EXHIBIT E

Mitigated Negative Declaration and Appendices

City of Los Angeles

Department of City Planning

City Hall • 200 N. Spring Street, Room 621 • Los Angeles, CA 90012

DOC City NG No.- Cert Date

INITIAL STUDY/Mitigated Negative Declaration

WILSHIRE COMMUNITY PLAN AREA

3170 West Olympic Boulevard

Case Number: ENV-2016-3663-MND

Project Address: 3170 and 3188 West Olympic Boulevard; 1006, 1010, 1012, 1014, 1020 South Serrano Avenue; 1007, 1011, 1015, 1017, 1019, 1021 South Hobart Boulevard.

Project Location: The Project is located in the City of Los Angeles along the south side of W. Olympic Boulevard between S. Hobart Boulevard and S. Serrano Avenue and extending south along those streets approximately 200 feet.

Council District: 10; Herb J. Wesson, Jr.

Project Description: The Project would involve the demolition of an existing one-story commercial retail building, related surface parking, and 5 residential buildings (a one-story single-family dwelling, a two-story single-family dwelling and three multi-family rental units that are one-story) for the construction of a new 7-story mixed-use structure above two levels of subterranean parking. The Project would contain 252 dwelling units, of which 46 units would be designated as restricted affordable to Very Low Income Households, and 32,100 square feet of retail space. The Project would include approximately 311 parking spaces using Parking Option 3 and would be located at-grade behind the commercial, on a mezzanine level and within two subterranean levels. The Project also includes 272 long-term bicycle parking spaces and 46 short-term bicycle parking spaces. The Project would contain a total of 270,199 square feet of floor area and an average Floor Area Ratio (FAR) of 6.09:1. Approximately 144,251 square feet and an FAR of 5.79:1 is in the C2-1 Zone, and 125,948 square feet and an FAR of 6.39:1 in the R4-1 Zone. The Project would be 85 feet in height with roof structures up to 91 feet in height.

The Applicant has requested the following entitlement: Three (3) On-Menu Density Bonus Incentives pursuant to Section 12.22 A.25(g)(2) of the LAMC to (1) reduce the front yard on Hobart Boulevard in the R4-1 Zone by 20% from 15 feet to 12 feet; (2) to reduce the front yard on Serrano Avenue in the R4-1 Zone by 20% from 15 feet to 20 feet; and (3) to reduce the side yard in the R4-1 Zone by 20% from 10 feet to 8 feet. The applicant also requests two (2) Waivers of Development Standards pursuant to Section 12.22 A.25(g)(3) of the LAMC to (1) use pre-dedication area of any land required to be dedicated for street or alley purposes as lot area for purposes of calculating the maximum density permitted by the

underlying zone in which the project is located, and (2) to average the floor area, density, parking or open space, and permitted vehicular access from a less restrictive zone to a more restrictive zone. The applicant is requesting a Conditional Use Permit pursuant to Section 12.24 U.26 of the LAMC to allow a density bonus increase greater than the maximum permitted in Section 12.22 A.25, to 95% over the entire Project Site in order to permit 252 dwelling units in lieu of the otherwise permitted 129 dwelling units, and pursuant to 12.24 F of the LAMC an increase in the permitted Floor Area Ratio (FAR) to 6.09 in lieu of 1.5:1 in the C2-1 Zone and 3:1 in the R4-1 Zone. The applicant seeks approval of Site Plan Review pursuant to Section 16.05 of the LAMC; and a Vesting Tentative Tract Map to merge and re-subdivide eight existing lots into three lots, Lot 1 a ground lot, Lot 2 a residential lot consisting of 252 apartment units and parking, and Lot 3 a commercial lot consisting of 32,100 square feet to be subdivided into a maximum of 33 commercial units and parking. In addition, the Project would require ministerial approvals associated with construction of the project, including but not limited to the removal of 22 trees on-site and 8 street trees (5 street trees on Olympic Boulevard, 1 street tree on Hobart Boulevard and 2 street trees on Serrano Avenue), demolition, grading, excavation, a haul route for the export of 37,660 cubic yards of dirt, and building permits.

APPLICANTS:	**PREPARED BY:**	**ON BEHALF OF:**
Choi Bo Sung, Inc. CBS Property Group LLC 3170 W Olympic Blvd, Suite #G Los Angeles, CA 90006	Meridian Consultants LLC 910 Hampshire Rd., Ste. V Westlake Village, CA 91361	City of Los Angeles Department of City Planning Central Project Planning

CITY OF LOS ANGELES
CALIFORNIA ENVIRONMENTAL QUALITY ACT
PROPOSED MITIGATED NEGATIVE DECLARATION

LEAD CITY AGENCY:		**COUNCIL DISTRICT:**
City of Los Angeles, Department of City Planning		CD 10 – Herb J. Wesson, Jr.
PROJECT TITLE:	**ENVIRONMENTAL CASE:**	**CASE NOS:**
3170 West Olympic Boulevard	ENV-2016-3663-MND	CPC-2016-3662-CU-DB-SPR VTT-74311

PROJECT LOCATION: 3170 and 3188 West Olympic Boulevard; 1006, 1010, 1012, 1014, 1020 South Serrano Avenue; 1007, 1011, 1015, 1017, 1019, 1021 South Hobart Boulevard.

PROJECT DESCRIPTION: The Project would involve the demolition of an existing commercial retail building, related surface parking, and 5 residential buildings (a one-story single-family dwelling, a two-story single-family dwelling and three multi-family rental units that are one-story) for the construction of a new 7-story mixed-use structure above two levels of subterranean parking. The Project would contain 252 dwelling units, 46 of which would be designated as affordable, and 32,100 square feet of retail space. The Project would include approximately 311 parking spaces using Parking Option 3 and would be located at-grade behind the commercial, on a mezzanine level and within two subterranean levels. The Project also includes 272 long-term bicycle parking spaces and 46 short-term bicycle parking spaces. The Project would contain a total of 270,199 square feet of floor area and an average Floor Area Ratio (FAR) of 6.09:1. Approximately 144,251 square feet and an FAR of 5.79:1 is in the C2-1 Zone, and 125,948 square feet and an FAR of 6.39:1 in the R4-1 Zone. The Project would be 85 feet in height with roof structures up to 91 feet in height.

The Applicant has requested the following entitlement: Three (3) On-Menu Density Bonus Incentives pursuant to Section 12.22 A.25(g)(2) of the LAMC to (1) reduce the front yard on Hobart Boulevard in the R4-1 Zone by 20% from 15 feet to 12 feet; (2) to reduce the front yard on Serrano Avenue in the R4-1 Zone by 20% from 15 feet to 20 feet; and (3) to reduce the side yard in the R4-1 Zone by 20% from 10 feet to 8 feet. The applicant also requests two (2) Waivers of Development Standards pursuant to Section 12.22 A.25(g)(3) of the LAMC to (1) use pre-dedication area of any land required to be dedicated for street or alley purposes as lot area for purposes of calculating the maximum density permitted by the underlying zone in which the project is located, and (2) to average the floor area, density, parking or open space, and permitted vehicular access from a less restrictive zone to a more restrictive zone. The applicant is requesting a Conditional Use Permit pursuant to Section 12.24 U.26 of the LAMC to allow a density bonus increase greater than the maximum permitted in Section 12.22 A.25, to 95% over the entire Project Site in order to permit 252 dwelling units in lieu of the otherwise permitted 129 dwelling units, and pursuant to 12.24 F of the LAMC an increase in the permitted Floor Area Ratio (FAR) to 6.09 in lieu of 1.5:1 in the C2-1 Zone and 3:1 in the R4-1 Zone. The applicant seeks approval of Site Plan Review pursuant to Section 16.05 of the LAMC; and a Vesting Tentative Tract Map to merge and re-subdivide eight existing lots into three lots, Lot 1 a ground lot, Lot 2 a residential lot consisting of 252 apartment units and parking, and Lot 3 a commercial lot consisting of 32,100 square feet to be subdivided into a maximum of 33 commercial units and parking. In addition, the Project would require ministerial approvals associated with construction of the project, including but not limited to the removal of 22 trees on-site and 8 street trees (5 street trees on Olympic Boulevard, 1 street tree on Hobart Boulevard and 2 street trees on Serrano Avenue), demolition, grading, excavation, a haul route for the export of 37,660 cubic yards of dirt, and building permits.

NAME AND ADDRESS OF APPLICANT IF OTHER THAN CITY AGENCY:
Choi Bo Sung, Inc.
CBS Property Group LLC
3170 W Olympic Blvd, Suite #G
Los Angeles, CA 90006

FINDING: The Department of City Planning of the City of Los Angeles has proposed that a mitigated negative declaration be adopted for this project. The mitigation measures outlined on the attached pages will reduce any potentially significant adverse effects to a level of insignificance.		
SEE ATTACHED SHEET(S) FOR ANY MITIGATION MEASURES IMPOSED		
Any written comment received during the public review period is attached together with the response of the Lead City Agency. The project decision-maker 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 FORM Monique Acosta	**TITLE** City Planning Associate	**TELEPHONE NUMBER** (213) 978-1173
ADDRESS 200 N. Spring Street, Room 621 Los Angeles, CA 90012	**SIGNATURE (Official)**	**DATE**

SUMMARY OF MITIGATION MEASURES

Aesthetics: No mitigation measures are required.

Agriculture and Forestry Resources: No mitigation measures are required.

Air Quality: No mitigation measures are required.

Biological Resources:

MM-BIO-1: Tree Removal (Non-Protected Trees)

- Prior to the issuance of any permit for the Project, a plot plan shall be prepared indicating the location, size, type and general condition of all existing trees on the site and within the adjacent public right(s)-of-way.

- All significant (8-inch or greater trunk diameter, or cumulative trunk diameter if multi-trunked, as measured 54 inches above the ground) non-protected trees on the Project site proposed for removal shall be replaced at a 1:1 ratio with a minimum 24-inch box tree. Net new trees, located within the parkway of the adjacent public right(s)-of-way of the Project site, may be counted toward replacement tree requirements.

- Removal or planting of any tree in the public right-of-way requires approval of the Board of Public Works. All trees in the public right-of-way shall conform to the current standards of the Department of Public Works, Urban Forestry Division, Bureau of Street Services.

MM-BIO-2: Tree Removal (Public Right-of-Way)

- Removal of trees in the public right-of-way requires approval by the Board of Public Works.

- The required Tree Report shall include the location, size, type, and condition of all existing trees in the adjacent public right-of-way and shall be submitted for review and approval by the Urban Forestry Division of the Bureau of Street Services, Department of Public Works (213-847-3077).

- The plan shall contain measures recommended by the tree expert for the preservation of as many trees as possible. Measures such as replacement by a minimum of 24-inch box trees in the parkway and on the site, on a 2:1 basis, shall be required for the unavoidable loss of trees in the public right-of-way.

- All trees in the public right-of-way shall be provided per the current Urban Forestry Division standards.

Cultural Resources: No mitigation measures are required.

Geology and Soils: No mitigation measures are required.

Greenhouse Gas Emissions: No mitigation measures are required.

Hazards and Hazardous Materials:

MM-HAZ-1 Emergency Evacuation Plan

- Prior to the issuance of a building permit, the applicant shall develop an emergency response plan for the Project in consultation with the Fire Department. The emergency response plan shall include but not be limited to the following performance standards and requirements: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments

Hydrology and Water Quality: No mitigation measures are required.

Land Use and Planning: No mitigation measures are required.

Mineral Resources: No mitigation measures are required.

Noise:

MM-NOI-1 Increased Noise Levels (Demolition, Grading and Construction Activities)

- Demolition and construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.

- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, must be turned off when not in use for more than 30 minutes.

- Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.

- Stationary construction equipment, such as pumps, generators, or compressors, must be placed as far from noise sensitive uses as feasible during all phases of project construction.

- Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.

- 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 on Saturday.

- Demolition and construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.

- The project contractor shall use power construction equipment with state-of-the-art noise shielding and muffling devices and shall include the use of plug-in electrical or solar powered generators.

Population and Housing: No mitigation measures are required.

Public Services:

MM-PS-1 Public Services (Police – Demolition/Construction Sites)

Temporary construction fencing shall be placed along the periphery of the active construction areas to screen as much of the construction activity from view at the local street level and to keep unpermitted persons from entering the construction area.

MM-PS-2 Public Services (Police)

The plans shall incorporate a design that enhances the security, semi-public and private spaces, which may include but not be limited to access control to building, secured parking facilities, walls/fences with key systems, well-illuminated public and semi-public space designed with a minimum of dead space to eliminate areas of concealment, location of toilet facilities or building entrances in high-foot traffic areas, and provision of security guard patrol throughout the Project Site if needed. Please refer to "Design Out Crime Guidelines: Crime Prevention Through Environmental Design", published by the LAPD. Contact the Community Relations Division, located at 100 W. 1st Street, #250, Los Angeles, CA 90012; (213) 486-6000. These measures shall be approved by the LAPD prior to the issuance of building permits.

Upon completion of the Project, the Wilshire Area commanding officer shall be provided with a diagram of each portion of the property. The diagram shall include access routes and any additional information that might facilitate police response.

MM-PS-3 Public Services (Construction Activity Near Schools)

- The developer and contractors shall maintain ongoing contact with administrator of Hobart Boulevard Elementary School and Los Angeles Elementary School. The administrative offices shall be contacted when demolition, grading and construction activity begin on the project site so that students and their parents will know when such activities are to occur. The developer shall obtain school walk and bus routes to the schools from the administrators and guarantee that safe and convenient pedestrian and bus routes to the school be maintained.

- The developer shall install appropriate traffic signs around the site to ensure pedestrian and vehicle safety.

- There shall be no staging or parking of construction vehicles, including vehicles to transport workers on any of the streets adjacent to the school.

- Due to noise impacts on the schools, no construction vehicles or haul trucks shall be staged or idled on these streets during school hours.

MM-PS-4 Public Services (Schools affected by Haul Route)

- LADBS shall assign specific haul route hours of operation based upon Hobart Boulevard Elementary School and Los Angeles Elementary School's hours of operation.

- Haul route scheduling shall be sequenced to minimize conflicts with pedestrians, school buses and cars at the arrival and dismissal times of the school day. Haul route trucks shall not be routed past the school during periods when school is in session especially when students are arriving or departing from the campus.

Recreation: No mitigation measures are required.

Transportation and Traffic:

MM-TRAF-1 Safety Hazards

- The developer shall install appropriate construction related traffic signs around the site to ensure pedestrian and vehicle safety.

- The applicant shall submit a parking and driveway plan that incorporates design features that reduce accidents, to the Bureau of Engineering and the Department of Transportation for approval.

- Applicant shall plan construction and construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases. This requires the applicant to maintain adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding, etc.) from work space and vehicular traffic, and overhead protection, due to sidewalk closure or blockage, at all times.

- Temporary pedestrian facilities should be adjacent to the project site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility.

- Covered walkways should be provided where pedestrians are exposed to potential injury from falling objects.

- Applicant shall keep sidewalk open during construction until only when it is absolutely required to close or block sidewalk for construction and/or construction staging. Sidewalk shall be reopened as soon as reasonably feasible taking construction and construction staging into account.

Tribal Cultural Resources: No mitigation measures are required.

Utilities and Service Systems: No mitigation measures are required.

Mandatory Findings of Significance: Applicable mitigation measures have been stated above.

Initial Study
3170 West Olympic Boulevard
City of Los Angeles

Prepared for:
City of Los Angeles
Department of City Planning

Prepared by:
Meridian Consultants LLC
910 Hampshire Road, Suite V
Westlake Village, California 91361

October 2018

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Appendices

A. Air Quality and Greenhouse Gas Modeling Report dated May 2018

B. Noise Data dated December 2016

C. Phase 1 dated August 8, 2016

D. Geotechnical Study dated June 30, 2016

E. Traffic Study dated August 30, 2016

F. Department of Building and Safety Soils Approval Letter dated September 27, 2016

G. Department of Transportation Letter dated October 19, 2016

H. CHRIS and SLF Reports dated August 3, 2018

I. Memo to Case File No. ENV-2016-3663-MND, City's Anaylsis of Project Potential Impacts to Tribal Cultural Resources at 3170 West Olympic Boulevard ("Project Site") dated October 5, 2018

1.0 INTRODUCTION

Project Title: 3170 West Olympic Boulevard

Project Addresses: 3170 and 3188 West Olympic Boulevard; 1006, 1010, 1012, 1014, 1020 South Serrano Avenue; 1007, 1011, 1015, 1017, 1019, 1021 South Hobart Boulevard.

Project Location: South side of W. Olympic Boulevard between S. Hobart Boulevard and S. Serrano Avenue and extending south 200 feet from Olympic Boulevard.

Project Applicants: Choi Bo Sung, Inc.
CBS Property Group LLC
3170 W. Olympic Boulevard, Suite #G
Los Angeles, CA 90006

Lead Agency: City of Los Angeles
Department of City Planning
200 N. Spring Street, Room 621
Los Angeles, CA 90012

PROJECT SUMMARY

The Project would involve demolition of the existing uses that include a one-story commercial retail building, related surface parking and five (5)residential structures (a one-story single-family dwelling, a two-story single-family dwelling and three multi-family rental units that are one-story), and the construction of a new 7-story structure above two levels of subterranean parking. The proposed structure would contain 252 dwelling units and 32,100 square feet of commercial space on the first and second floors. The structure would have a maximum height of approximately 85 feet, a maximum floor area of 270,198 square feet and an average Floor Area Ratio (FAR) of approximately 6.09:1.

The Project site is designated on the Wilshire Community Plan Map as Community Commercial and High Medium Residential. The Project site is zoned C2-1 (Commercial Zone) and R4-1 (Multifamily). To implement the Project, the Applicant has requested the following entitlement: Three (3) On-Menu Density Bonus Incentives pursuant to Section 12.22 A.25(g)(2) of the LAMC to (1) reduce the front yard on Hobart Boulevard in the R4-1 Zone by 20% from 15 feet to 12 feet; (2) to reduce the front yard on Serrano Avenue in the R4-1 Zone by 20% from 15 feet to 20 feet; and (3) to reduce the side yard in the R4-1 Zone

by 20% from 10 feet to 8 feet. The applicant also requests two (2) Waivers of Development Standards pursuant to Section 12.22 A.25(g)(3) of the LAMC to (1) use pre-dedication area of any land required to be dedicated for street or alley purposes as lot area for purposes of calculating the maximum density permitted by the underlying zone in which the project is located, and (2) to average the floor area, density, parking or open space, and permitted vehicular access from a less restrictive zone to a more restrictive zone. The applicant is requesting a Conditional Use Permit pursuant to Section 12.24 U.26 of the LAMC to allow a density bonus increase greater than the maximum permitted in Section 12.22 A.25, to 95% over the entire Project Site in order to permit 252 dwelling units in lieu of the otherwise permitted 129 dwelling units, and pursuant to 12.24 F of the LAMC an increase in the permitted Floor Area Ratio (FAR) to 6.09 in lieu of 1.5:1 in the C2-1 Zone and 3:1 in the R4-1 Zone. The applicant seeks approval of Site Plan Review pursuant to Section 16.05 of the LAMC; and a Vesting Tentative Tract Map to merge and re-subdivide eight existing lots into three lots, Lot 1 a ground lot, Lot 2 a residential lot consisting of 252 apartment units and parking, and Lot 3 a commercial lot consisting of 32,100 square feet to be subdivided into a maximum of 33 commercial units and parking. In addition, the Project would require ministerial approvals associated with construction of the project, including but not limited to the removal of 22 trees on-site and 8 street trees (5 street trees on Olympic Boulevard, 1 street tree on Hobart Boulevard and 2 street trees on Serrano Avenue), demolition, grading, excavation, a haul route for the export of 37,660 cubic yards of dirt, and building permits.

ENVIRONMENTAL REVIEW PROCESS

This Initial Study is a preliminary analysis, prepared by and for the City of Los Angeles as the Lead Agency in compliance with the California Environmental Quality Act (CEQA), to determine whether an Environmental Impact Report (EIR), a Negative Declaration (ND), or a Mitigated Negative Declaration (MND) should be prepared for the Project. An MND is prepared when the Initial Study has identified potentially significant effects on the environment but (1) revisions in the project plans or proposals made by, or agreed to by, the Applicant before the proposed MND and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur; and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment. Consequently, the analysis contained herein concludes that an MND should be prepared for the Project.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into six sections as follows:

Section 1.0, Introduction, provides introductory information such as the Project title, the Project Applicants, and the lead agency for the Project.

Section 2.0, Project Description*,* provides a detailed description of the Project, including the environmental setting, Project characteristics, related Project information, Project objectives, and environmental clearance requirements.

Section 3.0, **Initial Study Checklist**, includes the City of Los Angeles Initial Study Checklist showing the determination of the significance of potential environmental impacts of the Project.

Section 4.0, Environmental Analysis, includes discussion and analysis for each environmental topic and threshold listed in the Initial Study Checklist.

Section 5.0, List of Preparers*,* identifies the individuals who prepared this report.

Section 6.0, References, identifies all printed references cited in this Initial Study.

Appendices include Project-specific reports and data used to support the analysis in this Initial Study.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The Project is located in the Koreatown neighborhood and within the Wilshire Community Plan area of the City of Los Angeles, as shown in **Figure 2.0-1, Project Location Map**. The Project site occupied the south side of W. Olympic Boulevard between S. Hobart Boulevard and S. Serrano Avenue and extends south 200 feet from Olympic Boulevard, as shown in **Figure 2.0-2**, **Aerial Photograph of the Project site**.

2.2 EXISTING SITE CONDITIONS

The Project site is approximately 51,290 square feet (1.18 acres) in area and is currently developed with a 1-story, 18,295-square-foot commercial retail structure, a related surface parking lot and 5 private residential structures with associated accessory buildings. The commercial property is accessed through driveways along S. Serrano Avenue. One of the residential lots fronts on Serrano Avenue south of the commercial parking lot. The other two residential lots, one of which contains 3 residences, front on Hobart south of the commercial structure. Landscaping on the Project site is characterized by vegetation along the perimeter of the commercial property as well as hedges, trees, shrubs, and some grasses on the residential lots.

The current addresses for the Project site include 3170 and 3188 West Olympic Boulevard; 1006, 1010, 1012, 1014, 1020 South Serrano Avenue; 1007, 1011, 1015, 1017, 1019, 1021 South Hobart Boulevard. The Project site consists of eight parcels (Lots 9-12, 15-18 and a portion of lots 13 and 14, Tract Pellissier) that are linked together under Assessor's Parcel Number (APN) 5080017008-14. Shown in **Figure 2.0-3, Existing Zoning and Parcels Map,** the Project site consists of:

1. 3170 W. Olympic Boulevard/1007 S. Hobart Boulevard (APN 5080017010, Lot 12, Tract Pellissier). This 6,209 square-foot property is located on the southwest corner of Olympic Boulevard and S. Hobart Boulevard and is developed with a 1-story commercial building that was constructed in 1955.
2. 1011 South Hobart Boulevard (APN 5080017010, Lot 11, Tract Pellissier). This 6,209-square-foot property is located on the west side of Hobart Boulevard and is developed with a 1-story commercial building that was constructed in 1955.
3. 1015-1017-1019 South Hobart Boulevard (APN 5080017009, Lot 10, Tract Pellissier). This 6,209 square-foot property is located on the west side of Hobart Boulevard and is developed with three single-story residences that were constructed in 1907, 1912 and 1923.
4. 1021 South Hobart Boulevard (APN 5080017008, Lot 9, Tract Pellissier). This 6,209 square-foot property is located on the west side of Hobart Boulevard and is developed with a 1-story single-family residential use that was constructed in 1902.

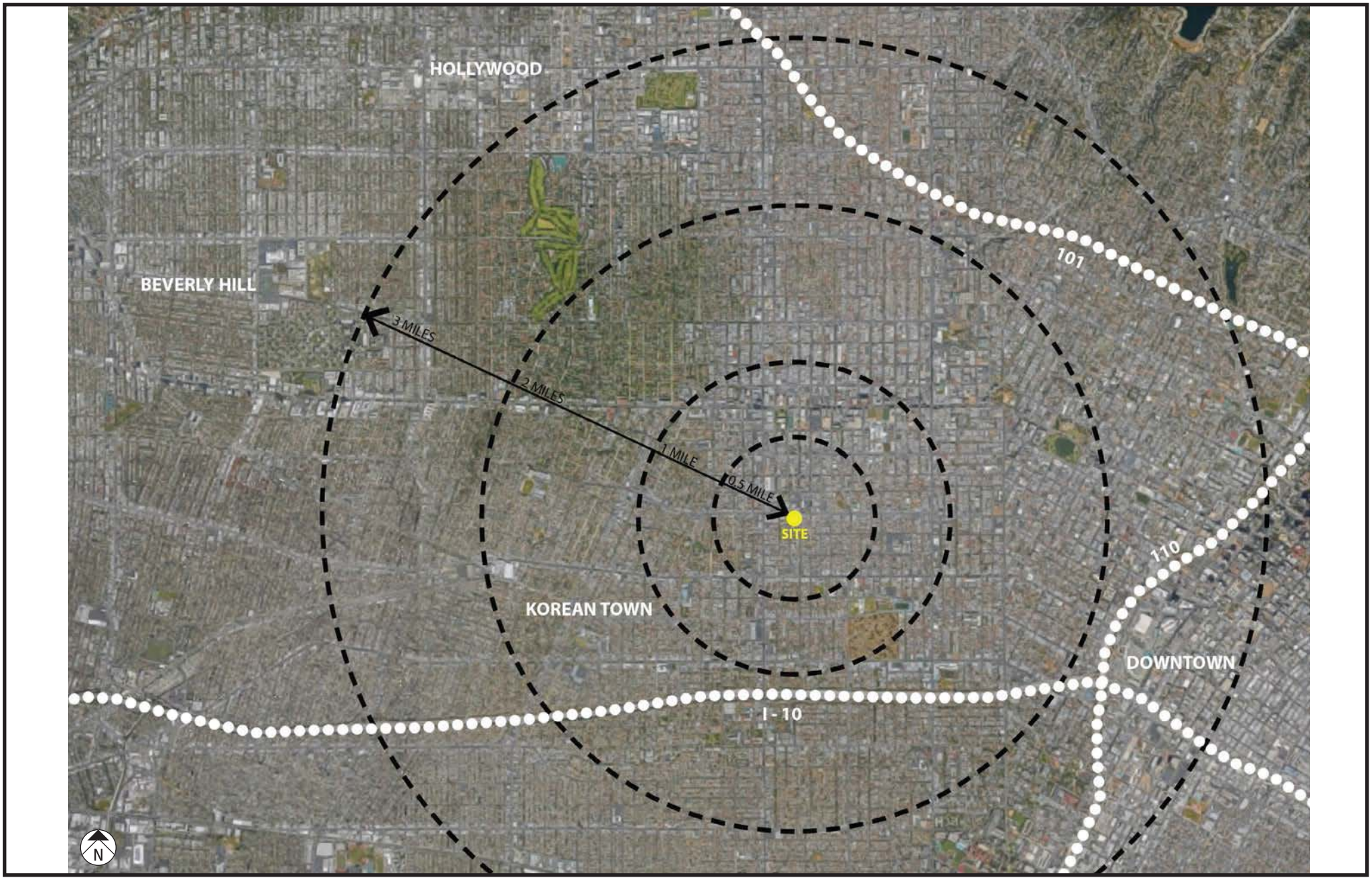
5. 3188 West Olympic Boulevard/1006 South Serrano Avenue (APN 5080017011, Lot FR 15, Tract Pellissier). This 6,185 square-foot property is located along the southeast corner of W. Olympic Boulevard and S. Serrano Avenue. It has a land use designation of Community Commercial and is zoned C2-1. The site is developed with a 1-story community commercial building constructed in 1972 and a parking lot.
6. 1010 South Serrano Avenue (APN 5080017012 Lot 16, Tract Pellissier). This 6,209 square-foot property is located on the east side of Serrano Avenue. It has a land use designation of Community Commercial and is zoned C2-1. The site is developed as a parking lot.
7. 1012and 1014 South Serrano Avenue (APN 5080017013 Lot 17, Tract Pellissier) This 6,209 square-foot property is located on the east side of Serrano Avenue. It has a land use designation of Community Commercial and is zoned C2-1. The site is developed as a parking lot.
8. 1020 South Serrano Avenue (APN 5080017014, Lot 18, Tract Pellissier). This 6,209 square-foot property is located on the east side of Serrano Avenue. It has a land use designation of High Medium Residential and is zoned R4-1. The site is developed with a 1-story single-family residential use that was constructed in 1909.

2.3 ZONING AND LAND USE DESIGNATIONS

As shown in **Figure 2.0-4, Wilshire Community Plan Map**, the Project is located in the Wilshire Community Plan Area. The Wilshire Community Plan Map designates the north half of the site as Community Commercial and the south half of the site as High Medium Residential. The north half of the project site is zoned C2-1; the south half is zoned R4-1. The C2 Commercial Zone permits a variety of commercial uses, such as retail with limited manufacturing; service stations and garages; and office uses, hotels, and hospitals. The C2 Zone also permits R4 residential uses, as well as churches, schools, and childcare. The R4 Residential Zone permits group dwellings, multiple dwellings, and apartment buildings to a density of 400 square feet of lot size per unit. The Height District No. 1 designations limits the Floor Area Ratio (FAR) to 1.5:1 for commercial uses and to 3:1 for residential uses.

2.4 SURROUNDING LAND USES

The Project site is located in an urbanized area of Los Angeles. Surrounding uses include a mix of commercial and residential uses and surface parking lots. To the north is a single story commercial building, a multi-story California Department of Water and Power building and the Hobart Boulevard Elementary School which includes some 2-story buildings. To the west there are commercial businesses ranging from 1- to 2-story buildings and a 4-story mixed-use building at S. Harvard Boulevard and W. Olympic Boulevard. To the east there is a mixture of 1- to 2-story commercial businesses on either side of W. Olympic Boulevard. To the south there is a mixture of single-family houses and multi-family apartments reaching up to 5-stories tall on both S. Hobart Boulevard and S. Serrano Avenue.



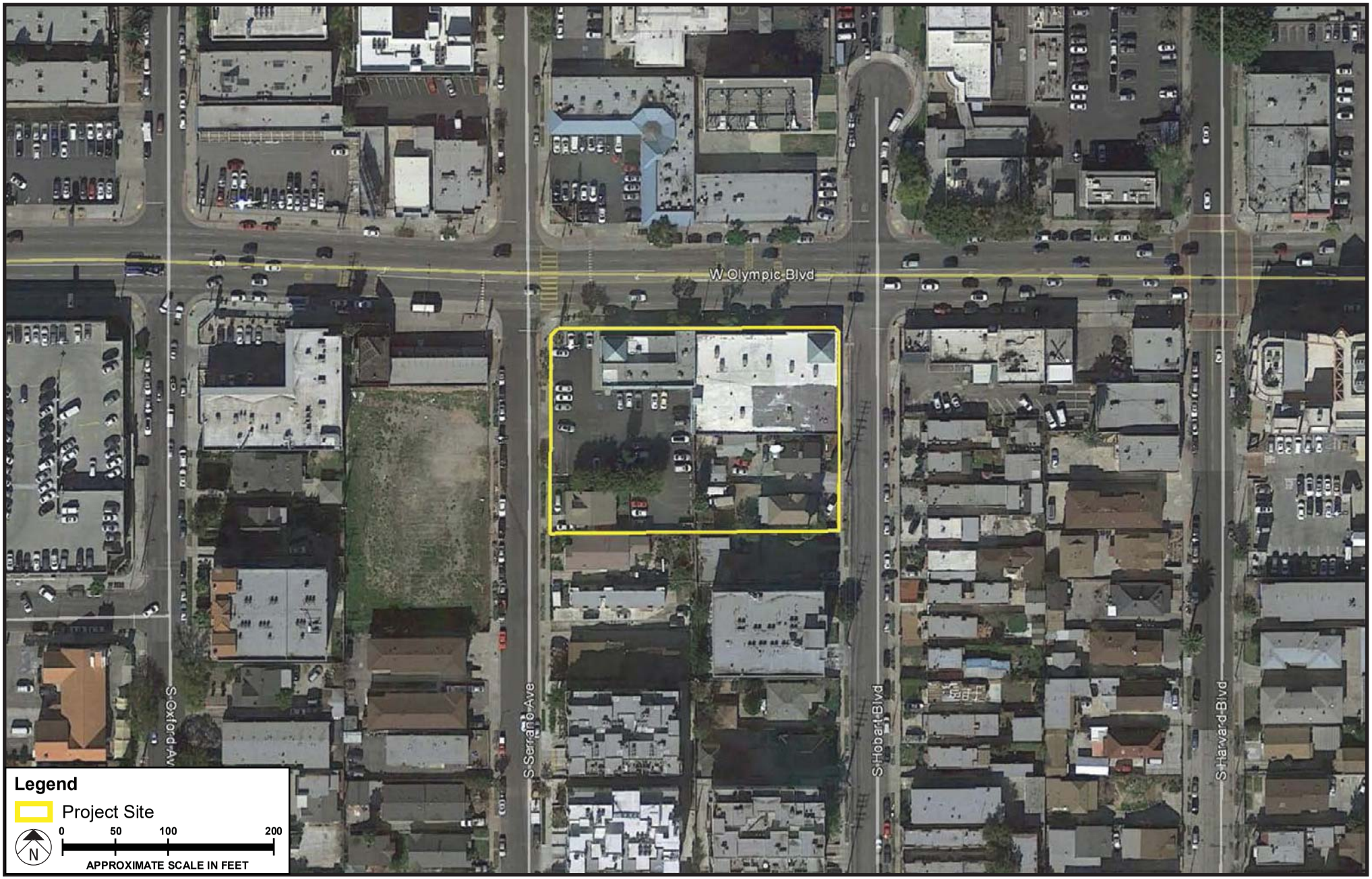
SOURCE: Archeon Group - October 2018

FIGURE **2.0-1**

Meridian Consultants

Project Vicinity Map

130-001-16



SOURCE: Google Earth - 2018

FIGURE **2.0-2**

Meridian Consultants

Aerial Photograph of the Project Site

130-001-16



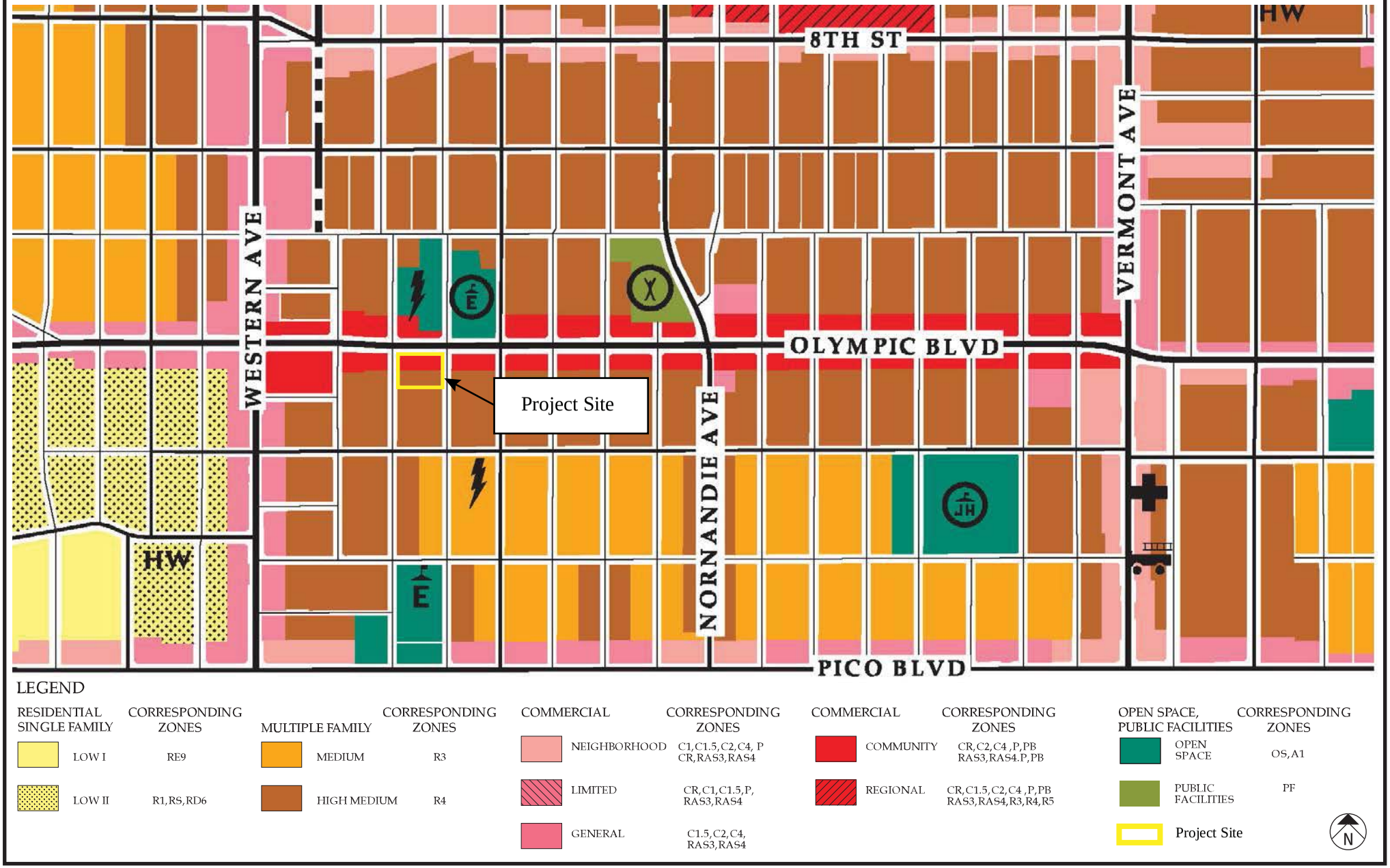
SOURCE: Archeon Group - October 2018

FIGURE **2.0-3**

Meridian Consultants

Existing Zoning and Parcels Map

130-001-16



SOURCE: City of Los Angeles, Department of City Planning - May 2014

FIGURE **2.0-4**

Meridian Consultants

Wilshire Community Plan Map

130-001-16

2.5 ACCESS

Regional Access

Primary regional access to the Project site is provided by State Route 110 (SR 110) and Interstate 10 (I-10), which run in a north–south and east–west direction east and south of the Project site, respectively. Additional regional access to the Project site is provided by the US Route 101/Hollywood Freeway (US 101), which generally runs in an east–west direction to the north of the Project site.

Local Street Access

Local street access is provided by a grid roadway system encompassing the Project site and surrounding area. West Olympic Boulevard, which borders the Project site to the north, runs in an east–west direction along the Project site. West Olympic Boulevard generally provides two travel lanes in each direction and is classified as an Avenue II. S Hobart Boulevard, located east of the Project site, is classified as a Local Street and runs in a north–south direction, with one travel lane in each direction. South Serrano Avenue, which borders the Project site to the west, runs in a north–south direction and provides one travel lane in each direction. It is classified as a Local Street.[1]

Public Transit

The Project site is served by regional and local public transit. Specifically, the Los Angeles County Metropolitan Transportation Authority (Metro) and the Los Angeles Department of Transportation (LADOT) provide access to and from the Project area. Metro Bus Lines 66 runs along Olympic Boulevard with a stop located at the intersection of S. Serrano Avenue and W. Olympic Boulevard.[2] Additionally, the Project site is located within 0.8 miles of the multimodal transit hub located at Wilshire Boulevard and S. Western Avenue. This multimodal transit hub offers transit options to major employment centers such as Santa Monica, Hollywood, Century City, Wilshire Corridor, and Downtown Los Angeles. The available transit options at this transit hub include Metro's Purple Line, Wilshire Bus Rapid Transit, Santa Monica's Big Blue Bus, Metro's 207 bus line, and LADOT's Wilshire Center/Koreatown and Hollywood/Wilshire DASH lines.

1 *City of Los Angeles General Plan*, "Mobility Plan 2035" (2015), City of Los Angeles, Citywide General Plan Circulation System Map A4—Central, Midcity Subarea

2 Metro, "Maps & Timetables," http://www.metro.net/riding/maps/, accessed August 2017.

2.6 PROJECT CHARACTERISTICS

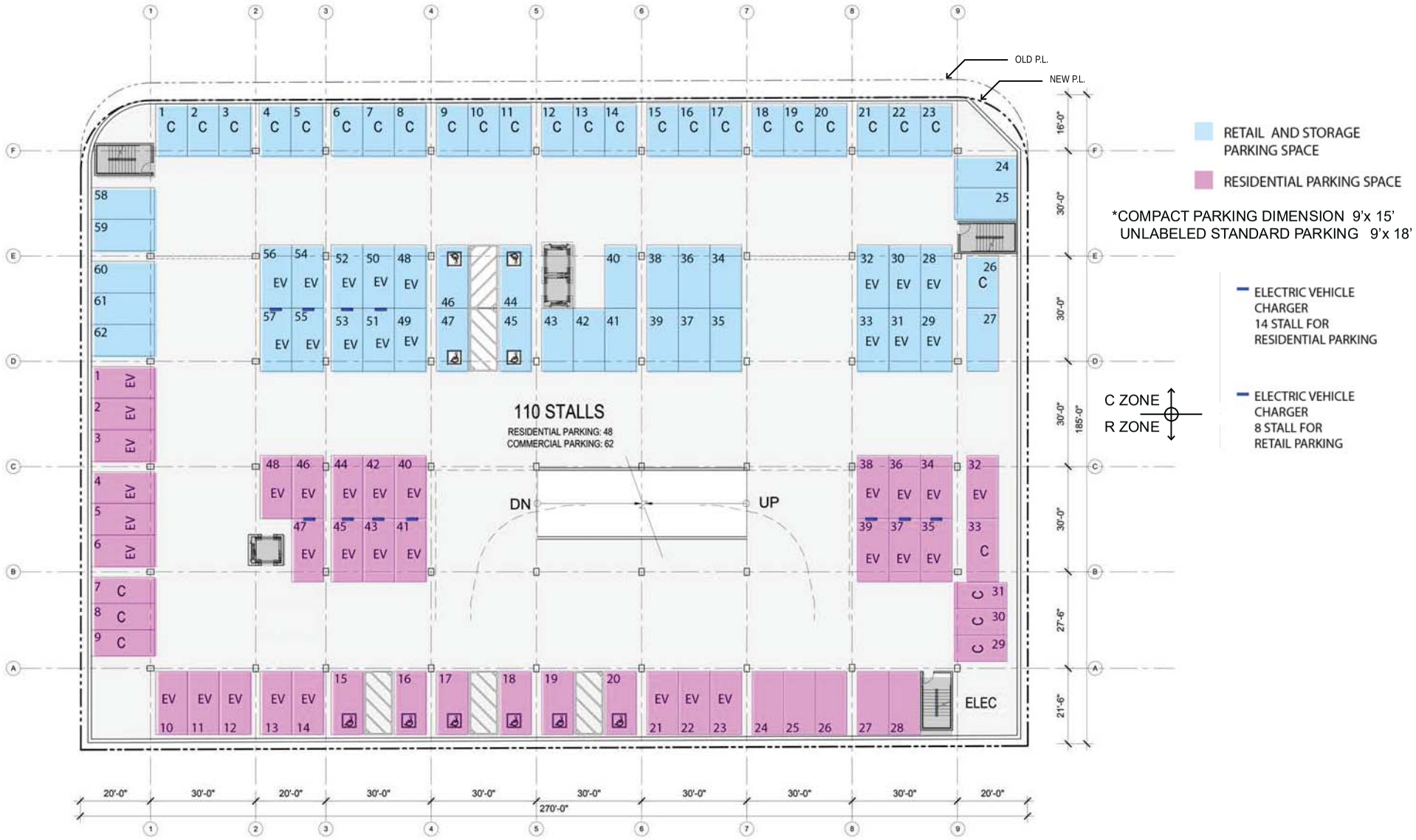
The Project Applicant has proposed to demolish the existing commercial retail building and related surface parking on the Project site and construct a 7-story mixed-use building containing 32,100 square feet of commercial space and 252 dwelling units. The building would be 85 feet in height, with an FAR of 6.09:1.

