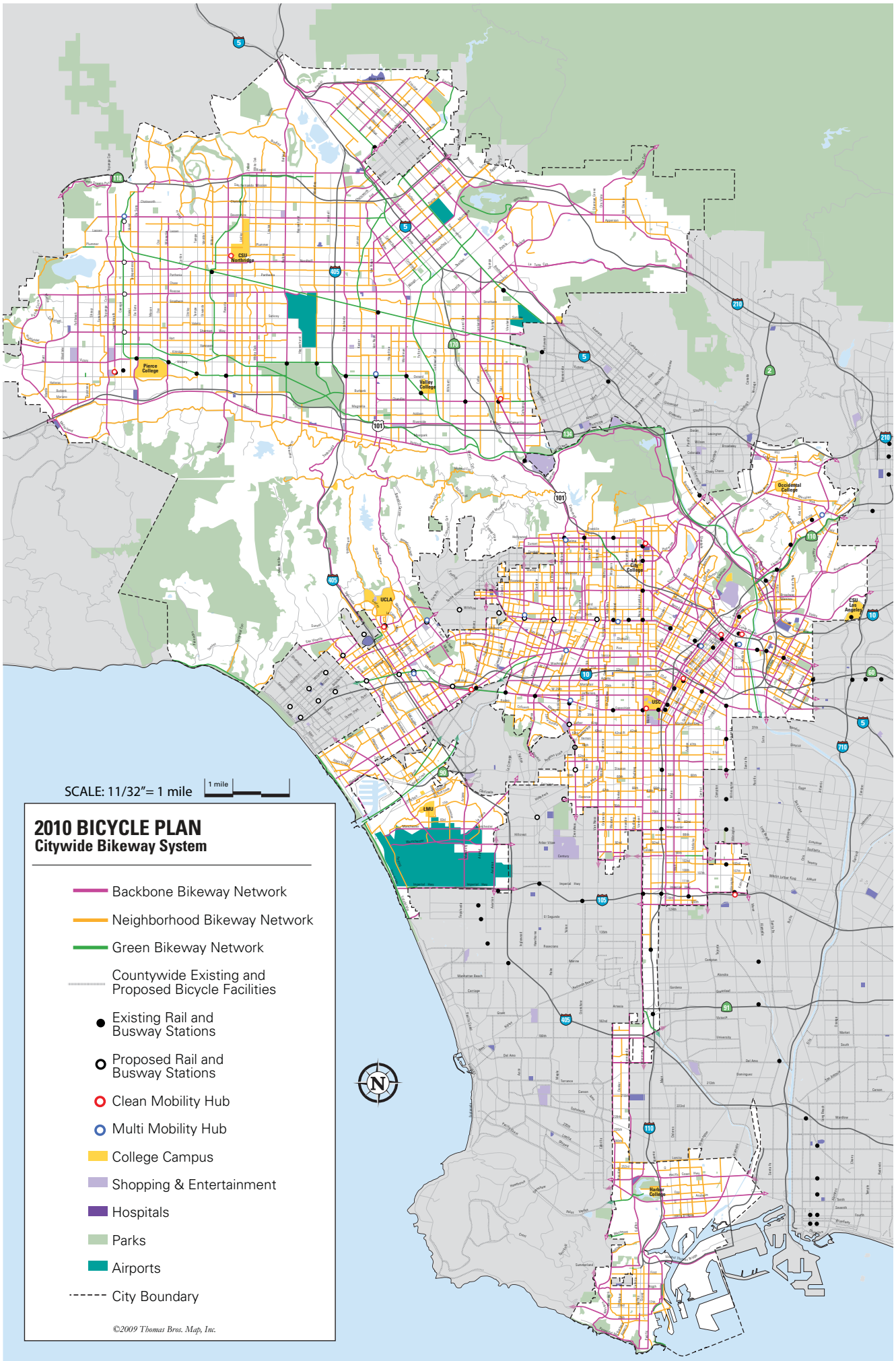
APPENDIX G

BICYCLE MASTER PLANS



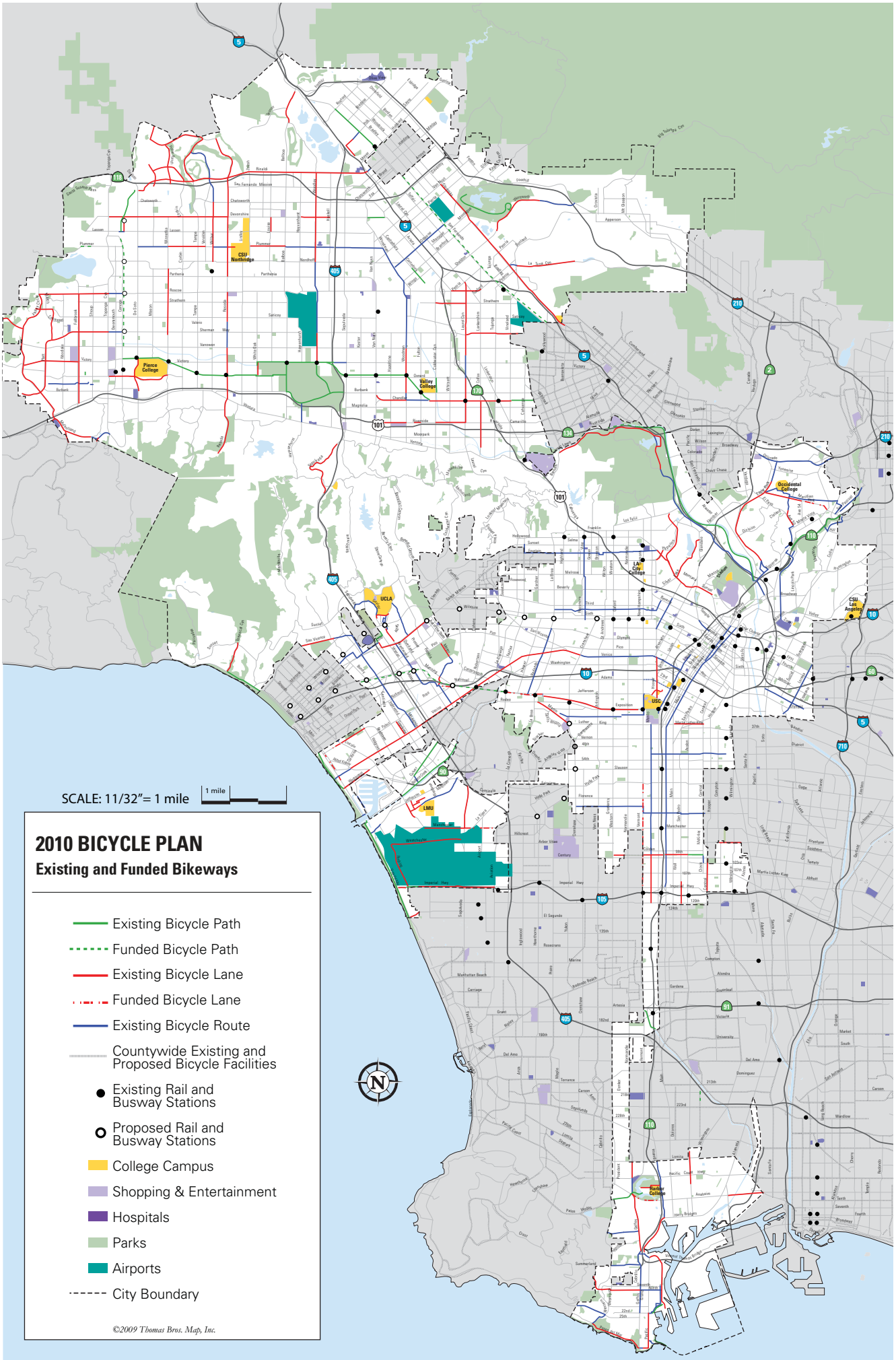
Prepared by City of Los Angeles Planning Department • Graphics Section • March 2011

039_map2:06.29.11



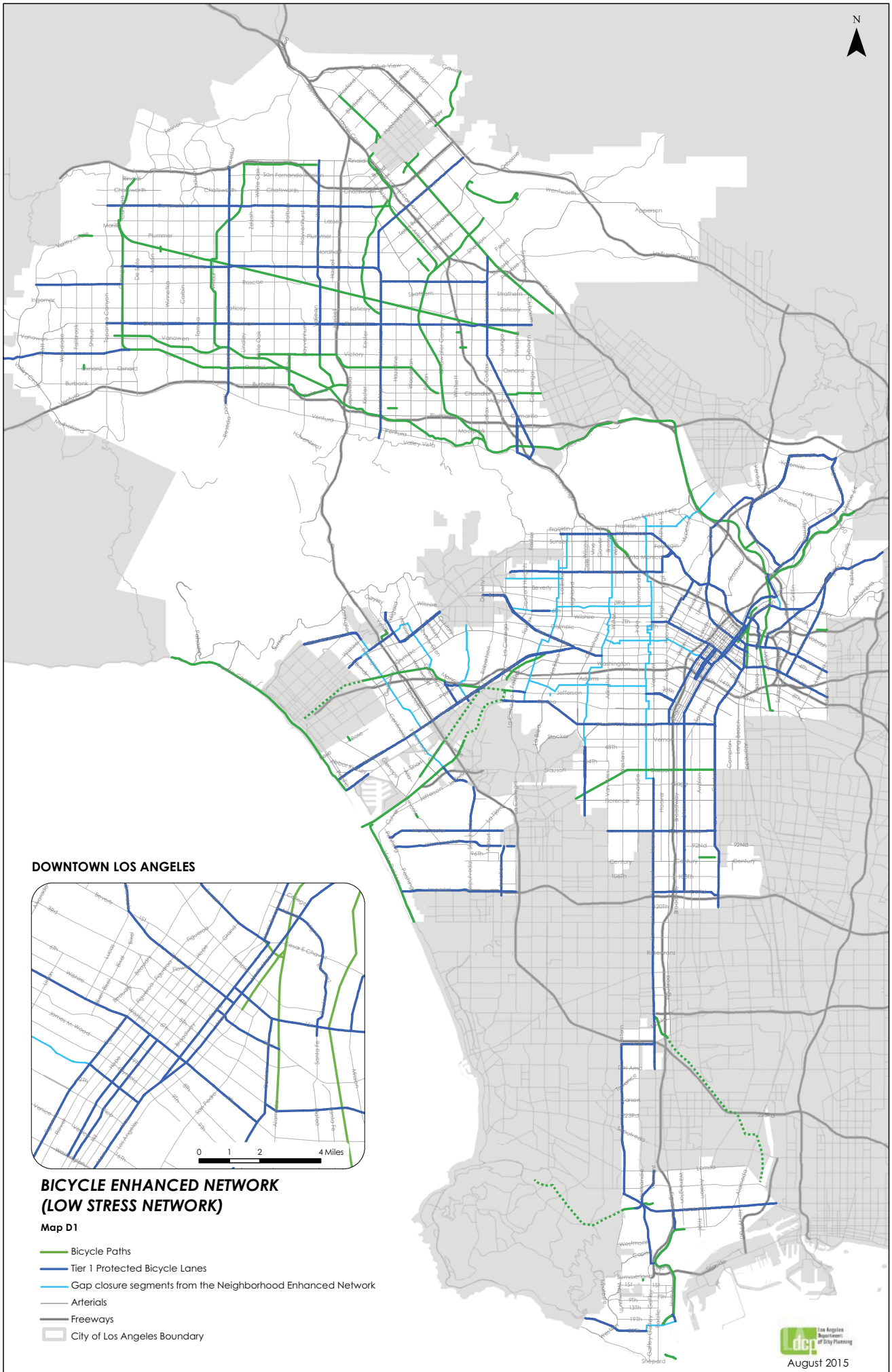
Prepared by City of Los Angeles Planning Department • Graphics Section • March 2011

039_map1:06.29.11



Prepared by City of Los Angeles Planning Department • Graphics Section • March, 2011

039_map3:07.07.11


N
DOWNTOWN LOS ANGELES
0 1 2 4 Miles
BICYCLE ENHANCED NETWORK
(LOW STRESS NETWORK)
Map D1
Bicycle Paths
Tier 1 Protected Bicycle Lanes
Gap closure segments from the Neighborhood Enhanced Network
Arterials
Freeways
City of Los Angeles Boundary
0 3 6 9 Miles
August 2015

APPENDIX H

LEVEL OF SERVICE
WORKSHEETS

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	HASKELL AVENUE	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
1	East-West Street:	405 FREEWAY SB RAMPS	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	173	1	138	0	173	139	2	186	1	152	0	186	1	153	0	186	1	153
	Through-Right		1							1				1				1	
	Right	102	0	102	3	105	105	9	117	0	117	3	120	0	120	0	120	0	120
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	197	1	197	3	200	200	4	213	1	213	3	216	1	216	0	216	1	216
	Left-Through		0							0				0				0	
	Through	714	2	**357**	0	714	**357**	3	761	2	**381**	0	761	2	**381**	0	761	2	**381**
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	913	1	**480**	1	914	**481**	2	971	1	**519**	1	972	1	**520**	0	972	1	**520**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	47	0	480	1	48	481	16	66	0	519	1	67	0	520	0	67	0	520
	Left-Through-Right		0							0				0				0	
	Left-Right		1							1				1				1	
CRITICAL VOLUMES		North-South:		357	North-South:		357	North-South:			381	North-South:			381	North-South:			381
		East-West:		480	East-West:		481	East-West:			519	East-West:			520	East-West:			520
		SUM:		837	SUM:		838	SUM:			900	SUM:			901	SUM:			901
VOLUME/CAPACITY (*V/C*) RATIO:				0.558			0.559				0.600				0.601				0.601
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.458**			**0.459**				**0.500**				**0.501**				**0.501**
LEVEL OF SERVICE (LOS):				**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	0.001
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	HASKELL AVENUE	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