The Project would contain 311 parking spaces, 231 allocated for the residential uses and 80 for commercial uses. **Figure 2.0-5 Floor Plan-Level B1,** depicts the first level of subterranean parking. **Figure 2.0-6 Floor Plan-Level B2,** depicts the second level of subterranean parking. These subterranean levels would contain the residential parking and would include 27 electric vehicle stalls with chargers.

As shown in **Figure 2.0-7, Ground Floor Plan,** the ground floor would include retail space oriented toward Olympic Boulevard with residential parking and services behind. Additional residential parking and storage would be provided on the Mezzanine level, shown in **Figure 2.0-8**, **Mezzanine Floor Plan**. As shown in **Figure 2.0-9**, **Second Floor Plan**, the retail space would continue to the second floor. The commercial parking area would include 8 electric vehicle stalls and the residential parking area would include 19 electric vehicle stalls. These levels would also contain bicycle parking, residential storage, and recycling and trash areas.

The residential portion of the project, on levels 2 through 7, would consist of 252 dwelling units: 69 studios, 157 1-bedroom apartments and 26 2-bedroom apartments. The retail uses would extend to the second floor that also would contain 24 units as well as residential amenities including a pool. As shown in **Figure 2.0-10, L3-L6 Floor Plan,** Level 3 through Level 6 would each contain 47 units while Level 7, shown in **Figure 2.0-11, L7 Floor Plan,** would contain 40 residential units and a roof deck.

Figure 2.0-12, North and East Elevations, depicts the north and east facades. **Figure 2.0-13, South and West Elevations,** depicts the south and west facades. **Figure 2.0-14, Section View,** depicts the structure from the east and west perspectives. **Figure 2.0-15, Rendering—View from Olympic Blvd,** depicts a conceptual view of the Project from street level, showing the way the potential colors, geometry and articulation of the façade. **Figure 2.0-16, Rendering—View from Hobart Blvd,** depicts a conceptual view of the Project from street level, showing the way the potential colors, geometry and articulation of the façade.



SOURCE: Archeon Group - October 2018

FIGURE **2.0-5**

Meridian Consultants

B1 Floor Plan

130-001-16



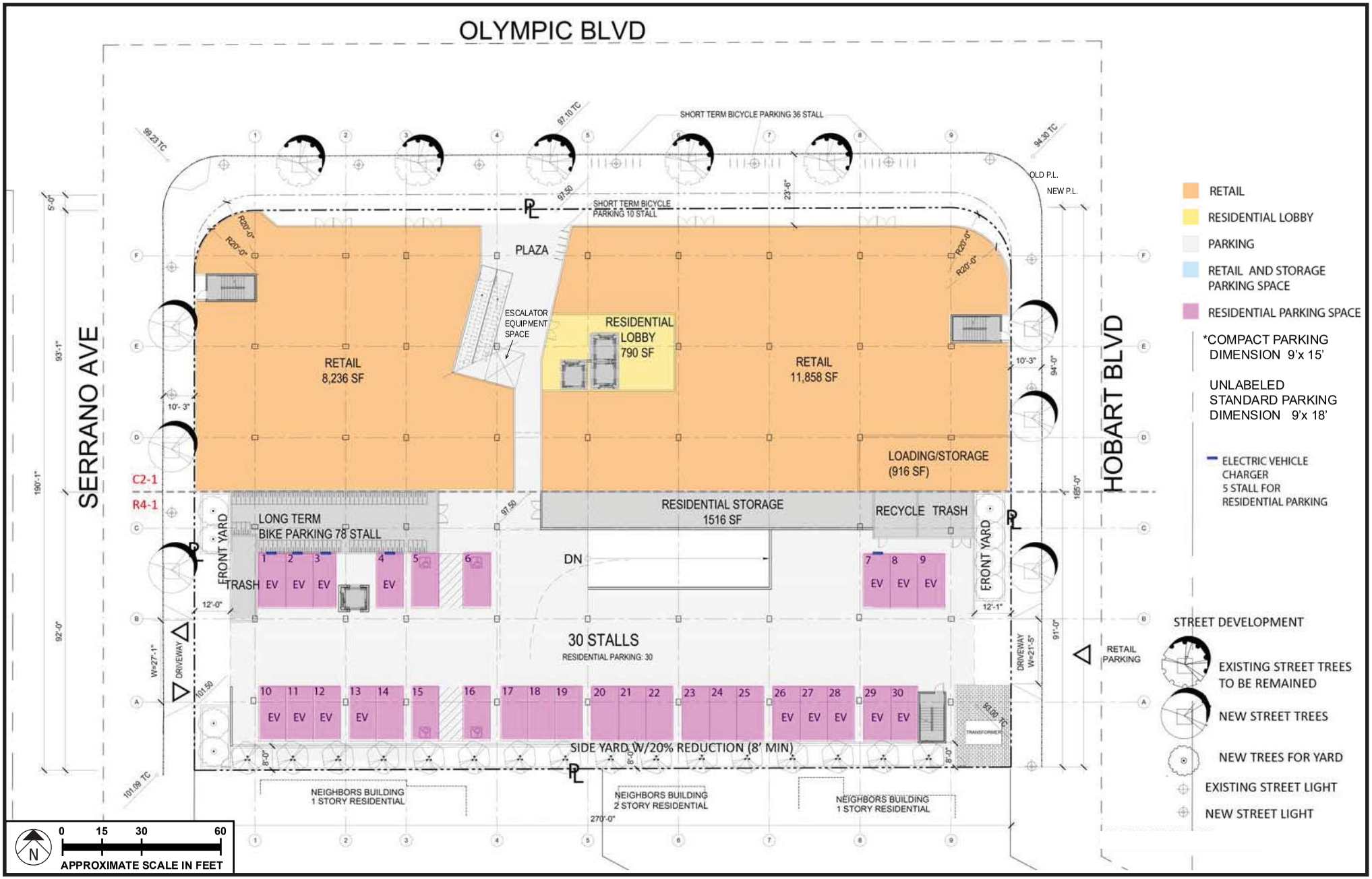
SOURCE: Archeon Group - October 2018

FIGURE **2.0-6**

Meridian Consultants

B2 Floor Plan

130-001-16



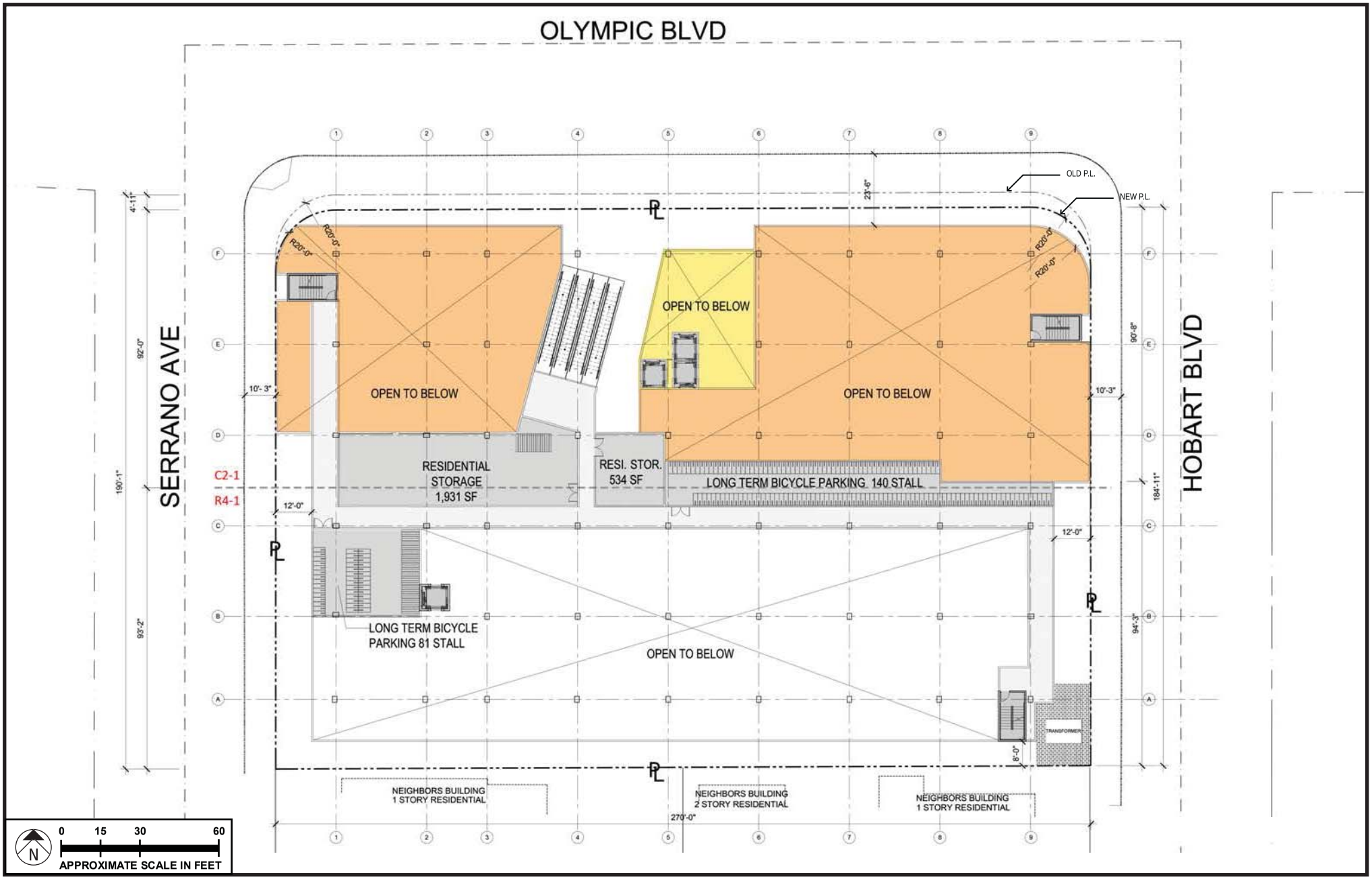
SOURCE: Archeon Group - October 2018

FIGURE **2.0-7**

Meridian Consultants

Ground Floor Plan

130-001-16



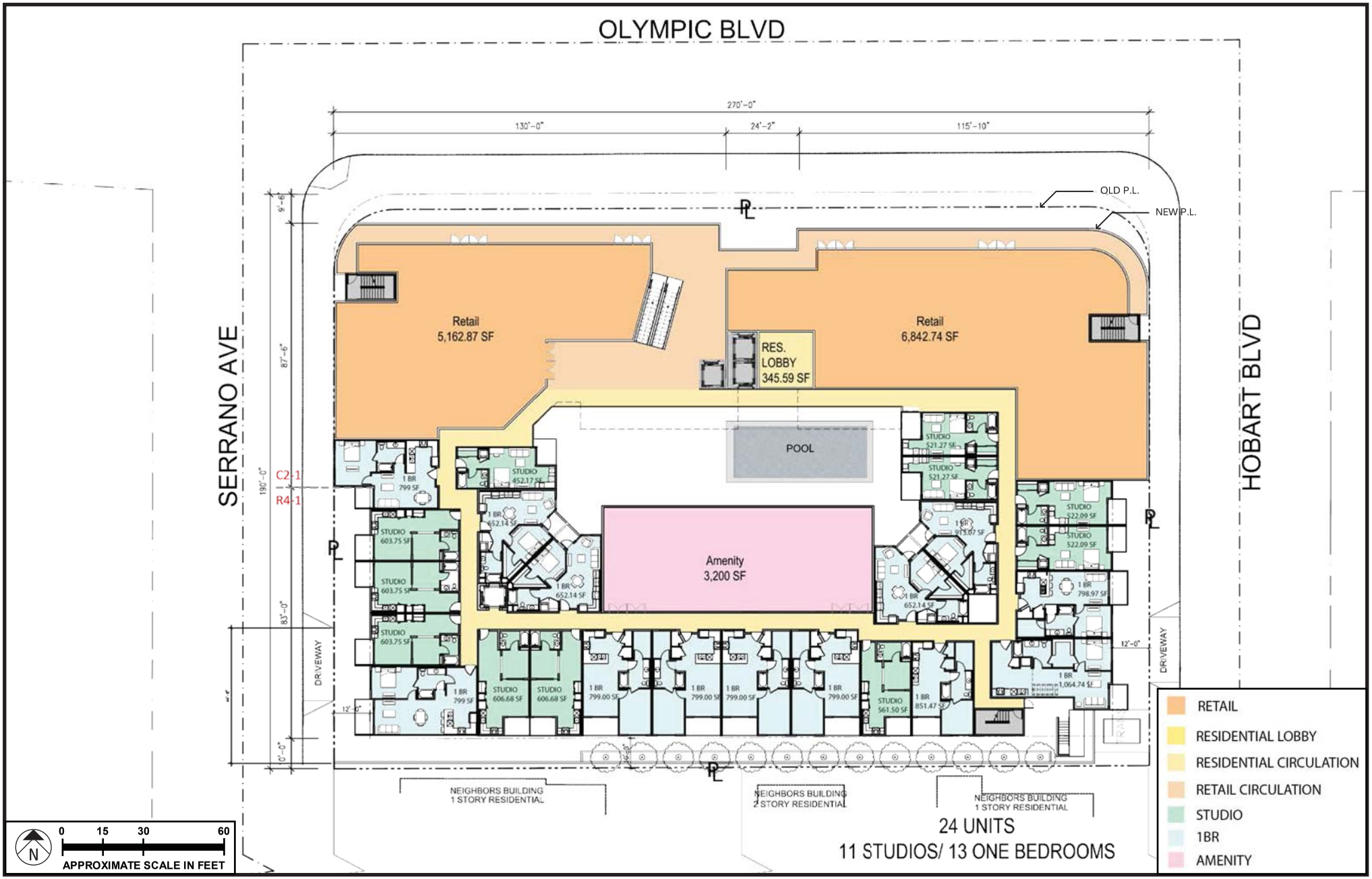
SOURCE: Archeon Group - October 2018

FIGURE **2.0-8**

Meridian Consultants

Mezzanine Floor Plan

130-001-16



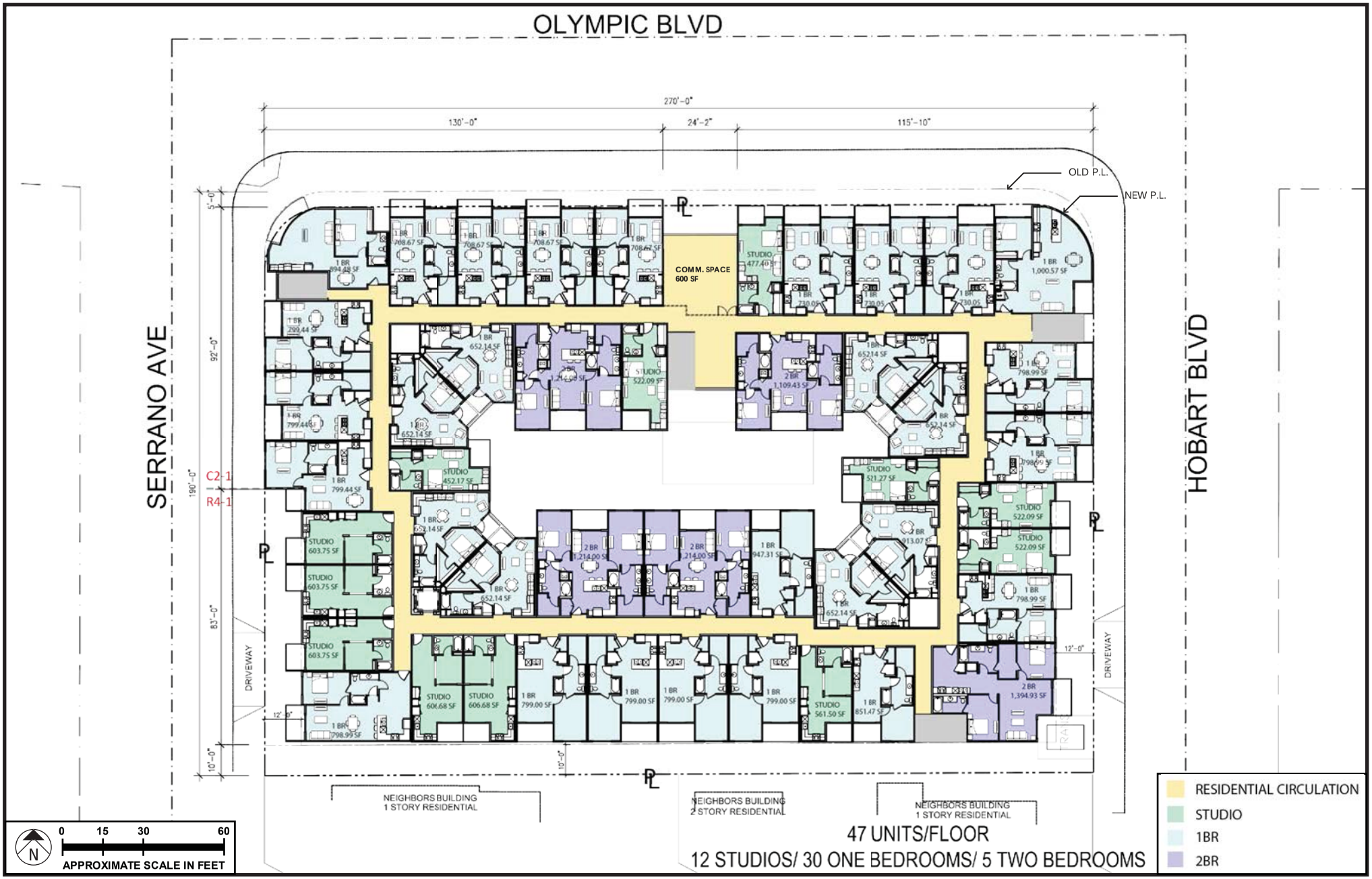
SOURCE: Archeon Group - October 2018

FIGURE **2.0-9**

Meridian Consultants

Level 2 Floor Plan

130-001-16



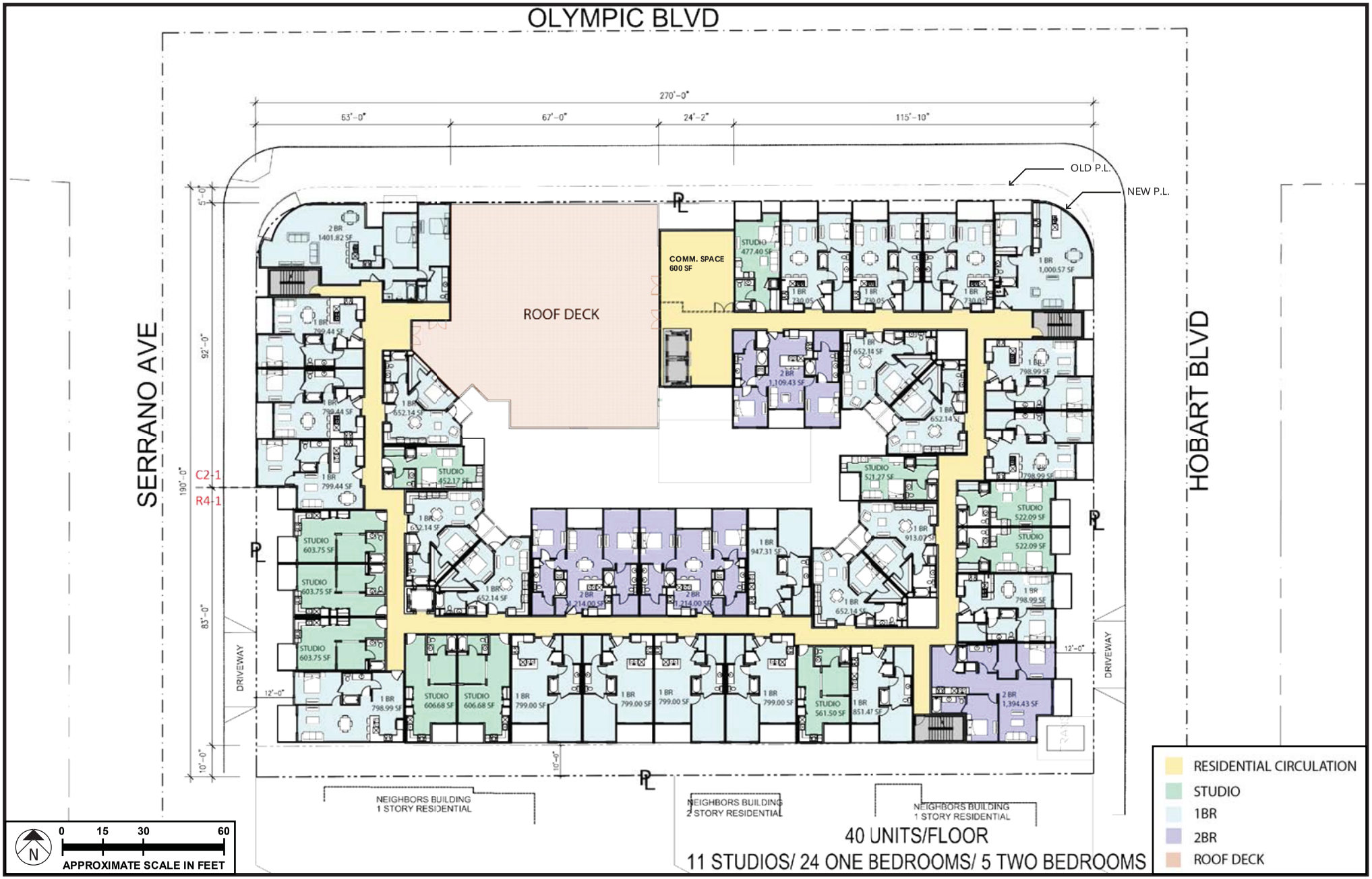
SOURCE: Archeon Group - October 2018

FIGURE **2.0-10**

Meridian Consultants

Level 3 - Level 6 Floor Plan

130-001-16



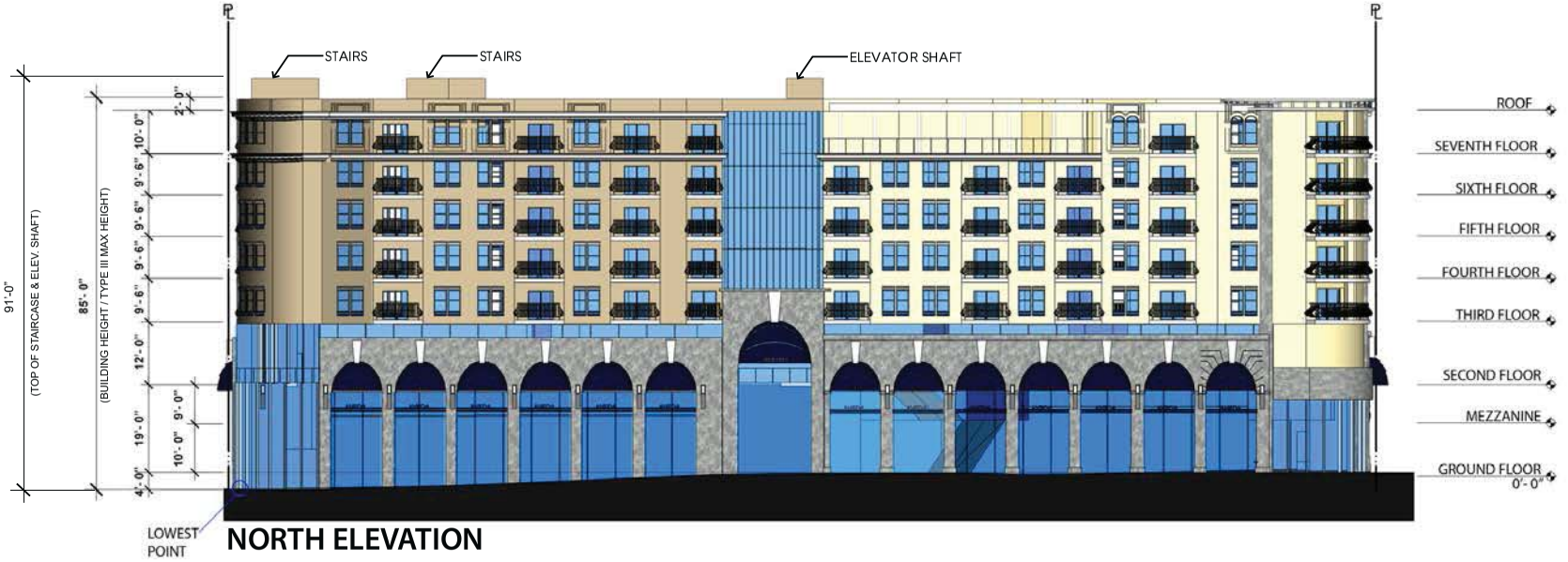
SOURCE: Archeon Group - October 2018

FIGURE **2.0-11**

Meridian Consultants

Level 7 Floor Plan

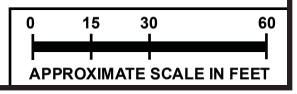
130-001-16



NORTH ELEVATION



EAST ELEVATION



SOURCE: Archeon Group - October 2018

FIGURE **2.0-12**

Meridian Consultants

North and East Elevations

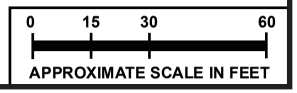
130-001-16



SOUTH ELEVATION



WEST ELEVATION



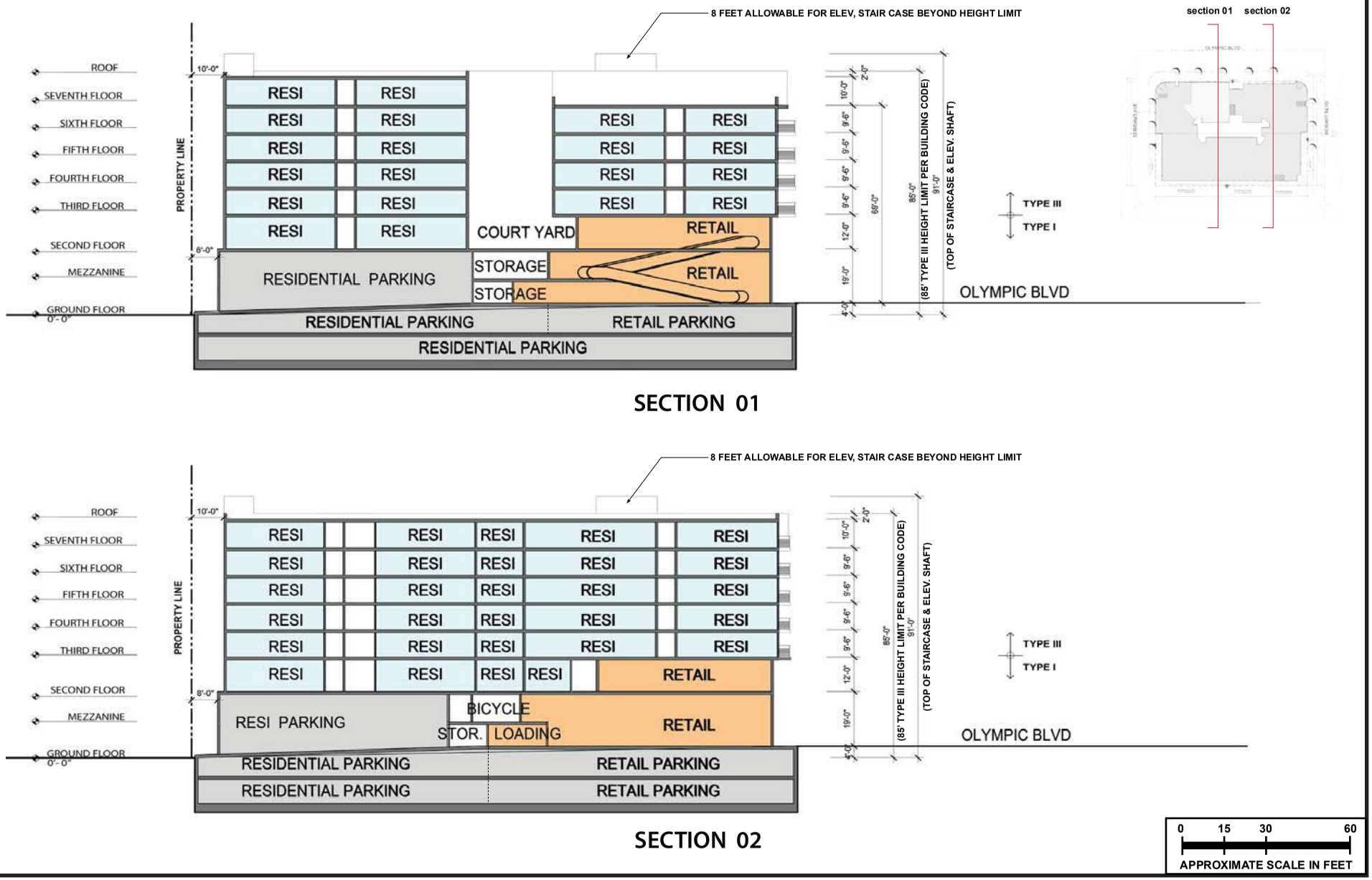
SOURCE: Archeon Group - October 2018

FIGURE **2.0-13**

Meridian Consultants

South and West Elevations

130-001-16



SOURCE: Archeon Group - October 2018

FIGURE **2.0-14**

Meridian Consultants

Section View

130-001-16



SOURCE: Archeon Group - October 2018

FIGURE **2.0-15**

Meridian Consultants

Rendering – View from Olympic Boulevard

130-001-16



SOURCE: Archeon Group - October 2018

FIGURE **2.0-16**

Meridian Consultants

Rendering – View from Hobart Boulevard

130-001-16

2.7 APPROVAL ACTIONS

In order to implement the Project, the Applicant is requesting the following entitlement:

1) Pursuant to Los Angeles Municipal Code (the "LAMC") Section 12.22.A.25(g)(2), three (3) on-menu incentives, as follows:

    - a 20% decrease in the required width of the front yard on Serrano Avenue in the R4-1 Zone by 20% from 15 feet to 20 feet;
    - a 20% decrease in the required width of the front yard on Hobart Boulevard in the R4-1 Zone by 20% from 15 feet to 12 feet;

      a 20% decrease in the required width of the side yard along the south property line in the R4-1 Zone by 20% from 10 feet to 8 feet;

2) Pursuant to LAMC Section 12.22 A.25(g)3), two (2) waivers of development standards, as follows:

    - use pre-dedication area of any land required to be dedicated for street or alley purposes as lot area for purposes of calculating the maximum density permitted by the underlying zone in which the project is located; and
    - average the floor area, density, parking or open space, and permitted vehicular access from a less restrictive zone to a more restrictive zone;

3) Pursuant to LAMC Section 12.24.U.26, a Conditional Use Permit to allow a density bonus increase greater than the maximum permitted in Section 12.22 A.25 to 95% over the entire Project Site in order to permit 252 dwelling units in lieu of 129 dwelling units and pursuant to 12.24 F of the LAMC an increase in the permitted Floor Area Ratio (FAR) to 6.09 in lieu of 1.5:1 in the C2-1 Zone and 3:1 in the R4-1 Zone;

4) Pursuant to LAMC Section 16.05, Site Plan Review approval for a development that creates an increase of 50 or more dwelling units; and

5) Pursuant to LAMC 17.15, a Vesting Tentative Tract Map to merge and re-subdivide the Property into three lots, Lot 1 a ground lot, Lot 2 a residential lot consisting of 252 apartment units and parking, and Lot 3 a commercial lot consisting of 32,100 square feet to be subdivided into a maximum of 33 commercial units and parking.

In addition to the entitlements identified above, the following approvals are also required from other City entities for the Project, including, but not limited to, approvals and permits from the City's Department of Building and Safety and Public Works (and other municipal agencies) for Project construction activities including, but not limited to the following: demolition, haul route, excavation, shoring, grading,

foundation, building and interior improvements and the removal of trees on public and/or private property.

2.8 Construction

The construction of the Project, including demolition, would take approximately 18 months from start to finish. Construction activities associated with the Project would be undertaken in three main steps: (1) demolition/site clearing, (2) site preparation, and (3) building construction.

Construction of the Project would commence with demolition and site-clearing activities. All existing improvements on the Project site would be removed. Construction and demolition debris would be recycled to the maximum extent feasible.

After the completion of site clearing, excavation for three subterranean levels of parking would begin. Approximately 37,660 cubic yards of soil would be removed from the Project site and taken to an approved landfill. The Project would require a haul route permit that would specify the truck route to and from the Project site. The anticipated haul route would direct trucks to reach the Project site via the Western Avenue exit on Interstate 10, then north along Western Avenue to Olympic Boulevard**.** Similarly, trucks would be directed from the Project site traveling west on Olympic Boulevard and south on Western Avenue to the Interstate 10.

Construction activities may necessitate temporary lane closures on streets adjacent to the Project site on an intermittent basis for utility relocations/hookups, delivery of materials, and other construction activities as needed. Site deliveries and staging of all equipment and materials would be organized in the most efficient manner possible on site to mitigate any temporary impacts to the neighborhood and surrounding traffic. Construction equipment would be staged on site for the duration of construction activities. Traffic lane and right-of-way closures, if required, will be properly permitted by the City and will conform to City standards.

Unless stated otherwise, all construction activities would be performed in accordance with all applicable State and federal laws and City codes and policies with respect to building construction and activities. As stated in Section 41.40 of the Los Angeles Municipal Code (LAMC), the permissible hours of construction involving noise-generating equipment within the City are 7:00 AM to 9:00 PM Monday through Friday, and between 8:00 AM and 6:00 PM on any Saturday or national holiday. No construction activities are permitted on Sundays. The Project would comply with these restrictions.

3.0 INITIAL STUDY CHECKLIST

CITY OF LOS ANGELES
CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY and CHECKLIST
(*CEQA Guidelines* Section 15063)

LEAD CITY AGENCY: City of Los Angeles, Department of City Planning	**COUNCIL DISTRICT:** CD 10 – Herb J. Wesson, Jr.	**DATE:**
RESPONSIBLE AGENCIES: Southern California Air Quality Management District Los Angeles Regional Water Quality Control Board		
PROJECT TITLE: 3170 West Olympic	**ENVIRONMENTAL CASE:** ENV-2016-3663-MND	**CASE NOS:** CPC-2016-3662-CU-DB-SPR VTT-74311
PREVIOUS ACTIONS CASE NO. No recent activity.	☒ DOES have significant changes from previous actions. ☐ DOES NOT have significant changes from previous actions	
PROJECT LOCATION: 3170 and 3188 West Olympic Boulevard; 1006, 1010, 1012, 1014, 1020 South Serrano Avenue; 1007, 1011, 1015, 1017, 1019, 1021 South Hobart Boulevard, Los Angeles, California, 90006.		
PROJECT DESCRIPTION: See Section 2.0 of this Initial Study.		
ENVIRONMENTAL SETTING: See Section 2.0 of this Initial Study.		

COMMUNITY PLAN AREA: Wilshire **STATUS:** ☐ Preliminary ☒ Does Conform to Plan ☐ Proposed ☐ Does NOT Conform to Plan ☒ Adopted in 2001		**AREA PLANNING COMMISSION:** Central	**CERTIFIED NEIGHBORHOOD COUNCIL:** Wilshire Center–Koreatown
EXISTING ZONING: C2-1, R4-1	**MAX DENSITY ZONING:** C2-1 Zone: 1.5:1 FAR R4-1 Zone: 3.0:1	**LA River Adjacent:** No	
GENERAL PLAN LAND USE: Community Commercial; High Medium Residential	**MAX. DENSITY PLAN:** Same as zoning	**PROPOSED PROJECT DENSITY:** 6.09:1 FAR	

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.

Monique Acosta	City Planning Associate	(213) 978-1173
Signature	**Title**	**Phone**

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
EACH DETERMINATION IN THIS INITIAL STUDY CHECKLIST IS BASED UPON SECTION 4.0, ENVIRONMENTAL ANALYSIS. PLEASE REFER TO THE APPLICABLE SECTION THEREIN FOR A DETAILED DISCUSSION OF THE CHECKLIST DETERMINATIONS.					
1	**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, or other locally recognized desirable aesthetic natural feature within a city-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?	☐	☐	☒	☐
2	**AGRICULTURE AND FOREST RESOURCES**				
Would the project:					
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(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?	☐	☐	☐	☒

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
3	**AIR QUALITY**				
Would the project:					
a.	Conflict with or obstruct implementation of the SCAQMD or congestion management 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 air basin 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?	☐	☐	☒	☐
4	**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 by The California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the city or regional plans, policies, regulations by the California Department of Fish and Game 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 conservation plan?	☐	☐	☐	☒

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
5	**CULTURAL RESOURCES**				
Would the project:					
a.	Cause a substantial adverse change in significance of a historical resource as defined in State CEQA Section 15064.5?	☐	☐	☒	☐
b.	Cause a substantial adverse change in significance of an archaeological resource pursuant to State 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?	☐	☐	☒	☐
6	**GEOLOGY AND SOILS**				
Would the project:					
Exacerbate existing hazardous environmental conditions by bringing people or structures into areas that are susceptible to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a.	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault? Refer to division of mines and geology special publication 42.	☐	☐	☒	☐
b.	Strong seismic ground shaking?	☐	☐	☒	☐
c.	Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
d.	Landslides?	☐	☐	☐	☒
e.	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
f.	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 caused in whole or in part by the project's exacerbation of the existing environmental conditions?	☐	☐	☒	☐
g.	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 caused in whole or in part by the project exacerbating the expansive soil conditions?	☐	☐	☒	☐
h.	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?	☐	☐	☐	☒

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
7	**GREENHOUSE GAS EMISSIONS**				
Would the project:					
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
8	**HAZARDS AND HAZARDOUS MATERIALS**				
Would the project:					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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 exacerbate the current environmental conditions so as to 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 exacerbate current environmental conditions so as to 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 exacerbate current environmental conditions so as to result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h.	Exacerbate existing hazardous environmental conditions by bringing people or structures into areas that are susceptible 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?	☐	☐	☐	☒

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
9	**HYDROLOGY AND WATER QUALITY**				
Would the project:					
a.	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b.	Substantially deplete groundwater supplies or interfere 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 offsite?	☐	☐	☒	☐
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 offsite?	☐	☐	☒	☐
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 as mapped on federal flood hazard boundary or flood insurance rate map or other flood hazard delineation map?	☐	☐	☐	☒
h.	Place within a 100-year flood plain structures which would impede or redirect flood flows?	☐	☐	☐	☒
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j.	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
10	**LAND USE AND PLANNING**				
Would the project:					
a.	Physically divide an established community?	☐	☐	☐	☒
b.	Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
11	**MINERAL RESOURCES**				
Would the project:					
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
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?	☐	☐	☐	☒
12	**NOISE**				
Would the project:					
a.	Exposure of persons to or generation of noise in level 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?	☐	☐	☐	☒

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
13	**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?	☐	☐	☐	☒
14	**PUBLIC SERVICES**				
Would the project:					
a.	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	i. Fire protection?	☐	☐	☒	☐
	ii. Police protection?	☐	☒	☐	☐
	iii. Schools?	☐	☒	☐	☐
	iv. Parks?	☐	☐	☒	☐
	v. Other public facilities?	☐	☐	☒	☐
15	**RECREATION**				
Would the project:					
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?	☐	☐	☒	☐

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
16	**TRANSPORTATION AND 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
4.17	**TRIBAL CULTURAL RESOURCES**				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
a.	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)	☐	☐	☒	☐
b.	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

		Potentially Significant Impact	Less than Significant with Project Mitigation	Less than Significant Impact	No Impact
17	**UTILITIES & 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 resource, 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 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?	☐	☐	☒	☐
18	**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 limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☐	☐	☒	☐
c.	Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

4.0 ENVIRONMENTAL ANALYSIS

This section contains an assessment of impacts associated with the issues and subject areas identified in the Initial Study Checklist. The thresholds of significance are based on the L.A. *CEQA Thresholds Guide*.

4.1 AESTHETICS

Senate Bill (SB) 743, effective January 1, 2014, deems the aesthetic impacts of residential infill projects located in defined transit priority project areas as less than significant under CEQA. Zoning Information File (ZI) No. 2451 issued by the Planning Department includes a corresponding map of Transit Priority Areas (TPAs), which identifies the Project site as within a TPA. Therefore, any aesthetic impacts, including but not limited to (a) adverse effects on scenic vistas, (b) damage to scenic resources, (c) degradation of existing visual character, (d) light and/or glare, and (e) shade shadow are deemed less than significant as a matter of law. Notwithstanding the mandate imposed by SB 743, the following aesthetic analysis of the project is provided for informational purposes only.