1	East-West Street:	405 FREEWAY SB RAMPS	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through		0							0				0				0	
Through	402	1	**275**	0	402	**276**	3	430	1	**296**	0	430	1	**297**	0	430	1	**297**
Through-Right		1							1				1				1	
Right	148	0	148	1	149	149	5	162	0	162	1	163	0	163	0	163	0	163
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	196	1	**196**	1	197	**197**	22	230	1	**230**	1	231	1	**231**	0	231	1	**231**
Left-Through		0							0				0				0	
Through	218	2	109	0	218	109	2	233	2	117	0	233	2	117	0	233	2	117
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through		0							0				0				0	
Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	902	1	**538**	3	905	**541**	9	966	1	**579**	3	969	1	**582**	0	969	1	**582**
Left-Through		0							0				0				0	
Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Through-Right		0							0				0				0	
Right	173	0	538	3	176	541	8	192	0	579	3	195	0	582	0	195	0	582
Left-Through-Right		0							0				0				0	
Left-Right		1							1				1				1	
CRITICAL VOLUMES	*North-South:*		471	*North-South:*		473	*North-South:*			526	*North-South:*			528	*North-South:*			528
	East-West:		538	*East-West:*		541	*East-West:*			579	*East-West:*			582	*East-West:*			582
	SUM:		1009	*SUM:*		1014	*SUM:*			1105	*SUM:*			1110	*SUM:*			1110
VOLUME/CAPACITY (*V/C*) RATIO:			0.673			0.676				0.737				0.740				0.740
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.573**			**0.576**				**0.637**				**0.640**				**0.640**
LEVEL OF SERVICE (LOS):			**A**			**A**				**B**				**B**				**B**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	HASKELL AVENUE	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
2	East-West Street:	VICTORY BOULEVARD	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			3			3			3			3						3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0						0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	3	NB--	0	SB--	3	NB--	0	SB--	3	NB--	0	SB--	3	NB--	0	SB--	3
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2				2				2				2				2
Override Capacity				0				0				0				0				0

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	73	0	73	0	73	73	0	77	0	77	0	77	0	77	0	77	0	77
	Left-Through		0							0				0				0	
	Through	13	0	**89**	0	13	**89**	0	14	0	**94**	0	14	0	**94**	0	14	0	**94**
	Through-Right		0							0				0				0	
	Right	3	0	0	0	3	0	0	3	0	0	0	3	0	0	0	3	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	849	1	**522**	1	850	**523**	5	906	1	**557**	1	907	1	**557**	0	907	1	**557**
	Left-Through		1							1				1				1	
	Through	195	0	522	0	195	523	0	207	0	557	0	207	0	557	0	207	0	557
	Through-Right		0							0				0				0	
	Right	535	1	508	0	535	508	0	568	1	539	0	568	1	539	0	568	1	539
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	27	1	**27**	0	27	**27**	0	29	1	**29**	0	29	1	**29**	0	29	1	**29**
	Left-Through		0							0				0				0	
	Through	1576	2	562	2	1578	563	27	1699	2	606	2	1701	2	606	0	1701	2	606
	Through-Right		1							1				1				1	
	Right	111	0	111	0	111	111	0	118	0	118	0	118	0	118	0	118	0	118
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	2	1	2	0	2	2	0	2	1	2	0	2	1	2	0	2	1	2
	Left-Through		0							0				0				0	
	Through	1634	3	**545**	8	1642	**547**	24	1758	3	**586**	8	1766	3	**589**	0	1766	3	**589**
	Through-Right		0							0				0				0	
	Right	237	1	0	3	240	0	11	263	1	0	3	266	1	0	0	266	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		611	*North-South:*		612	*North-South:*			651	*North-South:*			651	*North-South:*			651
		East-West:		572	*East-West:*		574	*East-West:*			615	*East-West:*			618	*East-West:*			618
		SUM:		1183	*SUM:*		1186	*SUM:*			1266	*SUM:*			1269	*SUM:*			1269
VOLUME/CAPACITY *(V/C)* RATIO:				0.830			0.832				0.888				0.891				0.891
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.730**			**0.732**				**0.788**				**0.791**				**0.791**
LEVEL OF SERVICE (LOS):				C			C				C				C				C