Impact Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact. Based on the L.A. CEQA Thresholds Guide, a significant impact could occur for non–SB 743 projects if the Project introduced incompatible visual elements within a field of view containing a scenic vista or substantially blocked views of a scenic vista. Scenic vistas are generally described in two ways: panoramic views (visual access to a large geographic area, for which the field of view can be wide and extend into the distance) and focal views (visual access to a particular object, scene, or feature of interest).

The Project site is located within the Koreatown neighborhood in the Wilshire Community Plan area of the City of Los Angeles. The Project site is not located within or along a designated scenic corridor or roadway. The Project site is within the field of view of surrounding mountain ranges. However, the existing level of development on the site and in the surrounding area limits views across and beyond the site from surrounding roadways. As such, and given that the Project is within a Transit Priority Area, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less than Significant Impact. Based on the L.A. CEQA Thresholds Guide, a significant impact could occur for non–SB 743 projects if existing structures on the Project site have been identified as a scenic resource. The Project site is not bordered by or within the viewshed of a designated scenic highway. No historic buildings, rock outcroppings, or unique geologic features exist on the Project site. As such, and given that the Project is within a Transit Priority Area, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Less than Significant Impact. Based on the L.A. CEQA Thresholds Guide, a significant impact could occur for non–SB 743 projects if the Project were to introduce incompatible visual elements on the Project site or visual elements that would be incompatible with the character of the area surrounding the Project site.

Building Heights and Massing

With respect to building mass and height, land uses within the Project vicinity vary in use and height. Within the Wilshire area are commercial retail, office, restaurant, parking, residential, and mixed-use land uses ranging in various heights. Within the proximity of the Project site, buildings range from low- to medium-rise in height, with buildings ranging from 1 to 5 stories in height close to the Project site. The proposed building in the Project site would be 7 stories and approximately 85 feet in height. Though the proposed building would be taller than buildings immediately adjacent, it would be consistent with the overall visual character of Koreatown. As such, and given that the Project is within a Transit Priority Area, impacts would be less than significant.

Views

At a height of approximately 85 feet above grade, the proposed mixed-use building may be visible from private viewpoints within commercial or residential buildings in the Koreatown neighborhood. Existing views toward the Los Angeles skyline or the Hollywood Hills from these vantage points may be obstructed as a result of the Project. However, it should be noted that private views are not protected by any viewshed protection ordinance, and the alteration of private views would not constitute a significant impact. The visual impact of one building blocking another building is not considered a significant impact because the general characteristics of the urban setting would not be altered. The project would be consistent with the general visual character of Koreatown when viewed from a distance. As such, and given that the Project is within a Transit Priority Area, impacts would be less than significant.

Streetscape

The street perimeter of the Project would feature new street trees and improved sidewalks. The façade of the proposed building would be articulated with geometric forms and variations in color. The center of the W. Olympic Boulevard front would feature an entry plaza. These design elements are intended to create visual interest that mitigate the visual effect of the building mass. As such, and given that the Project is within a Transit Priority Area, impacts would be less than significant.

Shade and Shadow

Based on the *L.A. CEQA Thresholds Guide*, a shading impact would normally be considered significant if the proposed Project's structure cast shadows on shade sensitive uses for more than 3 hours each day between the hours of 9:00 AM and 3:00 PM during winter months, or for more than 4 hours each day between the hours of 9:00 AM and 5:00 PM during the summer months. Shade sensitive uses include routinely useable outdoor spaces associated with residential, recreational, or institutional land uses; commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors. The Project would cast shadows across neighboring buildings to the northeast, north and northwest. At 85 feet high, the Project could cast shadows as long as 250 feet.[3] These shadows would reach the Hobart School building on the north side of Olympic Boulevard; however, they would not reach as far as the outdoor play areas on the north side of the school campus. There are no other specific outdoor spaces or shade sensitive uses that would be effected that are not already subjected to shadow from existing structures. As such, and given that the Project is within a Transit Priority Area, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

d. Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Based on the L.A. CEQA Thresholds Guide, a significant impact could occur for non–SB 743 projects if the Project introduces new sources of light or glare on or from the Project site that would be incompatible with the areas surrounding the Project site, or which pose a safety hazard to motorists utilizing adjacent streets or freeways. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether the Project results in a significant nighttime illumination impact shall be made considering the change in ambient illumination levels as a result of Project sources and the extent to which Project lighting would spill off the Project site and affect adjacent light-sensitive areas.

3 L.A. CEQA Thresholds Guide Exhibit A.3-2

Light

Night lighting for the Project site would be provided to illuminate the building entrances and common open space areas, and largely to provide adequate night visibility for residents and visitors and to provide a measure of security. The Project site would utilize outdoor lighting designed and installed to meet City Code requirements for shielding. In general, lighting would be typical of multi-family residential high-rise structures found in the surrounding area. As such, and given that the Project is within a Transit Priority Area, impacts would be less than significant.

Glare

Potential reflective surfaces in the Project site vicinity include automobiles, exterior building windows, and other glass and polished metal surfaces. Excessive glare not only restricts visibility, but also increases the ambient heat reflectivity in a given area. The Project site's architectural materials would include a mix of glass, metal and wood panels. While distinct in style, the Project would utilize materials and finishes typical of modern multi-family residential high-rise structures. As such, and given that the Project is within a Transit Priority Area, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Impact Analysis

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project site is located within a developed and heavily urbanized area of the City of Los Angeles. No farmland or agricultural activity exists on or near the Project site. According to the California Department of Conservation "Los Angeles County Important Farmland 2012" map, the Project site is designated as "urban and built-up land."[4] No portion of the Project site is designated as Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is located within the jurisdiction of the City of Los Angeles and is subject to the applicable land use and zoning requirements of the LAMC. The Project site has land use designations of Community Commercial and High Medium Residential and is zoned for commercial uses [C2-1] and residential uses [R4-1]. As such, the Project site is not zoned for agricultural production, and there is no farmland at the Project site. In addition, no Williamson Act Contracts are in effect for the Project site.[5] No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

4 California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, "Los Angeles County Important Farmland 2016", (July 2017) ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/los16.pdf.

5 California Department of Conservation, Division of Land Resource Protection, "The Land Conservation (Williamson) Act" (2013), http://www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project site has land use designations of Community Commercial and High Medium Residential and is zoned for commercial uses [C2-1] and residential uses [R4-1]. As such, the Project site is not zoned as forest land or timberland, and there is no timberland production at the Project site. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project site is currently developed with a single story commercial retail complex and related surface parking while the remainder of the Project site is developed with residential uses. No forested lands or natural vegetation exists on or near the Project site. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

e. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

No Impact. Neither the Project site, nor nearby properties, are currently utilized for agricultural or forestry uses. The Project site is not classified in any "Farmland" category designated by the State of California. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

4.3 AIR QUALITY

Impact Analysis

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

Less than Significant Impact. Based on the *L.A. CEQA Thresholds Guide*, a significant air quality impact could occur if the Project is not consistent with the applicable Air Quality Management Plan (AQMP) or would in some way represent a substantial hindrance to employing the policies or obtaining the goals of that plan. The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin ("Basin"). To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments, and cooperates actively with all State and federal government agencies to develop rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary. Projects that are consistent with the projections of employment and population forecasts identified in the Growth Management chapter of the Regional Comprehensive Plan (RCP) are considered consistent with the AQMP growth projections because the Growth Management chapter forms the basis of the land use and transportation control portions of the AQMP. Because impacts with respect to population, housing, and employment would be less than significant (see Section 4.13 below), the Project would not conflict with the AQMP. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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

Less than Significant Impact. Based on the *L.A. CEQA Thresholds Guide*, the Project could have a significant impact where Project-related emissions would exceed Federal, State, or regional standards or thresholds, or where Project-related emissions would substantially contribute to an existing or projected air quality violation. The Project would contribute to regional and localized air pollutant emissions during construction and Project operation. The applicable air quality standards and the calculated emissions associated with the Project are discussed in the Air Quality and Greenhouse Gas Technical Report included as Appendix A of this Initial Study. **Table 4.3-1, Maximum Construction Emissions**, identifies daily emissions that are estimated for peak construction days for each construction phase on and off-site.

Table 4.3-1
Maximum Construction Emissions (pounds/day)

Source	VOC	NOx	CO	SOx	PM10	PM2.5
	pounds/day					
Maximum	47.8	78.0	34.3	0.2	6.7	2.7
SCAQMD threshold	75	100	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

The proposed Project would contribute to regional and localized air pollutant emissions during construction (short term) and proposed Project occupancy (long term). These construction activities would create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Construction activities during demolition/site clearing and site preparation/excavation would primarily generate particulate matter less than 10 microns (PM10) and particulate matter less than 3.0 microns (PM2.5) emissions. Mobile sources (such as diesel-fueled equipment on site and traveling to and from the Project site) would primarily generate nitrogen oxide (NOx) emissions. The application of architectural coatings would primarily result in the release of reactive organic gas (ROG) emissions. The amount of emissions generated on a daily basis would vary, depending on the amount and types of construction activities occurring at the same time. In addition, these calculations assume that appropriate dust control measures would be implemented as part of the proposed Project during each phase of development, as required by SCAQMD Rule 403—Fugitive Dust; South Coast Air Quality Management District Rule 1113 limiting the volatile organic compound content of architectural coatings; and other related SCAQMD rules.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities of the Project. Area-source emissions would be generated by the consumption of natural gas and landscape maintenance. Mobile emissions would be generated by the motor vehicles traveling to and from the Project site. The analysis of daily operational emissions associated with the Project has been prepared utilizing CalEEMod, as recommended by the SCAQMD. The estimated emissions from existing uses on the site were subtracted from the estimated emissions resulting from the Project in order to calculate a potential net change in emissions. The results of these calculations are presented in **Table 4.3-2, Maximum Operational Emissions**. Note that the results reflect the net difference between the existing operational emissions generated by uses that would be removed from the Project site and the Project's operational emissions. As shown in **Table 4.3-2**, the operational emissions generated by the Project would not exceed the regional thresholds of significance set by the SCAQMD. As such, impacts would be less than significant. Based on the above, impacts from the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

Table 4.3-2
Maximum Operational Emissions (pounds/day)

Source	VOC	NOx	CO	SOx	PM10	PM2.5
	pounds/day					
Area	9.64	3.79	22.38	0.02	0.04	0.40
Energy	0.07	0.60	0.26	<0.01	0.05	0.05
Mobile	4.18	20.23	52.83	0.19	15.07	4.13
Total	13.89	24.62	76.47	0.21	15.16	4.58
Existing	*(3.27)*	*(6.35)*	*(26.19)*	*(0.05)*	*(3.78)*	*(1.07)*
Net Total	**10.62**	**18.27**	**49.28**	**0.16**	**11.38**	**3.51**
SCAQMD Mass Daily Threshold	55	55	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod

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

Less than Significant Impact. Based on the *L.A. CEQA Thresholds Guide*, a significant impact could occur if the Project would add a considerable cumulative contribution to Federal or State nonattainment pollutants. Given that the Basin is currently in State nonattainment[6] for ozone, PM10, and PM2.5, related projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance. In regard to determining the significance of the Project contribution, the SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-

6 California Air Resources Board (CARB), "Area Designation Maps/State and National," http://www.arb.ca.gov/desig/adm/adm.htm.

specific impacts. Furthermore, SCAQMD states that "projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."[7] If an individual Project generates less than significant construction or operational emissions, then the Project would not generate a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed before, the Project would not generate construction or operational emissions that exceed the SCAQMD's recommended regional thresholds of significance. The Project would not generate a cumulatively considerable increase in emissions of the pollutants for which the Basin is in nonattainment. Additionally, there are no proposed or contemplated changes in the remaining parcels within the Project site that would change the existing emissions from those properties, therefore, impacts of the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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

Less than Significant Impact. Project construction activities and operations, as described previously, may increase air emissions above current levels. Also, concentrations of pollutants may have the potential to impact nearby sensitive receptors. Sensitive receptors are defined as schools, residential homes, hospitals, resident care facilities, daycare centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality.

The SCAQMD has developed localized significance thresholds (LSTs) based on the pounds of emissions per day that can be generated by a project that would cause or contribute to adverse localized air quality impacts.[8] These localized thresholds apply to projects that are less than or equal to 5 acres in size and are only applicable to the following criteria pollutants: NOx, CO, PM10, and PM2.5. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standards, and are developed based on the ambient concentrations of that pollutant for each Source Receptor Area (SRA). For PM10, the LSTs were derived based on requirements in SCAQMD Rule 403—Fugitive Dust. For PM2.5, LSTs were derived based on a general ratio of PM2.5 to PM10 for both fugitive dust and combustion emissions.

LSTs are provided for each of SCAQMD's 38 SRAs at various distances from the source of emissions. The Project site is located within SRA 1, which covers the central Los Angeles area. The nearest sensitive

7 South Coast Air Quality Management District (SCAQMD), *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (2003), Appendix A.

8 SCQAMD, *Final Localized Significance Threshold Methodology* (June 2003; rev. July 2008).

receptors that could potentially be subject to localized air quality impacts associated with construction of the Project are the multifamily residential units adjacent and immediately south to the Project site. Given the proximity of these sensitive receptors to the Project site, the LSTs with receptors located within 25 meters (82 feet) have been used to address the potential localized air quality impacts associated with the construction-related NOx, CO, PM10, and PM2.5 emissions for each construction phase.

Emissions from construction activities have the potential to generate localized emissions that may expose sensitive receptors to harmful pollutant concentrations. However, as shown in **Table 4.3-3, Localized Significance Threshold (LST) Worst-Case Emissions**, which shows the net difference between the emissions from current uses at the Project site and the peak daily emissions that would be generated within the Project site during construction activities for each phase, net new emissions would not exceed the applicable construction LSTs for a 1.18-acre site in SRA 1. Additionally, since there are no proposed or contemplated changes to the remaining uses within the Project site, no other construction emissions would occur and, therefore, localized air quality impacts from construction activities to the off-site sensitive receptors would be less than significant.

Though uses that make up the Project may store and use cleaning products and other chemicals that could be toxic if improperly used, the normal operations of the Project are not associated with the use, storage, or processing of carcinogenic or non-carcinogenic toxic air contaminants (TACs), and no toxic airborne emissions would typically result from Project implementation**.** Additional, no changes in the uses at the remaining properties within the Project site are proposed or contemplated at this time and, therefore, no new toxic airborne emissions are expected from these properties. TACs are typically associated with uses such as automotive repair, dry cleaners, painting operations, and manufacturing facilities, none of which are located within the Project site nor part of the Project.

In addition, construction activities associated with the Project would be typical of other projects in the City, and would be subject to the regulations and laws relating to TACs at the regional, State, and federal levels that would protect sensitive receptors from substantial concentrations of these emissions. Therefore, given the proposed uses and regulatory compliance, the Project would not generate substantial pollutant concentrations and impacts associated with the release of TACs would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

e. Create objectionable odors affecting a substantial number of people?

Less than Significant Impact. A significant impact could occur if a project generated objectionable odors occur that adversely affected sensitive receptors. Odors are typically associated with industrial projects

involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. As the Project involves no elements related to these types of activities, no odors are anticipated. During the construction phase for the Project, activities associated with the operation of construction equipment, the application of asphalt, the application of architectural coatings, and other interior and exterior finishes may produce discernible odors typical of most construction sites. Although these odors could be a source of nuisance to adjacent receptors, they are temporary and intermittent in nature. As construction-related emissions dissipate from the construction area, the odors associated with these emissions would also decrease, dilute, and become unnoticeable. Good housekeeping practices, such as the use of trash receptacles, would be sufficient to prevent nuisance odors. Adherence with SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines would limit potential objectionable odor impacts from the proposed uses. Therefore, impacts from the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

Table 4.3-3
Localized Significance Threshold (LST) Worst-Case Emissions[1] (pounds/day)

Source	NOx	CO	PM10	PM2.5
	pounds/day			
Construction				
Total maximum emissions	12.10	15.42	2.64	1.53
LST threshold	80.12	746.24	5.54	3.36
Threshold exceeded?	***No***	***No***	***No***	***No***
Operational				
Area/energy emissions	4.40	22.64	0.09	0.45
Existing area/energy emissions	(0.03)	(0.27)	(0.01)	(0.01)
Net area/energy emissions	3.37	22.37	0.08	0.44
LST threshold	80.12	746.24	2.00	1.18
Threshold exceeded?	***No***	***No***	***No***	***No***

4.4 BIOLOGICAL RESOURCES

Impact Analysis

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

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact on biological resources if it would result in (a) the loss of individuals, or the reduction of existing habitat of a State- or federal-listed endangered, threatened, rare, protected, candidate, or sensitive species or a Species of Special Concern; (b) the loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community; or (c) interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise or light) to a degree that may diminish the chances for long-term survival of a sensitive species.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. The Project site is occupied by a commercial building, surface parking lot, and five residential structures (two single-family dwellings and three multi-family dwellings). No riparian or other sensitive natural community is located on or adjacent to the Project site. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact on biological resources if it would result in the alteration of an existing wetland habitat. The Project site is entirely developed and covered with impermeable surfaces. The Project site does not

contain any wetlands or natural drainage channels. The Project site does not have the potential to support any riparian or wetland habitat as defined by Section 404 of the Clean Water Act. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact on biological resources if it would interfere with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species. The Project site is located in an area that has been previously developed in a heavily urbanized area of the Wilshire community of the City of Los Angeles. Due to the highly urbanized surroundings, there are no wildlife corridors or native wildlife nursery sites in the Project vicinity. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact with Project Mitigation. Based on the criteria established in the *L.A. CEQA Thresholds Guide,* a project-related, significant adverse effect could occur if the Project were to cause an impact that is inconsistent with local regulations pertaining to biological resources, such as the City of Los Angeles Protected Tree Ordinance[11] or the City's adopted street tree policies.

The Applicant has provided a *Tree Clearance Letter* and *Tree Survey* prepared by a licensed arborist. Eight street trees and 22 other trees were identified. Species include Camphor, Brisbane Box, Norfolk Island Pine, Modesto Ash., Weeping Fig, Pomegranate, Citrus, Mexican Fan Palm, Plumeria, Purple Orchid, Mediterranean Hackberry, Avocado, and Elderberry. These trees do not consist of any protected tree species (i.e., Valley Oak, California Live Oak, Southern California Black Walnut, Western Sycamore, or California Bay). These trees would be remove to clear the site for the Project. New street trees would be planted when the Project is complete. The removal and placement of street trees would be subject to the review and approval of the Board of Public Works, Urban Forestry Division. The Project Applicant would comply with the Mitigation Measure below to ensure that impacts would be less than significant.

11 City of Los Angeles Department of City Planning, Los Angeles Tree Ordinance (No. 177404), LAMC, sec. 12.21

Mitigation Measures: The following mitigation measure is proposed to reduce impacts from the Project to a less than significant level.

MM-BIO-1: Tree Removal (Non-Protected Trees)

- Prior to the issuance of any permit for the Project, a plot plan shall be prepared indicating the location, size, type and general condition of all existing trees on the site and within the adjacent public right(s)-of-way.

- All significant (8-inch or greater trunk diameter, or cumulative trunk diameter if multi-trunked, as measured 54 inches above the ground) non-protected trees on the site proposed for removal shall be replaced at a 1:1 ratio with a minimum 24-inch box tree. Net new trees, located within the parkway of the adjacent public right(s)-of-way, may be counted toward replacement tree requirements.

- Removal or planting of any tree in the public right-of-way requires approval of the Board of Public Works. All trees in the public right-of-way shall conform to the current standards of the Department of Public Works, Urban Forestry Division, Bureau of Street Services.

MM-BIO-2: Tree Removal (Public Right-of-Way)

- Removal of trees in the public right-of-way requires approval by the Board of Public Works.

- The required Tree Report shall include the location, size, type, and condition of all existing trees in the adjacent public right-of-way and shall be submitted for review and approval by the Urban Forestry Division of the Bureau of Street Services, Department of Public Works (213-847-3077).

- The plan shall contain measures recommended by the tree expert for the preservation of as many trees as possible. Measures such as replacement by a minimum of 24-inch box trees in the parkway and on the site, on a 2:1 basis, shall be required for the unavoidable loss of trees in the public right-of-way.

- All trees in the public right-of-way shall be provided per the current Urban Forestry Division standards.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. A significant impact could occur if the Project would be inconsistent with mapping or policies in any conservation plans of the types cited. The Project site is not part of any draft or adopted Habitat

Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or State habitat conservation plan. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

4.5 CULTURAL RESOURCES

Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact could occur if the Project would disturb historic resources that presently exist within the Project site. Section 15064.5 of the CEQA Guidelines generally defines a historic resource as a resource that is: (1) listed in, or determined to be eligible for listing in the California Register of Historical Resources (California Register); (2) included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code); or (3) identified as significant in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code). Additionally, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register. The California Register automatically includes all properties listed in the National Register of Historic Places (National Register) and those formally determined to be eligible for listing in the National Register.

The Project site is currently developed with a commercial retail building, five residential structures and related surface parking. None of the existing structure are designated for listing on the National Register of Historic Places, California Register of Historic Places, or the Los Angeles Historic Cultural Monument list.

The City has conducted several historic surveys of properties in the vicinity. In 1995 the Los Angeles CRA prepared the Wilshire Center Koreatown Redevelopment Project Historic Resources Survey Report, which identified the 1000 South Hobart block potentially eligible for local designation. However, the eligible properties were specifically the Mediterranean Revival Bungalows on the even-numbered (east) side of the block and not the properties on the odd-numbered (west) side of the block that are part of the Project site. In 2009 the CRA published another historic survey titled Intensive Historic Resources Survey Wilshire Center and Koreatown Recovery Redevelopment Area. Additionally, in 2015 the City of Los Angeles Office of Historic Resources published the Historic Resources Survey Report for the Wilshire Community Plan Area as part of SurveyLA, its citywide survey to identify and document significant historic resources. The

2009 and 2015 surveys did not identify any of the properties on or adjacent to the Project Site as eligible for historic designation.12

The nearest historic resources or potentially historic resources are the Villa Serrano and Chateau Alpine located approximately 0.2 miles north of the Project site, which are designated as Los Angeles Historic Cultural MonumentNos. LA-646 and LA-928. Construction and operation of the Project would not directly effect, nor change the historic context, of these buildings. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact. Based upon the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact could occur if grading or excavation activities associated with the Project would disturb unique archaeological resources that could exist within the Project site. The Project site is located within an urbanized area that has been subject to grading and development in the past. There are no known archaeological sites or archaeological survey areas on or adjacent to the Project site. As such, the likelihood of unearthing unique archeological resources is considered low. With regulatory compliance, any potential archeological impacts of the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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

Less than Significant Impact. Based upon the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact could occur if grading or excavation activities associated with the Project were to disturb unique paleontological resources or geologic features that presently exist within the Project site. The Project site has been previously graded and is currently improved with an existing commercial retail building and related surface parking. The Project site and immediate surrounding areas do not contain any known vertebrate paleontological resources. As such, the likelihood of unearthing unique paleontological resources is considered low. With regulatory compliance, any potential paleontological impacts of the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

12 https://preservation.lacity.org/surveyla-findings-and-reports

d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant adverse effect could occur if grading or excavation activities would disturb previously interred human remains. The Project site is located in an urbanized area and has been subject to grading and development in the past. No known burial sites are located on or adjacent to the Project site. Furthermore, the Project Applicant shall be required to comply with existing regulations, including State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 that specify the protocol if human remains are discovered during excavation, grading, or construction activities. With regulatory compliance, any potential impacts of the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

4.6 GEOLOGY AND SOILS

Impact Analysis

Would the project exacerbate existing hazardous environmental conditions by bringing people or structures into areas that are susceptible to potential substantial adverse effects, including the risk of loss, injury, or death involving:

a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact could occur if a project is located within a State-designated Alquist-Priolo Zone or other designated fault zone. According to the City's General Plan, the Project site is not located within a seismic hazard zone for liquefaction, landsliding, or faulting, as delineated by the State of California, in accordance with the Seismic Hazards Mapping Act or the Alquist-Priolo Act.[14] Additionally, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone, nor do any known active faults cross the Project site. The potential risk for surface fault rupture through the Project site is considered low. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Strong seismic ground shaking?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact could 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 other locations in Southern California.

As previously discussed, the Project site is not located within a seismic hazard zone for liquefaction, landsliding, or faulting. The nearest potentially active faults are the Santa Monica-Hollywood Fault, the Puente Hills Blind Thrust Fault and the Newport-Inglewood strike-slip fault, all within 5 miles of the Project site. The Project would conform to all applicable provisions of the California Building Code seismic standards with respect to new construction, as approved by the Department of Building and Safety. 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

14 *City of Los Angeles General Plan,* "Safety Element" (1996).

that are greater than the average risk associated with locations in the Southern California region. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

c. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact could occur if a project site is located within a liquefaction zone. As stated in the City's General Plan, Safety Element, and as noted in the City's parcel information report, the Project site is not located within an area identified as having a potential for liquefaction. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

d. Landslides?

No Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant geologic hazard impact if it would cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. A project-related, significant adverse effect may occur if the project is located in a hillside area with soil conditions that would suggest a high potential for sliding.

The Project site is located on relatively level terrain. According to the CDMG Seismic Hazard Zones Map of the Hollywood Quadrangle[15] and the City of Los Angeles Safety Element,[16] the Project site is not located in a designated earthquake-induced landslide hazard zone. Therefore, the probability of landslides is considered to be very low. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

15 California Department of Conservation, Division of Mines and Geology, "Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle, Los Angeles County, California" (1998).

16 *City of Los Angeles General Plan*, "Safety Element" (1990).

e. Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have significant sedimentation or erosion impacts if it would (a) constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or (b) accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition that would not be contained or controlled on site.

Although development of the Project site has the potential to result in the erosion of soils during site preparation and construction activities, erosion would be reduced by implementation of stringent erosion controls imposed by the City of Los Angeles through grading and building permit regulations. Minor amounts of erosion and siltation could occur during grading. The potential for soil erosion during the ongoing operation of the Project is extremely low due to the predominantly level topography of the site; furthermore, the Project site would be almost entirely built upon, with little or no soil exposed.

All grading activities would require grading permits from the Los Angeles Department of Building and Safety (LADBS), and would be required to comply with the standards designed to limit potential erosion impacts. All on-site grading and site preparation would comply with applicable provisions of Chapter IX, Division 70 of the LAMC, which addresses grading, excavations, and fills. The grading plan would conform to the City's Landform Grading Manual Guidelines, subject to approval by the Department of City Planning and the Department of Building and Safety's Grading Division. Chapter IX, Division 70 of the LAMC addresses grading, excavations, and fills.

For all these reasons, Project impacts would less than significant.

Mitigation Measures: No mitigation measures are necessary.

f. 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 caused in whole or in part by the project's exacerbation of the existing environmental conditions?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant geologic hazard impact if it could cause or accelerate geologic hazards causing substantial damage to structures or infrastructure, or expose people to substantial risk of injury. For the purpose of this specific issue, a significant impact could occur if the Project is built in an unstable area without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property.

As previously discussed, the Project site is not located within a liquefaction zone and the potential for seismically induced settlement at the Project site is considered small. The design and construction of the Project would be to the satisfaction of the LADBS to ensure favorable conditions for the permanent retaining structure. Additionally, construction of the Project would comply with the City of Los Angeles Uniform Building Code (Building Code) which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Code requirements to prevent soil erosion and liquefaction would be implemented.

For all these reasons, Project Impacts would less than significant.

Mitigation Measures: No mitigation measures are necessary.

g. 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 caused in whole or in part by the project exacerbating the expansive soil conditions?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant geologic hazard impact if it would cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. For the purpose of this specific issue, a significant impact could occur if a project is built on expansive soils without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property. Expansive soils contain significant amounts of clay particles that swell considerably when wetted and that shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation measures, heaving and cracking of both building foundations and slabs-on-grade could result.

The Project site currently contains five residential structures, a commercial building and a related surface parking lot. A Geotechnical Investigation conducted for the Project Site (Appendix D) indicates that soils on the Project Site possess medium expansive characteristics. Construction of the Project would be required to comply with the City of Los Angeles Uniform Building Code, Los Angeles Municipal Code and other applicable building codes which includes building foundation requirements appropriate to site-specific conditions. Additionally, the Grading Division of the Department of Building and Safety has reviewed the geotechnical report prepared by Don Soils Engineering Co. dated June 30, 2016 and has issued a Soils Report Approval Letter dated September 27, 2016 (Appendix F), which states that the referenced report is acceptable provided the conditions contained in the Soils Approval Letter are complied with during site development. For all these reasons, Project impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary

h. 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?

No Impact. The Project site is located in a developed area that is served by the wastewater collection, conveyance, and treatment system operated by the City of Los Angeles. The Project's wastewater demand would be accommodated via connections to this existing wastewater infrastructure. No septic tanks or alternative disposal systems would be utilized. For all these reasons, no impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

4.7 GREENHOUSE GAS EMISSIONS

Impact Analysis

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

Less than Significant Impact. A significant impact could occur if a project would generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment. GHG emissions refer to a group of emissions that are believed to affect global climate conditions. These gases trap heat in the atmosphere, and the major concern is that increases in GHG emissions are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation, and temperature. The background and regulatory context of GHG emissions is discussed in the Technical Report included as an Appendix of this Initial Study.

As detailed therein, construction and operational GHG emissions were modeled using CalEEMod for each year of construction of the Project and for the typical year of operation. The estimated emissions from existing uses on the site were subtracted from the estimated emissions resulting from the Project in order to calculate a potential net change in emissions. The results of this analysis are presented in **Table 4.7-1, Proposed Project Construction-Related Greenhouse Gas Emissions** and **Table 4.7-2, Proposed Project Operational Greenhouse Gas Emissions**. As shown the greatest annual increase in GHG emissions from construction activities would be 991.38 metric tons in 2018 while the net increase in GHG emissions generated by the Project would be 3,007.33 MTCO2e per year.

The California Air Pollution Control Officers Association (CAPCOA) suggests making significance determinations on a case-by-case basis when no significance thresholds have been formally adopted by a lead agency. Although GHG emissions are quantified and shown in **Tables 4.7-1** and **4.7-2**, CARB, SCAQMD, and the City of Los Angeles have yet to adopt project-level significance thresholds for GHG emissions that would be applicable to the Project. Assessing the significance of a project's contribution to cumulative global climate change involves: (1) evaluating the project's sources of GHG emissions; and (2) considering project consistency with applicable emission reduction strategies and goals, such as those set forth by the lead agency or other regional state agency. As described below, the Project would be consistent with the City of Los Angeles goals and actions to reduce the generation and emission of GHGs from both public and private activities pursuant to the applicable portions of the *Wilshire Community Plan*, *LA Green Plan* and *Sustainable City pLAn.* As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

Table 4.7-1
Proposed Project Construction-Related Greenhouse Gas Emissions

Year	CO2e Emissions (Metric Tons per Year)[a]
2019	851.22
2020	360.92
Total Construction GHG Emissions	1,212.14
Annualized over Project's Lifetime	**40.41**

[a] *Construction CO_2 values were derived using CalEEMod Version 2013.2.2.*
*Note: Calculation data and results are provided in **Appendix B** of this Initial Study.*
For comparative purposes, SCAQMD recommends that construction-related GHG emissions be amortized over the assumed operational lifetime of a project, which is recommended by SCAQMD as 30-years.
**N2O emissions account for 0.06 MTCO2e/year.*

Table 4.7-2
Proposed Project Operational Greenhouse Gas Emissions

GHG Emissions Source	Emissions ($MTCO_2e$/year)
Construction (amortized)	40.41
Operational (mobile) sources*	2,986.74
Area sources	56.10
Energy	1,334.69
Waste	75.35
Water	198.65
Annual Total	**4,691.94**
Existing	**821.44**
Net Total	**3,870.50**

Source: CalEEMod.
*Notes: Emissions calculations are provided in **Appendix B***
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
The emissions of the Project represent the net difference between the existing greenhouse generated uses that would be removed and the Project greenhouse gas emissions.
$MTCO_2e$ = metric tons of carbon dioxide emissions.
** N2O emissions account for 0.08 MTCO2e/year.*

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

Less than Significant Impact. The Project would be designed to comply with the LA Green Building Code and would be consistent with the City's goals as expressed in the *Sustainable City pLAn* and *LA Green Plan*. The Project's generation of GHG emissions would not make a cumulatively considerable contribution to or conflict with an applicable plan, policy, or regulation for the purposes of reducing the emissions of greenhouse gasses. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following section incorporates by reference information from the *Phase 1 Environmental Site Assessment,* dated August 8, 2016 and prepared by Gabriel Environmental Group on behalf of the Applicant.

Impact Analysis

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

Less than Significant Impact. Based upon the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact to hazards and hazardous materials if: (a) the project involved a risk of accidental explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals or radiation); or (b) the project involved the creation of any health hazard or potential health hazard. The types and amounts of hazardous materials that would be used in connection with the Project would include typical household products either uses by the residents or sold at the grocery store (e.g., cleaning solutions, solvents, pesticides for landscaping, painting supplies, and petroleum products). The routine use and disposal of normal household products is not considered to create a significant hazard to the public or the environment.

Construction of the Project would also involve the temporary use of potentially hazardous materials, including vehicle fuels, paints, oils, transmission fluids, solvents, and other acidic and alkaline solutions that would require special handling, transport, and disposal. However, all potentially hazardous materials would be used and stored in accordance with applicable Federal, State, and Local regulations. As such, the Project would not create a significant hazard to the public or the environment. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project 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?

Less than Significant Impact. Based upon the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact to hazards and hazardous materials if (a) A project involved a risk of accidental explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals or radiation); or (b) A project involved the creation of any health hazard or potential health hazard. A common list of potentially hazardous materials that may be found at the Project site could consist of, but are not limited to, the following:

Household Products

By far the most common hazardous materials are those found or used in the home for such activities as cleaning, painting, and pest control. However, it is expected that household products would be used and stored in accordance with applicable federal, State, and local regulations.

Asbestos-Containing Materials

Asbestos is a crumbly material often found in older buildings, typically used as insulation in walls or ceilings. It was formerly popular as an insulating material because it had the desirable characteristic of being fire resistant. However, it can pose a health risk when very small particles become airborne. These dust-like particles can be inhaled, where their microscopically sharp structures can puncture the tiny air sacs in the lungs, resulting in long-term health problems. The Department of Toxic Substance Control (DTSC) classifies asbestos waste as potentially hazardous if it is greater than 1 percent and easily crumbled (friable). Based on the age of the on-site building, the potential for asbestos-containing building materials at the Project site is possible. The Project Applicant would be required to comply with the South Coast Air Quality Management District's Rule 1403 as well as all other applicable State and Federal rules and regulations regarding the disposal of asbestos-containing materials (ACMs).

Lead-Based Paint

While lead-based paint was taken off the market, it is estimated that 80 percent of existing buildings built prior to 1978 contain lead paint. Based on the age of the existing on-site building, there is a potential for lead-based paint at the Project site. However, the Project Applicant would be required to comply with the applicable OSHA regulations regarding the handling and disposal of lead based paint. However, the Applicant shall comply with the Regulatory Compliance Measure and standard handling and disposal practices shall be implemented pursuant to OSHA regulations.

Polychlorinated Biphenyls

Polychlorinated Biphenyls (PCBs) are man-made organic chemicals that were formerly manufactured for use in various industrial and commercial applications as a result of their non-flammability, chemical stability, high boiling point, and electrical insulating properties. While the manufacture of PCBs was banned in 1979, these hazardous materials may be found in products associated with transformers, electrical equipment, motor oil, hydraulic systems, cable and thermal insulation, adhesives and tapes, oil-based paint, caulking, plastics, and floor finish.[17] During the site visit performed for the Phase 1 assessment, no PCB-containing equipment was identified.

17 US Environmental Protection Agency (USEPA), "Polychlorinated Biphenyls," http://www.epa.gov/wastes/hazard/tsd/pcbs/about.htm (accessed August 2017).

Methane and Radon Gas

According to the City's parcel records, the Project site is not located within a Methane Buffer Zone.[18] According to the Radon Potential Zone Map for Southern Los Angeles County, California,[19] the Project site is not located within a radon zone. No further investigations related to these hazards would be required.

Mitigation Measures: No mitigation measures are necessary.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. Based upon the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact to hazards and hazardous materials if: (a) the project involved a risk of accidental explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation); or (b) the project involved the creation of any health hazard or potential health hazard. According to the *L.A. CEQA Thresholds Guide*, the determination of significance shall be made on a case-by-case basis considering the following factors: (a) the regulatory framework for the health hazard; (b) the probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance; (c) the degree to which project design will reduce the frequency or severity of a potential accidental release or explosion of a hazardous substance; (d) the probable frequency and severity of consequences to people from exposure to the health hazard; and (e) the degree to which project design would reduce the frequency of exposure or severity of consequences to exposure to the health hazard.

The closest schools to the Project site are the Hobart Boulevard Elementary School, located 154 feet north at 980 S Hobart Boulevard, and Los Angeles Elementary School, located 0.2 miles south at 1211 S Hobart Boulevard. The Project will have a less than significant impact during construction (with regulatory compliance measures for asbestos, lead-based paint, PCBs, and USTs) and will not emit any hazardous substances during operation. The Project would remove and ensure that demolition of existing structures does not emit hazardous materials. The school would still be generally shielded from the Project Site by the distance noted above and standard construction walls and sheeting to reduce dust and other emissions from the Site. No hazardous materials other than modest amounts of typical cleaning supplies and solvents used for housekeeping and janitorial purposes would be present at the Project site, and use of these substances would comply with State health codes and regulations. Therefore, the Project would

18 City of Los Angeles Department of Planning, *Zone Information and Map Access System (ZIMAS)*, http://zimas.lacity.org/, accessed August 2017.

19 California Geologic Survey, *Radon Potential Zone Map for Southern Los Angeles County, California,* map, prepared by Ron Churchill (January 2005), http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/radon/Documents/sr182map.pdf.

not create a significant hazard through hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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 exacerbate the current environmental conditions so as to create a significant hazard to the public or the environment?

Less than Significant Impact. The Project site is currently developed with a retail building, related surface parking and residential uses. No aboveground storage tanks (ASTs) have been identified at the Project site, nor was there any indication of an underground storage tank (USTs) on the Project site.[20] There are 12 leaking underground storage tanks (LUSTs) within one-half mile of the Project site, eight of which have been remediated and closed as of 2013; the other 4 are all still open and currently under remediation with the State Water Resources Control Board (SWRCB). Additionally, there are 9 aboveground storage tank (ASTs) within one-half mile of the Project site that are permitted by the City of Los Angeles[21]. Based on the distance to the Project site and the status of the cases, these properties are not considered to pose a significant hazard to the Project site. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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 exacerbate current environmental conditions so as to result in a safety hazard for people residing or working in the project area?

No Impact. A significant impact may occur if a project is located within a public airport land use plan area, or within two miles of a public airport, and subject to a safety hazard. The closest public airports to the Project site are the Bob Hope Airport, Santa Monica Airport and the Los Angeles International Airport (LAX). None of these airports are located within two miles of the Project site. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

20 Western Environmental Engineers Company, *Phase I Environmental Site Assessment* (May 15, 2015).

21 State Water Resources Control Board, *GeoTracker,* http://geotracker.waterboards.ca.gov/, accessed August 2017.

f. For a project within the vicinity of a private airstrip, would the project exacerbate current environmental conditions so as to result in a safety hazard for people residing or working in the project area?

No Impact. The Project is not within the vicinity of a private airstrip and not within an area that would expose residents and workers to a safety hazard. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact with Project Mitigation. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact to hazards and hazardous materials if the project involved possible interference with an emergency response plan or emergency evacuation plan. According to the *L.A. CEQA Thresholds Guide*, the determination of significance shall be made on a case-by-case basis considering the degree to which the project may require a new (or interfere with an existing) emergency response or evacuation plan, and the severity of the consequences.

The Project site is located at 3170 W. Olympic Boulevard, bordered by S. Hobart Boulevard and S. Serrano Avenue, none of which are a selected disaster route as identified by the City's General Plan.[22] However, the Project site is located approximately 0.2 miles to the west of S. Western Avenue, which is a selected disaster route. While it is expected that the majority of construction activities for the Project would be confined to the Project site, limited off-site construction activities may occur in adjacent street rights-of-way during certain periods of the day, which may result in temporary lane closures that could have the potential to interfere with established emergency response or evacuation plans. However, any such closures would be temporary in nature and would be coordinated with the City of Los Angeles Departments of Transportation, Building and Safety, and Public Works. Impacts would be less than significant. The Project would provide an emergency evacuation plan as part of the mitigation measure listed below because the close proximity to the selected disaster route and the potential for temporary lane closures. Therefore, a less than significant impact will occur.

Mitigation Measures:

MM-HAZ-1 Emergency Evacuation Plan

- Prior to the issuance of a building permit, the applicant shall develop an emergency response plan for the Project in consultation with the Fire Department. The emergency response plan shall

22 *City of Los Angeles General Plan* "Safety Element," Exhibit H, Critical Facilities and Lifeline Systems in the City of Los Angeles.

include but not be limited to the following performance standards and requirements: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments

h. Exacerbate existing hazardous environmental conditions by bringing people or structures into areas that are susceptible 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?

No Impact. The Project site is located in a highly urbanized area of Los Angeles and does not include wildlands or high fire hazard terrain or vegetation. The Project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ).[23] No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

4.9 HYDROLOGY AND WATER QUALITY

Impact Analysis

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

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact on surface water quality if discharges associated with the project would create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable National Pollution Discharge Elimination System (NPDES) stormwater permit or Water Quality Control Plan for the receiving water body. For the purpose of this specific issue, a significant impact may occur if the Project would discharge water that does not meet the quality standards of local agencies that regulate surface water quality and water discharge into stormwater drainage systems. Significant impacts would also occur if the project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board (SWRCB). These regulations include the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts.

Construction Impacts

The three general sources of potential short-term, construction-related stormwater pollution associated with the Project are (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earthmoving activities, which,

23 City of Los Angeles Department of City Planning, *ZIMAS,* "Parcel Profile Reports," http://www.zimas.lacity.org, accessed August 2017.

when not controlled, may generate soil erosion via storm runoff or mechanical equipment. Under the NPDES, the Project Applicant is responsible for preparing a Storm Water Pollution Prevention Plan (SWPPP) to mitigate the effects of erosion and the inherent potential for sedimentation and other pollutants entering the stormwater system.