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	HASKELL AVENUE	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
2	East-West Street:	VICTORY BOULEVARD	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			3			3			3			3			3				3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB--	3
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	160	0	160	0	160	160	0	170	0	170	0	170	0	170	0	170	0	170
	Left-Through		0							0				0				0	
	Through	59	0	**242**	0	59	**242**	0	63	0	**257**	0	63	0	**257**	0	63	0	**257**
	Through-Right		0							0				0				0	
	Right	23	0	0	0	23	0	0	24	0	0	0	24	0	0	0	24	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	591	1	**324**	3	594	**326**	11	638	1	**349**	3	641	1	**351**	0	641	1	**351**
	Left-Through		1							1				1				1	
	Through	57	0	324	0	57	326	0	60	0	349	0	60	0	351	0	60	0	351
	Through-Right		0							0				0				0	
	Right	472	1	367	0	472	367	0	501	1	390	0	501	1	390	0	501	1	390
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	105	1	**105**	0	105	**105**	0	111	1	**111**	0	111	1	**111**	0	111	1	**111**
	Left-Through		0							0				0				0	
	Through	1705	2	594	8	1713	597	38	1847	2	643	8	1855	2	646	0	1855	2	646
	Through-Right		1							1				1				1	
	Right	77	0	77	0	77	77	0	82	0	82	0	82	0	82	0	82	0	82
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	1	1	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1
	Left-Through		0							0				0				0	
	Through	1646	3	**549**	4	1650	**550**	31	1778	3	**593**	4	1782	3	**594**	0	1782	3	**594**
	Through-Right		0							0				0				0	
	Right	394	1	232	1	395	232	8	426	1	252	1	427	1	252	0	427	1	252
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES			*North-South:*	566		*North-South:*	568		*North-South:*		606		*North-South:*		608		*North-South:*		608
			East-West:	654		*East-West:*	655		*East-West:*		704		*East-West:*		705		*East-West:*		705
			SUM:	1220		*SUM:*	1223		*SUM:*		1310		*SUM:*		1313		*SUM:*		1313
VOLUME/CAPACITY *(V/C)* RATIO:				0.856			0.858				0.919				0.921				0.921
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.756**			**0.758**				**0.819**				**0.821**				**0.821**
LEVEL OF SERVICE (LOS):				C			C				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	NB 405 FREEWAY RAMPS	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
3	East-West Street:	VICTORY BOULEVARD	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			3			3			3			3			3				3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through		0							0				0				0	
Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	234	2	**129**	3	237	**130**	1	249	2	**137**	3	252	2	**139**	0	252	2	**139**
Left-Through		0							0				0				0	
Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Through-Right		0							0				0				0	
Right	210	1	74	0	210	74	13	236	1	90	0	236	1	90	0	236	1	90
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	273	1	**273**	0	273	**273**	2	292	1	**292**	0	292	1	**292**	0	292	1	**292**
Left-Through		0							0				0				0	
Through	2183	3	728	8	2191	730	25	2342	3	781	8	2350	3	783	0	2350	3	783
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through		0							0				0				0	
Through	1682	3	**561**	4	1686	**562**	22	1807	3	**602**	4	1811	3	**604**	0	1811	3	**604**
Through-Right		0							0				0				0	
Right	566	1	502	1	567	502	16	617	1	549	1	618	1	549	0	618	1	549
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		129	*North-South:*		130	*North-South:*			137	*North-South:*			139	*North-South:*			139
	East-West:		834	*East-West:*		835	*East-West:*			894	*East-West:*			896	*East-West:*			896
	SUM:		963	*SUM:*		965	*SUM:*			1031	*SUM:*			1035	*SUM:*			1035
VOLUME/CAPACITY *(V/C)* RATIO:			0.676			0.677				0.724				0.726				0.726
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.576**			**0.577**				**0.624**				**0.626**				**0.626**
LEVEL OF SERVICE (LOS):			**A**			**A**				**B**				**B**				**B**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	NB 405 FREEWAY RAMPS	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
3	East-West Street:	VICTORY BOULEVARD	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			3			3			3			3			3				3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
Left-Through		0							0				0				0	
Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	250	2	138	5	255	140	2	267	2	147	5	272	2	150	0	272	2	150
Left-Through		0							0				0				0	
Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Through-Right		0							0				0				0	
Right	432	1	**296**	0	432	**296**	20	478	1	**328**	0	478	1	**328**	0	478	1	**328**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	272	1	**272**	0	272	**272**	11	300	1	**300**	0	300	1	**300**	0	300	1	**300**
Left-Through		0							0				0				0	
Through	2057	3	686	11	2068	689	48	2231	3	744	11	2242	3	747	0	2242	3	747
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through		0							0				0				0	
Through	1601	3	**534**	6	1607	**536**	18	1717	3	**572**	6	1723	3	**574**	0	1723	3	**574**
Through-Right		0							0				0				0	
Right	476	1	407	3	479	409	8	513	1	440	3	516	1	441	0	516	1	441
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		296	*North-South:*		296	*North-South:*			328	*North-South:*			328	*North-South:*			328
	East-West:		806	*East-West:*		808	*East-West:*			872	*East-West:*			874	*East-West:*			874
	SUM:		1102	*SUM:*		1104	*SUM:*			1200	*SUM:*			1202	*SUM:*			1202
VOLUME/CAPACITY *(V/C)* RATIO:			0.773			0.775				0.842				0.844				0.844
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.673**			**0.675**				**0.742**				**0.744**				**0.744**
LEVEL OF SERVICE (LOS):			**B**			**B**				**C**				**C**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	SEPULVEDA BOULEVARD	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
4	East-West Street:	VANOWEN STREET	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	6500 SEPULVEDA

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			4			4			4				4				4	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			1			1			1				1				1	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	144	1	**144**	8	152	**152**	0	153	1	**153**	8	161	1	**161**	0	161	1	**161**
	Left-Through		0							0				0				0	
	Through	607	2	238	5	612	239	9	653	2	260	5	658	2	262	0	658	2	262
	Through-Right		1							1				1				1	
	Right	106	0	106	0	106	106	16	128	0	128	0	128	0	128	0	128	0	128
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	201	1	201	0	201	201	16	229	1	229	0	229	1	229	0	229	1	229
	Left-Through		0							0				0				0	
	Through	1617	2	**582**	1	1618	**582**	23	1739	2	**870**	1	1740	2	**870**	0	1740	2	**870**
	Through-Right		1							0				0				0	
	Right	128	0	128	0	128	128	0	136	1	113	0	136	1	113	0	136	1	113
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	44	1	44	0	44	44	0	47	1	47	0	47	1	47	0	47	1	47
	Left-Through		0							0				0				0	
	Through	737	1	**442**	0	737	**443**	12	794	1	**475**	0	794	1	**476**	0	794	1	**476**
	Through-Right		1							1				1				1	
	Right	146	0	146	2	148	148	0	155	0	155	2	157	0	157	0	157	0	157
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	121	1	**121**	1	122	**122**	4	132	1	**132**	1	133	1	**133**	0	133	1	**133**
	Left-Through		0							0				0				0	
	Through	980	2	490	0	980	490	18	1058	2	529	0	1058	2	529	0	1058	2	529
	Through-Right		0							0				0				0	
	Right	153	1	53	0	153	53	4	166	1	52	0	166	1	52	0	166	1	52
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		726	*North-South:*		734	*North-South:*			1023	*North-South:*			1031	*North-South:*			1031
		East-West:		563	*East-West:*		565	*East-West:*			607	*East-West:*			609	*East-West:*			609
		SUM:		1289	*SUM:*		1299	*SUM:*			1630	*SUM:*			1640	*SUM:*			1640
	VOLUME/CAPACITY *(V/C)* RATIO:			0.937			0.945				1.185				1.193				1.193
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.867**			**0.875**				**1.115**				**1.123**				**1.123**
	LEVEL OF SERVICE (LOS):			**D**			**D**				**F**				**F**				**F**

REMARKS: CAPACITY REDUCED 3% TO ACCOUNT FOR HIGH PED VOLUMES

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.008	Δ*v/c* after mitigation:	0.008
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	SEPULVEDA BOULEVARD	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
4	East-West Street:	VANOWEN STREET	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			4			4			4			4			4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			1			1			1			1			1				1
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	221	1	221	4	225	225	0	235	1	235	4	239	1	239	0	239	1	239
Left-Through		0							0				0				0	
Through	1420	2	**515**	3	1423	**516**	25	1532	2	**557**	3	1535	2	**558**	0	1535	2	**558**
Through-Right		1							1				1				1	
Right	124	0	124	0	124	124	8	140	0	140	0	140	0	140	0	140	0	140
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	143	1	**143**	0	143	**143**	8	160	1	**160**	0	160	1	**160**	0	160	1	**160**
Left-Through		0							0				0				0	
Through	815	2	331	5	820	333	23	888	2	444	5	893	2	447	0	893	2	447
Through-Right		1							0				0				0	
Right	179	0	179	0	179	179	0	190	1	132	0	190	1	132	0	190	1	132
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	109	1	**109**	0	109	**109**	0	116	1	**116**	0	116	1	116	0	116	1	116
Left-Through		0							0				0				0	
Through	835	1	459	0	835	463	27	913	1	501	0	913	1	**505**	0	913	1	**505**
Through-Right		1							1				1				1	
Right	83	0	83	8	91	91	0	88	0	88	8	96	0	96	0	96	0	96
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	118	1	118	5	123	123	22	147	1	147	5	152	1	**152**	0	152	1	**152**
Left-Through		0							0				0				0	
Through	1000	2	**500**	0	1000	**500**	12	1073	2	**537**	0	1073	2	537	0	1073	2	537
Through-Right		0							0				0				0	
Right	234	1	163	0	234	163	22	270	1	190	0	270	1	190	0	270	1	190
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		658	*North-South:*		659	*North-South:*			717	*North-South:*			718	*North-South:*			718
	East-West:		609	*East-West:*		609	*East-West:*			653	*East-West:*			657	*East-West:*			657
	SUM:		1267	*SUM:*		1268	*SUM:*			1370	*SUM:*			1375	*SUM:*			1375
VOLUME/CAPACITY *(V/C)* RATIO:			0.921			0.922				0.996				1.000				1.000
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.851**			**0.852**				**0.926**				**0.930**				**0.930**
LEVEL OF SERVICE (LOS):			D			D				E				E				E

REMARKS: CAPACITY REDUCED 3% TO ACCOUNT FOR HIGH PED VOLUMES

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	SEPULVEDA BOULEVARD	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
5	East-West Street:	VICTORY BOULEVARD	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	6500 SEPULVEDA