Surface water runoff from the Project site would continue to be collected on the Project site and directed toward existing storm drains in the Project vicinity that have adequate capacity. Pursuant to local practice and City policy, stormwater retention will be required as part of the Low Impact Development (LID) and SUSMP implementation features (despite no increased imperviousness of the site). Any contaminants gathered during routine cleaning of construction equipment would be disposed of in compliance with applicable stormwater pollution prevention permits.

Additionally, any pollutants from the parking areas on the Project site would be subject to the requirements and regulations of the NPDES and applicable LID Ordinance. The Project would be required to demonstrate compliance with LID Ordinance standards and retain or treat the first three-quarters of an inch of rainfall in a 24-hour period, which would reduce the Project's impact to the stormwater infrastructure. The Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. With regulatory compliance, any potential water quality impacts from the Project during construction would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

Operation Impacts

The Project would be required to demonstrate compliance with LID Ordinance standards and retain or treat the first three-quarters of an inch of rainfall in a 24-hour period. Compliance with the LID Ordinance would reduce the amount of surface water runoff leaving the Project site as compared to the current conditions. City of Los Angeles Ordinance Nos. 172,176 and 173,494 specify Storm Water and Urban Runoff Pollution Control, which requires the application of BMPs. The Project would also comply with water quality standards and wastewater discharge requirements set forth by the SUSMP for Los Angeles County and Cities in Los Angeles County and approved by the Los Angeles Regional Water Quality Control Board (LARWQCB). Full compliance with the LID Ordinance and implementation of design-related BMPs would ensure that the operation of the Project would not violate any water quality standards or discharge requirements or otherwise substantially degrade water quality. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact on groundwater level if it would change potable water levels sufficiently to (a) reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or respond to emergencies and drought; (b) reduce yields of adjacent wells or well fields (public or private); (c) adversely change the rate or direction of flow of groundwater; or (d) result in demonstrable and sustained reduction in groundwater recharge capacity.

The Project is not adjacent to a well field nor part of a substantial groundwater recharge area. Most of the surface water runoff from the Project site is directed to adjacent storm drains though some percolation occurs around the existing residential properties. Given the relatively small pervious site area and the location, the development of the existing residential lots to impervious surfaces would not substantially interfere with groundwater supplies. Impacts on groundwater would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

c. Would the project 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?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact on surface water hydrology if it would result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow. The Project site is located in a highly urbanized area of Los Angeles, and no streams or river courses are located on or within the Project vicinity. The Project site is fully developed with impervious surface. Implementation of the Project would not increase site runoff or result in changes to the local drainage patterns. Implementation of a SWPPP for the Project would reduce the amount of surface water runoff after storm events because the Project would be required to implement stormwater BMPs to retain or treat the runoff from a storm event producing three-quarters of an inch of rainfall in a 24-hour period. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

d. Would the project 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?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact on surface water hydrology if it would result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow. The Project site is fully developed with impervious surface. Implementation of the Project would not result in a significant increase in site runoff or cause any changes in the local drainage patterns that would result in flooding on or off site. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

e. Would the project 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?

Less than Significant Impact. Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project could have a significant impact on surface water quality if discharges associated with the project would create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for the receiving water body. For the purpose of this specific issue, a significant impact may occur if the volume of stormwater runoff from the Project site were to increase to a level that exceeds the capacity of the storm drain system serving the Project site. A Project-related significant adverse effect would also occur if the Project would substantially increase the probability that polluted runoff would reach the storm drain system.

The Project would not result in a significant increase in site runoff, or any changes in the local drainage patterns. Runoff from the Project site currently is, and would continue to be, collected on the site and directed toward existing storm drains in the Project vicinity that have adequate capacity. Pursuant to local practice and City policy, stormwater retention would be required as part of the LID/SUSMP implementation features (despite no increased imperviousness of the site). Any contaminants gathered during routine cleaning of construction equipment would be disposed of in compliance with applicable stormwater pollution prevention permits. Further, any pollutants from the parking areas would be subject to the requirements and regulations of the NPDES and applicable LID Ordinance requirements. Accordingly, the Project would be required to demonstrate compliance with LID Ordinance standards and retain or treat the first three-quarters of an inch of rainfall in a 24-hour period. The Project would not

create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

f. Would the project otherwise substantially degrade water quality?

Less than Significant Impact. A significant impact could occur if the Project includes potential sources of water pollutants that would have the potential to substantially degrade water quality. Construction of the Project, such as grading and excavation activities, could potentially degrade water quality through erosion and subsequent sedimentation. However, the implementation of BMPs and compliance with all Federal, State, and Local regulations governing stormwater discharge would reduce the impacts of the Project on surrounding water quality. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

g. Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. A significant impact could occur if the Project were to place housing within a 100-year flood hazard area. A 100-year flood is defined as a flood that results from a severe rainstorm with a probability of occurring approximately once every 100 years. According to the Safety Element of the City's General Plan, the Project site is not located within a designated flood zone.[24] Therefore, no impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

h. Would the project place within a 100-year flood hazard area structures, which would impede or redirect flood flows?

No Impact. A significant impact could occur if a Project was located within a 100-year flood zone and would impede or redirect flood flows. The Project site is not in an area designated as a 100-year flood hazard area. The Project site is located in a highly urbanized area, and no changes to the local drainage pattern would occur with implementation of the Project. Therefore, the Project would not have the potential to impede or redirect floodwater flows. No impact would occur.

24 *City of Los Angeles General Plan, "*Safety Element," Exhibit F, 100-Year & 500-Year Flood Plains in the City of Los Angeles, (1996).

Mitigation Measures: No mitigation measures are necessary.

i. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. A significant impact could occur if the Project exposes people or structures to a significant risk of loss or death caused by the failure of a levee or dam. According to the Safety Element of the City General Plan, the Project site is not located within a potential inundation area. As such, the Project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

j. Would the project expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?

No Impact. A significant impact would occur if the Project site were sufficiently close to the ocean or other water body to potentially be at risk of the effects of seismically induced tidal phenomena (e.g., seiche and tsunami), or if the Project site were 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 potential seiche or tsunami zone. With respect to the potential impact from a mudflow, the Project site is relatively flat and is surrounded by urban development. Therefore, there are no sources of mudflow within the vicinity of the Project site. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

4.10 LAND USE AND PLANNING

Impact Analysis

a. Would the project physically divide an established community?

No Impact. A significant impact could 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. According to *the L.A. CEQA Thresholds Guide*, the determination of significance shall be made on a case- by-case basis considering the following factors: (a) the extent of the area that would be impacted, the nature and degree of impacts, and the types of land uses within that area; (b) the extent to which existing neighborhoods, communities, or land uses would be disrupted, divided or isolated, and the duration of the disruptions; and (c) the number, degree, and type of secondary impacts to surrounding land uses that could result from implementation of the proposed Project.

The Project site is located in the Wilshire Community Plan Area of the City of Los Angeles. The neighborhood is urbanized and contains uses similar to the proposed use of the Project site. No alteration of street pattern is proposed and no separation of uses or disruption of access between land use types would occur as a result of the Project. Therefore, the Project would not significantly disrupt or divide the physical arrangement of the established community. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. A significant impact could occur if a project is inconsistent with the *General Plan* or zoning designations currently applicable to a project site, and would cause adverse environmental effects, which the General Plan and Zoning Ordinance are designed to avoid or mitigate.

The Project site is located within the jurisdiction of the City of Los Angeles, and is therefore subject to the designations and regulations of several local and regional land use plans and the municipal zoning code.

***SCAG Regional Comprehensive Plan*.** The Project site is located within the six-county region that comprises the SCAG planning area. The SCAG Regional Comprehensive Plan (RCP) includes growth management policies that strive to improve the standard of living, maintain the regional quality of life, and provide social, political, and cultural equity. The guiding principles of the RCP are: (1) Improve mobility

for all residents; (2) Foster livability in all communities; (3) Enable prosperity for all people; and (4) Promote sustainability for future generations.

The Project would be consistent with policies set forth in the RCP because it would develop an underdeveloped site within an existing urban setting. Relevant land use goals of the RCP include focusing growth along transportation corridors; targeting growth within walking distance of transit; and injecting new life into under-used areas. The Project would further these strategies by redeveloping an underutilized commercial property with a denser mixed-use project that is within walking distance of a transit hub. Impacts would be less than significant.

***City of Los Angeles General Plan*.** The land use component of the City of Los Angeles General Plan is set forth in the General Plan Framework (GPF) and in Community Plans. The GPF sets forth a citywide comprehensive long-range growth strategy and defines Citywide policies regarding land use, housing, urban form, neighborhood design, open space and conservation, economic development, transportation, infrastructure, and public services. GPF land use policies are further guided at the community level through community plans and specific plans. The GPF Land Use chapter designates Districts (i.e., Neighborhood Districts, Community Centers, Regional Centers, Downtown Centers, and Mixed-Use Boulevards) and provides policies applicable to each District to support the vitality of the City's residential neighborhoods and commercial districts. The Project site is along the edge of an area designated as a Regional Center as shown in Figure 3-1 of the GPF, which defines Regional Center as a "focal point of regional commerce, identity and activity and containing a diversity of uses." The GPF states that Regional Centers will have a range of FARs from 1.5:1 to 6.0:1 and are characterized by 6- to 20-story buildings.[25] As such, the Project is generally consistent with the General Plan Framework.

The Project site is within the Wilshire Community Plan area. In conformity with the land use concepts in the GPF, Wilshire Landuse Diagram Amendment[26] shows an area defined as a Regional Commercial Center as extending along Olympic Boulevard to include the Project site. However, the Community Plan Land Use Map shows the Project site designated as High Medium Residential and Community Commercial, which general correspond to Height District 1. The proposed uses comply with the use designations of the plan. As discussed below, the proposed density would exceed what is normally allowed in Height District 1.

25 *City of Los Angeles General Plan, "*Framework Element" (2003), Fig. 3-1, Long Range Land Use Diagram.

26 City of Los Angeles, Department of City Planning, Wilshire Community Plan, Wilshire Landuse Diagram, *Wilshire Community Plan Update III Land Use Diagram,* http://cityplanning.lacity.org/complan/pdf/willudiagram.pdf

Los Angeles Municipal Code. Development of the Project site is subject to the constraints of the Los Angeles Municipal Code (LAMC), especially Chapter I, the Planning and Zoning Code.

The Project site is zoned C2 and R4. C2 permits a range of retail and commercial uses as well as the residential uses permitted in the R4 zone. As such, the proposed uses would conform to existing zoning.

The Project site is also currently zoned as Height District 1, which permits a maximum Floor Area Ratio (FAR) for commercial uses of 1.5:1 and for residential uses of 3.0:0. The Project would have an FAR of approximately6.09:1. As such, it would exceed the permitted density of Height District 1.

As part of the Project, the Applicant has requested a Conditional Use to increase the density beyond what is allowed by the density bonus ordinance. The density proposed is consistent with the density bonus percentage increase for the number of units set aside as restricted affordable to Very Low Income Households. The Applicant has proposed to set aside 46 units as affordable at a Very-Low Income Household level. Pursuant to LAMC Section 12.24 F. and as part of the Conditional Use, the Applicant has requested to exceed the FAR limit on the site. The City may approve this request after it has determined that the project would support the overall planning and housing policies of the City, would enhance the neighborhood, and would not adversely affect or degrade adjacent properties. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. A project-related significant adverse effect could occur if a project site were located within an area governed by a habitat conservation plan or natural community conservation plan.

No such plans presently exist which govern any portion of the Project site. Further, the Project site is located within a heavily urbanized area of Los Angeles. Therefore, the Project would not conflict with the provisions of an adopted habitat conservation plan or natural community conservation plan. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

4.11 MINERAL RESOURCES

Impact Analysis

a. Would the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?

No Impact. A significant impact could occur if a project site is located in an area used or available for extraction of a regionally-important mineral resource, or if a project would convert an existing or future regionally-important mineral extraction use to another use, or if a project would affect access to a site used or potentially available for regionally-important mineral resource extraction. According to the *L.A. CEQA Thresholds Guide*, the determination of significance shall be made on a case-by-case basis considering: (a) whether, or the degree to which, the project might result in the permanent loss of, or loss of access to, a mineral resource that is located in a State Mining and Geology Board Mineral Resource Zone 2 (MRZ-2) Area, or other known or potential mineral resource area, and (b) whether the mineral resource is of regional or Statewide significance, or is noted in the Conservation Element as being of local importance. The Project site is not located within a designated MRZ-2 Area, an Oil Drilling/Surface Mining Supplemental Use District, or an Oil Field/Drilling Area.[27] No mineral resources are known to exist beneath the Project site. Therefore, no impacts associated with the loss of availability of a known mineral resource would occur.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. As noted, the Project site is not located within a MRZ-2 Area. The Project site is not designated as a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, no impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

27 *City of Los Angeles General Plan,* "Safety Element" (1990).

4.12 NOISE

Impact Analysis

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

Less Than Significant Impact with Mitigation Incorporated. A significant impact could occur if a project would generate excessive noise that would cause the ambient noise environment to exceed noise level standards set forth in the City of Los Angeles Noise Ordinance (Noise Ordinance) or the City of Los Angeles CEQA Thresholds Guide. The City's Noise Ordinance (Section 112.05 of the LAMC) prohibits construction equipment noise that produces a maximum noise level exceeding 75 dB(A) at a distance of 50 feet. However, the Noise ordinance also states that this limitation does not apply where compliance is technically infeasible. According to the City of Los Angeles CEQA Threshold Guide, a significant noise impact could occur if construction activities lasting more than one day would increase the ambient noise levels by 10 dB(A) or more at a noise-sensitive location or construction activities lasting more than 10 days in a three-month period would increase ambient noise levels by 5 dB(A) or more at a noise-sensitive location. The Threshold Guide defines sensitive uses as "residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks."[28]

To identify the existing ambient noise levels at nearby off-site sensitive receptors as well as the general vicinity of the Project site, noise measurements were taken using monitoring equipment that conforms to industry standards and the requirement specified in Section 111.01(l) of the LAMC. The measured noise levels are shown in **Table 4.12-1, Existing Ambient Daytime Noise Levels in the Project site Vicinity**.

Construction of the Project would require the use of heavy equipment for demolition, site clearing, grading, excavation and foundation preparation, the installation of utilities, paving, and building construction. During each construction phase there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of each activity.

The US Environmental Protection Agency (USEPA) has compiled data regarding the noise-generating characteristics of specific types of construction equipment and typical construction activities.[29] Based on this data, **Table 4.12-2, Typical Outdoor Construction Noise Levels** presents composite noise levels pertaining to the type and number of construction equipment that would occur at the Project site.

28 City of Los Angeles, *L.A.* CEQA Thresholds Guide (2006), p. I.1-3.

29 USEPA, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances,* PB 206717 (1971).

Table 4.12-1
Existing Ambient Daytime Noise Levels in the Project Vicinity

Site	Location	Primary Noise Source	Leq (15-minute)
Site 1	Hobart Street, between Olympic and 11th St	Steady traffic along Olympic Blvd	55.4
Site 2	Corner of Olympic Blvd and Hobart Blvd	Heavy traffic along Olympic Blvd	72.2
Site 3	Serrano Avenue, between Olympic & 11th St	Light traffic along Serrano Avenue	54.5
Site 4	SE Corner of Olympic Blvd & Serrano Avenue	Heavy traffic on Olympic Blvd	73.6

Measurements were taken on Thursday, June 6, 2016 from 7:56 AM through 9:04 AM.

Table 4.12-2
Typical Outdoor Construction Noise Levels

	Approximate Leq dB(A) with Mufflers			
Construction Phase	**25 Feet**	**50 Feet**	**100 Feet**	**200 Feet**
Demolition	92	86	80	74
Site Preparation	88	82	76	70
Grading	93	87	81	75
Building Construction	94	88	82	76
Architectural Coating	88	82	76	70

Source: U.S. Department of Transportation, Construction Noise Handbook, Chapter 9.0 (August 2006).

The nearest sensitive receptors are the residential units along Serrano and Hobart. Given the measured ambient noise levels along the southern portion of the Project site, construction noise would exceed ambient exterior noise levels at the nearest identified off-site sensitive receptors by more than 5 dB(A) during construction. As such, a substantial temporary increase in ambient noise levels would occur at the identified off-site sensitive receptors. Impacts would be potentially significant. As such, mitigation identified below shall be incorporated into the Project to reduce noise levels to the extent feasible.

Mitigation Measures: The incorporation of the following mitigation measures into the Project would reduce construction noise impacts to a less than significant level.

MM-NOI-1 **Increased Noise Levels (Demolition, Grading and Construction Activities)**

- Demolition and construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, must be turned off when not in use for more than 30 minutes.
- Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.
- Stationary construction equipment, such as pumps, generators, or compressors, must be placed as far from noise sensitive uses as feasible during all phases of project construction.
- Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.
- 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 on Saturday.
- Demolition and construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.
- The project contractor shall use power construction equipment with state-of-the-art noise shielding and muffling devices.

b. Would the project result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant with Project Mitigation. Vibration is sound radiated through the ground. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response. A vibration velocity level of 75 VdB is the approximate dividing line between barely

perceptible and distinctly perceptible levels for most people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Construction activities have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate through the ground but diminishes in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels.

In terms of construction-related impacts on buildings, the City of Los Angeles has not adopted policies or guidelines relative to groundborne vibration. While the Los Angeles County Code (LACC Section 12.08.350) states a presumed perception threshold of 0.01 inch per second RMS, this threshold applies to groundborne vibrations from long-term operational activities, not construction. Consequently, as both the City of Los Angeles and the County of Los Angeles do not have a significant threshold to assess vibration impacts during construction, the Federal Transit Administration (FTA) and California Department of Transportation's (Caltrans) adopted vibration standards for buildings are used to evaluate potential impacts related to project construction. Based on the FTA and Caltrans criteria, construction impacts relative to groundborne vibration would be considered significant if the following were to occur:[30]

- Project construction activities would cause a PPV groundborne vibration level to exceed 0.5 inches per second (ips) at any building that is constructed with reinforced concrete, steel, or timber.
- Project construction activities would cause a PPV groundborne vibration level to exceed 0.3 ips at any engineered concrete and masonry buildings.
- Project construction activities would cause a PPV groundborne vibration level to exceed 0.2 ips at any nonengineered timber and masonry buildings.
- Project construction activities would cause a PPV groundborne vibration level to exceed 0.12 ips at any historical building or building that is extremely susceptible to vibration damage.

30 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (May 2006); and California Department of Transportation, Transportation and Construction Vibration Guidance Manual, (September 2013)..

Table 4.12-2, Vibration Source Levels for Construction Equipment, identifies various PPV and RMS velocity (in VdB) levels for the types of construction equipment that would operate at the Project site during construction.

Table 4.12-2
Vibration Source Levels for Construction Equipment

	Approximate PPV (in/sec)					Approximate RMS (VdB)				
Equipment	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Caisson Drilling	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Loaded Trucks	0.076	0.027	0.020	0.015	0.010	86	77	75	72	68
Excavator	0.040	0.014	0.011	0.008	0.005	80	71	69	66	62
Jackhammer	0.035	0.012	0.009	0.007	0.004	79	70	68	65	61
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004	58	49	47	44	40

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, Final Report, 2006.

Residences to the south are located within 25 feet of the Project site, thus vibration levels could reach 0.086 ips at these residences. As discussed previously, the most restrictive threshold for building damage from vibration is 0.12 PPV for historic buildings and buildings that are extremely susceptible to vibration damage. Therefore, vibration levels at the nearby buildings would not exceed the building damage threshold from vibration. As maximum off-site vibration levels would not exceed 0.12 PPV, there would be no potential for Project construction to result in vibration levels exceeding the most restrictive threshold of significance. Impacts with respect to building damage resulting from Project-generated vibration would be less than significant.

The FTA guidance manual also provides vibration criteria for human annoyance based on the frequency of vibration events and sensitivity of land uses. For residential buildings subject to infrequent vibration events (construction) the criterion is 80 VdB. The multifamily residential use located adjacent to the Project site could be exposed to increased vibration levels during construction. The activity of loaded trucks at the northern property edge could expose the adjacent property to vibration that would slightly exceed the threshold. As such, impacts from the Project could be potentially significant unless mitigated.

Mitigation Measures: Mitigation Measure **MM NOI-1**, described above, would serve to reduce construction-related vibration impacts of the Project to a less than significant level. Specifically, restriction of the construction schedule, limitation on operating several pieces of equipment simultaneously, and placement of noise-generating equipment and staging areas away from sensitive uses would increase the distance from the noise-source and reduce the frequency of vibration events.

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

Less than Significant Impact. A significant impact could occur if the Project were to result in a substantial permanent increase in ambient noise levels above existing ambient noise levels without the Project. The primary long-term noise source associated with the Project would be Project-related traffic. According to the *L.A. CEQA Thresholds Guide*, if a project would result in traffic that is less than double the existing traffic, then the project's mobile noise impacts can be assumed to be less than significant. As evaluated in **Section 4.16 Traffic and Transportation**, the Project would not result in a doubling of the existing traffic volumes. Therefore, traffic-generated noise impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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

Less than Significant with Project Mitigation. The Project does not involve uses that are sources of substantial increases in periodic noise. Noise from traffic and the residential activities associated with the Project exist in the Project vicinity without the Project. As discussed above, substantial temporary increases in ambient noise levels are likely during construction.

Mitigation Measures: Mitigation measure **MM-NOI-1**, identified above, would reduce potential construction noise impacts to a less than significant level.

e. For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. A significant impact may occur if a proposed project were located within an airport land use plan and would introduce substantial new sources of noise or substantially add to existing sources of noise within or near a project site. There are no airports within a 2-mile radius of the Project site. The Project would not expose people to excessive noise levels associated with airport uses. No impact would occur.

Mitigation Measures: No mitigation measures are necessary.

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?

No Impact. The Project site is not located in the vicinity of a private airstrip. No impact would occur.

Mitigation Measures: No mitigation measures are necessary.

4.13 POPULATION AND HOUSING

Impact Analysis

a. Would the project 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)?

Less than Significant Impact. A significant impact could occur if a project would locate new development, such as homes, businesses, or infrastructure, with the effect of substantially inducing growth in the proposed area that would otherwise not have occurred as rapidly or in as great a magnitude. At the time of the 2010 Census, the Wilshire Community Plan area contained 278,392 residents; the City estimated a 2014 population of 290,383 residents.[31] Implementation of the Project is expected to accommodate approximately 370 residents.[32] As such, the Project would not cause substantial growth. In addition, the Project would not occur in an undeveloped area nor would it introduce unplanned infrastructure. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Less than Significant Impact. The Project would displace five existing residences, which does not represent a substantial number of existing housing. Furthermore, the Project would create 252 housing units including the replacement of three (3) units subject to the Rent Stabilization Ordinance under AB 2222. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

c. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Less than Significant Impact. The Project would displace five existing residences which does not represent a substantial number of people. Furthermore, the Project would create 252 housing units. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

31 Los Angeles Department of City Planning, *2015 Growth & Infrastructure Report,* (November 1, 2016).

32 An estimate of on average 1 tenant per studio, 1.5 tenant per one-bedroom, and 2.5 tenant per two-bedroom units.

4.14 PUBLIC SERVICES

Impact Analysis

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire Protection

Less than Significant. Based on the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on fire protection if it requires the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. The City of Los Angeles Fire Department (LAFD) considers fire protection services for a project adequate if a project is within the maximum response distance for the land use proposed. Pursuant to LAMC Section 57.09.07A, the maximum response distance between residential land uses and a LAFD fire station that houses an engine or truck company is 1.5 miles; for a commercial land use, the distance is 1 mile for an engine company and 1.5 miles for a truck company. If either of these distances is exceeded, all structures located in the applicable residential or commercial area would be required to install automatic fire sprinkler systems.

The Project could potentially increase the demand for LAFD services. The Project site is served by LAFD Station No. 29, located at 4029 W. Wilshire Boulevard, approximately 1.2 miles northwest of the Project site. Based on the response distance criteria specified in LAMC Section 57.09.07A and the relatively short distance from Station No. 29 to the Project site, fire protection response would be considered adequate. Additionally, the National Fire Protection Association (NFPA) has published target response times for fire stations of 5 minutes, 20 seconds or less.[33] Station 29 currently meets these response time standards.[34] As such, a new fire station would not be needed to serve the project. impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

33 *NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* (2015).

34 Los Angeles Fire Department, "Find Your Station," http://www.lafd.org/fire_stations/find_your_station.

ii. Police Protection.

Less than Significant Impact with Project Mitigation. A significant impact may occur if the City of Los Angeles Police Department (LAPD) could not adequately serve a project without necessitating a new or physically altered station, the construction of which may cause significant environmental impacts. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether a project results in a significant impact on police protection shall be made considering the following factors: (a) the population increase resulting from the project, based on the net increase of residential units or square footage of non-residential floor area; (b) the demand for police services anticipated at the time the project is completed compared to the expected level of service available, considering, as applicable, scheduled improvements to LAPD services (facilities, equipment, and officers) and the project's proportional contribution to the demand; and (c) whether the project includes security and/or design features that would reduce the demand for police services.

The Project site is located within Reporting District 2053 of the Olympic division of the LAPD's West Bureau. The Olympic Community Police Station is located at 1130 S. Vermont, less than 1 mile driving distance to the north side of the Project site.

Construction Impacts

Construction sites can be sources of attractive nuisances, providing hazards, and inviting theft and vandalism. Therefore, when not properly secured, construction sites can become a distraction for local law enforcement from more pressing matters that require their attention. Consequently, developers typically take precautions to prevent trespassing through construction sites. Most commonly, temporary fencing is installed around a construction site to minimize unauthorized entry. The Project Site is open along its Western and Franklin Avenue frontages. All sides will need to be secured during construction. The Project Applicant will employ construction security features, such as fencing, which would serve to minimize the need for LAPD services (see mitigation measures). These security measures would ensure that valuable materials (e.g., building supplies, metals such as copper wiring) and construction equipment are not easily stolen or abused. This measure would reduce potential construction impacts on police protection services to less than significant.

Operational Impacts

The Project would increase the number of residents and employees at the Site, as well as an increase in visitors and patrons, especially over the evening hours due to the residential and commercial uses. As such, the Project could potentially increase in the number of police service calls due to an increase in onsite persons. The potential for crime can be reduced with site specific designs and features (see

mitigation measures). The Project will include standard security measures such as adequate security lighting, secure access to non-public areas and separate commercial access points. Parking would continue to be provided on site and would be in a parking structure integrated into the building. The LAPD will require that the commanding officer of LAPD station be provided a diagram of each portion of the property showing access routes, and any additional information that might facilitate police response (see mitigation measures). The Project will not require the construction of a new or expanded police station. These mitigation measures will ensure the impacts associated with police services are less than significant.

Mitigation Measures:

MM-PS-1 Public Services (Police – Demolition/Construction Sites)

Temporary construction fencing shall be placed along the periphery of the active construction areas to screen as much of the construction activity from view at the local street level and to keep unpermitted persons from entering the construction area.

MM-PS-2 Public Services (Police)

The plans shall incorporate a design that enhances the security, semi-public and private spaces, which may include but not be limited to access control to building, secured parking facilities, walls/fences with key systems, well-illuminated public and semi-public space designed with a minimum of dead space to eliminate areas of concealment, location of toilet facilities or building entrances in high-foot traffic areas, and provision of security guard patrol throughout the Project Site if needed. Please refer to "Design Out Crime Guidelines: Crime Prevention Through Environmental Design", published by the LAPD. Contact the Community Relations Division, located at 100 W. 1st Street, #250, Los Angeles, CA 90012; (213) 486-6000. These measures shall be approved by the LAPD prior to the issuance of building permits.

Upon completion of the Project, the Hollywood Area commanding officer shall be provided with a diagram of each portion of the property. The diagram shall include access routes and any additional information that might facilitate police response.

iii. Schools

Less than Significant Impact with Project Mitigation. A significant impact could occur if a project includes substantial employment or population growth that could generate a demand for school facilities which would exceed the capacity of the Los Angeles Unified School District (LAUSD). Based on the *L.A. CEQA Thresholds Guide*, the determination of whether the project results in a significant impact on public schools shall be made considering the following factors: (a) the population increase resulting from the project, based on the net increase of residential units or square footage of nonresidential floor area; (b) the demand for school services anticipated at the time of project completion and occupancy compared to the expected level of service available, considering, as applicable, scheduled improvements to LAUSD services (facilities, equipment, and personnel) and the project's proportional contribution to the demand; (c) whether (and to the degree to which) accommodation of the increased demand would require construction of new facilities, a major reorganization of students or classrooms, major revisions to the school calendar (such as year-round sessions), or other actions that would create a temporary or permanent impact on the school(s); and (d) whether the project includes features that would reduce the demand for school services (e.g., on-site school facilities or direct support to LAUSD).

The Project area is currently served by the following LAUSD public schools: Hobart Boulevard Elementary, located at 980 S. Hobart Boulevard; Berendo Middle School, located at 1157 S. Berendo Street; and Los Angeles Senior High School, located at 4650 W. Olympic Boulevard.

As shown in **Table 4.14-1, Project Estimated Student Generation,** the Project could generate approximately 42 elementary students, 12 middle school students, and 24 high school students, for a total of approximately 78 students, a relatively minor increase in student population. In addition, the Applicant would be expected to pay applicable school fees in accordance with California Government Code Section 65995, which are deemed by Code to be full and complete mitigation of any impacts.

Table 4.14-1
Project Estimated Student Generation

Land Use	Size	Elementary School Students	Middle School Students	High School Students	Total
Multifamily residences[a]	252 du	42	12	24	**78**

Source: Los Angeles Unified School District, School Facilities Needs Analysis (September 2012).

aStudent generation rates are as follows for residential uses: 0.1649 elementary, 0.0450 middle, and 0.0943 high school students per unit.

Note: du = dwelling unit.

The Project is in close proximity to Hobart Boulevard Elementary School, located 154 feet north at 980 S Hobart Boulevard, and Los Angeles Elementary School, located 0.2 miles south at 1211 S Hobart Boulevard from the Project Site. Mitigation Measures will ensure that the proximity to the schools is a less than significant impact.

Mitigation Measures:

MM-PS-3 Public Services (Construction Activity Near Schools)

- The developer and contractors shall maintain ongoing contact with administrator of Hobart Boulevard Elementary School and Los Angeles Elementary School. The administrative offices shall be contacted when demolition, grading and construction activity begin on the project site so that students and their parents will know when such activities are to occur. The developer shall obtain school walk and bus routes to the schools from the administrators and guarantee that safe and convenient pedestrian and bus routes to the school be maintained.

- The developer shall install appropriate traffic signs around the site to ensure pedestrian and vehicle safety.

- There shall be no staging or parking of construction vehicles, including vehicles to transport workers on any of the streets adjacent to the school.

- Due to noise impacts on the schools, no construction vehicles or haul trucks shall be staged or idled on these streets during school hours.

MM-PS-4 Public Services (Schools affected by Haul Route)

- LADBS shall assign specific haul route hours of operation based upon Hobart Boulevard Elementary School and Los Angeles Elementary School's hours of operation.

- Haul route scheduling shall be sequenced to minimize conflicts with pedestrians, school buses and cars at the arrival and dismissal times of the school day. Haul route trucks shall not be routed past the school during periods when school is in session especially when students are arriving or departing from the campus.

iv. Parks

Less than Significant Impact. Based on the *L.A. CEQA Thresholds Guide*, a significant impact could occur if the Project resulted in the construction of new recreation and park facilities that creates significant direct or indirect impacts to the environment. The Project site is located within a highly urbanized area of the Koreatown neighborhood and has access to numerous parks and public recreation facilities within a 2-mile radius. The projected resident population of the Project represents

a relatively small change in the population of the local community and as such would not result in the construction of new facilities. Impacts of the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

v. Other public services

Less than Significant Impact. Based on the *L.A. CEQA Thresholds Guide,* the determination of whether a project results in a significant impact on libraries shall be made considering the following factors: (a) the net population increase resulting from the Project; (b) the demand for library services anticipated at the time of project build-out compared to the expected level of service available, considering, as applicable, scheduled improvements to existing library services (renovation, expansion, addition or relocation) and the project's proportional contribution to the demand; and (c) whether the project includes features that would reduce the demand for library services (e.g., on-site library facilities or direct financial support to the Los Angeles Public Library [LAPL]).

Within the City of Los Angeles, the LAPL provides library services at the Central Library, 7 regional branch libraries, 56 community branches, and 2 bookmobile units consisting of a total of 5 individual bookmobiles. Approximately 6.5 million books and other materials comprise the LAPL collection. The closest branch to the Project site is the Koreatown Branch Library, located at 694 S. Oxford Avenue, approximately 0.6 miles north of the Project site, though there are other branch locations nearby. The projected resident population for the Project represents a relatively small change in the population of the local community. Given the multiple branches serving the area, as well as the other library facilities, new or physically altered library facilities would not be needed to serve the Project. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

4.15 RECREATION

Impact Analysis

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

Less than Significant Impact. A significant impact could occur if a project includes substantial employment or population growth, which would 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. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether a project results in a significant impact on recreation and parks shall be made considering the following factors: (a) the net population increase resulting from the Project; (b) the demand for recreation and park services anticipated at the time of Project build-out compared to the expected level of service available, considering, as applicable, scheduled improvements to recreation and park services (renovation, expansion, or addition) and the Project's proportional contribution to the demand; and (c) whether the Project includes features that would reduce the demand for park services (e.g., on-site recreation facilities, land dedication, or direct financial support to the Department of Recreation and Parks).

The Project includes on-site recreational amenities intended to serve some of the needs of the residents. Notwithstanding the availability of on-site recreational amenities, it may be assumed that the future occupants of the Project would utilize recreation and park facilities in the surrounding area. There are several existing parks and recreation centers are located within the surrounding area and larger regional facilities located further away. With the number of expected residents and the on-site amenities it is expected that the Project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of such facilities would result. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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?

Less than Significant Impact. A significant impact could occur if a project includes the construction or expansion of park facilities and such construction would have a significant adverse effect on the environment. The Project does not include recreational facilities. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

4.16 TRANSPORTATION AND TRAFFIC

The following section summarizes and incorporates by reference information from the *Traffic Impact Study, 3170 W Olympic Boulevard Project,* dated August30, 2016 (Traffic Study) and prepared by Linscott, Law & Greenspan, Engineers for the Applicant and reviewed by LADOT.

a. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less than Significant Impact. A significant impact could occur if the Project were to result in substantial increases in traffic volumes in the vicinity of the Project such that the existing street capacity experiences a decrease in the existing volume-to-capacity (V/C) ratios or experiences increased traffic congestion exceeding LADOT's recommended level of service.

Operational Traffic

Nine (9) study intersections were identified, in coordination with LADOT staff, for inclusion in the traffic analysis. The analyzed locations are shown in the Traffic Study and correspond to locations where potential traffic impacts from the Project are most likely to occur. The intersections identified for analysis are as follows:

1. Western Avenue / 8th Street
2. Western Avenue / Olympic Boulevard
3. Western Avenue / 11th Street
4. Western Avenue / Pico Boulevard
5. Hobart Boulevard / Pico Boulevard
6. Harvard Boulevard / Olympic Boulevard
7. Harvard Boulevard / 11th Street
8. Normandie Avenue / Olympic Boulevard
9. Normandie Avenue / Pico Boulevard

The Department of Transportation (DOT) has issued a letter dated October 19, 2016 (Appendix G) discussing their review of the traffic analysis prepared by Linscott Law & Greenspan, Engineers and dated August 30, 2016 for the proposed mixed use development project located at 3170 West Olympic Boulevard. The DOT letter states that based on DOT's traffic impact criteria, none the nine study intersections included in the traffic analysis are expected to be significantly impacted by project-related traffic. The letter also states that the results of the traffic analysis accounted for other known

development project in evaluating potential cumulative impacts and adequately evaluated the project's traffic impacts on the surrounding community.

Estimated Trip Generation

Trip generation estimates for the Project were reviewed and approved by LADOT and were calculated using trip generation rates contained in *Trip Generation, 9th Edition*. **Table 4.16-1, Trip Generation Estimates,** summarizes the trip generation estimates for the daily AM peak-hour and PM peak-hour periods, respectively. In addition to calculating the trip rates for the specific components of the proposed Project, credits and offsets were calculated. The existing uses on the Project site would be removed, thus future traffic conditions surrounding the Project site would not include trips associated with the existing uses of the Project site. The Trip Generation manual also assumes separate, distinct land uses. However, there will be some internal activity by on-site residents utilizing on-site retail without generating off-site traffic. In addition, due to its proximity to transit, some of the trips assumed in the Trip Generation manual would occur by transit rather than private vehicle. Finally, there would be some trips to the Project site that would be drawn from existing traffic passing the site and thus would not be considered new trips. Based on these factors, the trip calculation was adjusted accordingly.

As shown in **Table 4.16-1**, the Project would generate 1,639 weekday trips, including 113 morning peak-hour trips and 151 afternoon peak-hour trips.

Project Impacts

Existing with Project Impacts

Project traffic was added to existing traffic conditions and the potential for impacts evaluated. **Table 4.16-2, Existing with Project Conditions—Intersection Level of Service AM/PM Peak Hours,** summarizes the level of service for the existing with Project conditions at the analyzed intersections for the AM and PM peak hours, respectively. Based on the City's guidelines, an impact could be significant if one of the following scenarios would occur: at an intersection with Level of Service C if the volume-to-capacity (V/C) ratio increased by .04 or greater; at an intersection with Level of Service D if the volume-to-capacity (V/C) ratio increased by .02 or greater; or at an intersection with Level of Service E or F if the volume-to-capacity (V/C) ratio increased by .01 or greater. The analysis summarized in **Table-4.16-2** indicates that for the AM/PM peak hour, the addition of Project traffic would not cause an increase in V/C ratios above the threshold. Therefore, it is concluded that the Project would not cause any significant traffic impacts compared to existing conditions in either the AM or PM peak hours.

Future with Project Impacts

Table 4.16-3, Future without and with Project Conditions—Intersection Level of Service AM/PM Peak Hours, summarizes the results of the future with Project conditions intersections analysis during the

weekday morning and afternoon peak hours. The future with Project conditions were compared to the future without Project conditions to assess the impacts of the Project as compared to the future environment without of the Project. In addition, potential net increases in average daily vehicle trips and peak-hour vehicle trips from the related projects were taken into consideration. Based on the City's significance criteria, the change in traffic flow generated by the Project when compared to conditions without the Project is not anticipated to result in a significant impact at any of the study intersections under future conditions.

Table 4.16-1
Trip Generation Estimates for Project

Land Use (ITE Code)	Size	Units	Daily	AM Peak-Hour Trips			PM Peak-Hour Trips		
				In	Out	Total	In	Out	Total
Proposed Project									
Apartments [ITE 220]	252	du	1,676	26	103	129	101	55	156
Retail/Restaurant [ITE 820]	33,280	gsf	1,407	20	12	32	59	63	122
Subtotal			**3,083**	**43**	**115**	**161**	**160**	**118**	**278**
Proposed Transit Trips									
Apartments (15%)			(251)	(4)	(15)	(19)	(15)	(8)	(23)
Retail/Restaurant (15%)			(179)	(3)	(2)	(5)	(8)	(8)	(16)
Subtotal			**(430)**	**(7)**	**(17)**	**(24)**	**(23)**	**(16)**	**(39)**
Proposed Internal Capture									
Retail/Restaurant (15%)			(211)	(3)	(2)	(5)	(9)	(9)	(18)
Existing Land Use									
Retail/Restaurant [ITE 820]	(15,135)	gsf	(646)	(9)	(6)	(15)	(27)	(29)	(56)
Single-Family Homes [ITE 210]	(3)	du	(29)	(1)	(1)	(2)	(2)	(1)	(3)
Subtotal			**(675)**	**(10)**	**(7)**	**(17)**	**(29)**	**(30)**	**(59)**
Existing Transit Trips									
Retail/Restaurant (15%)			97	1	1	2	4	4	8
Single-Family Homes (15%)			4	0	0	0	0	0	0
Subtotal			**101**	**1**	**1**	**2**	**4**	**4**	**8**
Net Project Driveway Subtotal			***1,868***	***27***	***90***	***117***	***103***	***67***	***170***
Proposed Pass-By Trips									
Retail/Restaurant (50%)			(514)	(7)	(4)	(11)	(21)	(23)	(44)
Existing Pass-By Trips									
Retail/Restaurant (50%)			275	4	3	7	12	13	25
Total Net Project Trips			***1,639***	***24***	***89***	***113***	***94***	***57***	***151***

Source: Linscott, Law & Greenspan, Engineers (August 2016)

Table 4.16-2
Existing with Project Conditions—Intersection
Level of Service AM/PM Peak Hours

No.	Intersection	Peak Hour	Existing 2015		Existing 2015 with Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Western Avenue/8th Street	AM	0.494	A	0.495	A	0.001	No
		PM	0.565	A	0.567	A	0.002	No
2	Western Avenue/Olympic Boulevard	AM	0.748	C	0.755	C	0.007	No
		PM	0.803	D	0.814	D	0.011	No
3	Western Avenue/11th Street	AM	0.439	A	0.457	A	0.018	No
		PM	0.465	A	0.475	A	0.010	No
4	Western Avenue/Pico Boulevard	AM	0.666	B	0.668	B	0.002	No
		PM	0.669	B	0.675	B	0.006	No
5	Hobart Boulevard/Pico Boulevard	AM	0.367	A	0.374	A	0.006	No
		PM	0.371	A	0.381	A	0.011	No
6	Harvard Boulevard/Olympic Boulevard	AM	0.535	A	0.541	A	0.006	No
		PM	0.683	B	0.693	B	0.010	No
7	Harvard Boulevard/11th Street	AM	0.157	A	0.157	A	0.001	No
		PM	0.324	A	0.327	A	0.003	No
8	Normandie Avenue/Olympic Boulevard	AM	0.669	B	0.673	B	0.004	No
		PM	0.705	C	0.711	C	0.006	No
9	Normandie Avenue/Pico Boulevard	AM	0.661	B	0.665	B	0.004	No
		PM	0.608	B	0.612	B	0.004	No

Source: Linscott, Law & Greenspan, Engineers (August 2016)
LOS = level of service.