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			4			4			4				4				4	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		3	NB-- 0 SB--		3	NB-- 0 SB--		3		NB-- 0 SB--		3		NB-- 0 SB--		3	
		EB-- 3 WB--		3	EB-- 3 WB--		3	EB-- 3 WB--		3		EB-- 3 WB--		3		EB-- 3 WB--		3	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	469	2	**258**	0	469	**258**	5	503	2	**277**	0	503	2	**277**	0	503	2	**277**
	Left-Through		0							0				0				0	
	Through	576	2	208	2	578	209	17	628	2	227	2	630	2	228	0	630	2	228
	Through-Right		1							1				1				1	
	Right	49	0	49	0	49	49	2	54	0	54	0	54	0	54	0	54	0	54
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	286	2	157	8	294	162	3	307	2	169	8	315	2	173	0	315	2	173
	Left-Through		0							0				0				0	
	Through	1548	3	**516**	9	1557	**519**	17	1660	3	**553**	9	1669	3	**556**	0	1669	3	**556**
	Through-Right		0							0				0				0	
	Right	134	1	38	17	151	51	7	149	1	43	17	166	1	56	0	166	1	56
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	96	1	96	4	100	100	4	106	1	106	4	110	1	110	0	110	1	110
	Left-Through		0							0				0				0	
	Through	1634	3	**545**	0	1634	**545**	18	1752	3	**584**	0	1752	3	**584**	0	1752	3	**584**
	Through-Right		0							0				0				0	
	Right	580	1	322	0	580	322	3	619	1	342	0	619	1	342	0	619	1	342
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	83	1	**83**	0	83	**83**	14	102	1	**102**	0	102	1	**102**	0	102	1	**102**
	Left-Through		0							0				0				0	
	Through	1481	3	494	0	1481	494	18	1590	3	530	0	1590	3	530	0	1590	3	530
	Through-Right		0							0				0				0	
	Right	90	1	0	2	92	0	14	110	1	0	2	112	1	0	0	112	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		774	*North-South:*		777	*North-South:*			830	*North-South:*			833	*North-South:*			833
		East-West:		628	*East-West:*		628	*East-West:*			686	*East-West:*			686	*East-West:*			686
		SUM:		1402	*SUM:*		1405	*SUM:*			1516	*SUM:*			1519	*SUM:*			1519
	VOLUME/CAPACITY *(V/C)* RATIO:			1.020			1.022				1.103				1.105				1.105
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.920**			**0.922**				**1.003**				**1.005**				**1.005**
	LEVEL OF SERVICE (LOS):			**E**			**E**				**F**				**F**				**F**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	SEPULVEDA BOULEVARD	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
5	East-West Street:	VICTORY BOULEVARD	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	6500 SEPULVEDA

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			4			4			4				4				4	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		3	NB-- 0 SB--		3	NB-- 0 SB--		3		NB-- 0 SB--		3		NB-- 0 SB--		3	
		EB-- 3 WB--		3	EB-- 3 WB--		3	EB-- 3 WB--		3		EB-- 3 WB--		3		EB-- 3 WB--		3	
	ATSAC-1 or ATSAC+ATCS-2?			1			1			1				1				1	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	562	2	309	0	562	309	7	603	2	332	0	603	2	332	0	603	2	332
	Left-Through		0							0				0				0	
	Through	1475	2	**535**	8	1483	**538**	20	1585	2	**578**	8	1593	2	**580**	0	1593	2	**580**
	Through-Right		1							1				1				1	
	Right	131	0	131	0	131	131	9	148	0	148	0	148	0	148	0	148	0	148
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	247	2	**136**	4	251	**138**	13	275	2	**151**	4	279	2	**153**	0	279	2	**153**
	Left-Through		0							0				0				0	
	Through	716	3	239	5	721	240	23	783	3	261	5	788	3	263	0	788	3	263
	Through-Right		0							0				0				0	
	Right	215	1	37	9	224	30	9	237	1	42	9	246	1	35	0	246	1	35
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	178	1	178	16	194	**194**	6	195	1	195	16	211	1	211	0	211	1	211
	Left-Through		0							0				0				0	
	Through	1537	3	**512**	0	1537	512	35	1666	3	**555**	0	1666	3	**555**	0	1666	3	**555**
	Through-Right		0							0				0				0	
	Right	446	1	137	0	446	137	7	480	1	148	0	480	1	148	0	480	1	148
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	54	1	**54**	0	54	54	11	68	1	**68**	0	68	1	**68**	0	68	1	**68**
	Left-Through		0							0				0				0	
	Through	1137	3	379	0	1137	**379**	12	1219	3	406	0	1219	3	406	0	1219	3	406
	Through-Right		0							0				0				0	
	Right	136	1	0	8	144	6	7	151	1	0	8	159	1	6	0	159	1	6
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		671	*North-South:*		676	*North-South:*			729	*North-South:*			733	*North-South:*			733
		East-West:		566	*East-West:*		573	*East-West:*			623	*East-West:*			623	*East-West:*			623
		SUM:		1237	*SUM:*		1249	*SUM:*			1352	*SUM:*			1356	*SUM:*			1356
	VOLUME/CAPACITY *(V/C)* RATIO:			0.900			0.908				0.983				0.986				0.986
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.830**			**0.838**				**0.913**				**0.916**				**0.916**
	LEVEL OF SERVICE (LOS):			**D**			**D**				**E**				**E**				**E**