Table 4.16-3
Future without and with Project Conditions—
Intersection Level of Service AM/PM Peak Hours

No.	Intersection	Peak Hour	Future 2019 without Project		Future 2019 with Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Western Avenue/8th Street	AM	0.545	A	0.545	A	0.000	No
		PM	0.633	B	0.637	B	0.004	No
2	Western Avenue/Olympic Boulevard	AM	0.793	C	0.800	C	0.007	No
		PM	0.873	D	0.833	D	0.010	No
3	Western Avenue/11th Street	AM	0.485	A	0.503	A	0.018	No
		PM	0.521	A	0.531	A	0.010	No
4	Western Avenue/Pico Boulevard	AM	0.695	B	0.697	B	0.002	No
		PM	0.713	C	0.719	C	0.006	No
5	Hobart Boulevard/Pico Boulevard	AM	0.383	A	0.389	A	0.006	No
		PM	0.384	A	0.395	A	0.011	No
6	Harvard Boulevard/Olympic Boulevard	AM	0.560	A	0.566	A	0.006	No
		PM	0.718	C	0.728	C	0.010	No
7	Harvard Boulevard/11th Street	AM	0.167	A	0.168	A	0.001	No
		PM	0.345	A	0.348	A	0.003	No
8	Normandie Avenue/Olympic Boulevard	AM	0.699	B	0.703	C	0.004	No
		PM	0.784	C	0.790	C	0.006	No
9	Normandie Avenue/Pico Boulevard	AM	0.691	B	0.695	B	0.004	No
		PM	0.660	B	0.664	B	0.004	No

Source: Linscott, Law & Greenspan, Engineers (August 2016)
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Congestion Management Plan Analysis

The Los Angeles County Congestion Management Plan (CMP) requires that when a Traffic Impact Assessment (TIA) is prepared for a project, traffic and transit impact analyses be conducted for select regional facilities based on the amount of project traffic expected to use these facilities.

CMP Significant Traffic Impact Criteria

The *CMP Guidelines* state that a CMP freeway analysis must be conducted if 150 or more trips attributable to the proposed Project are added to a mainline freeway-monitoring location in either direction during the morning or afternoon weekday peak hours. Similarly, a CMP arterial monitoring station analysis must be conducted if 50 or more peak-hour project trips are added to a CMP arterial monitoring station during the morning or afternoon weekday peak hours of adjacent street traffic.

A significant project-related CMP impact would be identified if the CMP facility is projected to operate at LOS F (V/C > 1.00) and if the project traffic causes an incremental change in the V/C ratio of 0.02 or greater. The proposed Project would not be considered to have a regionally significant impact, regardless of the increase in V/C ratio, if the analyzed facility is projected to operate at LOS E or better after the addition of the project traffic.

There are three CMP intersection-monitoring locations within the vicinity of the Project:

- CMP Station No. 84, located at Western Avenue & 9th Street
- CMP Station No. 85, located at Wilshire Boulevard & Alvarado Street
- CMP Station No. 89, located at Wilshire Boulevard & Western Avenue

Based on the trip distribution analysis in the Traffic Impact Study, the Project would not contribute 50 or more new trips at these intersections during the morning or afternoon weekday peak hours.

The CMP freeway-monitoring stations closest to the Project vicinity includes:

- CMP Station No. 1013, located on the I-10 Freeway at Budlong Avenue

Based on the trip distribution shown in the traffic study, the Project would not generate 150 or more trips (in either direction) during the morning or afternoon weekday peak period to this CMP freeway-monitoring location. Thus, no further review of the Project's potential impacts to CMP freeway-monitoring locations is required. Impacts would be less than significant.

Regional Transit Impact Analysis

An analysis of potential Project impacts on the transit system was also performed, per the CMP requirements and guidelines. The CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the number of vehicle trips. This methodology assumes an average vehicle occupancy (AVO) factor of 1.4 to estimate the number of person-trips to and from the Project.

The CMP guidelines estimate that approximately 3.5 percent of total project person-trips may use public transit to travel to and from the site if the site. The Project is estimated to generate approximately 113 morning peak-hour trips and 151 afternoon peak-hour trips. Assuming an AVO of 1.4, the Project would generate 158 morning peak-hour person trips and 211 afternoon peak-hour person trips. Using the 3.5 percent mode split suggested in the CMP, the Project would generate approximately 6 transit trips during the weekday morning peak-hour and 7 transit trips during the weekday afternoon peak hour.

The Project location is served by transit routes. A review of the schedules of the lines serving the area (Metro, DASH and Big Blue Bus) shows a total of 138 buses or trains during the AM peak and 118 buses or trains during the PM peak.[35] With multiple public transportation opportunities within the Project vicinity, including bus routes and Metro lines, the existing transit service in the Project vicinity would adequately accommodate the new transit trips generated by the Project. Thus, based on the calculated number of generated transit trips, impacts to the existing or future regional transit system in the vicinity of the Project site are not anticipated to be significant.

Construction—Traffic

The Project would require the use of haul trucks during site clearing and excavation and the use of a variety of other construction vehicles throughout the construction of the Project. The demolition and site clearing phase has been estimated by the Project Applicant to require approximately 100 daily hauling truck trips at its peak. The Haul Route would utilize Olympic Boulevard east to Interstate 10. The addition of these vehicles into the street system would contribute to increased traffic in the Project vicinity. The haul trips would occur outside of the peak hours and during the permissible hauling hours identified in the haul route to be approved by the Department of City Planning. As stated above in **Table 4.16-1**, the operation of the Project is expected to generate more than 1,200 trips per day. The Project's peak construction trip traffic is estimated at approximately 330 trips per day.[36] Therefore, it is not anticipated that the construction trips would contribute to a significant increase in the overall congestion in the Project vicinity. In addition, any truck trips would be limited to the length of time required for the Project's construction. Impacts would less than significant.

Mitigation Measures: No mitigation measures are necessary.

35 Linscott, Law & Greenspan, Engineers, *Traffic Impact Study, 3170 W Olympic Boulevard Project,* (August 30, 2016),

36 Derived from construction worker and vendor trip rates contained in *California Emissions Estimator Users Guide,* Appendix E, "Technical Source Documentation," California Air Pollution Control Officers Association (July 2013).

b. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No Impact. As discussed previously in Section 4.16a, no CMP freeway-monitoring segment or intersection analysis is required, and there would be no Project-related impacts to the CMP. The Project would not conflict with any travel demand measures. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

c. Would the project 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?

No Impact. This question would apply to the Project only if it involved an aviation-related use or would influence changes to existing flight paths. No aviation-related use would occur. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

d. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact with Project Mitigation. A significant impact could occur if a project includes new roadway design or introduces a new land use or features into an area with specific transportation requirements and characteristics that have not been previously experienced in that area, or if access or other features were designed in such a way as to create hazard conditions. The Project would include new vehicular access driveways to the Site from S. Serrano Avenue and S. Hobart Boulevard. These driveways would be properly designed and constructed to ensure the safety of vehicular and pedestrian circulation in the Project area. To accommodate the turning radius of delivery trucks entering and exiting the Project site for the commercial uses, on-street parking opposite the proposed driveways would be reconfigured. With this modification, impacts would less than significant.

Driveways

The Project proposes one vehicle driveway on Serrano Avenue and one vehicle driveway on Hobart Boulevard. The existing commercial development currently has one driveway on Serrano Avenue and one vehicle driveway on Hobart Boulevard, the residence on Serrano Avenue has one driveway curb cut and the two residential lots on Hobart Boulevard have one driveway curb cut each.

Pedestrian Safety

Temporary impacts to pedestrian safety could occur during construction. The Project will include mitigation measure TRAF-1 that will ensure the safety of pedestrians and other vehicles in general, as the construction area could create hazards of incompatible/slow-moving construction and haul vehicles. Therefore, impacts would be less than significant.

Proximity to a School

The Project is in close proximity to Hobart Boulevard Elementary School, located 154 feet north at 980 S Hobart Boulevard, and Los Angeles Elementary School, located 0.2 miles at 1211 S Hobart Boulevard from the Project Site. However, the Project includes mitigation measures PS-3 and PS-4 to ensure that the proximity to the school would be a less than significant impact (see Section 4.14 above).

Other Hazards

The Project does not include any sharp curves, dangerous intersections, or incompatible uses. No off-site traffic improvements are proposed or warranted in the area surrounding the Project Site.

Mitigation Measures:

MM-TRAF-1 Safety Hazards

- The developer shall install appropriate construction related traffic signs around the site to ensure pedestrian and vehicle safety.
- The applicant shall submit a parking and driveway plan that incorporates design features that reduce accidents, to the Bureau of Engineering and the Department of Transportation for approval.
- Applicant shall plan construction and construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases. This requires the applicant to maintain adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding, etc.) from work space and vehicular traffic, and overhead protection, due to sidewalk closure or blockage, at all times.
- Temporary pedestrian facilities should be adjacent to the project site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility.
- Covered walkways should be provided where pedestrians are exposed to potential injury from falling objects.
- Applicant shall keep sidewalk open during construction until only when it is absolutely required to close or block sidewalk for construction and/or construction staging. Sidewalk shall be reopened as soon as reasonably feasible taking construction and construction staging into account.

e. Would the project result in inadequate emergency access?

Less than Significant Impact. A significant impact could occur if a project design would not provide emergency access meeting the requirements of the LAFD, or in any other way threatened the ability of emergency vehicles to access and serve a project or adjacent uses.

As previously discussed, the Project site is located at 3170 W. Olympic Boulevard, bordered by S. Hobart Boulevard and S. Serrano Avenue and extending south 200 feet from Olympic Boulevard, neither of which is a selected disaster route as identified by the City's General Plan.[37] However, the Project site is located approximately 0.2 miles to the west of S. Western Avenue, which is a selected disaster route.

As described previously, the Project would satisfy the emergency response requirements of the LAFD. No hazardous design features are included in the access design or site plan for the Project that could impede emergency access. Furthermore, the Project would be subject to the site plan review requirements of both the LAFD and the LAPD to ensure that all access roads, driveways, and parking areas would remain accessible to emergency service vehicles. The Project would not be expected to result in inadequate emergency access. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. For the purpose of this Initial Study, a significant impact could occur if a project would conflict with adopted polices or involve modification of existing alternative transportation facilities located on or off site. The Project would not require the disruption of public transportation services or the alteration of public transportation routes. Furthermore, the Project would not interfere with any Class I or Class II bikeway systems. No impacts would occur.

Mitigation Measures: No mitigation measures are necessary.

37 *City of Los Angeles General Plan,* "Safety Element," Exhibit H, Critical Facilities and Lifeline Systems in the City of Los Angeles.

4.17 TRIBAL CULTURAL RESOURCES

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

Less than Significant Impact. As described in section 4.5a, Cultural Resources, the Project site does not contain any features that are listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources; nor would the Project adversely affect any nearby resources that are listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources.

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 §21074, as part of CEQA. As specified in AB 52, lead agencies must provide notice inviting consultation to California Native American Tribes that are traditionally and culturally affiliated with the geographic area of a Proposed Project if the Tribe has submitted a request in writing to be notified of Proposed Projects. The Tribe must respond in writing within 30 days of the City's AB 52 notice. 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 May 10, 2018, an informational letter was mailed to a total of ten (10) Tribes known to have resources in this area describing the Project and requesting any information regarding resources that may exist on or near the Project Site. On May 14, 2018, the Gabrieleno Band of Mission Indians-Kizh Nation (Gabrieleno) submitted a written request for a consultation. A memo was prepared, which documents the consultation between the City of Los Angeles as the Lead Agency and the Gabrieleno (Appendix I). The information provided during the consultation by the Gabrieleno did not demonstrate that the Project Site is a tribal cultural resource. Furthermore, a report prepared by PaleoWest Archaeology dated August 3, 2018 (Appendix H) conducted a cultural resource records review for the Proposed Project. The cultural resource study was limited to a cultural resource literature review and records search of the California Historic Resource Information System (CHRIS) and a review of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC). The records search indicated that no less than four previous studies have been conducted within a quarter-mile of the Project area since 2007. None of the four studies include the Project area. In addition, no prehistoric or historic period archeological resources were identified as a result of the records search. On July 25, 2018, the NAHC provided a letter (Appendix H) stating that the

SLF was completed with negative results. The City has determined that the Proposed Project will have no potential direct, and reasonably foreseeable indirect impacts on tribal cultural resources. However, in the unlikely event that tribal cultural resources are inadvertently discovered during the excavation and grading of the Project Site, the City will include a Condition of Approval as a part of the recommended project approvals for tribal cultural resource inadvertent discovery. Furthermore, regulatory compliance measures will ensure that grading or excavation activities shall be halted should any burial remains or artifact be discovered. Therefore, potential impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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

Less than Significant Impact. Public Resources Code §21080.3.1 establishes a formal process for Lead Agencies to consult with California Native American Tribes to identify potential significant impacts to Tribal Cultural Resources, as defined in Public Resources Code §21074. In compliance with the Code, the City has sent notices to Native American tribes that are known to be traditionally and culturally affiliated with the Project area and have requested to be notified of projects. As no Tribal Cultural Resources have been identified on the site and the response received to the City's notice did not indicate evidence of likely discovery of buried resources, impacts to Tribal Cultural Resources would be less than significant.

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 §21074, as part of CEQA. As specified in AB 52, lead agencies must provide notice inviting consultation to California Native American Tribes that are traditionally and culturally affiliated with the geographic area of a Proposed Project if the Tribe has submitted a request in writing to be notified of Proposed Projects. The Tribe must respond in writing within 30 days of the City's AB 52 notice. 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 May 10, 2018, an informational letter was mailed to a total of ten (10) Tribes known to have resources in this area describing the Project and requesting any information regarding resources that may exist on or near

the Project Site. On May 14, 2018, the Gabrieleno Band of Mission Indians-Kizh Nation (Gabrieleno) submitted a written request for a consultation. A memo was prepared, which documents the consultation between the City of Los Angeles as the Lead Agency and the Gabrieleno (Appendix I). The information provided during the consultation by the Gabrieleno did not demonstrate that the Project Site is a tribal cultural resource. Furthermore, a report prepared by PaleoWest Archaeology dated August 3, 2018 (Appendix H) conducted a cultural resource records review for the Proposed Project. The cultural resource study was limited to a cultural resource literature review and records search of the California Historic Resource Information System (CHRIS) and a review of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC). The records search indicated that no less than four previous studies have been conducted within a quarter-mile of the Project area since 2007. None of the four studies include the Project area. In addition, no prehistoric or historic period archeological resources were identified as a result of the records search. On July 25, 2018, the NAHC provided a letter (Appendix H) stating that the SLF was completed with negative results. The City has determined that the Proposed Project will have no potential direct, and reasonably foreseeable indirect impacts on tribal cultural resources. However, in the unlikely event that tribal cultural resources are inadvertently discovered during the excavation and grading of the Project Site, the City will include a Condition of Approval as a part of the recommended project approvals for tribal cultural resource inadvertent discovery. Furthermore, regulatory compliance measures will ensure that grading or excavation activities shall be halted should any burial remains or artifact be discovered. Therefore, potential impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

4.18 UTILITIES AND SERVICE SYSTEMS

Impact Analysis

a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant Impact. A significant impact would occur if a project exceeds wastewater treatment requirements of the applicable RWQCB. Section 13260 of the California Water Code states that persons discharging or proposing to discharge waste that could affect the quality of the waters of the State, other than into a community sewer system, shall file a Report of Waste Discharge (ROWD) containing information that may be required by the appropriate RWQCB. The RWQCB then authorizes an NPDES permit that ensures compliance with wastewater treatment and discharge requirements. Currently, wastewater from the Project site is conveyed via municipal sewage infrastructure maintained by the Los Angeles Bureau of Sanitation to the Hyperion Treatment Plant (HTP), a public facility subject to the State's wastewater treatment requirements. Wastewater from the Project would continue to be conveyed through City sewage infrastructure to HTP. Though the Project would generate more wastewater than is currently generated on the Project site, pollutant loads would be typical of urban wastewater already processed by the HTP. Furthermore, as discussed below, HTP has the available capacity to accommodate the additional waste associated with the Project. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. A significant impact could occur if a project would increase water consumption or wastewater generation to such a degree that the capacity of facilities currently serving the project site would be exceeded. Water is provided by the Los Angeles Department of Water and Power (LADWP); the Los Angeles Bureau of Sanitation provides sewer service to the proposed Project area.

LADWP ensures the reliability and quality of its water supply through an extensive distribution system that includes more than 7,100 miles of pipes, more than 100 storage tanks and reservoirs within the City, and eight storage reservoirs along the Los Angeles Aqueducts. Water entering the Los Angeles Aqueduct Filtration Plant (LAAFP) undergoes treatment and disinfection before being distributed throughout the LADWP's Water Service Area. The LAAFP has the capacity to treat approximately 600 million gallons per day (mgd). The average plant flow is approximately 362 mgd averaged over calendar year 2013, and

operates at approximately 60 percent capacity. Therefore, the LAAFP has a remaining capacity of approximately 238 mgd, depending on the season.[38]

The Los Angeles Bureau of Sanitation provides sewer service to the proposed Project area. Sewage from the Project site is conveyed via sewer infrastructure to the HTP. The HTP treats an average daily flow of 362 mgd, and has the capacity to treat 450 mgd.[39] This equals a remaining capacity of 88 mgd of wastewater able to be treated at the HTP.

The Project site is located in a developed, urbanized portion of Los Angeles that is served by existing water and sewer mains. As shown in **Table 4.18-1** below, it is estimated that the Project would have a daily water demand of 32,577 gallons or an annual demand of 36.49 acre feet. Water conservation design features are likely to reduce this estimate. Given the remaining capacity of the LAAFP, the Project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities. Furthermore, the Project Applicant shall be required to implement applicable LA Green Building Code requirements that would further reduce water and wastewater flow. Impacts on water treatment facilities would be less than significant.

As shown in **Table 4.18-2** below, it is estimated that the Project would generate 27,148 gpd of wastewater. Given the available capacity of the HTP, the Project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities. Impacts on wastewater treatment facilities would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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

Less than Significant Impact. A significant impact could occur if the volume of stormwater runoff would increase to a level exceeding the capacity of the existing storm drain system. The Project site is located in a developed portion of Los Angeles that is currently served by stormwater infrastructure. In addition, the Project would be required to demonstrate compliance with the Los Angeles Low Impact Development (LID) Ordinance standards and retain or treat the first three-quarter inch of rainfall in a 24-hour period. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

38 Los Angeles Department of Water and Power, *Urban Water Management Plan* (2016)

39 City of Los Angeles Department of Public Works, Bureau of Sanitation, Wastewater *System Fact Sheet* (2014)

Table 4.18-1
Estimated Water Demand

Land Use	Quantity	Demand Factor (gpd/unit)[a]	Daily Demand (gpd)	Annual Demand (afy)
Residential—Studio	69 du	90 gpd/du	6,210 gpd	6.96
Residential—One Bedroom	157 du	132 gpd/du	20,724 gpd	23.21
Residential – Two Bedroom	26 du	180 gpd/du	4,680 gpd	5.24
Retail	32,100	0.03 gpd/sq. ft.	963 gpd	1.08
Total:			**32,577 gpd**	**36.49**

Note: afy = acre-feet per year; gpd = gallons per day.
a 120 percent sewage generation loading factor; Los Angeles Bureau of Sanitation, Sewage Generation Factors, April 2012.

Table 4.18-2
Estimated Sewage Generation

Land Use	Quantity	Factor (gpd/unit)[a]	Daily Generation (gpd)
Residential—Studio	70 du	75 gpd/du	5,175 gpd
Residential—One Bedroom	157 du	110 gpd/du	17,270 gpd
Residential–Two Bedroom	25 du	150 gpd/du	3,900 gpd
Retail	33,280	0.025 gpd/sq. ft.	803 gpd
Total:			**27,148 gpd**

Note: afy = acre-feet per year; gpd = gallons per day.
a Los Angeles Bureau of Sanitation, Sewage Generation Factors, April 2012.

d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed?

Less than Significant Impact. A significant impact may occur if a project would increase water consumption to such a degree that new water sources would need to be identified. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether the project results in a significant impact on water shall be made considering the following factors: (a) the total estimated water demand for the project; (b) whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project completion; (c) the amount by which the project would cause the projected growth in population, housing, or employment for the Community Plan area to be exceeded in the year of the project completion; and (d) the degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

According to the City's Urban Water Management Plan (UWMP), the City's projected demand for water, during dry seasons would be 513,540 acre-feet per year (afy) for 2015 and 611,800 afy for 2020.[1] The *UWMP* projects adequate water supplies through 2040. As such, it is expected that LADWP has sufficient water supplies available to serve the Project.[40] Furthermore, as previously stated, the Project Applicant shall adhere to current standards including the Green Building Code that would reduce demand on local water supplies. Impacts of the Project would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

e. Would the project 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 in addition to the provider's existing commitments?

Less Than Significant Impact. Based upon the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant wastewater impact if: (a) the project would cause a measurable increase in wastewater flows to a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or (b) the project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the *Wastewater Facilities Plan* or *General Plan* and its elements. As stated above, the Hyperion Treatment Plant is expected to have capacity to serve the Project. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

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[1] City of Los Angeles Department of Public Works, *2015 City of Los Angeles Urban Water Management Plan* (June 2016).

40 City of Los Angeles Department of Public Works, *2015 City of Los Angeles Urban Water Management Plan* (June 2016).

f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. A significant impact could occur if a project were to increase solid waste generation to a degree such that the existing and projected landfill capacity would be insufficient to accommodate the additional solid waste. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether a project results in a significant impact on solid waste shall be made considering the following factors: (a) amount of projected waste generation, diversion, and disposal during demolition, construction, and operation of the project, considering proposed design and operational features that could reduce typical waste generation rates; (b) need for additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste; and (c) whether the project conflicts with solid waste policies and objectives in the Source Reduction and Recycling Element (SRRE) or its updates, the Solid Waste Management Policy Plan ((SWMPP), or the Framework Element of the Curbside Recycling Program, including consideration of the land use-specific waste diversion goals contained in Volume 4 of the SRRE.

Solid waste generated within the City is disposed of at privately owned landfill facilities throughout Los Angeles County. While the Bureau of Sanitation provides waste collection services to single-family and some small multifamily developments, private haulers provide waste collection services for most multifamily residential and commercial developments within the City. Solid waste transported by both public and private haulers is recycled, reused, and transformed at a waste-to-energy facility, or disposed of at a landfill. Of the various landfills serving the City of Los Angeles, Sunshine Canyon Landfill is the largest recipient of nonhazardous solid waste disposal materials (i.e. Class III waste materials). This landfill had a remaining capacity of 62.11 million tons in 2016, with an expected life expectancy of 21 years. The maximum daily capacity for the landfill is 12,100 tons per day and the 2016 disposal rate was 7,496 tons per day.[43] In addition, the County continues to address landfill capacity through the preparation of annual County of Los Angeles Integrated Waste Management Plan (CIWMP) reports. The preparation of each annual CIWMP report provides sufficient lead time (15-years) to address potential future shortfalls in landfill capacity. Furthermore, in future years, it is anticipated that the rate of declining landfill capacity would slow considering the City's current diversion rate of at least 76.4 percent, and plans to reach achieve an overall diversion rate of nearly zero percent or more by 2030.[44]

Construction of the Project would comply with the City's Citywide Construction and Demolition (C&D) Waste Recycling Ordinance. As such, construction waste would be removed from the Project site by a

43 County of Los Angeles, Countywide Integrated Waste Management Plan: 2016 Annual Report, Appendix E-2 Table 1, September 2017

44 City of Los Angeles, Bureau of Sanitation, *City of Los Angeles Solid Waste Integrated Resources Plan–A Zero Waste Master Plan* (October 2013).

City-permitted solid waste hauler and taken to a City-certified C&D processing facility. As shown in **Table 4.18-3, Expected Operational Solid Waste Generation,** the Project's net generation during the life of the Project would be 1,200 pounds per day.

Table 4.18-3
Expected Operational Solid Waste Generation

Type of Use	Size	Waste Generation Rate[a] (lb./unit/day)	Total Solid Waste Generated (lb./day)
Residential units	252 du	4 lb./du/day	1,008
Commercial uses	32,100 sq. ft.	0.006 lb./sq. ft./day	192
Total Project Waste Generation			**1,200**

Notes: du = dwelling unit; lb. = pounds; sq. ft. =square feet.
a City of Los Angeles Bureau of Sanitation, Solid Waste Generation (1981). Waste generation includes all materials discarded, whether or not they are later recycled or disposed of in a landfill.

This estimate is conservative because it does not factor in any recycling or waste diversion programs. The amount of solid waste generated by the Project is within the available capacities at area landfills. Furthermore, the Project Applicant shall be required to comply with the following regulatory measures regarding recycling. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

g. Would the project comply with federal, State, and local statutes and regulations related to solid waste?

Less than Significant Impact. A significant impact could occur if a project would generate solid waste that was not disposed of in accordance with applicable regulations. The Project would generate solid waste during both construction and operation that is typical of a mixed-use residential building with ground-floor commercial uses and would comply with all Federal, State, and Local statutes and regulations regarding proper disposal. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

4.19 MANDATORY FINDINGS OF SIGNIFICANCE

Impact Analysis

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a 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?

Less than Significant Impact. A significant impact could occur only if the Project would have an identified potentially significant impact for any of the issues cited above: quality of the environment; habitat or populations of fish or wildlife species; plant or animal communities; rare or endangered plant or animal; or important examples of the major periods of California history or prehistory. As indicated by the analysis in this Initial Study, the Project would not 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; or reduce the number or restrict the range of a rare or endangered plant or animal. Nor would the Project potentially affect important historic or prehistoric resources. Though potentially significant impacts were identified with respect to construction noise and the removal of street trees, implementation of the mitigation measures described in this Initial Study would reduce those impacts to less than significant levels. Therefore, impacts on the quality of the environment would be less than significant.

Mitigation Measures: No mitigation measures are necessary.

b. Does the project have impacts that are individually 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.)

Less Than Significant Impact. Cumulative impacts can occur when the impacts of two or more separate projects are considerable when considered together. In the preceding topical analyses, cumulative impacts have been considered where appropriate. For example, the evaluation of air quality impacts considered the Project's cumulative contribution to federal or State nonattainment pollutants within the South Coast Air Basin and the evaluation of traffic impacts considered the cumulative effect of other proposed projects in the immediate vicinity. Through the analyses, no significant cumulative impacts were identified for the Project.

Mitigation Measures: No mitigation measures are necessary.

c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact with Mitigation Incorporated. As discussed in the preceding sections, the Project could result in potentially significant impacts due to removal of trees, construction noise and demand on public services. Mitigation Measures **MM-BIO-1, MM-BIO-2**, **MM-GEO-1** and **MM-NOI-1** as listed in **Sections 4.4, Biological Resources, Sections 4.6, Geology and Soils** and **4.12, Noise** respectively, have been identified to address these impacts.

Mitigation Measures: Applicable mitigation measures have been identified in the Biological Resources, Noise, and Public Services sections in this Initial Study. With incorporation of these measures, impacts of the Project would be less than significant.

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Air Quality Technical Report

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Attachment

1 CalEEMod Output Files

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1. EXECUTIVE SUMMARY

This Air Quality Study examines the potential air quality impacts that could occur as a result of the development of the proposed 3170 Olympic Mixed-Use Project (Project), located in the City of Los Angeles, California. This study analyzes the potential for the Project to generate air quality emissions that may impact the environment, conflict with an applicable air quality plan, violate an air quality standard or threshold, result in a cumulatively net increase of criteria pollutant concentrations, or create objectionable odors affecting a substantial number of people.

The conclusions of this study are as follows:

- The Project would be consistent with air quality policies set forth by the South Coast Air Quality Management District (SCAQMD), City of Los Angeles General Plan, and the Southern California Association of Governments (SCAG).
- Project construction emissions would not contribute to long-term emissions that would increase the carcinogenic effects on sensitive receptors. Emissions associated with operation would not exceed the SCAQMD-recommended thresholds. Thus, the Project would not result in a regional violation of applicable air quality standards or jeopardize the timely attainment of such standards in the South Coast Air Basin ("Basin").
- All criteria pollutants would be below the SCAQMD construction thresholds, and the Project would comply with SCAQMD Rule 403.
- Operation of the Project will not employ toxic air contaminant (TAC)-emitting processes, and no substantial pollutant concentration would be generated.
- Project construction and operations would not result in significant levels of odors.
- The Project would result in less than significant cumulative air quality impacts during construction and operation of the Project.

2. PROJECT DESCRIPTION

The Project would involve demolition of the existing uses, that include a commercial retail building, related surface parking and three residential lots, and the construction of a new 7-story structure above two levels of subterranean parking. The proposed structure would contain 252 dwelling units and 32,100 square feet of ground-floor commercial space**.**

The Project site is approximately 51,290 square feet (1.18 acres) in area and is currently developed with a 1-story, 18,295-square-foot commercial retail structure, a related surface parking lot and 5 private residential structures with associated accessory buildings. The commercial property is accessed through driveways along S. Serrano Avenue. One of the residential lots fronts on Serrano Avenue south of the

commercial parking lot. The other two residential lots, one of which contains 3 residences, front on Hobart south of the commercial structure.

3. REGULATORY FRAMEWORK

Air Quality Standards

At the federal level, the United States Environmental Protection Agency (USEPA) sets national vehicle and stationary source emission standards; oversees approval of all State Implementation Plans;[1] provides research and guidance for air pollution programs; and sets National Ambient Air Quality Standards (NAAQS).[2] The NAAQS for six common air pollutants (ozone, particulate matter PM10 and PM2.5, nitrates, carbon monoxide, lead, and sulfur dioxide) were identified from the provisions of the Clean Air Act (CAA) of 1970.

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the CAAQS by the earliest practicable date.

The NAAQS and CAAQS for each of the monitored pollutants and their effects on health are summarized in **Table 1, Air Quality Standards**.

1 A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards.

2 The NAAQS were set to protect public health, including that of sensitive individuals, and for this reason; the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. The primary NAAQS define the air quality considered necessary, with an adequate margin of safety, to protect the public health.

Table 1
Air Quality Standards

Air Pollutant	Averaging Time	CA Standard	National Standard[a]
Ozone (O3)	1 hour	0.09 ppm	—
	8 hours	0.070 ppm	0.075 ppm
Carbon monoxide (CO)	1 hour	20 ppm	35 ppm
	8 hours	9.0 ppm	9 ppm
Nitrogen dioxide (NO2)[b]	1 hour	0.18 ppm	0.100 ppm
	Annual	0.030 ppm	0.053 ppm
Sulfur dioxide (SO2)	1 hour	0.25 ppm	—
	3 hours	—	0.5 ppm
	24 hours	0.04 ppm	0.14 ppm
	Annual	—	0.030 ppm
Particulate matter (PM10)	24 hours	50 µg/m^3	150 µg/m^3
	Mean	20 µg/m^3	—
Particulate matter (PM2.5)	24 hours	—	35 µg/m^3
	Annual	12 µg/m^3	15.0 µg/m^3
Sulfates	24 hours	25 µg/m^3	—
Lead (Pb)[c]	30 days	1.5 µg/m^3	—
	Quarter	—	1.5 µg/m^3
	Rolling 3-month average	—	0.15 µg/m^3
Vinyl chloride[c]	24 hours	0.01 ppm	—
Hydrogen sulfide (H2S)	1 hour	0.03 ppm	—
Volatile organic compounds (VOC)	No State or federal ambient air quality standard exists for VOCs because they are not classified as criteria pollutants.		

Notes; µg/m^3 = micrograms per cubic meter; ppm = parts per million.

[a] *"National standard" refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3-hour SO2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.*

[b] *USEPA established a 1-hour NO2 standard of 100 ppb or 188 µg/m^3. In addition to establishing an averaging time and level, the USEPA also is setting a new "form" for the standard. The form is the air quality statistic used to determine if an area meets the standard. The form for the 1-hour NO2 standard is the 3-year average of the 98th percentile of the annual distribution of daily maximum 1-hour average concentrations. This suite of standards will protect public health by limiting exposures to short-term peak concentrations of NO2, which primarily occur near major roads, and by limiting community-wide NO2 concentrations to levels below those that have been linked to respiratory-related emergency department visits and hospital admissions in the United States.*

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

South Coast Air Quality Management District

The Air Pollution Control Act of 1947 divided the State of California into air pollution control districts and air quality management districts. The City is located within the SCAQMD. The SCAQMD area—the Basin—includes all of Orange and Los Angeles Counties except for the Antelope Valley; the nondesert portion of western San Bernardino County; and the western and Coachella Valley portions of Riverside County.

SCAQMD, in coordination with SCAG, is responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the Basin. The current applicable AQMP was approved on March 3, 2017 (2016 AQMP), and includes the integrated strategies and measures needed to meet the State and national air quality standards. Furthermore, the 2016 AQMP demonstrates attainment of the national 1-hour and 8-hour ozone standards, as well as the latest 24-hour and annual particulate matter standards. Because the Project is within the jurisdiction of the SCAQMD, compliance with SCAQMD rules and guidelines is required. The SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the Basin by various stationary, area, and mobile sources. The SCAQMD governing board has adopted specific rules and regulations limiting the emissions that can be generated by various uses/activities and identifying specific pollution reduction measures, which must be implemented in association with various uses and activities. These rules regulate not only the emissions of the federal and State criteria pollutants, but also TACs and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules applicable to the Project are Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 1113 (Architectural Coatings), and Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Rule 402 requires that no discharge takes place from any source of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Rule 403 requires the use of stringent Best Available Control Measures (BACMs) to minimize PM10 emissions during grading and construction activities. Rule 1113 will require reductions in the volatile organic compound (VOC) content of coatings, with a substantial reduction in the VOC content limit for flat coatings. Compliance with SCAQMD Rule 1403 requires the owner or operator of any demolition or renovation activity to have an asbestos survey performed prior to demolition and to provide notification to the SCAQMD prior to commencing demolition activities. Additional details regarding these rules and other potentially applicable rules are presented below.

Rule 402 (Nuisance). This rule requires that no discharge takes place from any source of air contaminants or other material that causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endangers the comfort, repose, health or safety of any such persons or the public, or that causes, or has a natural tendency to cause, injury or damage to business or property.

Rule 403 (Fugitive Dust). This rule requires fugitive dust sources to implement BACMs. BACMs may include application of water or chemical stabilizers to disturbed soils; covering haul vehicles; restricting vehicle speeds on unpaved roads to 15 miles per hour (mph); sweeping loose dirt from paved site access roadways; ceasing construction activity when winds exceed 25 mph; and establishing a permanent ground cover on finished sites. SCAQMD Rule 403 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

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

Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). This rule requires limits on asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.

City of Los Angeles General Plan

The City's General Plan Air Quality Element was adopted on November 24, 1992.[3] The planning area for the Air Quality Element covers the entire City of Los Angeles, which encompasses an area of approximately 465 square miles. The Air Quality Element served to aid the greater Los Angeles region in attaining State and federal ambient air quality standards at the earliest feasible date while still maintaining economic growth and improving quality of life.

The Air Quality Element and the accompanying Clean Air Program provide for interrelationships between transportation and land use planning to meet the City's mobility and clean air goals. With the City's adoption of the Air Quality Element and the accompanying Clean Air Program, the City is seeking to achieve consistency with regional (SCAG) and local air quality, growth management, mobility, and congestion management plans. Performance-based standards have been adopted with the local plans to provide flexibility in implementation of the policies and objectives of the City's Air Quality Element.

The following Air Quality Element goals, objectives, and policies are relevant to the Project:

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

[3] City of Los Angeles, Department of City Planning, *General Plan,* "Air Quality Element" (November 1992).

Goal 4: Minimal 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.

Objective 4.1: It is the objective of the City of Los Angeles to include regional attainment of ambient air quality standards as a primary consideration in land use planning.

Objective 4.2: It is the objective of the City of Los Angeles to reduce vehicle trips and vehicle miles traveled associated with land use patterns.

Policy 4.2.3 Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.

Local governments have the authority and responsibility to reduce air pollution through their police power and land use decision-making authority. Specifically, local governments are responsible for the mitigation of emissions resulting from land use decisions and for the implementation of transportation control measures as outlined in the AQMP.[4] The AQMP assigns local governments certain responsibilities to assist the Basin in meeting air quality goals and policies. The Air Quality Element's goals, policies, and implementation measures provide the regulatory framework needed to assist the Basin in meeting the AQMP's goals and policies. Through capital improvement programs, local governments can fund infrastructure that contributes to improved air quality by requiring such improvements as bus turnouts, energy-efficient streetlights, and synchronized traffic signals.

4. ENVIRONMENTAL SETTING

Topography, Climate, and Meteorology

The Project Site is located within the 6,700-square-mile Basin. As noted, the Basin includes the southern two-thirds of Los Angeles County, all of Orange County, and the western urbanized portions of Riverside and San Bernardino Counties. The Basin is a coastal plain, with connecting broad valleys and low hills that are bounded by the Pacific Ocean to the southwest and by high mountains around the rest of its perimeter. The general region lies in the semipermanent, high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds.

The dominant land and sea breeze circulation system usually drive winds in the Project region, with on- and off-shore wind patterns. During the day, winds are generally on shore, blowing from sea to land, while

[4] South Coast Air Quality Management District, *CEQA Air Quality Handbook* (April 2003), p. 2-2.

at night the winds generally slow and reverse direction, traveling toward the sea. Local canyons and hillsides can also alter wind direction off shore due to a mountain and valley breeze circulation system. Nighttime cold air from the mountains blows into the Basin and then mixes with cool marine air, resulting in more stable atmospheric conditions.

The vertical dispersion of air pollutants in the Basin is hampered by the presence of persistent temperature inversions. High-pressure systems, such as the semipermanent, high-pressure zone in which the Basin is located, are characterized by an upper layer of dry air that warms as it descends, restricting the mobility of cooler, marine-influenced air near the ground surface and resulting in the formation of subsidence inversions. Such inversions restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of photochemical smog and oxidants. The Basin-wide occurrence of inversions at 3,500 feet above mean sea level (amsl) or less averages 191 days per year.

The potential for atmospheric pollution in an area depends largely on winds, atmospheric stability, solar radiation, and terrain. The combination of low wind speeds and low inversions produces the greatest concentration of air pollutants. The warm sunny weather in the Basin associated with a persistent high-pressure system is conducive to the formation of ozone and other oxidative pollutants, commonly referred to as smog. The problem is further aggravated by the surrounding mountains, frequent low inversion heights, and stagnant air conditions. All of these factors act together to trap pollutants in the Basin. On days without inversions or on days when winds average more than 15 miles per hour (mph), smog potential is greatly reduced.

Predominant meteorological conditions in the region include light winds and shallow vertical mixing due to low-altitude temperature inversion. Long-term diurnal wind patterns in the general vicinity of the Project Site are dominated by higher velocity, on-shore daytime winds of 4 to 12 mph from the southwest. Diurnal winds from the southwest are created by pressure differences between the relatively cold ocean and the unevenly heated land. Nocturnal winds exhibit more directional variability and commonly result in low-velocity, on-shore flow at speeds of 2 to 5 mph from the west and southwest, and less commonly in 2 to 20 mph winds from the northwest and east. Nocturnal winds are created when air along the mountain slopes cools and descends into the lower elevations of the Basin toward the ocean. These diurnal and nocturnal wind patterns play an important role in dispersing air pollutants and moderating the temperatures throughout the Basin and the Project vicinity. Furthermore, the region is known to experience Santa Ana winds, which are strong downslope winds that blow through mountain passes in Southern California and can easily exceed 40 mph. These warm, dry winds can severely exacerbate brush or forest fires, notably under drought conditions, and can happen throughout the year.

Average temperatures in the Project vicinity range from the high 70s to low 80s Fahrenheit to the upper 40s to low 60s Fahrenheit. The warmest periods tend to be from June to October. Average annual rainfall ranges from 14 or 15 inches, with the majority of precipitation occurring from November through March.[5] Summer rainfall usually consists of periodic and short-term scattered thunderstorms that are formed by an extension of the North American monsoon pattern that dominates over the southwestern United States.

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law. Criteria air pollutants (CAPs) are categorized into primary and secondary pollutants. Primary air pollutants are those emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOCs), oxides of nitrogen (NOx), sulfur dioxide (SO2), coarse inhalable particulate matter (PM10), fine inhalable particulate matter (PM2.5), and lead (Pb) are primary air pollutants. VOCs and NOx are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O3) and nitrogen dioxide (NO2) are the principal secondary pollutants. A brief description of each CAP is provided below:

- **Carbon Monoxide**. CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike O3, and because motor vehicles operating at slow speeds are the primary source of CO in the basin, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.
- **Volatile Organic Compounds**. VOCs are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Adverse effects on human health are not caused directly by VOCs, but rather by reactions of VOCs to form secondary air pollutants, including O3. VOCs are also referred to as reactive organic compounds (ROCs) or reactive organic gases (ROGs). VOCs themselves are not "criteria" pollutants; however, they contribute to the formation of O3.
- **Nitrogen Dioxide**. NO2 is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). NO2 is also a byproduct of fuel combustion. The principal form of NO2 produced by combustion is NO, but NO reacts quickly to form NO2, creating the mixture of NO and NO2 referred to as NOx. NO2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NOx is only potentially irritating. NO2 absorbs blue light, leading to a reddish-brown cast to the atmosphere and reduced visibility.

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[5] Western Regional Climate Center, "Historical Climate Information," https://wrcc.dri.edu/CLIMATEDATA.html. Accessed February 2018.

- **Sulfur Dioxide**. SO2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly from the burning of high-sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO2 oxidizes in the atmosphere, it forms sulfates (SO4).
- **Respirable Particulate Matter**. PM10 consists of extremely small, suspended particles or droplets 10 microns or smaller in diameter. Some sources of PM10, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM10 is caused by road dust, diesel soot, combustion products, the abrasion of tires and brakes, and construction activities.
- **Fine Particulate Matter**. PM2.5 refers to particulate matter that is 2.5 microns or smaller in size. Sources of PM2.5 include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles such as buses and trucks. These fine particles are also formed in the atmosphere when gases such as SO2, NOx, and VOCs are transformed in the air by chemical reactions.
- **Lead**. Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles, such as racecars, that use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.
- **Ozone**. O3 is a gas that is formed when VOCs and NOx, both byproducts of internal combustion engine exhaust and other sources, undergo slow photochemical reactions in the presence of sunlight. O3 concentrations are generally highest during the summer months, when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

Existing Local Air Quality

The SCAQMD territory is divided into 38 source receptor areas (SRAs). These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area. The Project Site is within SRA 1, Central Los Angeles.[6] The nearest air-monitoring station SCAQMD operates is located at 1630 N. Main Street, Los Angeles.[7] **Table 2**: **Air Quality Monitoring Summary**, summarizes published monitoring data from 2014 through 2016, the most recent 3-year period available. This station does not monitor SO2. The data show that during the past few years, the region has exceeded the ozone and PM2.5 standards.

6 South Coast Air Quality Management District, "General Forecast Areas & Air Monitoring Areas," http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf.

7 South Coast Air Quality Management District, *Site Survey Report for Central LA*, AQS ID 060371103 (May 2017), http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan/aaqmnp-losangeles.pdf?sfvrsn=6.

Table 2
Air Quality Monitoring Summary

Air Pollutant	Average Time (Units)	2014	2015	2016
Ozone (O3)	State Max 1 hour (ppm)	0.113	0.104	0.103
	Days > CAAQS threshold (0.09 ppm)	3	2	2
	National Max 8 hour (ppm)	0.094	0.074	0.078
	Days > NAAQS threshold (0.070 ppm)	6	6	4
	State Max 8 hour (ppm)	0.094	0.074	0.078
	Days > CAAQS threshold (0.07 ppm)	2	0	1
Carbon Monoxide (CO)	Max 1 hour (ppm)	3.0	3.2	1.9
	Days > CAAQS threshold (20 ppm)	0	0	0
	Days > NAAQS threshold (35 ppm)	0	0	0
	Max 8 hours (ppm)	2.0	1.8	1.4
	Days > CAAQS threshold (9.0 ppm)	0	0	0
	Days > NAAQS threshold (9.0 ppm)	0	0	0
Nitrogen dioxide (NO)	National Max 1 hour (ppm)	0.082	0.079	0.065
	Days > NAAQS threshold (0.100 ppm)	0	0	0
	State Max 1 hour (ppm)	0.082	0.079	0.064
	Days > CAAQS threshold (0.18 ppm)	0	0	0
Particulate matter (PM10)	Annual Average (µg/m^3)	30.6	27.1	25.8
	24 hours (µg/m^3)	86.8	88.5	74.6
	Days > CAAQS threshold (50 µg/m^3)	38	30	21
	Days > NAAQS threshold (150 µg/m^3)	0	0	0
Fine particulate matter (PM2.5)	National Max (µg/m^3)	59.9	56.4	44.3
	National Annual Average (µg/m^3)	ND	12.3	11.7
	Days > NAAQS threshold (35 µg/m^3)	6	7	2
	State Max (µg/m^3)	65.0	70.3	49.4
	State Annual Average (µg/m^3)	ND	12.5	12

Source: CARB, "Top 4 Summary," https://www.arb.ca.gov/adam/topfour/topfour1.php
CO data found at SCAQMD, Historical Data By Year, http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year
Notes: > = exceed; CAAQS = California Ambient Air Quality Standard; max = maximum; mean = annual arithmetic mean; µg/m^3 = micrograms per cubic meter; ND = no data; NAAQS = National Ambient Air Quality Standard; ppm = parts per million.
** Data not available.*

Both the USEPA and the CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." Federal nonattainment areas are further designated as marginal, moderate, serious,

severe, or extreme as a function of deviation from standards. The current attainment designations for the Basin are shown in **Table 3: South Coast Air Basin Attainment Status**. The Basin is currently designated as nonattainment at the federal level for ozone, lead, and PM2.5. The Basin is classified nonattainment at the State level for ozone, PM10, and PM2.5.

Table 3
South Coast Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone (O3)	Nonattainment	Nonattainment
Carbon monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen dioxide (NO2)	Attainment	Unclassified/Attainment
Sulfur dioxide (SO2)	Attainment	Attainment
Lead (Pb)	Attainment	Nonattainment
Suspended particulate matter (PM10)	Nonattainment	Attainment
Fine particulate matter (PM2.5)	Nonattainment	Nonattainment

Source: CARB, "Area Designations Maps/State and National," http://www.arb.ca.gov/desig/adm/adm.htm (last updated October 18, 2017).

Sensitive Receptors

The SCAQMD considers a sensitive receptor to be a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant. Sensitive receptors are identified near sources of air pollution to determine the potential for health hazards. Locations evaluated for exposure to air pollution include but are not limited to residences, schools, hospitals, and convalescent facilities. The nearest sensitive receptors that could potentially be subject to localized air quality impacts associated with construction of the Project are the multifamily residential units adjacent and immediately south to the Project site.

5. METHODOLOGY

Emissions were estimated for both construction and operation of the proposed Project using the CARB-approved California Emissions Estimator Model (CalEEMod) computer program, as is recommended by SCAQMD. CalEEMod is designed to model construction and operational emissions for land use development projects and allows for the input of project-specific information when it is known. The program contains default settings specific to the air district, county, air basin, or State level using approved vehicle emissions factors (EMFAC2014), established methodologies, and the latest survey data. Project-

specific information was included where available. Default data were used to supplement where necessary.

The CalEEMod model includes several options for the user that are labeled as mitigation. These are common construction measures that impact the calculations. Some of these measures are covered by SCAQMD rules with which projects would comply as a standard matter as discussed below. Therefore, these are not mitigation as it is understood in the CEQA context. Therefore, the CalEEMod output files consist of two results: Baseline and Regulatory Compliance where the Regulatory Compliance section incorporates rules and regulations from CARB and SCAQMD into the model.

The model outputs are based on the more extreme of weather seasons, summer and winter, to account for the largest shifts in temperature, precipitation, and wind patterns. For construction emissions, the highest values from mitigated on-site construction output tables for each phase of construction for each season (winter, summer) located under *3.0 Construction Detail* in the model output sheets are used. For operational values, the highest values from each seasonal output from *2.2 Regulatory Compliance Operation* in the model output sheets are used.

Construction activities produce atmospheric emissions of air pollutants from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the Project Site, and motor vehicles transporting the construction crew. Grading activities produce fugitive dust emissions (PM10 and PM2.5) from soil-disturbing activities, such as excavation for the subterranean parking. Exhaust emissions from construction activities on the Project Site would vary daily as construction activity levels change. Short-term emissions of criteria air pollutants (e.g., CO, sulfates [SOx], PM10, and PM2.5) generated by Project construction and O3 precursors (e.g., VOC and NOx) were assessed in accordance with SCAQMD-recommended methods.

The emission calculations assume the use of standard construction practices, such as compliance with SCAQMD Rule 402 (Nuisance) and Rule 403 (Fugitive Dust), which are mandatory for all construction projects. In the CalEEMod model, the emission calculations take into account Rule 402 and Rule 403 by incorporating the following measures:[8]

- Watering of exposed surfaces three times daily, or application of nontoxic stabilizers to all unpaved parking or staging areas or unpaved road surfaces, which is estimated to reduce fugitive dust emissions from this source (both PM10 and PM2.5);

[8] SCAQMD, *CEQA Handbook,* Tables 11-4, page 11-15 and A11-9-A, page A11-77. http://www.aqmd.gov/docs/default-source/default-document-library/templates/finalreport.pdf.

- Reduction of vehicle speeds to 15 miles per hour on unpaved roads;
- Replacement of ground cover in disturbed areas as quickly as possible; and
- Use of Tier 3 engines for off-road vehicles during construction activities where commercially available.[9]

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities of the Project. The consumption of natural gas and landscape maintenance would generate emissions. Mobile emissions would be generated by the motor vehicles traveling to and from the Project Site. The analysis of daily operational emissions associated with the Project have been prepared using the data and methodologies identified in SCAQMD's *CEQA Air Quality Handbook* ("Handbook") and current motor vehicle emission factors in CalEEMod. Default trip rates calculated by the CalEEMod software for these land uses were used (as shown in **Attachment 1**).

The following assumptions were made in the CalEEMod computer program:

Land Uses

- 252 dwelling units for a mid-rise apartment building
- 32,300 square feet of retail and restaurant space and
- 242 spaces in two-levels of subterranean parking levels

Construction

Construction would last approximately 18 months and would include: (1) demolition and site preparation, which would last approximately 1 month; (2) grading and building construction, which would last approximately 14 months; (3) paving and architectural coatings, which would last approximately 3 months.[10] Each phase of construction would result in varying levels of intensity and number of construction personnel. Excavation would involve export of 37,660 cubic yards of soil.

Localized Significance Thresholds

The Localized Significance Threshold (LST) Methodology document provides lookup tables of emissions that are based on construction projects of up to 5 acres in size. LST values for a 1-acre site were used because that is the smallest size available for AQMD thresholds. CalEEMod calculates construction

9 California Air Resources Board, tit. 13 Motor Vehicles, div. 3 Air Resources Board, ch. 9, Off-Road Vehicles and Engines Pollution Control Devices, art. 4 Off-Road Compression-Ignition Engines and Equipment.

10 Architectural coating will be taking place intermittently throughout construction.

emissions (off-road exhaust and fugitive dust) based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment.

LSTs are based on the ambient concentrations of that pollutant within the Project SRA and the distance to the nearest sensitive receptors, which are the multifamily residential units approximately 80 feet (25 meters) south of the Project Site. If the Project's emissions exceed the LST thresholds for NOx, CO, PM10, and/or PM2.5, then additional dispersion modeling would be conducted.

Data Summary

The Project air emissions are reported in relation to the ambient concentrations of the six primary CAPs (VOC, NO2, CO, SO2, PM10, and PM2.5) identified by the SCAQMD. Several pollutants listed in **Table 1** are not addressed in this analysis. Particulate matter is and represents the primary visibility-reducing particles that would be generated by the Project; therefore, other visibility-reducing particles are not addressed. The Project would also not generate or expose nearby residents to vinyl chloride because the Project would not involve the type of chemical processes that create this pollutant. Moreover, the Project would not expose nearby residents to hydrogen sulfide because it would not be generated in any substantial quantity. In addition, there is no generation of hydrogen sulfide or usage near the Project Site.

6. MODELING RESULTS

Construction

The maximum daily emissions during Project construction are listed in **Table 4, Maximum Construction Emissions**. The modeling incorporates standard compliance with SCAQMD rules and regulations, as previously discussed in **Section 3, Regulatory Framework**. The maximum daily emissions are predicted values for the worst-case day and do not represent the emissions that would occur for every day of construction. Detailed emissions calculations are provided in **Attachment 1**. As shown in **Table 4**, construction-related daily emissions for the CAPs would be below the SCAQMD thresholds.

Table 4
Maximum Construction Emissions

	VOC	NOx	CO	SOx	PM10	PM2.5
Source	**pounds/day**					
Maximum	47.8	78.0	34.3	0.2	6.7	2.7
SCAQMD threshold	75	100	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; ROG = reactive organic gases; SOx = sulfur oxides.
*Refer to Air Quality Modeling Results in **Attachment 1.***

Operation

Operational emissions were assessed for mobile, area, and stationary sources. Results of the criteria pollutant calculations are presented in **Table 5, Maximum Operational Emissions**. The increase in operational-related Project daily emissions for the criteria pollutants would be below the SCAQMD thresholds.

Table 5
Maximum Operational Emissions

Source	VOC	NOx	CO	SOx	PM10	PM2.5
	pounds/day					
Area	9.64	3.79	22.38	0.02	0.04	0.40
Energy	0.07	0.60	0.26	<0.01	0.05	0.05
Mobile	4.18	20.23	52.83	0.19	15.07	4.13
Total	17.48	12.79	70.96	0.17	11.56	3.35
Existing	*(3.27)*	*(6.35)*	*(26.19)*	*(0.05)*	*(3.78)*	*(1.07)*
Net Total	**10.62**	**18.27**	**49.28**	**0.16**	**11.38**	**3.51**
SCAQMD Mass Daily Threshold	55	55	550	150	150	55
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

_____

Notes:

CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; ROG = reactive organic gases; SOx = sulfur oxides.

*Refer to Air Quality Modeling Results in **Attachment 1.***

Localized Significance Thresholds

As mentioned previously, the screening criteria provided in the SCAQMD's LST Methodology document were used to determine localized construction and operational emissions thresholds for the Project. The maximum daily localized emissions and significance thresholds are provided in **Table 6, LST Maximum On-Site Emissions.** As shown therein, maximum localized emissions would not exceed the localized thresholds for NOx, CO, PM10, and PM2.5 at the nearby multifamily residences.

Table 6
LST Maximum On-Site Emissions

	NOx	CO	PM10	PM2.5
Source	**pounds/day**			
Construction				
Total maximum emissions	12.10	15.42	2.64	1.53
LST threshold	80.12	746.24	5.54	3.36
Threshold exceeded?	***No***	***No***	***No***	***No***
Operational				
Area/energy emissions	4.40	22.64	0.09	0.45
Existing area/energy emissions	(0.03)	(0.27)	(0.01)	(0.01)
Net area/energy emissions	3.37	22.37	0.08	0.44
LST threshold	80.12	746.24	2.00	1.18
Threshold exceeded?	***No***	***No***	***No***	***No***

Notes:
CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; ROG = reactive organic gases; SOx = sulfur oxides.
Refer to Air Quality Modeling Results in ***Attachment 1.***
LST values for a 1.18-acre site, *LST values were interpolated between the 1-acre and 2-acre values accordingly, then rounded down to the nearest whole number.*

Odors

According to the SCAQMD, while almost any source may emit objectionable odors, some land uses will be more likely to produce odors because of their operation. Land uses that are more likely to produce odors include agriculture, chemical plants, composting operations, dairies, fiberglass molding, landfills, refineries, rendering plants, rail yards, and wastewater treatment plants. The Project does not contain any active manufacturing activities and would convert current agricultural land to residential land uses. Therefore, objectionable odors would not be emitted by the Project.

Any unforeseen odors generated by the Project will be controlled in accordance with SCAQMD Rule 402 (Nuisance). Failure to comply with Rule 402 could subject the offending facility to possible fines and/or operational limitations in an approved odor control or odor abatement plan.

7. CUMULATIVE IMPACTS

SCAQMD recommends that a project be considered to result in a cumulatively considerable impact to air quality if any construction-related emissions from individual development projects exceed the mass daily emissions thresholds for individual projects**.**[11] SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions. As shown above, construction-related daily emissions at the Project Site would not exceed SCAQMD's regional or localized significance thresholds. Thus, the Project's contribution to cumulative construction-related regional and localized emissions would not be cumulatively considerable and, therefore, would be less than significant.

Similar to the Project, the greatest potential for TAC emissions at each related project would involve diesel particulate emissions associated with the operation of heavy equipment operation during demolition activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual cancer risk" is the likelihood that a person exposed to concentrations of TACS over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Construction activities at each related project would not result in a long-term (i.e. 70-year) substantial source of TAC emissions because the emissions are from short-term activities. In addition, SCAQMD Handbook and SCAQMD's supplemental online guidance/information do not require a health risk assessment for short-term construction emissions. It is therefore not required or meaningful to evaluate long-term cancer impacts from construction activities that occur over relatively short durations. As such, cumulative toxic emission impacts during construction would be less than significant.

Operational emissions from the Project would not exceed any of the SCAQMD's regional or localized significance thresholds. Thus, the Project's contribution to cumulative operational-related regional and localized emissions would not be cumulatively considerable and would be less than significant.

8. CONCLUSIONS

Construction and operation of the proposed Project would not result in any significant increase in air pollutant emissions. Furthermore, the Project would not conflict with regional and city policies intended to improve air quality.

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[11] *White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions,* SCAQMD Board Meeting, Agenda No. 29 (September 5, 2003), Appendix D, p. D-3.

APPENDIX B

Noise Technical Report

Noise Technical Report

3170 Olympic Boulevard
Los Angeles, CA 90006

ENV-2016-3633-EAF

Prepared for:
City of Los Angeles
Department of City Planning

Prepared on behalf of:
CBS Property Group

Prepared by:
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910 Hampshire Road, Suite V
Westlake Village, California 91361

December 2016

INTRODUCTION

This Noise Technical Report was prepared to support the CEQA evaluation of a proposed mixed-use development in the Koreatown neighborhood of Los Angeles. The Project would be located at 3170 West Olympic Boulevard. The Project would involve the construction of 252 apartment units and 32,100 square feet of commercial space. This report describes the existing noise environment within the Project area, and predicts future noise levels resulting from the Project.

BACKGROUND

Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (DB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale, the A-weighted decibel scale (dBA), has been devised to relate noise to human sensitivity.

Several rating scales have been developed to analyze the adverse effect of noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Common rating scales are as follows:

- L_{eq} – An Leq, or equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L_{min} – The minimum instantaneous noise level experienced during a given period of time.
- L_{max} – The maximum instantaneous noise level experienced during a given period of time.
- CNEL – The Community Noise Equivalent Level is a 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 PM to 10:00 PM and a 10 dBA "weighting" added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity in the evening and nighttime. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.7 dBA CNEL.

Vibration

Vibration is sound radiated through the ground. Vibration intensity is typically expressed as the peak particle velocity (PPV), defined as the maximum instantaneous peak of the vibration level and measured in inches/second (ips). The general range of groundborne vibration extends from barely perceptible (0.006 ips) to severe (2.0 ips).

EXISTING NOISE

The ambient noise level was evaluated on June 9, 2016 between the hours of 7:30 and 9:30 AM using Larson Davis 831 sound level meters. The noise meters meet the requirement specified in Section 111.01(1) of the LAMC that the instruments be "Type S2A" standard instruments or better. The instruments were calibrated and operated according to the manufacturer's specifications. At the noise monitoring locations, the microphones were placed on tri-pod mounts at a height of approximately 3.5 feet above the local grade. Noise measurements were collected at four locations around the site as shown on the figure included with this report. The measured noise levels are shown in the attached data sheets. The predominant source of existing noise is traffic along Olympic Boulevard. Existing noise levels ranged from a low of 54.5 dB(A) to a high of 73.6 dB(A) depending on the distance from traffic on Olympic.

PREDICTED NOISE

Construction

Construction of the proposed Project would require the use of heavy equipment for site clearing, grading, excavation and foundation preparation, the installation of utilities, paving, and building construction. During each construction phase there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of each activity.

The Federal Highway Administration has published estimated construction equipment noise levels based on measurements taken during the 1990s.[1] As these measurements were taken over a decade ago, they do not include current standard muffler technologies, thus the predicted noise levels are likely higher than actual. The FHWA data includes usage factors that adjust measured L_{max} noise levels based on expected duration of use to arrive at a predicted L_{eq}. Simultaneous operation of equipment results in combined noise levels. Multiple noise sources combine in a logarithmic fashion. Based on the data and methodology described above, and on expected equipment usage during construction, predicted noise levels were calculated, as shown in the attached spreadsheet.

1 *Construction Noise Handbook*, Federal Highway Administration (2006), Table 9.1, entries for backhoe, bulldozer, concrete pumps, crane, dump trucks and excavator. No more recent survey of construction equipment noise was available.

The nearest sensitive receptor would be residences to the south of the site. Given the proximity of these residences, construction could increase exterior noise levels more than 10 dBA over ambient. Mitigation measures should be incorporated into the construction process in order to reduce this impact. These could include requiring staging and equipment placement to occur away from adjacent residences and the installation of temporary barriers such as noise barriers or noise blankets along the edge of the site.

Operational

Traffic is the predominate source of long-term ambient noise. It requires a 3bB(A) or greater increase in ambient noise levels for new noise source to have a noticeable effect. In order for a change in traffic to result in a 3dB(A) change traffic volume on a roadway segment would need to double during peak hours. Given the size of the Project and the existing medical and residential uses nearby, the Project is not expected to double existing traffic on surrounding roadways.

Building mechanical and HVAC equipment generates operational noise that contributes to ambient noise conditions. However, the Los Angeles Municipal Code (LAMC), most notably Section 112.02, prohibits noise from air conditioning, refrigeration, heating, pumping, and filtering equipment from exceeding the ambient noise level on the premises of other occupied properties by more than 5 dB. New HVAC units generate noise levels up to 76 dB at the source. Noise levels typically fall by approximately 8 dB at 3 feet from the source, by 14 dB at approximately 6 feet from the unit.[2] Accordingly, noise levels from on-site HVAC units would generate up to 62 dBs approximately 6 feet from the unit, consistent with measured ambient noise levels. Given the physical separation between the proposed buildings nearby receptors, any increase in noise due to building mechanical and HVAC equipment is not expected to be noticeable.

2 ANSI/AHRI Standard 275-2010, Application of Outdoor Unitary Equipment A-Weighted Sound Power Ratings, Table 4, Distance Factor.

PREDICTED VIBRATION

Construction

Construction activities have the potential to generate groundborne vibration. Vibration exceeding 0.12 ips at any historical building or building and 0.3 ips at any engineered concrete and masonry buildings is considered significant. In addition, vibration of 0.2 ips is considered "annoying" to humans. [3] The table below identifies various PPV and RMS velocity (in VdB) levels for the types of construction equipment that would operate at the Project Site during construction. As shown**,** vibration velocities could approach 0.1 at 25 feet from the source activity. Vibration levels would decrease with distance, thus the vibration experienced at nearby locations would be less than 0.1 ips. As such, no damage to buildings or human annoyance is expected from vibration.

Operational

The Project would not involve the use of stationary equipment that would result in high vibration levels, which are more typical for large commercial and industrial projects. Although ground-borne vibration at the Project Site and immediate vicinity may result from heavy-duty vehicular travel (e.g., delivery and refuse trucks), the proposed land uses would not result in a substantial increase or change in the presence of these types of vehicles within the surrounding area.

Vibration Source Levels for Construction Equipment

Construction Phase	Equipment	PPV at 25 feet (in/sec)
Site Preparation	Graders	0.071
	Tractors/Loaders/Backhoe	0.040
Building Construction	Cranes	0.057
	Forklifts	0.020
	Tractors/Loaders/Backhoes	0.040
Paving	Pavers	0.063
	Tractors/Loaders/Backhoes	0.040
	Rollers	0.020
	Cement and Mortar Mixers	0.040

Source: Office of Planning and Environment, Federal Transit Administration, Transit Noise and Vibration Impact Assessment, FTA-VA-90-1003-06 (May 2006), 12-9. Note: ppv = peak particle velocity; in/sec = inches per second.

3 California Department of Transportation, *Transportation- and Construction-Induced Vibration Guidance Manual* (September 2013

NOISE MONITORING FIELD RECORD

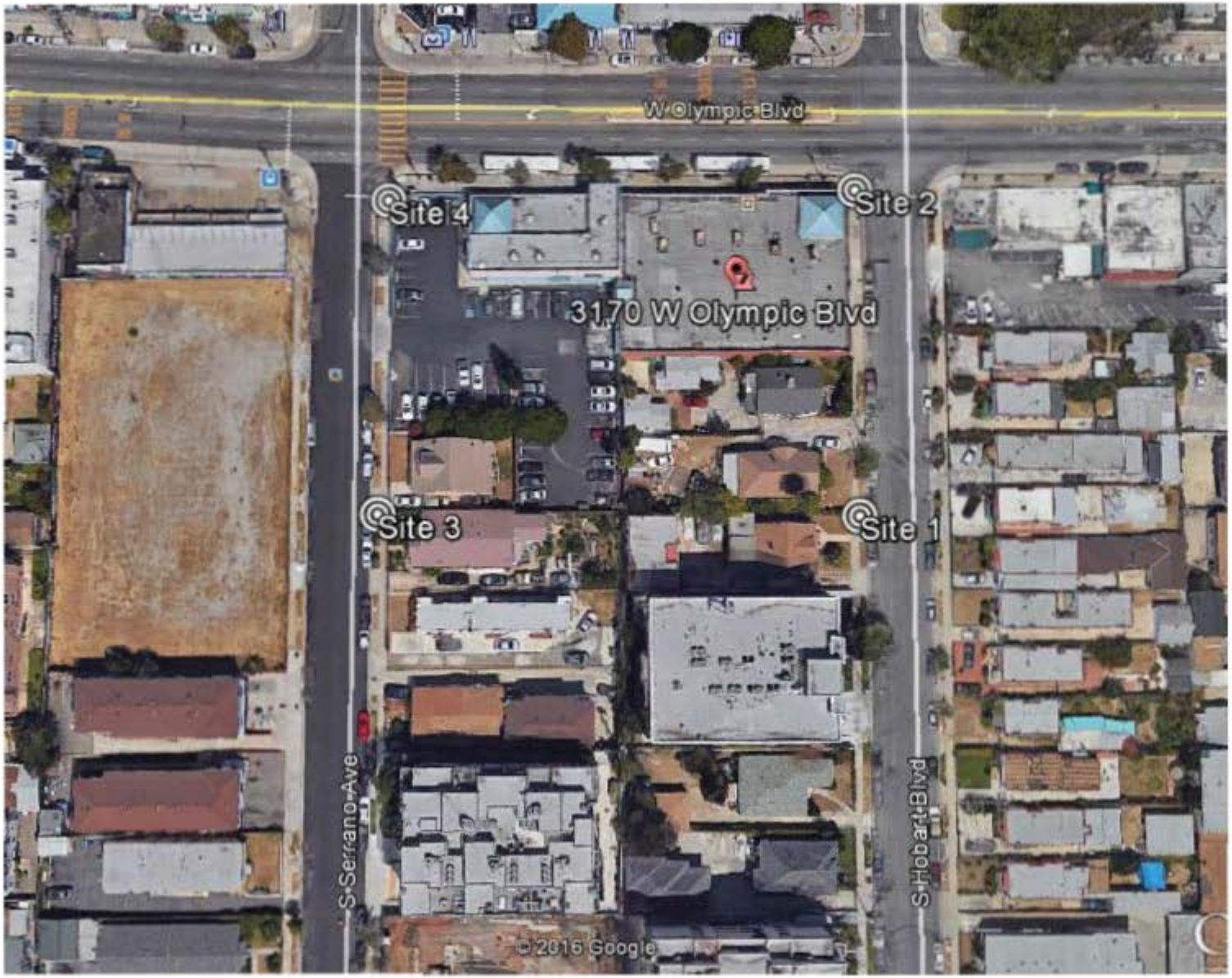
Project and Task Number: 130-001-016	Date: 6/9/2016
Project Name: 3170 Olympic	Field Activity: Noise monitoring
Location: Koreatown, CA	Weather: Overcast, 65 degrees

PERSONNEL: Name	Company	Time In	Time Out
Jose Fernandez	Meridian Consultants	7:40 AM	9:25 AM

PERSONAL SAFETY CHECKLIST

x	Protective Footwear	x	Hard Hat	x	Safety Vest
x	Safety Goggles				

TIME	DESCRIPTION OF WORK PERFORMED
7:56 AM	Site 1 File no: 831_Data.046 Coordinates: N 34.05199 W 118.30540 Location: On Hobbart between Olympic and 11th Description: Residential on both sides of the streets, multi family complex just south. Activity: Morning commute traffic mostly on Olympic, very few cars passing on Hobbart.
8:12 AM	Site 2 File no: 831_Data.047 Coordinates: N 34.05243 W 118.30524 Location: SW Corner of Olympic and Hobbart Blvd Description: Elementary School to the north, commercial retail to the east and west. Activity: Morning commute traffic mostly on Olympic. Fire truck passes at 12:45 min mark.
8:33 AM	Site 3 File no: 831_Data.048 Coordinates: N 34.05193 W 118.30624 Location: east side of Serrano between Olympic and 11th. Description: Residential to the east, vacant lot to west. Activity: Very light traffic on Serrano. Most noise is coming from Olympic.
8:49 AM	Site 4 File no: 831_Data.049 Coordinates: N 34.05250 W 118.30626 Location: SE corner of Olympic and Serrano. Description: Small shopping center to north, auto mechanic to west, shopping plaza east, residential south. Activity: Heavy traffic on Olympic. Big truck passes at 2:00 min mark.


W Olympic Blvd
Site 4
Site 2
3170 W Olympic Blvd
Site 3
Site 1
S Serrano Ave
S Hobart Blvd
©2016 Google

Summary

Filename	831_Data.046
Serial Number	3171
Model	Model 831
Firmware Version	2.302
User	
Location	
Job Description	
Note	
Measurement Description	
Start	2016/06/09 7:56:26
Stop	2016/06/09 8:11:32
Duration	0:15:05.7
Run Time	0:15:05.7
Pause	0:00:00.0
Pre Calibration	2015/12/10 6:55:39
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	143.8 dB

	A	**C**	**Z**
Under Range Peak	**76.3**	73.3	78.3 dB
Under Range Limit	**26.3**	26.6	32.1 dB
Noise Floor	17.1	17.5	22.7 dB

Results

LAeq	55.4 dB	
LAE	85.0 dB	
EA	35.279 µPa²h	
LApeak (max)	2016/06/09 7:57:13	104.2 dB
LASmax	2016/06/09 8:04:31	71.0 dB
LASmin	2016/06/09 8:11:28	42.8 dB
SEA	-99.9 dB	

LAS > 65.0 dB (Exceedence Counts / Duration)	10	25.8 s
LAS > 85.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**	**LNight 22:00-07:00**
	55.4	55.4	-99.9	55.4	55.4	-99.9	-99.9

LCeq	70.9 dB
LAeq	55.4 dB
LCeq - LAeq	15.4 dB
LAleq	61.7 dB
LAeq	55.4 dB
LAleq - LAeq	6.3 dB
# Overloads	0
Overload Duration	0.0 s
# OBA Overloads	[redacted]
OBA Overload Duration	2.0 s

Statistics

LAS1.67	65.8 dB
LAS8.33	58.4 dB
LAS25.00	53.3 dB
LAS33.30	52.0 dB
LAS50.00	50.5 dB
LAS90.00	46.9 dB

Summary

Filename	831_Data.047
Serial Number	3171
Model	Model 831
Firmware Version	2.302
User	
Location	
Job Description	
Note	
Measurement Description	
Start	2016/06/09 8:12:30
Stop	2016/06/09 8:27:35
Duration	0:15:05.7
Run Time	0:15:05.7
Pause	0:00:00.0
Pre Calibration	2015/12/10 6:55:39
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	143.8 dB

	A	**C**	**Z**
Under Range Peak	**76.3**	73.3	78.3 dB
Under Range Limit	**26.3**	26.6	32.1 dB
Noise Floor	17.1	17.5	22.7 dB

Results

LAeq	72.2 dB		
LAE	101.8 dB		
EA	1.688 mPa²h		
LApeak (max)	2016/06/09 8:25:46	103.3 dB	
LASmax	2016/06/09 8:25:46	92.1 dB	
LASmin	2016/06/09 8:17:38	54.5 dB	
SEA	-99.9 dB		
LAS > 65.0 dB (Exceedence Counts / Duration)	18	632.9 s	
LAS > 85.0 dB (Exceedence Counts / Duration)	2	5.9 s	
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0 s	
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0 s	
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0 s	

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**	**LNight 22:00-07:00**
	72.2	72.2	-99.9	72.2	72.2	-99.9	-99.9

LCeq	79.3 dB	
LAeq	72.2 dB	
LCeq - LAeq	7.0 dB	
LAleq	75.0 dB	
LAeq	72.2 dB	
LAleq - LAeq	2.8 dB	
# Overloads	0	
Overload Duration	0.0 s	
# OBA Overloads	0	
OBA Overload Duration	0.0 s	

Statistics

LAS1.67	82.0 dB
LAS8.33	75.2 dB
LAS25.00	71.2 dB
LAS33.30	70.0 dB
LAS50.00	67.3 dB
LAS90.00	59.6 dB

Summary

Filename	831_Data.048
Serial Number	3171
Model	Model 831
Firmware Version	2.302
User	
Location	
Job Description	
Note	
Measurement Description	
Start	2016/06/09 8:33:24
Stop	2016/06/09 8:48:29
Duration	0:15:05.1
Run Time	0:15:05.1
Pause	0:00:00.0
Pre Calibration	2015/12/10 6:55:39
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	143.8 dB

	A	**C**	**Z**
Under Range Peak	**76.3**	73.3	78.3 dB
Under Range Limit	**26.3**	26.6	32.1 dB
Noise Floor	17.1	17.5	22.7 dB

Results

LAeq	54.5 dB	
LAE	84.1 dB	
EA	28.616 µPa²h	
LApeak (max)	2016/06/09 8:34:00	92.3 dB
LASmax	2016/06/09 8:33:45	70.1 dB
LASmin	2016/06/09 8:35:45	44.1 dB
SEA	-99.9 dB	

LAS > 65.0 dB (Exceedence Counts / Duration)	8	17.6 s
LAS > 85.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**	**LNight 22:00-07:00**
	54.5	54.5	-99.9	54.5	54.5	-99.9	-99.9
LCeq	66.4 dB						
LAeq	54.5 dB						
LCeq - LAeq	11.8 dB						
LAleq	58.0 dB						
LAeq	54.5 dB						
LAleq - LAeq	3.5 dB						
# Overloads	0						
Overload Duration	0.0 s						
# OBA Overloads	0						
OBA Overload Duration	0.0 s						

Statistics

LAS1.67	64.3 dB
LAS8.33	57.2 dB
LAS25.00	53.0 dB
LAS33.30	52.4 dB
LAS50.00	51.3 dB
LAS90.00	47.7 dB

Summary

Filename	831_Data.049
Serial Number	3171
Model	Model 831
Firmware Version	2.302
User	
Location	
Job Description	
Note	
Measurement Description	
Start	2016/06/09 8:49:28
Stop	2016/06/09 9:04:33
Duration	0:15:05.7
Run Time	0:15:05.7
Pause	0:00:00.0
Pre Calibration	2015/12/10 6:55:39
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	143.8 dB

	A	C	Z
Under Range Peak	**76.3**	73.3	78.3 dB
Under Range Limit	**26.3**	26.6	32.1 dB
Noise Floor	17.1	17.5	22.7 dB

Results

LAeq	73.6 dB	
LAE	103.2 dB	
EA	2.314 mPa^2h	
LApeak (max)	2016/06/09 8:51:25	102.1 dB
LASmax	2016/06/09 8:51:26	89.0 dB
LASmin	2016/06/09 8:52:03	55.4 dB
SEA	-99.9 dB	

LAS > 65.0 dB (Exceedence Counts / Duration)	17	770.5 s
LAS > 85.0 dB (Exceedence Counts / Duration)	1	3.5 s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0 s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**	**LNight 22:00-07:00**
	73.6	73.6	-99.9	73.6	73.6	-99.9	-99.9

LCeq	79.1 dB
LAeq	73.6 dB
LCeq - LAeq	5.5 dB
LAleq	75.1 dB
LAeq	73.6 dB
LAleq - LAeq	1.4 dB
# Overloads	0
Overload Duration	0.0 s
# OBA Overloads	0
OBA Overload Duration	0.0 s

Statistics

LAS1.67	79.3 dB
LAS8.33	76.9 dB
LAS25.00	75.1 dB
LAS33.30	74.4 dB
LAS50.00	71.8 dB
LAS90.00	62.5 dB

3170 Olympic
Construction Noise Model

Site Prep

Assumed Attenuation: 6 dBA per doubling of distance

NOISE SOURCE	NUMBER OF UNITS	ASSUMED USE FACTOR	Lmax @ 50 FT (dBA)	DISTANCE (Feet)	NOISE LEVEL Leq (dBA)
Backhoe	2	0.4	78	25	83
Excavator	2	0.4	81	25	86
Dozer	1	0.4	82	25	84
Loader	1	0.4	79	25	81
Truck	3	0.4	76	25	83

TOTAL Leq DURING NORMAL OPERATIONS: 90

Sources: Federal Highway Adminidstration (FHWA) (August 2006), *Construction Noise Handbook, Table 9.1*

Building Construction

Assumed Attenuation: 6 dBA per doubling of distance

NOISE SOURCE	NUMBER OF UNITS	ASSUMED USE FACTOR	TYPICAL PRESSURE LEVEL @ 50 FT (dBA)	DISTANCE (Feet)	NOISE LEVEL Leq (dBA)
Concrete Pump	1	0.2	81	25	80
Crane Mobile	1	0.2	81	25	80
Generator	2	0.5	81	25	87
Pneumatic Tools	2	0.5	85	25	91
Welder	1	0.4	74	25	76
Truck	2	0.5	88	25	94

TOTAL Leq DURING NORMAL OPERATIONS: 88

Sources: Federal Highway Adminidstration (FHWA) (August 2006), *Construction Noise Handbook, Table 9.1*

APPENDIX C

Phase 1 ESA

PHASE I ENVIRONMENTAL SITE ASSESSMENT
(ASTM E 1527-13)

3170-3188 W. OLYMPIC, 1010-1020 S. SERRANO & 1015-1021 S. HOBART
LOS ANGELES, LOS ANGELES COUNTY, CA 90006

PREPARED ON BEHALF OF:
CHOI BO SUNG, INC.

DATE:
AUGUST 8, 2016

PROJECT NUMBER:
GEG16103

Acronym List

Governmental Agency Names

ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
CPSC	Consumer Products Safety Commission
DOT	Department of Transportation
OSHA	Occupational Safety & Health Administration
EPA	Environmental Protection Agency
EPRI	Electrical Power Research Institute
USNRCS	United States Natural Resource Conservation Service (former Soil Conservation Service)
USSCS	United States Department of Agriculture Soil Conservation Service
USGS	United States Geological Survey

Governmental Regulations

AHERA	Asbestos Hazard Emergency Response Act
CERCLIS	Comprehensive Emergency Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
ERNS	Emergency Response Notification System
LBPPPA	Lead-Based Paint Poisoning Prevention Act
NPDES	National Pollutants Discharge Elimination System
NPL	National Priorities List
RCRA	Resource Conservation and Recovery Act
SPCC	Spill Prevention, Control Countermeasures
TRI	Toxic Release Inventory

Environmental Terms & Measurements

ACBM	Asbestos Containing Building Material
ACM	Asbestos Containing Material
AST	Aboveground Storage Tank
BDL	Below Detection Limits
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
ESA	Environmental Site Assessment
FRP	Fiberglass Reinforced Plastic
LPST	Leaking Petroleum Storage Tank
LUST	Leaking Underground Storage Tank
MCL	Maximum Contaminant Level
MSW	Municipal Solid Waste Site
PACM	Presumed Asbestos Containing Material
PCB	Polychlorinated Biphenyl
PCi/l	PicoCurries of Radon per Liter of Air
PCM	Phase Contrast Microscopy
PLM	Polarized Light Microscopy
PPM	Part Per Million
PST	Petroleum Storage Tank
REC	Recognized Environmental Condition
TEM	Transmission Electron Microscopy
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

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1. Summary

Gabriel Environmental Group (GEG) conducted a Phase I ESA for a site addressed at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California in accordance with the generally accepted ESA industry standard ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

The scope of work included: an inspection of the site for environmental concerns, a review of environmental databases and other governmental records, a review of available historical documents (including aerial photographs, fire insurance maps, and topographic maps), interviews with the owner, and the preparation of this report.

Site Information:

The subject property consists of seven mostly improved tracts located along the southerly right-of-way line of West Olympic Boulevard, the westerly right-of-way line of South Hobart Boulevard and the easterly right-of-way line of South Serrano Avenue, in the City of Los Angeles, Los Angeles County, California. Its physical address ranges are 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, California. The subject site is geographically located at latitude 34.0523250 and longitude 118.3055510. The site consists of the following (based on available records and the current site addresses):

3170 W. Olympic: Pellissier Tract Lots 11 and 12 and Ex of St Lot 13 Blk E, Los Angeles County. Year Built: 1955. Lot Size: 13,237 SF. Square Feet: 12,199 SF.

3188 W. Olympic: Pellisier Tract Pellissier Tract (Ex of Sts) Lot 14 and (Ex of St) Lot 15 Blk E, Los Angeles County. Year Built: 1972. Lot Size: 6,944 SF. Square Feet: 2,936 SF.

1010 S. Serrano: Pellissier Tract Lot 16 Blk E, Los Angeles County. Lot Size: 6,208 SF.

1014 S. Serrano: Pellissier Tract Lot 17 Blk E, Los Angeles County. Lot Size: 6,209 SF.

1020 S. Serrano: Pellissier Tract Lot 18 Blk E, Los Angeles County. Year Built: 1909. Lot Size: 6,290 SF. Square Feet: 1,560 SF.

1015 S. Hobart: Pellissier Tract Lot 10 Blk E, Los Angeles County. Year Built: 1923. Lot Size: 6,208 SF. Square Feet: 1,888 SF Lot Size: 6,208 SF

1021 S. Hobart: Pellissier Tract Lot 9 Blk E, Los Angeles County. Year Built: 1902. Lot Size: 6,209 SF. Square Feet: 1,000 SF.

GEG was authorized to conduct the ESA by Kyoung Lan Choi of Choi Bo Sung, Inc.. The property was inspected on July 28, 2016 by GEG Environmental Consultant Hartley Beeks.

The site under consideration in this project, or the designated property in review, consists of two commercial buildings and several residential dwellings, and asphalt and concrete paved parking areas and driveways. The commercial tenants (3170 and 3188 West Olympic Boulevard) consists of a foot massage facility, a wireless phone outlet; Verizon, a drug store; Jay's Drugs, a medical clinic; Martin H. Lee, MD, a dental clinic; Chung's Family Dental, a piano store; Han Mi Piano and a Tae Kwan Do studio. The commercial buildings comprise a center are known as Olympic Art Plaza. Additionally, the subject site consists of three single family and multifamily residential units; at 1015 S. Hobart (triplex), at 1021 S. Hobart (single family dwelling), and at 1020 S. Serrano (single family dwelling). Residential units were previously located at 1010 S. Serrano and 1014 S. Serrano which have been removed.

Based on a review of Los Angeles County Appraisal District records, it appears that the improvements on site were erected in several stages, starting in the early 1900s.

The dental and medical clinics on site utilize X-Ray materials and dispose of medical waste (hazardous and regulated substances) licensed contractors for such. This finding was not deemed to constitute an environmental concern.

No evidence of acutely hazardous chemical storage problems, waste disposal concerns, leaking transformers, deteriorating lead based paint, sumps, pits, catch basins, surface impoundments, landfill activities, bodies of water, unusual odors, oil or gas wells, or other environmental conditions was observed on the property in review. There was no physical or visual evidence of stressed vegetation, soil discoloration, odors, or other indicators of environmental exposure to the surface areas or soils on the subject property.