REMARKS: CAPACITY REDUCED 3% FOR HIGH PED VOLUME

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	KESTER AVENUE	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
6	East-West Street:	KITTRIDGE STREET	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	61	1	**61**	1	62	**62**	0	65	1	**65**	1	66	1	**66**	0	66	1	**66**
	Left-Through		0							0				0				0	
	Through	635	2	318	0	635	318	10	684	2	342	0	684	2	342	0	684	2	342
	Through-Right		0							0				0				0	
	Right	66	1	33	0	66	33	0	70	1	35	0	70	1	35	0	70	1	35
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	134	1	134	0	134	134	0	142	1	142	0	142	1	142	0	142	1	142
	Left-Through		0							0				0				0	
	Through	1082	1	**551**	0	1082	**551**	6	1154	1	**587**	0	1154	1	**588**	0	1154	1	**588**
	Through-Right		1							1				1				1	
	Right	19	0	19	1	20	20	0	20	0	20	1	21	0	21	0	21	0	21
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	26	1	26	6	32	32	0	28	1	28	6	34	1	34	0	34	1	34
	Left-Through		0							0				0				0	
	Through	70	0	**148**	0	70	**151**	0	74	0	**157**	0	74	0	**160**	0	74	0	**160**
	Through-Right		1							1				1				1	
	Right	78	0	0	3	81	0	0	83	0	0	3	86	0	0	0	86	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	66	1	**66**	0	66	**66**	0	70	1	**70**	0	70	1	**70**	0	70	1	**70**
	Left-Through		0							0				0				0	
	Through	54	1	54	0	54	54	0	57	1	57	0	57	1	57	0	57	1	57
	Through-Right		0							0				0				0	
	Right	92	1	25	0	92	25	0	98	1	27	0	98	1	27	0	98	1	27
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		612	*North-South:*		613	*North-South:*			652	*North-South:*			654	*North-South:*			654
		East-West:		214	*East-West:*		217	*East-West:*			227	*East-West:*			230	*East-West:*			230
		SUM:		826	*SUM:*		830	*SUM:*			879	*SUM:*			884	*SUM:*			884
VOLUME/CAPACITY *(V/C)* RATIO:				0.551			0.553				0.586				0.589				0.589
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.451**			**0.453**				**0.486**				**0.489**				**0.489**
LEVEL OF SERVICE (LOS):				**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	KESTER AVENUE	Year of Count:	2016	Ambient Growth: (%):	2	Conducted by:	LF	Date:	9/24/2016
6	East-West Street:	KITTRIDGE STREET	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	6500 SEPULVEDA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	103	1	103	3	106	106	0	109	1	109	3	112	1	112	0	112	1	112
	Left-Through		0							0				0				0	
	Through	1243	2	**622**	0	1243	**622**	7	1326	2	**663**	0	1326	2	**663**	0	1326	2	**663**
	Through-Right		0							0				0				0	
	Right	71	1	45	0	71	45	0	75	1	47	0	75	1	47	0	75	1	47
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	66	1	**66**	0	66	**66**	0	70	1	**70**	0	70	1	**70**	0	70	1	**70**
	Left-Through		0							0				0				0	
	Through	660	1	340	0	660	341	13	713	1	367	0	713	1	368	0	713	1	368
	Through-Right		1							1				1				1	
	Right	20	0	20	1	21	21	0	21	0	21	1	22	0	22	0	22	0	22
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	21	1	21	3	24	24	0	22	1	22	3	25	1	25	0	25	1	25
	Left-Through		0							0				0				0	
	Through	43	0	**78**	0	43	**80**	0	46	0	**83**	0	46	0	**85**	0	46	0	**85**
	Through-Right		1							1				1				1	
	Right	35	0	0	2	37	0	0	37	0	0	2	39	0	0	0	39	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	53	1	**53**	0	53	**53**	0	56	1	**56**	0	56	1	**56**	0	56	1	**56**
	Left-Through		0							0				0				0	
	Through	64	1	64	0	64	64	0	68	1	68	0	68	1	68	0	68	1	68
	Through-Right		0							0				0				0	
	Right	80	1	47	0	80	47	0	85	1	50	0	85	1	50	0	85	1	50
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		688	*North-South:*		688	*North-South:*			733	*North-South:*			733	*North-South:*			733
		East-West:		131	*East-West:*		133	*East-West:*			139	*East-West:*			141	*East-West:*			141
		SUM:		819	*SUM:*		821	*SUM:*			872	*SUM:*			874	*SUM:*			874
VOLUME/CAPACITY *(V/C)* RATIO:				0.546			0.547				0.581				0.583				0.583
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.446**			**0.447**				**0.481**				**0.483**				**0.483**
LEVEL OF SERVICE (LOS):				**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A