Surrounding Uses:

To the south of the subject site are single family residential dwellings and residential condominiums. To the east is South Hobart Boulevard, across from which are commercial facilities and single family residential dwellings. To the west is South Serrano Avenue, across from which are an automotive service facility and vacant land. To the north is West Olympic Boulevard, across from which are commercial facilities. To the northeast is a school. To the northwest is a dental clinic.

Historical Records Review:

A historical aerial photograph search was prepared as part of the previous ESA conducted on the subject site. The aerial photographs obtained are from 1928, 1938, 1948, 1952, 1954, 1964, 1972, 1981, 1989, 1994, 2005, 2009, 2010 and 2012. From the review of historical photographs, the improvements were erected in several stages, starting in the early 1900s. The aerial photographs were reviewed for visual evidence of past land usage that could have adversely impacted the subject site or properties surrounding the site. The aerial photograph review is primarily applicable for general site use chronology. Most of the aerials reviewed are not of large enough scale or of sufficient clarity to depict site-specific conditions.

A review of historical Sanborn maps was also prepared by EDR, as part of the previous ESA conducted on the subject site, to evaluate present and past land use, structures, improvements, and historical development of the subject site and surrounding properties. Maps were obtained from 1907, 1921, 1950, 1954, 1955, 1961, 1968 and 1970. In the map from 1907, West Olympic is named West 10th Street, and South Serrano is named Cahuenga. The subject site consists of two residential dwellings and vacant land. In the map from 1921, Cahuenga has been renamed South Serrano, and West Olympic remains as West 10th Street. The subject site consists of several residential dwellings and a plumbing operation at the southwest corner of West Olympic (West 10th Street) and South Hobart. In the map from 1950, West 10th has been renamed West Olympic. The subject site consists of several residential dwellings and a store. In the map from 1954, the north end of the property along West Olympic is vacant and the balance of the property to the south consists of residential dwellings. In the maps from 1955 and 1961, the north end of the property is occupied by a wholesale hardware facility and an automotive related facility, possibly an automobile repair shop, along South Serrano. In the maps from 1968 and 1970, the north end of the property is occupied by a wholesale hardware facility and a parking lot or garage. Based on the Sanborn map review, the subject site has been occupied by several commercial facilities and residential dwellings in the past.

According to the Sanborn map review, the subject site may have been occupied by a plumbing supply manufacturing facility and an automotive repair facility in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property.

A historical topographic map search was prepared as part of the previous ESA conducted on the subject site, to evaluate potential liability on the target property and its surrounding area, resulting from past activities. A topographic map is a color-coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topographic maps show the shape, elevation, and development of the terrain in precise detail by using contour lines and color-coded symbols. The historical topographic maps obtained are from 1896, 1900, 1901, 1902, 1920, 1926, 1928, 1953, 1966, 1972, 1981 and 1994. No potential environmental issues were noted at the subject property.

A review of the available historical city directories was also prepared by EDR as part of the previous ESA conducted on the subject site, to evaluate the present and past land use, structures, improvements, and the historical development of the subject site and surrounding properties. During the search, business directories including city, cross-reference, and telephone directories were reviewed, if available. The subject site has been occupied by the following:

Year	Address	Occupant/s
1937	3170 W. Olympic	Alonzo Harold
1958		Bennett Montgomery Hdwe Co
1962		Bennett Montgomery Hdwe Co
1967		Bennett Montgomery Hardware Co
1971		Montgomery Hardware Co
1976		Montgomery Hardware Co
1981		Montgomery Hardware Co
1986		Montgomery Hardware Co
2000		Chois Acupuncture Clinic, Division Ampac Co, Honma Golf, Joy Church Dept Store, Moda Milano, Peck Skin Institute, Plaza Travel & Tour, Universal Title
2006		Acupuncture, Cellmaster Inc, Chois, Clinic, Joy Church Dept, Ob Wireless, Peck Skin Inst, Plaza Travel, Stlifetech Inc, Wireless
2008		All Star Wireless, Chung Tai Hwan, Jays Drug, O B Wireless Inc, P2P Communication Inc, Premium Outlet
2013		Joy Church Department Store, Peck Skin Institute, Qrapha Inc, All Star Wireless, Han Kook Tour, Health Foot Therapists, Jays Drug
1937	3178 W. Olympic	Smith C. Houston Printer
1942		Vore Eileen Printer
1942	3180 W. Olympic	Lind Arth Shtmtlwks
2000	3188 W. Olympic	Chungs Family Dental, Martin H. Lee Md, Paik Kangihn Md
2006		Chungs Family Dental, Lee Martin Md
2008		Art Plaza Inc, Chungs Family Dental Center, Martin Lee Md
2013		Chungs Family Dental, Martin Lee Md, Paid Kangihn Md
1924	1010 S. Serrano	Dunseth Jas Building Contractor
1929		Dunseth Jas Carpenter
1933		Dunseth Jas Carpenter
1942		Dunseth Jas Carpenter
1951		Dunseth J H R
1924	1012 S. Serrano	Tyndall Fred Salesman
1929		Badger Chas Civil Engineer
1933		Badger Chas Accountant
1937		Hansen Louis Clerk
1942		McCormack Ernest Plumber
1962		Crusen Freda
1967		Saucedo Juan
1924	1014 S. Serrano	Hitt Chas Roadmaster, Jurden Frances, Thompson Agnes Nurse, Thompson Frank Auditor

1929		Coene Chas Machinist, McLaughlin Leland President Keystone Electric
1933		Alker Carol Telephone Operator, Hadley Alice
1937		Cardoza Michael Mechanic, Guthrie Henry Brake Mechanic
1942		Blue Stewart Opal, Lawrence Frank Police
1951		Trejo Beatrice, Grijalva Frank
1924	1016 S. Serrano	Murdock Clinton Estimator, Potter Cath Student, Potter Washington Attorney, McIntyre John Clerk
1929		Lyel Russell Machinist, Stevens Reginald Architect
1933		Jackson Lawrence Lab
1937		Hansen Carl Carpenter, Hansen Fred, Jackson Chas Sheet Metal Worker
1942		Poe Grayce, Sarikas Saml Bartender
1951		McCann John E R
1958		Silva Isabel
1962		Linegar Orta, Silva Isabel
1967		Linegar Orta
1924	1020 S. Serrano	Truslow Bertha Teacher
1929		Truslow Clara, Truslow Bertha Teacher
1933		Truslow Clara, Truslow Bertha Teacher
1937		Truslow Bertha Teacher
1942		Truslow Clara, Truslow Wallace President Citrus Exchange
1951		Truslow Clara
1967		Earl Jack
1971		Corral Cruz
1976		Corral Cruz, Buenaflor Bernardo
1981		Corral Cruz, Buenaflor Bernardo
1986		Corral Cruz, Corral Robert, Wonder Years School
1990		Corral Cruz
2000		Corral Cruz
2006		E. Corral, Lee Martin Md, Martin Hleem Md, Paik Kangihn Md
2001	1001 S. Hobart	B Allenj Inc
1933	1009 S. Hobart	Singeho Oshiba Grocery
1924	1011 S. Hobart	H Los Angeles
1929		Gray George Salesman
1933		Matsura K
1942		Matsura Frank
1951		Broom Robert
1937	1015 S. Hobart	Ninonifya George Gardener
1951		Takahashi William
2000		Choi Kee Jin
1924	1017 S. Hobart	Preston Herbert
1929		Tagushi George Gardener
1937		Koyamatsu Mankichi Hatsuno
1942		Koyamatsu Samuel
1951		Nagata Bill
1958		Nagata Bill
1962		Nagata Bill
1967		Nagata Bill
1971		Nagata Bill
1981		Nagata Bill
1986		Nagata Bill
1990		Nagata Bill

2000		Tianjin Oriental Medicine
2008		Tianjin Oriental Medicine
1924	1019 S. Hobart	Stanton Virginia
1929		Koebsell Richard Chef
1937		Mishikawa Tom Gardener
1942		Nishikawa Tom Gardener
1958		Oda Toshi
1962		Oda Toshi
1971		Tamai Reiko
1924	1021 S. Hobart	Breese J Clerk, Smallbone Julius Carpenter
1929		Kelley Chas Reporter, Kelly Jack Clerk, Kelly Winona
1933		Uyeda Kitaro Fruit
1937		Horiushi Chohei Kumeno Clerk
1942		Smallbone Julius Albina
1951		Parker Edward
1958		Parker Edward
1962		Nishida Hama, Fukuzawa Enichi
1967		Nishida Hama
1990		Chang Myong
2000		Paik Kanghin
2006		Paik Kanghin
2008		Castillo Maintenance Services

According to the city directory search, the subject site may have been occupied by a printing press or printing facility, an automobile service or repair facility and a metal machine shop in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property.

Environmental Database Review:

The subject site was not listed in any of the databases searched by EDR.

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL. Based on the environmental database review, no SEMS facilities were found located within a half of a mile radius from the subject site.

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under he Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site. Based on the environmental database review, no SEMS-Archive registered facilities were found located within a half of a mile radius from the subject site.

The National Priority List (NPL) identifies those sites that are currently involved in CERCLA or Superfund actions related to abandoned or inactive hazardous wastes. It is compiled from the designated CERCLIS list. NPL sites are prioritized as to their significant risk to human health and the environment. This list targets those sites to receive remedial funding under CERCLA. The NPL lists the nation's highest priority sites for remedial action. Only NPL sites can receive CERCLA funding. A review of the NPL list has revealed that there are no federal or State equivalent NPL sites (RESPONSE) located within approximately a mile of the target property.

The RCRA notifiers list identifies those facilities that indicate that they generate, transport, treat, store, or dispose of hazardous waste regulated under the Resource Conservation Recovery Act of 1976 (RCRA). RCRA is an amendment to the first piece of Federal Solid Waste legislation called the Solid Waste Disposal Act of 1965. RCRA was amended in 1980 and most recently in 1984 by HSWA (Hazardous and Solid Waste Amendments of 1984). This list is compiled by the EPA. All generators are required to have US EPA ID numbers on all waste manifest disposal records. The extent to which these facilities actually handle such wastes varies greatly from small-quantity generators to active treatment, storage, and disposal facilities. Based on the environmental database review, seven RCRA-SQG and one RCRA-LQG registered facilities were found located within a quarter of a mile radius from the subject site. Based on their topographical elevation, reported status and/or their distances from the site, the facilities found were not deemed likely to constitute a significant environmental risk to the subject site.

According to the environmental database review, two UST (Petroleum Storage Tank) facilities, two Historical UST facilities, five CA FID UST facilities and six SWEEPS UST facilities were found located within a half of a mile radius from the subject property. HIST UST: The Hazardous Substance Storage Container Database is a historical listing of UST sites. SWEEPS UST: The listing (Statewide Environmental Evaluation and Planning System) is an underground storage tank listing that was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. Based on these facilities' topographical elevation, reported status and/or their distances from the site, they were not deemed likely to constitute a significant environmental risk to the subject site.

According to the environmental database review, ten registered LPST (Leaking Petroleum Storage Tank) and one SLIC facilities were found located within a half of a mile radius from the subject property. Based on their topographical elevation, reported status and/or their distances from the site, the facilities found were not deemed likely to constitute a significant environmental risk to the subject site.

The ERNS database lists incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. According to the environmental database review, no incidents were found within a quarter of a mile radius from the subject property.

The California Voluntary Cleanup Program was established to provide administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in California. A review of the VCP list, provided by EDR, did not reveal the presence of any VCP sites within approximately half a mile from the target property.

According to the environmental database review, 16 Envirostor facilities, one WMUDS/SWAT facility, five Historical Cortese facilities, six Historical Auto Stations, four Historical Cleaner sites, one Drycleaners, and one SCH site were found located within a mile radius from the subject property. The database listings relate to the nature of the surrounding uses and the general area where the subject site is located. Based on these facilities' topographical elevation, reported status and/or their distances from the site, they were not deemed likely to constitute a significant environmental risk to the subject site.

GEG has reviewed the unmapped sites in the database and none of the sites or uses listed appear to have been located at the subject site or within the recommended search distance from the subject site.

Vapor Intrusion:

GEG has performed a Vapor Intrusion Assessment in conformance with the scope and limitations of the Standard Practice E 2600-10 on property located at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California. In the professional opinion of GEG, an appropriate level of assessment has been conducted consistent with good commercial and customary practice in an effort to minimize liability, and no evidence or indication of potential vapor intrusion conditions (pVIC) or vapor intrusion conditions (VIC) has been revealed and vapor intrusion is unlikely to be an issue of concern in connection with existing or planned structures on the target property.

Previous Reports:

A Phase I was previously conducted by GEG that was dated April 1, 2014. No recognized environmental conditions were found.

Interviews/Questionnaires:

The questionnaires were not returned as of the date of the issuance of this report. No items of environmental significance were suspected to be reported in the questionnaires with the information provided to GEG.

Findings:

According to the Sanborn map review, the subject site may have been occupied by a plumbing supply manufacturing facility and an automotive repair facility in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property.

According to the city directory search, the subject site may have been occupied by a printing press or printing facility, an automobile service or repair facility and a metal machine shop in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property.

The findings can only be verified to the extent available to the consultant and following industry standards for such. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property. If any impacts are found, they will need to be addressed in accordance with all regulatory requirements for such.

Opinion:

A data failure is a failure to achieve historical research objectives even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. A data gap is a lack or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. No data gaps were encountered during the preparation of this Phase I ESA.

Conclusions/Recommendations:

GEG has performed a Phase I ESA in conformance with the scope and limitations of the Standard Practice E 1527-13 on the property located at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California. In the professional opinion of GEG, an appropriate level of inquiry has been made into the previous ownership and use of the property consistent with good commercial and customary practice in an effort to minimize liability, and no evidence or indication of recognized environmental conditions, historical recognized environmental conditions or controlled recognized environmental conditions has been revealed. No further assessment is deemed necessary.

2. Introduction

2.1 Project Authorization

Kyoung Lan Choi of Choi Bo Sung, Inc. requested that GEG perform a Phase I ESA for a site located at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California. This report was prepared by Hani Gabriel, Environmental Professional. This report is prepared for the attention of: **Choi Bo Sung, Inc.**

2.2 Purpose

The purpose of this Phase I ESA was to gather information regarding recognized environmental conditions pertaining to the subject site. The investigation was conducted and the report was prepared within the scope and limitations of the guidelines in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

The purpose of this standard is to define good commercial and customary practice in the United States for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products. This practice permits a user to satisfy one of the requirements to qualify the user for the innocent landowner, contiguous property owner, or prospective purchaser limitations on CERCLA liability. The practice constitutes all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice. The goal of the processes established by this practice is to identify recognized environmental conditions.

Recognized Environmental Condition" definition: "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

Historical Recognized Environmental Condition" definition: "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use_criteria established by a regulatory authority, without subjecting the property to any required controls. Before labeling the past release an HREC, the Environmental Professional must determine whether the past release is a REC at the time the Phase I ESA is conducted. If the EP considers this past release to be a REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a REC."

Controlled Recognized Environmental Condition" definition: "a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls."

A release is defined as any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance, pollutant, or contaminant.

In conjunction with the subject site, a facility is defined as any building, structure, installation, equipment, pipe or pipeline, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft or any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located, but does not include any consumer product in consumer use or any vessel.

Owner or operator is defined as any person owning or operating a facility or the person who owned, operated, or otherwise controlled activities at a facility immediately prior to such facility's transfer to a unit of state or local government due to bankruptcy, foreclosure, tax delinquency, abandonment or similar means. Owner or operator does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility (secured creditor exemption).

Certain elements must be established by a plaintiff before a defendant may be found liable under CERCLA for response costs at a site. Assuming all the elements of liability exist, a party may still avoid CERCLA liability by meeting one of the so-called affirmative defenses. They provide that a party shall not be liable if it can establish by a preponderance of the evidence that the release or threat of release of a hazardous substance and the damages resulting therefore were caused solely by: an act of God, an act of war, or the third party defense, which includes the innocent landowner defense. All appropriate inquiry must be undertaken by the defendant to establish that the defendant did not know and had no reason to know of hazardous substances in regard to the subject property.

It entails independent investigations by environmental professionals of key issues or facts related to potential environmental liabilities associated with the property transaction. It is an investigation of the real property conducted in order to determine or discover the obviousness of the presence or likely presence of a release or threatened release of hazardous substances on the real property and adjacent properties.

2.3 Scope of Services

Gabriel Environmental Group's (GEG) scope of services included the following: a review of reasonably ascertainable records (information that is publicly available, obtainable within reasonable time and cost constraints, and practically reviewable) from ASTM standard sources and written inquiries regarding the site, site reconnaissance, interviews (via telephone or in person), and preparation of this report detailing findings, opinions, and conclusions. The items listed below were not considered part of the scope of work for this Phase I ESA: subsurface exploration, air, soil or groundwater sampling, asbestos-containing building materials, lead-based paint, radon, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, ecological resources, endangered species, health and safety, industrial hygiene, indoor air quality, biological agents, mold, or controlled substances.

2.4 Significant Assumptions

This ESA is subject to the accuracy of information reviewed and to the limitations of the personal recollections of persons interviewed. GEG cannot and does not warrant or guarantee that information provided by other sources is accurate or complete. Per E1527-13, an environmental professional may rely on information provided unless he or she has actual knowledge that certain information is incorrect.

2.5 Limitations and Exceptions

The conclusions included in this report are intended to assist the user in evaluating potential environmental risks associated with real estate transactions.

The visual inspection was not limited due to weather concerns or dense vegetation.

GEG does not represent that the site referred to herein contains hazardous or toxic substances or other latent conditions beyond those observed during the site assessment. GEG does not assume responsibility for the discovery of any special resources, nor does it assume responsibility for the elimination of hazards or adverse conditions that may cause accidents, injuries, damage, client liabilities, or environmentally adverse conditions. GEG assumes no responsibility if hidden environmental conditions are discovered.

The conclusions in this report are based on the findings of the Phase I investigation described herein. Such an assessment can never absolutely conclude that a site does not contain hazardous materials inside structures, on its surface, or in its subsurface or that any such materials have not impacted the condition of the site. As long as the assessment is conducted properly and all due considerations are made, a degree of assurance can be achieved. The degree of assurance is determined by the amount of available information, scope of the assessment, and complexity of analyses performed. An absolute warranty can never be expressed or implied that no environmental liabilities exist on the site.

The professional opinions expressed herein do not represent scientific certainties. All recommendations, findings, and conclusions stated in the report are based upon conditions, operations, and practices (facts and circumstances) as observed at the time that this report was prepared (e.g. federal, state, local law, rules, regulations, and other matters that GEG deemed relevant). A change in any fact or circumstances upon which this report is based may adversely affect the recommendations, findings, and conclusions presented in it.

The information obtained in the preparation of this report is not all inclusive and should not be construed as such but provides reasonable ascertainable and practically reviewable information regarding this project. A normal standard of care has been taken in compiling this report. GEG is not responsible for any errors, omissions, or inaccuracies in reasonable ascertainable information or undisclosed environmental conditions.

The conclusions in this report are based on current environmental regulations as of the date of this report.

2.6 Special Terms and Conditions

A contract between the client and GEG is attached at the end of this report. Any special terms and conditions are set forth in this contract.

2.7 User Reliance

This report is prepared for the sole and exclusive use of GEG's clients and their representatives and may not be dispersed, disclosed to, or relied upon, in whole or in part, by any other persons or entities without the prior written consent of GEG.

2.8 Conflict Certification

Gabriel Environmental Group (GEG) has no present or contemplated future ownership interest or financial interest in the real estate that is the subject of this Environmental Assessment Report; and GEG has no personal interest with respect to the subject matter of the Environmental Assessment Report or the parties involved and GEG has no relationship with the property or the owners thereof which would prevent an independent analysis of the environmental or other conditions of the property.

3. Site Description

3.1 Location and Legal Description

The subject property consists of seven mostly improved tracts located along the southerly right-of-way line of West Olympic Boulevard, the westerly right-of-way line of South Hobart Boulevard and the easterly right-of-way line of South Serrano Avenue, in the City of Los Angeles, Los Angeles County, California. Its physical address ranges are 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, California. The subject site is geographically located at latitude 34.0523250 and longitude 118.3055510.

GEG was authorized to conduct the ESA by Kyoung Lan Choi of Choi Bo Sung, Inc.. The property was inspected on July 28, 2016 by GEG Environmental Consultant Hartley Beeks.

3.2 Site and Vicinity General Characteristics

The site consists of the following (based on available records and the current site addresses):

3170 W. Olympic: Pellissier Tract Lots 11 and 12 and Ex of St Lot 13 Blk E, Los Angeles County. Year Built: 1955. Lot Size: 13,237 SF. Square Feet: 12,199 SF.

3188 W. Olympic: Pellisier Tract Pellissier Tract (Ex of Sts) Lot 14 and (Ex of St) Lot 15 Blk E, Los Angeles County. Year Built: 1972. Lot Size: 6,944 SF. Square Feet: 2,936 SF.

1010 S. Serrano: Pellissier Tract Lot 16 Blk E, Los Angeles County. Lot Size: 6,208 SF.

1014 S. Serrano: Pellissier Tract Lot 17 Blk E, Los Angeles County. Lot Size: 6,209 SF.

1020 S. Serrano: Pellissier Tract Lot 18 Blk E, Los Angeles County. Year Built: 1909. Lot Size: 6,290 SF. Square Feet: 1,560 SF.

1015 S. Hobart: Pellissier Tract Lot 10 Blk E, Los Angeles County. Year Built: 1923. Lot Size: 6,208 SF. Square Feet: 1,888 SF Lot Size: 6,208 SF

1021 S. Hobart: Pellissier Tract Lot 9 Blk E, Los Angeles County. Year Built: 1902. Lot Size: 6,209 SF. Square Feet: 1,000 SF.

3.3 Current Use of the Property

The site under consideration in this project, or the designated property in review, consists of two commercial buildings and several residential dwellings, and asphalt and concrete paved parking areas and driveways. The commercial tenants (3170 and 3188 West Olympic Boulevard) consists of a foot massage facility, a wireless phone outlet; Verizon, a drug store; Jay's Drugs, a medical clinic; Martin H. Lee, MD, a dental clinic; Chung's Family Dental, a piano store; Han Mi Piano and a Tae Kwan Do studio. The commercial buildings comprise a center are known as Olympic Art Plaza. Additionally, the subject site consists of three single family and multifamily residential units; at 1015 S. Hobart (triplex), at 1021 S. Hobart (single family dwelling), and at 1020 S. Serrano (single family dwelling). Residential units were previously located at 1010 S. Serrano and 1014 S. Serrano which have been removed.

3.4 Descriptions of Structures, Roads, and Other Improvements on the Site

Based on a review of Los Angeles County Appraisal District records, it appears that the improvements on site were erected in several stages, starting in the early 1900s.

3.5 Site Utilities

The City of Los Angeles supplies electricity, water and sanitary sewage facilities for the general area where the subject site is located. Gas is supplied by a private utility company.

3.6 Current Uses of Adjoining Properties

To the south of the subject site are single family residential dwellings and residential condominiums. To the east is South Hobart Boulevard, across from which are commercial facilities and single family residential dwellings. To the west is South Serrano Avenue, across from which are an automotive service facility and vacant land. To the north is West Olympic Boulevard, across from which are commercial facilities. To the northeast is a school. To the northwest is a dental clinic.

4. User Provided Information

4.1 Title Records

A historical chain-of-title search was not within the scope-of-work to be provided by GEG. A title search was not available and was not provided to GEG by the client before this report was completed.

4.2 Environmental Liens and Activity and Use Limitations

Activity and use limitations are legal or physical restrictions or limitations of the use of, or access to, a site or facility. They are used to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the property or to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property. AULs indicate that residual levels of hazardous substances or petroleum products may be present on a property. No activity and use limitations were identified in the databases searched and listed in the EDR Report.

4.3 Reason for Performing the Phase I ESA

The Phase I is being prepared to identify any recognized environmental conditions, to identify any potential environmental conditions that could materially impact the operation of his future busies, and to satisfy one of the requirements to qualify for one of the landowner liability protections (a defense to CERCLA liability).

4.4 Prior Environmental Reports

A Phase I was previously conducted by GEG that was dated April 1, 2014. No recognized environmental conditions were found.

5. Records Review

5.1 Standard Environmental Record Sources

The subject site was not listed in any of the databases searched by EDR.

GEG has reviewed the unmapped sites in the database and none of the sites or uses listed appear to have been located at the subject site or within the recommended search distance from the subject site.

5.1.1 Comprehensive Environmental Response, Compensation, and Liability Act Sites (SEMS & SEMS-Archive)

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL. Based on the environmental database review, no SEMS facilities were found located within a half of a mile radius from the subject site.

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under he Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site. Based on the environmental database review, no SEMS-Archive registered facilities were found located within a half of a mile radius from the subject site.

5.1.2 National Priorities List (NPL) Sites:

The National Priority List (NPL) identifies those sites that are currently involved in CERCLA or Superfund actions related to abandoned or inactive hazardous wastes. It is compiled from the designated CERCLIS list. NPL sites are prioritized as to their significant risk to human health and the environment. This list targets those sites to receive remedial funding under CERCLA. The NPL lists the nation's highest priority sites for remedial action. Only NPL sites can receive CERCLA funding. A review of the NPL list has revealed that there are no federal or State equivalent NPL sites (RESPONSE) located within approximately a mile of the target property.

5.1.3 Resource Conservation and Recovery Act (RCRA) Sites

The RCRA notifiers list identifies those facilities that indicate that they generate, transport, treat, store, or dispose of hazardous waste regulated under the Resource Conservation Recovery Act of 1976 (RCRA). RCRA is an amendment to the first piece of Federal Solid Waste legislation called the Solid Waste Disposal Act of 1965. RCRA was amended in 1980 and most recently in 1984 by HSWA (Hazardous and Solid Waste Amendments of 1984). This list is compiled by the EPA. All generators are required to have US EPA ID numbers on all waste manifest disposal records. The extent to which these facilities actually handle such wastes varies greatly from small-quantity generators to active treatment, storage, and disposal facilities. Based on the environmental database review, seven RCRA-SQG and one RCRA-LQG registered facilities were found located within a quarter of a mile radius from the subject site. Based on their topographical elevation, reported status and/or their distances from the site, the facilities found were not deemed likely to constitute a significant environmental risk to the subject site.

5.1.5 Petroleum Storage Tanks (PST's)

According to the environmental database review, two UST (Petroleum Storage Tank) facilities, two Historical UST facilities, five CA FID UST facilities and six SWEEPS UST facilities were found located within a half of a mile radius from the subject property. HIST UST: The Hazardous Substance Storage Container Database is a historical listing of UST sites. SWEEPS UST: The listing (Statewide Environmental Evaluation and Planning System) is an underground storage tank listing that was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. Based on these facilities' topographical elevation, reported status and/or their distances from the site, they were not deemed likely to constitute a significant environmental risk to the subject site.

5.1.6 Leaking Petroleum Storage Tanks within the ASTM Search Area

According to the environmental database review, ten registered LPST (Leaking Petroleum Storage Tank) and one SLIC facilities were found located within a half of a mile radius from the subject property. Based on their topographical elevation, reported status and/or their distances from the site, the facilities found were not deemed likely to constitute a significant environmental risk to the subject site.

5.1.7 Spill Incidents

The ERNS database lists incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. According to the environmental database review, no incidents were found within a quarter of a mile radius from the subject property.

5.1.8 California Voluntary Cleanup Program Sites

The California Voluntary Cleanup Program was established to provide administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in California. A review of the VCP list, provided by EDR, did not reveal the presence of any VCP sites within approximately half a mile from the target property.

5.1.9 Tribal Records

According to EDR, no Indian reservation was found within a mile radius of the subject site.

5.1.10 Activity and Use Limitations (AULs)

AUL sites are sites that have institutional controls. According to the environmental database review, no AUL sites were located within half a mile from the subject property.

5.1.11 Other

According to the environmental database review, 16 Envirostor facilities, one WMUDS/SWAT facility, five Historical Cortese facilities, six Historical Auto Stations, four Historical Cleaner sites, one Drycleaners, and one SCH site were found located within a mile radius from the subject property. The database listings relate to the nature of the surrounding uses and the general area where the subject site is located. Based on these facilities' topographical elevation, reported status and/or their distances from the site, they were not deemed likely to constitute a significant environmental risk to the subject site.

5.1.12 Vapor Intrusion Assessment

GEG has performed a Vapor Intrusion Assessment in conformance with the scope and limitations of the Standard Practice E 2600-10 on property located at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California. In the professional opinion of GEG, an appropriate level of assessment has been conducted consistent with good commercial and customary practice in an effort to minimize liability, and no evidence or indication of potential vapor intrusion conditions (pVIC) or vapor intrusion conditions (VIC) has been revealed and vapor intrusion is unlikely to be an issue of concern in connection with existing or planned structures on the target property.

5.2 Additional Environmental Record Sources

GEG inquired about emergency responses and other incidents that could have occurred at the subject site.

5.2.1 Property Tax

GEG was able to obtain parcel map information from the Los Angeles County Assessor's website.

5.2.2 California UST and LPST databases

The State UST and LPST databases were searched to find out if the subject site was listed in either or both databases.

5.2.3 Fire Department

GEG contacted the local fire department requesting information about the subject site.

5.3 Physical Setting Sources

Potential receptors are surface or subsurface features present or adjacent to the site. These include storm sewer inlets, sanitary sewer manholes/subsurface piping, underground telephone utilities, and natural receptors that are in the vicinity of the property in review.

5.3.1 Topographical Maps

Under natural, undisturbed conditions, shallow groundwater flow generally follows the surface topography of the land. However, localized conditions may alter groundwater flow. According to the United States Geological Survey (USGS) 7.5 Minute Topographical Map, Hollywood Quadrangle, which covers the area in review, the subject property is located at an elevation of 187 feet above sea level.

5.3.2 Geology

A Custom Soil Resource Report is attached at the end of the report.

5.3.3 Flood Zone

Flood Insurance Rate Maps, published by FEMA, were reviewed. The subject site is located in the 100-year flood zone.

5.4 Historical Use Information on the Property

5.4.1 Aerial Photographs:

A historical aerial photograph search was prepared as part of the previous ESA conducted on the subject site. The aerial photographs obtained are from 1928,1938, 1948, 1952, 1954, 1964, 1972, 1981, 1989, 1994, 2005, 2009, 2010 and 2012. From the review of historical photographs, the improvements were erected in several stages, starting in the early 1900s. The aerial photographs were reviewed for visual evidence of past land usage that could have adversely impacted the subject site or properties surrounding the site. The aerial photograph review is primarily applicable for general site use chronology. Most of the aerials reviewed are not of large enough scale or of sufficient clarity to depict site-specific conditions.

5.4.2 Topographic Maps:

A historical topographic map search was prepared as part of the previous ESA conducted on the subject site, to evaluate potential liability on the target property and its surrounding area, resulting from past activities. A topographic map is a color-coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topographic maps show the shape, elevation, and development of the terrain in precise detail by using contour lines and color-coded symbols. The historical topographic maps obtained are from 1896, 1900, 1901, 1902, 1920, 1926, 1928, 1953, 1966, 1972, 1981 and 1994. No potential environmental issues were noted at the subject property.

5.4.3 Sanborn Fire Insurance Maps:

A review of historical Sanborn maps was also prepared by EDR, as part of the previous ESA conducted on the subject site, to evaluate present and past land use, structures, improvements, and historical development of the subject site and surrounding properties. Maps were obtained from 1907, 1921, 1950, 1954, 1955, 1961, 1968 and 1970. In the map from 1907, West Olympic is named West 10th Street, and South Serrano is named Cahuenga. The subject site consists of two residential dwellings and vacant land. In the map from 1921, Cahuenga has been renamed South Serrano, and West Olympic remains as West 10th Street. The subject site consists of several residential dwellings and a plumbing operation at the southwest corner of West Olympic (West 10th Street) and South Hobart. In the map from 1950, West 10th has been renamed West Olympic. The subject site consists of several residential dwellings and a store. In the map from 1954, the north end of the property along West Olympic is vacant and the balance of the property to the south consists of residential dwellings. In the maps from 1955 and 1961, the north end of the property is occupied by a wholesale hardware facility and an automotive related facility, possibly an automobile repair shop, along South Serrano. In the maps from 1968 and 1970, the north end of the property is occupied by a wholesale hardware facility and a parking lot or garage. Based on the Sanborn map review, the subject site has been occupied by several commercial facilities and residential dwellings in the past.

5.4.4 City Directory Search:

A review of the available historical city directories was also prepared by EDR as part of the previous ESA conducted on the subject site, to evaluate the present and past land use, structures, improvements, and the historical development of the subject site and surrounding properties. During the search, business directories including city, cross-reference, and telephone directories were reviewed, if available. The subject site has been occupied by the following:

Year	Address	Occupant/s
1937	3170 W. Olympic	Alonzo Harold
1958		Bennett Montgomery Hardware Co
1962		Bennett Montgomery Hardware Co
1967		Bennett Montgomery Hardware Co
1971		Montgomery Hardware Co
1976		Montgomery Hardware Co
1981		Montgomery Hardware Co
1986		Montgomery Hardware Co
2000		Chois Acupuncture Clinic, Division Ampac Co, Honma Golf, Joy Church Dept Store, Moda Milano, Peck Skin Institute, Plaza Travel & Tour, Universal Title
2006		Acupuncture, Cellmaster Inc, Chois, Clinic, Joy Church Dept, Ob Wireless, Peck Skin Inst, Plaza Travel, Stlifetech Inc, Wireless
2008		All Star Wireless, Chung Tai Hwan, Jays Drug, O B Wireless Inc, P2P Communication Inc, Premium Outlet
2013		Joy Church Department Store, Peck Skin Institute, Qrapha Inc, All Star Wireless, Han Kook Tour, Health Foot Therapists, Jays Drug
1937	3178 W. Olympic	Smith C. Houston Printer
1942		Vore Eileen Printer
1942	3180 W. Olympic	Lind Arth Sheet Metal Works
2000	3188 W. Olympic	Chung's Family Dental, Martin H. Lee Md, Paik Kangihn MD
2006		Chung's Family Dental, Lee Martin Md
2008		Art Plaza Inc, Chung's Family Dental Center, Martin Lee Md
2013		Chung's Family Dental, Martin Lee Md, Paid Kangihn Md
1924	1010 S. Serrano	Dunseth Jas Building Contractor
1929		Dunseth Jas Carpenter
1933		Dunseth Jas Carpenter
1942		Dunseth Jas Carpenter
1951		Dunseth J H R
1924	1012 S. Serrano	Tyndall Fred Salesman
1929		Badger Chas Civil Engineer
1933		Badger Chas Accountant
1937		Hansen Louis Clerk
1942		McCormack Ernest Plumber
1962		Crusen Freda
1967		Saucedo Juan
1924	1014 S. Serrano	Hitt Chas Roadmaster, Jurden Frances, Thompson Agnes Nurse, Thompson Frank Auditor
1929		Coene Chas Machinist, McLaughlin Leland President Keystone Electric
1933		Alker Carol Telephone Operator, Hadley Alice
1937		Cardoza Michael Mechanic, Guthrie Henry Brake Mechanic
1942		Blue Stewart Opal, Lawrence Frank Police
1951		Trejo Beatrice, Grijalva Frank
1924	1016 S. Serrano	Murdock Clinton Estimator, Potter Cath Student, Potter Washington Attorney, McIntyre John Clerk
1929		Lyel Russell Machinist, Stevens Reginald Architect
1933		Jackson Lawrence Lab
1937		Hansen Carl Carpenter, Hansen Fred, Jackson Chas Sheet Metal Worker
1942		Poe Grayce, Sarikas Saml Bartender

1951		McCann John E R
1958		Silva Isabel
1962		Linegar Orta, Silva Isabel
1967		Linegar Orta
1924	1020 S. Serrano	Truslow Bertha Teacher
1929		Truslow Clara, Truslow Bertha Teacher
1933		Truslow Clara, Truslow Bertha Teacher
1937		Truslow Bertha Teacher
1942		Truslow Clara, Truslow Wallace President Citrus Exchange
1951		Truslow Clara
1967		Earl Jack
1971		Corral Cruz
1976		Corral Cruz, Buenaflor Bernardo
1981		Corral Cruz, Buenaflor Bernardo
1986		Corral Cruz, Corral Robert, Wonder Years School
1990		Corral Cruz
2000		Corral Cruz
2006		E. Corral, Lee Martin Md, Martin Hleem MD, Paik Kangihn Md
2001	1001 S. Hobart	B Allenj Inc
1933	1009 S. Hobart	Singeho Oshiba Grocery
1924	1011 S. Hobart	H Los Angeles
1929		Gray George Salesman
1933		Matsura K
1942		Matsura Frank
1951		Broom Robert
1937	1015 S. Hobart	Ninonifya George Gardener
1951		Takahashi William
2000		Choi Kee Jin
1924	1017 S. Hobart	Preston Herbert
1929		Tagushi George Gardener
1937		Koyamatsu Mankichi Hatsuno
1942		Koyamatsu Samuel
1951		Nagata Bill
1958		Nagata Bill
1962		Nagata Bill
1967		Nagata Bill
1971		Nagata Bill
1981		Nagata Bill
1986		Nagata Bill
1990		Nagata Bill
2000		Tianjin Oriental Medicine
2008		Tianjin Oriental Medicine
1924	1019 S. Hobart	Stanton Virginia
1929		Koebsell Richard Chef
1937		Mishikawa Tom Gardener
1942		Nishikawa Tom Gardener
1958		Oda Toshi
1962		Oda Toshi
1971		Tamai Reiko
1924	1021 S. Hobart	Breese J Clerk, Smallbone Julius Carpenter
1929		Kelley Chas Reporter, Kelly Jack Clerk, Kelly Winona

1933		Uyeda Kitaro Fruit
1937		Horiushi Chohei Kumeno Clerk
1942		Smallbone Julius Albina
1951		Parker Edward
1958		Parker Edward
1962		Nishida Hama, Fukuzawa Enichi
1967		Nishida Hama
1990		Chang Myong
2000		Paik Kanghin
2006		Paik Kanghin
2008		Castillo Maintenance Services

5.4.5 Historical Chain-of-Title Records

A historical chain-of-title was not provided or requested for this study. The historical use of the property was researched using other data sources.

5.4.7 Zoning/Land Use

GEG understands that there are zoning restrictions for the area where the subject property is situated.

5.4.8 Additional Records

No additional historical records were included in the preparation of this report.

5.4.8.1 Historical Assessments

A Phase I was previously conducted by GEG that was dated April 1, 2014. No recognized environmental conditions were found.

5.5 Historical Use Information on Adjoining Properties

The adjacent present and past uses are described further in the body of the report.

6. Site Reconnaissance

6.1 Methodology and Limiting Conditions

A GEG representative conducted a walking survey of the subject property to visually observe the site and structures on the site to the extent that they were not obstructed by bodies of water, adjacent buildings, or other obstacles. The objective of the site reconnaissance was to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the property.

The adjoining properties were observed from the site to determine if there was potential for impact to the site by recognized environmental conditions in connection with the adjacent properties.

No physical obstructions such as dense vegetation or water were present to obscure the site during the site inspection.

6.2 General Site Setting

The site is located in the City of Los Angeles, California, in an area that is developed with commercial and residential uses.

6.3.1 Water and Sewage Systems

No water wells or septic tanks were noted at the subject site.

6.3.2 Hazardous Substance and Petroleum Product Use, Storage, Treatment, and Disposal

Some regulated product use (medical and dental medication/supplies) was noted at the subject site at the present. This characteristic was not deemed to constitute an environmental concern.

6.3.3 Underground Storage Tanks/Above Ground Storage Tanks

No evidence of underground storage tanks was noted at the subject site at the present.

6.3.4 PCB Containing Power Equipment

Polychlorinated biphenyls (PCBs), a hazardous group of chlorinated aromatic hydrocarbons, were used in a wide range of products including hydraulic and electrical equipment. PCB-containing equipment has the potential to cause soil and groundwater contamination. During the site visit, the property was surveyed for the presence of power transformers and other potential PCB containing electrical equipment. In accordance with State regulations, PCB containing transformers have been banned from use in California. Therefore, the presence of such in the transformers was not deemed likely.

6.3.5 Landfill Activity

A landfill is a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, or an injection well. According to the EPA, a landfill is defined as an engineered (by excavation or construction) or natural hole in the ground where wastes have been disposed and are covered by backfilling or by contemporaneous soil deposition with waste disposal, covering wastes from view. The problems that the agency deems to be associated with landfills are the migration of leachate and wastes from it into the ground and adjacent surface and subsurface waters, subsidence of the ground in and above it, methane gas generation, the formation of pockets within it, and erosion. During the site visit, the subject site and area surrounding the property was surveyed for the evidence of landfill activity. None was found.

6.3.6 Surface Impoundments

No surface impoundments were noted at the subject site.

6.3.7 Oil/Gas Wells

No evidence of oil/gas wells, storage tanks, or associated piping was discovered on the site during the site inspection.

6.3.8 Pipeline Easements

No pipeline easements were noted on the subject property during the site inspection.

6.3.9 Municipal Solid Waste Disposal

Municipal or contracted solid waste pick-up is available for the subject site.

6.3.10 Surface Water Drainage

The subject property appeared to be well drained.

6.3.11 Industrial Wastewater/Wastewater Treatment

No industrial wastewater/wastewater treatment facilities were noted at the subject site.

6.3.12 Stressed Vegetation/Stained Soil/Odors/Fill material

There was no significant physical or visual evidence of stressed vegetation, soil discoloration, odors, or other indicators of environmental exposure to the surface areas or soils on the subject property.

6.3.13 Air Emissions

There is no evidence of significant air emissions on site.

6.5 Exterior Observations at Adjoining Properties

To the south of the subject site are single family residential dwellings and residential condominiums. To the east is South Hobart Boulevard, across from which are commercial facilities and single family residential dwellings. To the west is South Serrano Avenue, across from which are an automotive service facility and vacant land. To the north is West Olympic Boulevard, across from which are commercial facilities. To the northeast is a school. To the northwest is a dental clinic.

7. Interviews/Questionnaires

The questionnaires were not returned as of the date of the issuance of this report. No items of environmental significance were suspected to be reported in the questionnaires with the information provided to GEG.

8. Findings

According to the Sanborn map review, the subject site may have been occupied by a plumbing supply manufacturing facility and an automotive repair facility in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property.

According to the city directory search, the subject site may have been occupied by a printing press or printing facility, an automobile service or repair facility and a metal machine shop in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property.

The findings can only be verified to the extent available to the consultant and following industry standards for such. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property. If any impacts are found, they will need to be addressed in accordance with all regulatory requirements for such.

9. Opinion

A data failure is a failure to achieve historical research objectives even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. A data gap is a lack or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. No data gaps were encountered during the preparation of this Phase I ESA.

10. Conclusions

GEG has performed a Phase I ESA in conformance with the scope and limitations of the Standard Practice E 1527-13 on the property located at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California. In the professional opinion of GEG, an appropriate level of inquiry has been made into the previous ownership and use of the property consistent with good commercial and customary practice in an effort to minimize liability, and no evidence or indication of recognized environmental conditions, historical recognized environmental conditions or controlled recognized environmental conditions has been revealed. No further assessment is deemed necessary.

11. Deviations

Other than listed above in this report, GEG did not deviate from ASTM E 1527-13.

12. Additional Services

No additional services, such as asbestos or lead-based paint surveys, were conducted.

13. References

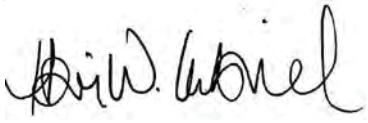
13.1 Regulatory Records and Public Documents:

The third party database companies who provided the information presented in our report is EDR of Norwood, MA.

13.2 Published References:
13.2.1 American Society for Testing and Materials (ASTM) Standard Practice for Site Assessments: Phase I Environmental Site Assessment Process (E 1527-13).
13.2.2 United States Department of the Interior Geological Survey; 7.5-Minute Series (Topographic), Hollywood Quadrangle, Los Angeles County, California.

14. Signatures of Environmental Professionals

Signatures of site investigators and/or environmental professionals who participated in the site investigation, report preparation, project management, or report review.



Hani Gabriel
Environmental Professional

15. Qualifications of Environmental Professionals

Resumes of key environmental professionals are attached at the end of this report. The Environmental professionals listed above are responsible for conducting this Phase I and preparation of this report. We declare that to the best of our professional judgment and belief, we meet the definition of Environmental professional as defined in 312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

16. Appendices

APPENDIX 16.2

SITE PHOTOGRAPHS

SITE PHOTOGRAPHS

SITE:	**PHASE I ENVIRONMENTAL SITE ASSESSMENT (ASTM E 1527-13)** **3170-3188 W. OLYMPIC, 1010-1020 S. SERRANO & 1015-1021 S. HOBART** **LOS ANGELES, LOS ANGELES COUNTY, CA 90006**
DATE:	**AUGUST 8, 2016**



PHOTO # 1 DESCRIPTION:

VIEW OF COMMERCIAL SPACES



PHOTO # 2 DESCRIPTION:

VIEW OF MEDICAL AND DENTAL CLINICS

SITE PHOTOGRAPHS

SITE:	PHASE I ENVIRONMENTAL SITE ASSESSMENT (ASTM E 1527-13) 3170-3188 W. OLYMPIC, 1010-1020 S. SERRANO & 1015-1021 S. HOBART LOS ANGELES, LOS ANGELES COUNTY, CA 90006
DATE:	AUGUST 8, 2016



PHOTO # 3 DESCRIPTION:

VIEW FROM NWC FACING NORTH



PHOTO # 4 DESCRIPTION:

VIEW AT REAR OF COMMERCIAL SPACES

SITE PHOTOGRAPHS

SITE:	PHASE I ENVIRONMENTAL SITE ASSESSMENT (ASTM E 1527-13) 3170-3188 W. OLYMPIC, 1010-1020 S. SERRANO & 1015-1021 S. HOBART LOS ANGELES, LOS ANGELES COUNTY, CA 90006
DATE:	AUGUST 8, 2016



PHOTO # 5 DESCRIPTION:

VIEW ALONG HOBART FACING SOUTH



PHOTO # 6 DESCRIPTION:

VIEW OF COMMERCIAL SPACES

SITE PHOTOGRAPHS

SITE:	PHASE I ENVIRONMENTAL SITE ASSESSMENT (ASTM E 1527-13) 3170-3188 W. OLYMPIC, 1010-1020 S. SERRANO & 1015-1021 S. HOBART LOS ANGELES, LOS ANGELES COUNTY, CA 90006
DATE:	AUGUST 8, 2016



PHOTO # 7 DESCRIPTION:

VIEW OF TENANT SIGN



PHOTO # 8 DESCRIPTION:

VIEW FROM SUBJECT SITE FACING WEST

SITE PHOTOGRAPHS

SITE:	PHASE I ENVIRONMENTAL SITE ASSESSMENT (ASTM E 1527-13) 3170-3188 W. OLYMPIC, 1010-1020 S. SERRANO & 1015-1021 S. HOBART LOS ANGELES, LOS ANGELES COUNTY, CA 90006
DATE:	AUGUST 8, 2016



PHOTO # 9 DESCRIPTION:

VIEW OF RESIDENTIAL UNITS ON HOBART



PHOTO # 10 DESCRIPTION:

VIEW OF HOUSE ON SERRANO

SITE PHOTOGRAPHS

SITE:	PHASE I ENVIRONMENTAL SITE ASSESSMENT (ASTM E 1527-13) 3170-3188 W. OLYMPIC, 1010-1020 S. SERRANO & 1015-1021 S. HOBART LOS ANGELES, LOS ANGELES COUNTY, CA 90006
DATE:	AUGUST 8, 2016



PHOTO # 11 DESCRIPTION:

VIEW FROM SUBJECT SITE FACING NORTH



PHOTO # 12 DESCRIPTION:

VIEW FROM SUBJECT SITE ALONG OLYMPIC FACING WEST

APPENDIX 16.3

PREVIOUS REPORT/S

GABRIEL ENVIRONMENTAL GROUP

PHASE I ENVIRONMENTAL SITE ASSESSMENT
(ASTM E 1527-13)

3170-3188 W. OLYMPIC, 1010-1020 S. SERRANO & 1015-1021 S. HOBART
LOS ANGELES, LOS ANGELES COUNTY, CA 90006

PREPARED ON BEHALF OF:
UNITIBANK

DATE:
APRIL 1, 2014

PROJECT NUMBER:
GEG14045

Acronym List

Governmental Agency Names

ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
CPSC	Consumer Products Safety Commission
DOT	Department of Transportation
OSHA	Occupational Safety & Health Administration
EPA	Environmental Protection Agency
EPRI	Electrical Power Research Institute
USNRCS	United States Natural Resource Conservation Service (former Soil Conservation Service)
USSCS	United States Department of Agriculture Soil Conservation Service
USGS	United States Geological Survey

Governmental Regulations

AHERA	Asbestos Hazard Emergency Response Act
CERCLIS	Comprehensive Emergency Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
ERNS	Emergency Response Notification System
LBPPPA	Lead-Based Paint Poisoning Prevention Act
NPDES	National Pollutants Discharge Elimination System
NPL	National Priorities List
RCRA	Resource Conservation and Recovery Act
SPCC	Spill Prevention, Control Countermeasures
TRI	Toxic Release Inventory

Environmental Terms & Measurements

ACBM	Asbestos Containing Building Material
ACM	Asbestos Containing Material
AST	Aboveground Storage Tank
BDL	Below Detection Limits
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
ESA	Environmental Site Assessment
FRP	Fiberglass Reinforced Plastic
LPST	Leaking Petroleum Storage Tank
LUST	Leaking Underground Storage Tank
MCL	Maximum Contaminant Level
MSW	Municipal Solid Waste Site
PACM	Presumed Asbestos Containing Material
PCB	Polychlorinated Biphenyl
PCi/l	PicoCurries of Radon per Liter of Air
PCM	Phase Contrast Microscopy
PLM	Polarized Light Microscopy
PPM	Part Per Million
PST	Petroleum Storage Tank
REC	Recognized Environmental Condition
TEM	Transmission Electron Microscopy
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

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Regulatory Records Documentation
Interview Documentation
Special Contractual Conditions between User and Environmental Professional
Resumes

1. Summary

Gabriel Environmental Group (GEG) conducted a Phase I ESA for a site addressed at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California in accordance with the generally accepted ESA industry standard ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

The scope of work included: an inspection of the site for environmental concerns, a review of environmental databases and other governmental records, a review of available historical documents (including aerial photographs, fire insurance maps, and topographic maps), interviews with the owner, and the preparation of this report.

The subject property consists of seven mostly improved tracts located along the southerly right-of-way line of West Olympic Boulevard, the westerly right-of-way line of South Hobart Boulevard and the easterly right-of-way line of South Serrano Avenue, in the City of Los Angeles, Los Angeles County, California. Its physical address ranges are 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, California. The subject site is geographically located at latitude 34.0522 and longitude 118.3058. The site consists of the following (based on available records and the current site addresses):

3170 W. Olympic: Pellissier Tract Lots 11 and 12 and Ex of St Lot 13 Blk E, Los Angeles County. Year Built: 1955. Lot Size: 13,237 SF. Square Feet: 12,199 SF.

3188 W. Olympic: Pellisier Tract Pellissier Tract (Ex of Sts) Lot 14 and (Ex of St) Lot 15 Blk E, Los Angeles County. Year Built: 1972. Lot Size: 6,944 SF. Square Feet: 2,936 SF.

1010 S. Serrano: Pellissier Tract Lot 16 Blk E, Los Angeles County. Lot Size: 6,208 SF.

1014 S. Serrano: Pellissier Tract Lot 17 Blk E, Los Angeles County. Lot Size: 6,209 SF.

1020 S. Serrano: Pellissier Tract Lot 18 Blk E, Los Angeles County. Year Built: 1909. Lot Size: 6,290 SF. Square Feet: 1,560 SF.

1015 S. Hobart: Pellissier Tract Lot 10 Blk E, Los Angeles County. Year Built: 1923. Lot Size: 6,208 SF. Square Feet: 1,888 SF Lot Size: 6,208 SF

1021 S. Hobart: Pellissier Tract Lot 9 Blk E, Los Angeles County. Year Built: 1902. Lot Size: 6,209 SF. Square Feet: 1,000 SF.

GEG was authorized to conduct the ESA by Jeffrey Kim of Unitibank. The property was inspected on March 20, 2014 by GEG Environmental Professional Hani Gabriel.

The site under consideration in this project, or the designated property in review, consists of two commercial buildings and several residential dwellings, and asphalt and concrete paved parking areas and driveways. The commercial tenants consists of a women's club, a massage facility, a wireless phone outlet, a drug store, a bookstore, several medical clinics, a dental clinic and a church supply store. Additionally, the subject site consists of three residential units at 1015 S. Hobart, one at 1021 S. Hobart, one at 1014 S. Serrano and one at 1020 S. Serrano.

Based on a review of Los Angeles County Appraisal District records, it appears that the improvements on site were erected in several stages, starting in the early 1900s.

No evidence of acutely hazardous chemical storage problems, waste disposal concerns, leaking transformers, deteriorating lead based paint, sumps, pits, catch basins, surface impoundments, landfill activities, bodies of water, unusual odors, oil or gas wells, or other environmental conditions was observed on the property in review. There was no physical or visual evidence of stressed vegetation, soil discoloration, odors, or other indicators of environmental exposure to the surface areas or soils on the subject property.

To the south of the subject site are single family residential dwellings and residential condominiums. To the east is South Hobart Boulevard, across from which are commercial facilities and single family residential dwellings. To the west is South Serrano Avenue, across from which are an automotive smog service facility and vacant land. To the north is West Olympic Boulevard, across from which are commercial facilities. To the northeast is a school. To the northwest is a dental clinic.

Historical Records Review:

A historical aerial photograph search was prepared as part of the previous ESA conducted on the subject site. The aerial photographs obtained are from 1928, 1938, 1948, 1952, 1954, 1964, 1972, 1981, 1989, 1994, 2005, 2009, 2010 and 2012. From the review of historical photographs, the improvements were erected in several stages, starting in the early 1900s. The aerial photographs were reviewed for visual evidence of past land usage that could have adversely impacted the subject site or properties surrounding the site. The aerial photograph review is primarily applicable for general site use chronology. Most of the aerials reviewed are not of large enough scale or of sufficient clarity to depict site-specific conditions.

A review of historical Sanborn maps was also prepared by EDR, as part of the previous ESA conducted on the subject site, to evaluate present and past land use, structures, improvements, and historical development of the subject site and surrounding properties. Maps were obtained from 1907, 1921, 1950, 1954, 1955, 1961, 1968 and 1970.

In the map from 1907, West Olympic is named West 10th Street, and South Serrano is named Cahuenga. The subject site consists of two residential dwellings and vacant land. In the map from 1921, Cahuenga has been renamed South Serrano, and West Olympic remains as West 10th Street. The subject site consists of several residential dwellings and a plumbing operation at the southwest corner of West Olympic (West 10th Street) and South Hobart. In the map from 1950, West 10th has been renamed West Olympic. The subject site consists of several residential dwellings and a store. In the map from 1954, the north end of the property along West Olympic is now vacant and the balance of the property to the south consists of residential dwellings. In the maps from 1955 and 1961, the north end of the property is occupied by a wholesale hardware facility and an automotive related facility, possibly an automobile repair shop, along South Serrano. In the maps from 1968 and 1970, the north end of the property is occupied by a wholesale hardware facility and a parking lot or garage. Based on the Sanborn map review, the subject site has been occupied by several commercial facilities and residential dwellings in the past.

According to the Sanborn map review, the subject site may have been occupied by a plumbing supply manufacturing facility and an automotive repair facility in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property.

A historical topographic map search was prepared as part of the previous ESA conducted on the subject site, to evaluate potential liability on the target property and its surrounding area, resulting from past activities. A topographic map is a color-coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topographic maps show the shape, elevation, and development of the terrain in precise detail by using contour lines and color-coded symbols. The historical topographic maps obtained are from 1896, 1900, 1901, 1902, 1920, 1926, 1928, 1953, 1966, 1972, 1981 and 1994. No potential environmental issues were noted at the subject property.

A review of the available historical city directories was also prepared by EDR as part of the previous ESA conducted on the subject site, to evaluate the present and past land use, structures, improvements, and the historical development of the subject site and surrounding properties. During the search, business directories including city, cross-reference, and telephone directories were reviewed, if available. The subject site has been occupied by the following:

Year	Address	Occupant/s
1937	3170 W. Olympic	Alonzo Harold
1958		Bennett Montgomery Hdwe Co
1962		Bennett Montgomery Hdwe Co
1967		Bennett Montgomery Hardware Co
1971		Montgomery Hardware Co
1976		Montgomery Hardware Co
1981		Montgomery Hardware Co
1986		Montgomery Hardware Co
2000		Chois Acupuncture Clinic, Division Ampac Co, Honma Golf, Joy Church Dept Store, Moda Milano, Peck Skin Institute, Plaza Travel & Tour, Universal Title
2006		Acupuncture, Cellmaster Inc, Chois, Clinic, Joy Church Dept, Ob Wireless, Peck Skin Inst, Plaza Travel, Stlifetech Inc, Wireless
2008		All Star Wireless, Chung Tai Hwan, Jays Drug, O B Wireless Inc, P2P Communication Inc, Premium Outlet
2013		Joy Church Department Store, Peck Skin Institute, Qrapha Inc, All Star Wireless, Han Kook Tour, Health Foot Therapists, Jays Drug
1937	3178 W. Olympic	Smith C. Houston Printer
1942		Vore Eileen Printer
1942	3180 W. Olympic	Lind Arth Shtmtlwks
2000	3188 W. Olympic	Chungs Family Dental, Martin H. Lee Md, Paik Kangihn Md
2006		Chungs Family Dental, Lee Martin Md
2008		Art Plaza Inc, Chungs Family Dental Center, Martin Lee Md
2013		Chungs Family Dental, Martin Lee Md, Paid Kangihn Md
1924	1010 S. Serrano	Dunseth Jas Building Contractor
1929		Dunseth Jas Carpenter
1933		Dunseth Jas Carpenter
1942		Dunseth Jas Carpenter
1951		Dunseth J H R
1924	1012 S. Serrano	Tyndall Fred Salesman
1929		Badger Chas Civil Engineer
1933		Badger Chas Accountant
1937		Hansen Louis Clerk
1942		McCormack Ernest Plumber
1962		Crusen Freda
1967		Saucedo Juan
1924	1014 S. Serrano	Hitt Chas Roadmaster, Jurden Frances, Thompson Agnes Nurse, Thompson Frank Auditor
1929		Coene Chas Machinist, McLaughlin Leland President Keystone Electric
1933		Alker Carol Telephone Operator, Hadley Alice
1937		Cardoza Michael Mechanic, Guthrie Henry Brake Mechanic
1942		Blue Stewart Opal, Lawrence Frank Police
1951		Trejo Beatrice, Grijalva Frank
1924	1016 S. Serrano	Murdock Clinton Estimator, Potter Cath Student, Potter Washington Attorney, McIntyre John Clerk

1929		Lyel Russell Machinist, Stevens Reginald Architect
1933		Jackson Lawrence Lab
1937		Hansen Carl Carpenter, Hansen Fred, Jackson Chas Sheet Metal Worker
1942		Poe Grayce, Sarikas Saml Bartender
1951		McCann John E R
1958		Silva Isabel
1962		Linegar Orta, Silva Isabel
1967		Linegar Orta
1924	1020 S. Serrano	Truslow Bertha Teacher
1929		Truslow Clara, Truslow Bertha Teacher
1933		Truslow Clara, Truslow Bertha Teacher
1937		Truslow Bertha Teacher
1942		Truslow Clara, Truslow Wallace President Citrus Exchange
1951		Truslow Clara
1967		Earl Jack
1971		Corral Cruz
1976		Corral Cruz, Buenaflor Bernardo
1981		Corral Cruz, Buenaflor Bernardo
1986		Corral Cruz, Corral Robert, Wonder Years School
1990		Corral Cruz
2000		Corral Cruz
2006		E. Corral, Lee Martin Md, Martin Hleem Md, Paik Kangihn Md
2001	1001 S. Hobart	B Allenj Inc
1933	1009 S. Hobart	Singeho Oshiba Gro
1924	1011 S. Hobart	H Los Angeles
1929		Gray George Salesman
1933		Matsura K
1942		Matsura Frank
1951		Broom Robert
1937	1015 S. Hobart	Ninonifya George Gardener
1951		Takahashi William
2000		Choi Kee Jin
1924	1017 S. Hobart	Preston Herbert
1929		Tagushi George Gardener
1937		Koyamatsu Mankichi Hatsuno
1942		Koyamatsu Samuel
1951		Nagata Bill
1958		Nagata Bill
1962		Nagata Bill
1967		Nagata Bill
1971		Nagata Bill
1981		Nagata Bill
1986		Nagata Bill
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2008		Tianjin Oriental Medicine
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1937		Mishikawa Tom Gardener
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1958		Oda Toshi

1962		Oda Toshi
1971		Tamai Reiko
1924	1021 S. Hobart	Breese J Clerk, Smallbone Julius Carpenter
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1933		Uyeda Kitaro Fruit
1937		Horiushi Chohei Kumeno Clerk
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1967		Nishida Hama
1990		Chang Myong
2000		Paik Kanghin
2006		Paik Kanghin
2008		Castillo Maintenance Services

According to the city directory search, the subject site may have been occupied by a printing press or printing facility, an automobile service or repair facility and a metal machine shop in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property.

Environmental Database Review:

The subject site was not listed in any of the databases searched by EDR.

CERCLIS, The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. A review of the CERCLIS list, as provided by EDR has revealed that there are no CERCLIS sites within a half of a mile radius of the target property.

The NFRAP database is a list of designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site. Based on the environmental database review, no NFRAP registered facilities were found located within a half of a mile radius from the subject site.

The National Priority List (NPL) identifies those sites that are currently involved in CERCLA or Superfund actions related to abandoned or inactive hazardous wastes. It is compiled from the designated CERCLIS list. NPL sites are prioritized as to their significant risk to human health and the environment. This list targets those sites to receive remedial funding under CERCLA. The NPL lists the nation's highest priority sites for remedial action. Only NPL sites can receive CERCLA funding. A review of the NPL list has revealed that there are no federal or State equivalent NPL sites (RESPONSE) located within approximately a mile of the target property.

The RCRA notifiers list identifies those facilities that indicate that they generate, transport, treat, store, or dispose of hazardous waste regulated under the Resource Conservation Recovery Act of 1976 (RCRA). RCRA is an amendment to the first piece of Federal Solid Waste legislation called the Solid Waste Disposal Act of 1965. RCRA was amended in 1980 and most recently in 1984 by HSWA (Hazardous and Solid Waste Amendments of 1984). This list is compiled by the EPA. All generators are required to have US EPA ID numbers on all waste manifest disposal records. The extent to which these facilities actually handle such wastes varies greatly from small-quantity generators to active treatment, storage, and disposal facilities. Based on the environmental database review, seven RCRA-SQG and one RCRA-LQG registered facilities were found located within a quarter of a mile radius from the subject site. Based on their topographical elevation, reported status and/or their distances from the site, the facilities found were not deemed likely to constitute a significant environmental risk to the subject site.

According to the environmental database review, two UST (Petroleum Storage Tank) facilities, two Historical UST facilities, three CA FID UST facilities and four SWEEPS UST facilities were found located within a half of a mile radius from the subject property. HIST UST: The Hazardous Substance Storage Container Database is a historical listing of UST sites. SWEEPS UST: The listing (Statewide Environmental Evaluation and Planning System) is an underground storage tank listing that was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. Based on these facilities' topographical elevation, reported status and/or their distances from the site, they were not deemed likely to constitute a significant environmental risk to the subject site.

According to the environmental database review, nine registered LPST (Leaking Petroleum Storage Tank) facilities were found located within a half of a mile radius from the subject property. Based on their topographical elevation, reported status and/or their distances from the site, the facilities found were not deemed likely to constitute a significant environmental risk to the subject site.

The ERNS database lists incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. According to the environmental database review, no incidents were found within a quarter of a mile radius from the subject property.

The California Voluntary Cleanup Program was established to provide administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in California. A review of the VCP list, provided by EDR, did not reveal the presence of any VCP sites within approximately half a mile from the target property.

According to the environmental database review, 16 Envirostor facilities, one SLIC facility, one WMUDS/SWAT facility, five Historical Cortese facilities, 16 Historical Auto Stations, 16 Historical Cleaner sites, one SWRCY, and one SCH site were found located within a mile radius from the subject property. The database listings relate to the nature of the surrounding uses and the general area where the subject site is located. Based on these facilities' topographical elevation, reported status and/or their distances from the site, they were not deemed likely to constitute a significant environmental risk to the subject site.

GEG has reviewed the unmapped sites in the database and none of the sites or uses listed appear to have been located at the subject site or within the recommended search distance from the subject site.

Vapor Intrusion:

GEG has performed a Vapor Intrusion Assessment in conformance with the scope and limitations of the Standard Practice E 2600-10 on property located at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California. In the professional opinion of GEG, an appropriate level of assessment has been conducted consistent with good commercial and customary practice in an effort to minimize liability, and no evidence or indication of potential vapor intrusion conditions (pVIC) or vapor intrusion conditions (VIC) has been revealed and vapor intrusion is unlikely to be an issue of concern in connection with existing or planned structures on the target property.

Previous Reports:

No previous Phase I ESA was provided to GEG for its review.

Interviews/Questionnaires:

The questionnaires were not returned as of the date of the issuance of this report. No items of environmental significance were suspected to be reported in the questionnaires with the information provided to GEG. GEG interviewed the site contact person working with the purchaser, Tammy Kim, and she had no knowledge of any spills or releases on the subject site and was not aware of any environmental liens that would affect the subject property.

Findings:

A data failure is a failure to achieve historical research objectives even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. A data gap is a lack or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. No data gaps were found in the preparation of this ESA.

Based on the Sanborn map review, the subject site has been occupied by a plumbing supply manufacturing facility and an automotive repair facility in the past. According to the city directory search, the subject site may have been occupied by a printing press or printing facility, an automobile service or repair facility and a metal machine shop in the past. Given that the subject site has been redeveloped through the years, and given the lack of any recorded violations, spills or environmental incidents at the subject site, the previous uses were not deemed to constitute an environmental concern. The findings can only be verified to the extent available to the consultant and following industry standards for such. If any information is found to the contrary, a proper assessment will need to be conducted at the subject site to determine whether any previous uses may have impacted the subsurface at the property. If any impacts are found, they will need to be addressed in accordance with all regulatory requirements for such.

Conclusions/Recommendations:

GEG has performed a Phase I ESA in conformance with the scope and limitations of the Standard Practice E 1527-13 on the property located at 3170-3188 West Olympic Boulevard, 1010-1020 South Serrano Avenue and 1015-1021 South Hobart Boulevard, Los Angeles, Los Angeles County, California. In the professional opinion of GEG, an appropriate level of inquiry has been made into the previous ownership and use of the property consistent with good commercial and customary practice in an effort to minimize liability, and no evidence or indication of recognized environmental conditions, historical recognized environmental conditions or controlled recognized environmental conditions has been revealed. No further assessment is deemed necessary.

APPENDIX 16.4

HISTORICAL RESEARCH DOCUMENTATION

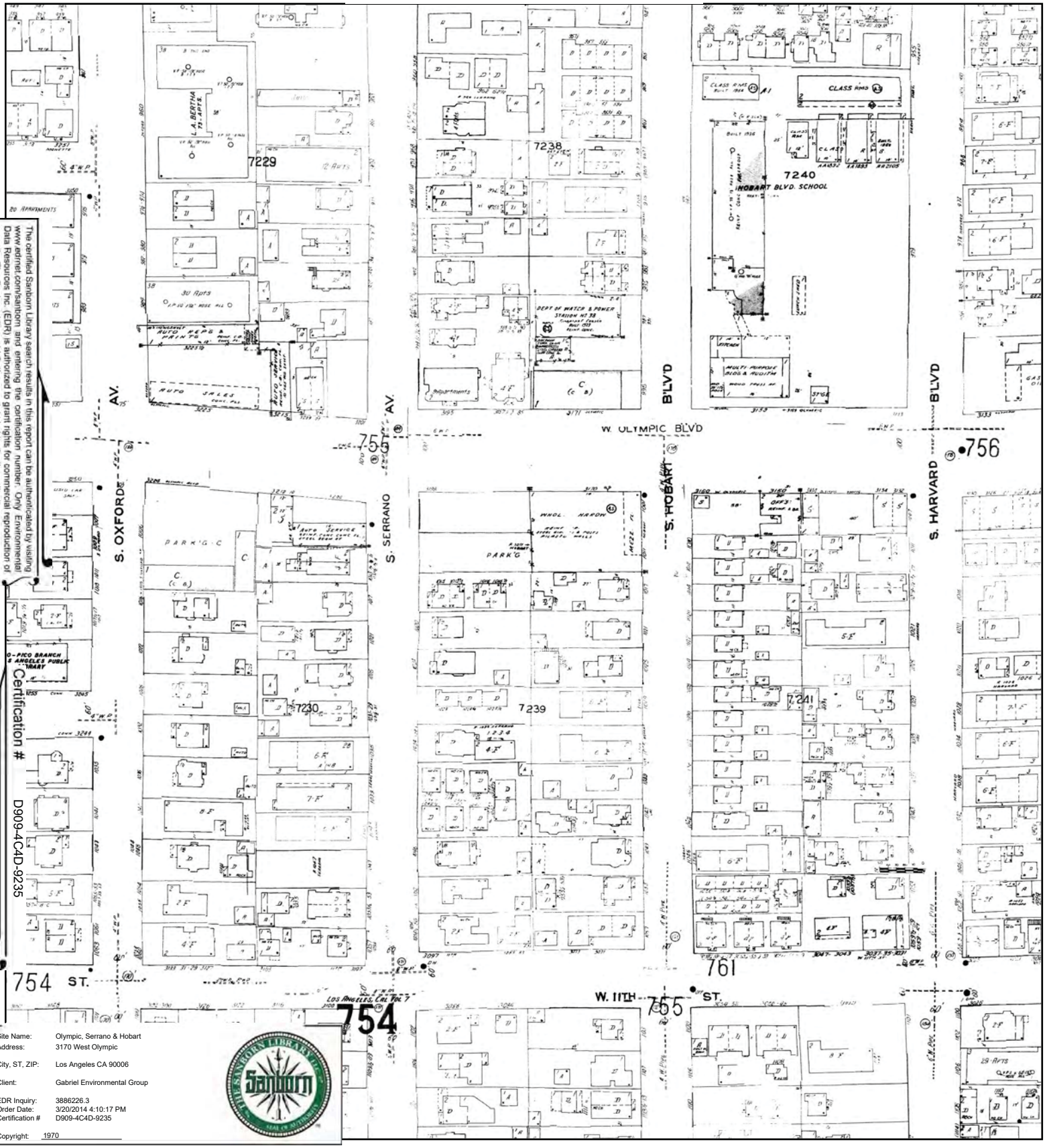
Olympic, Serrano & Hobart
3170 West Olympic
Los Angeles, CA 90006

Inquiry Number: 3886226.3
March 20, 2014

Certified Sanborn® Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

1970 Certified Sanborn Map



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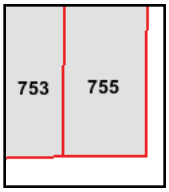
Certification # D909-4C4D-9235

Site Name:	Olympic, Serrano & Hobart
Address:	3170 West Olympic
City, ST, ZIP:	Los Angeles CA 90006
Client:	Gabriel Environmental Group
EDR Inquiry:	3886226.3
Order Date:	3/20/2014 4:10:17 PM
Certification #	D909-4C4D-9235
Copyright:	1970

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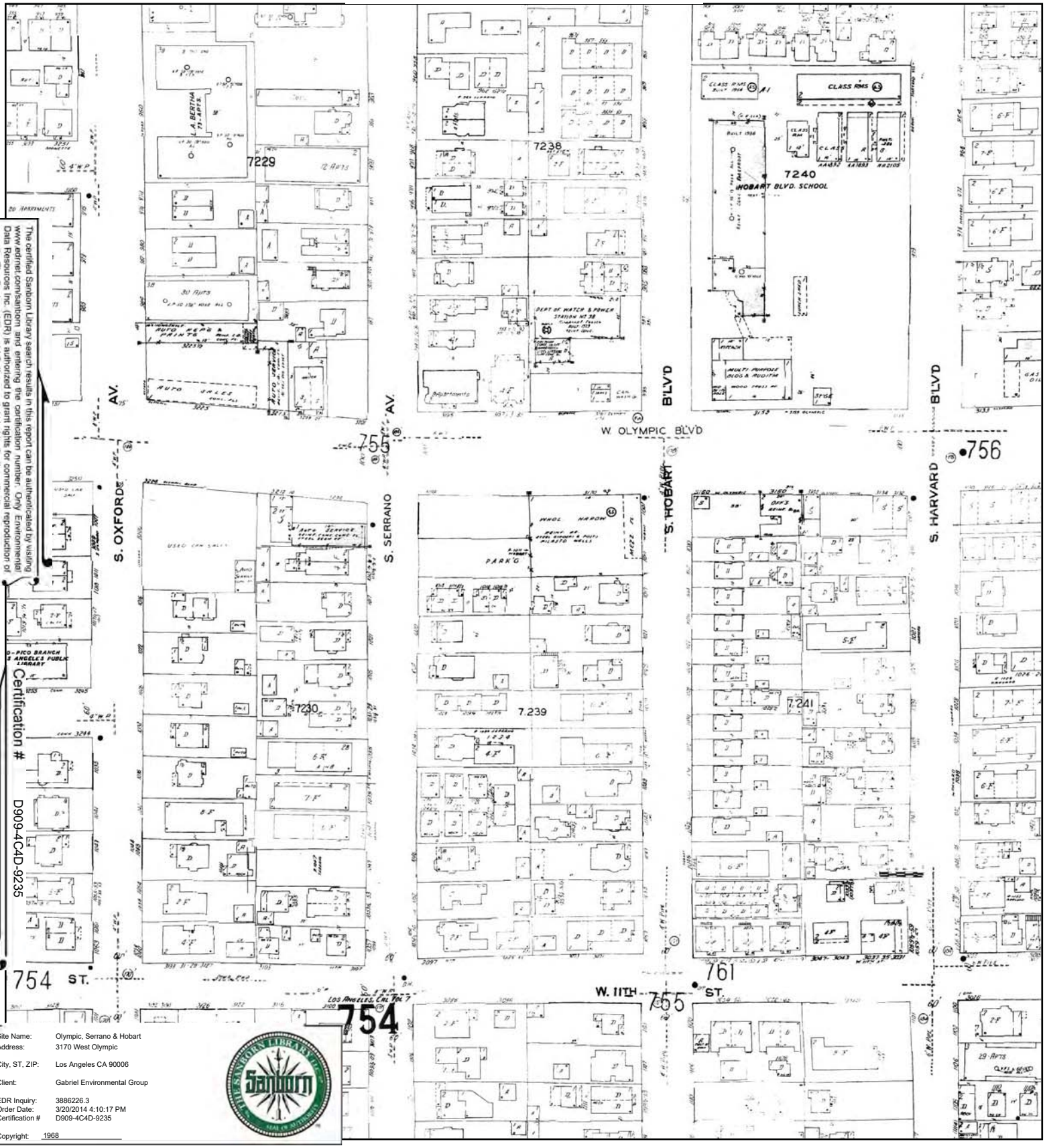




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1968 Certified Sanborn Map



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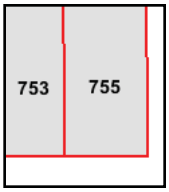
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Site Name:	Olympic, Serrano & Hobart
Address:	3170 West Olympic
City, ST, ZIP:	Los Angeles CA 90006
Client:	Gabriel Environmental Group
EDR Inquiry:	3886226.3
Order Date:	3/20/2014 4:10:17 PM
Certification #	D909-4C4D-9235
Copyright:	1968

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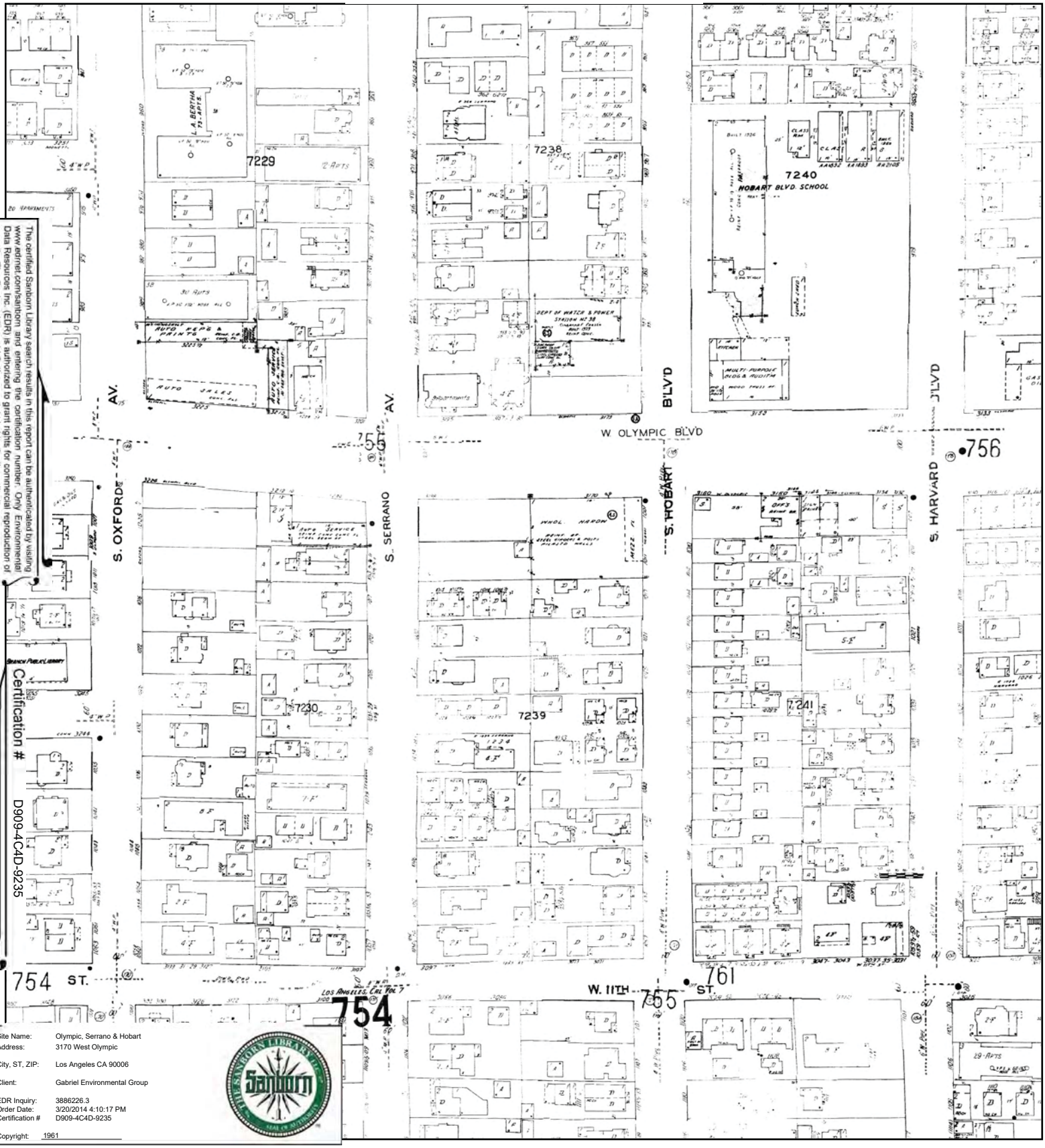




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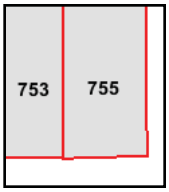
Certification # D909-4C4D-9235

Site Name:	Olympic, Serrano & Hobart
Address:	3170 West Olympic
City, ST, ZIP:	Los Angeles CA 90006
Client:	Gabriel Environmental Group
EDR Inquiry:	3886226.3
Order Date:	3/20/2014 4:10:17 PM
Certification #	D909-4C4D-9235
Copyright:	1961

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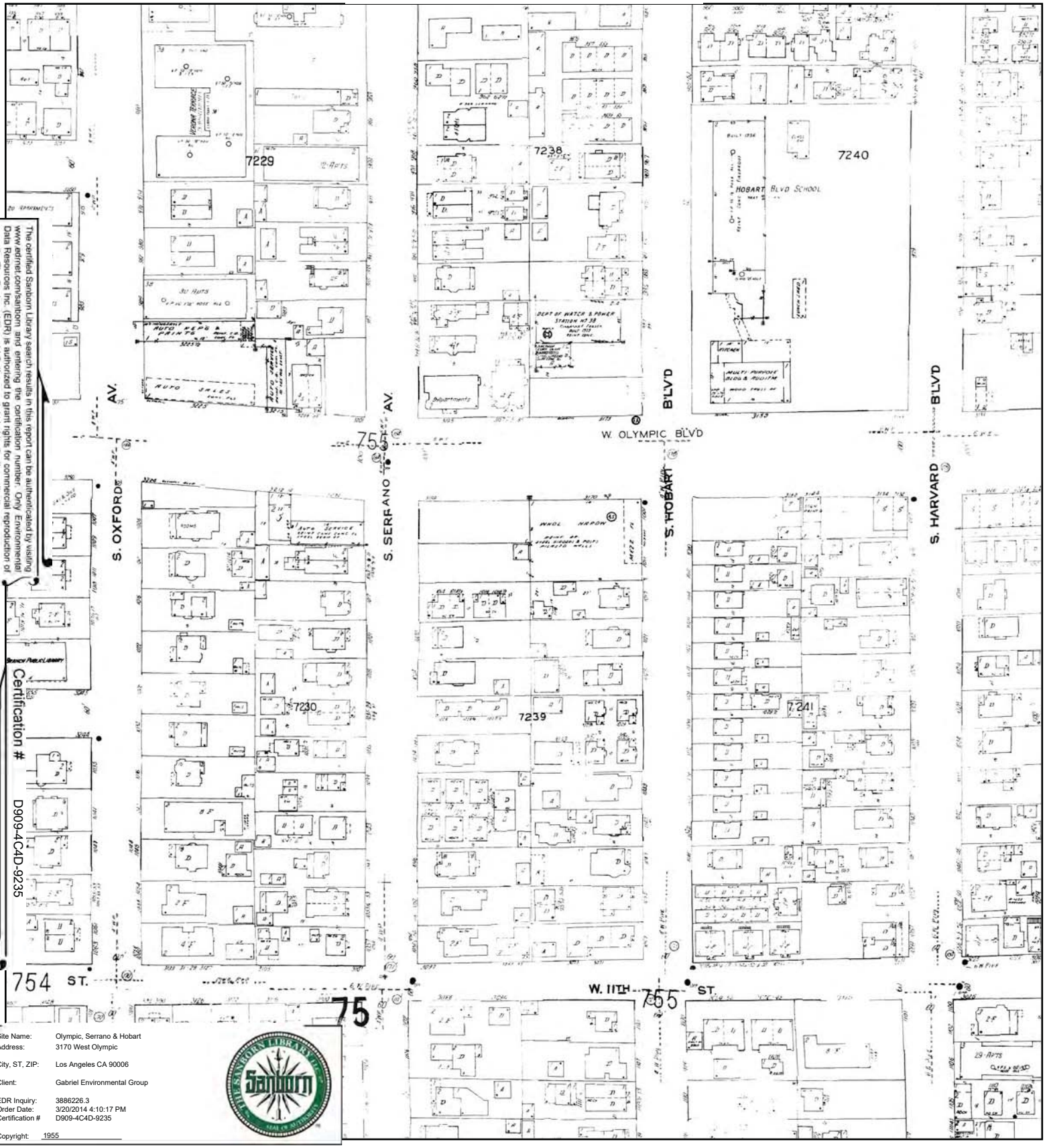




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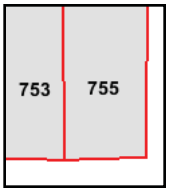
Certification # D909-4C4D-9235

Site Name: Olympic, Serrano & Hobart
Address: 3170 West Olympic
City, ST, ZIP: Los Angeles CA 90006
Client: Gabriel Environmental Group
EDR Inquiry: 3886226.3
Order Date: 3/20/2014 4:10:17 PM
Certification # D909-4C4D-9235
Copyright: 1955

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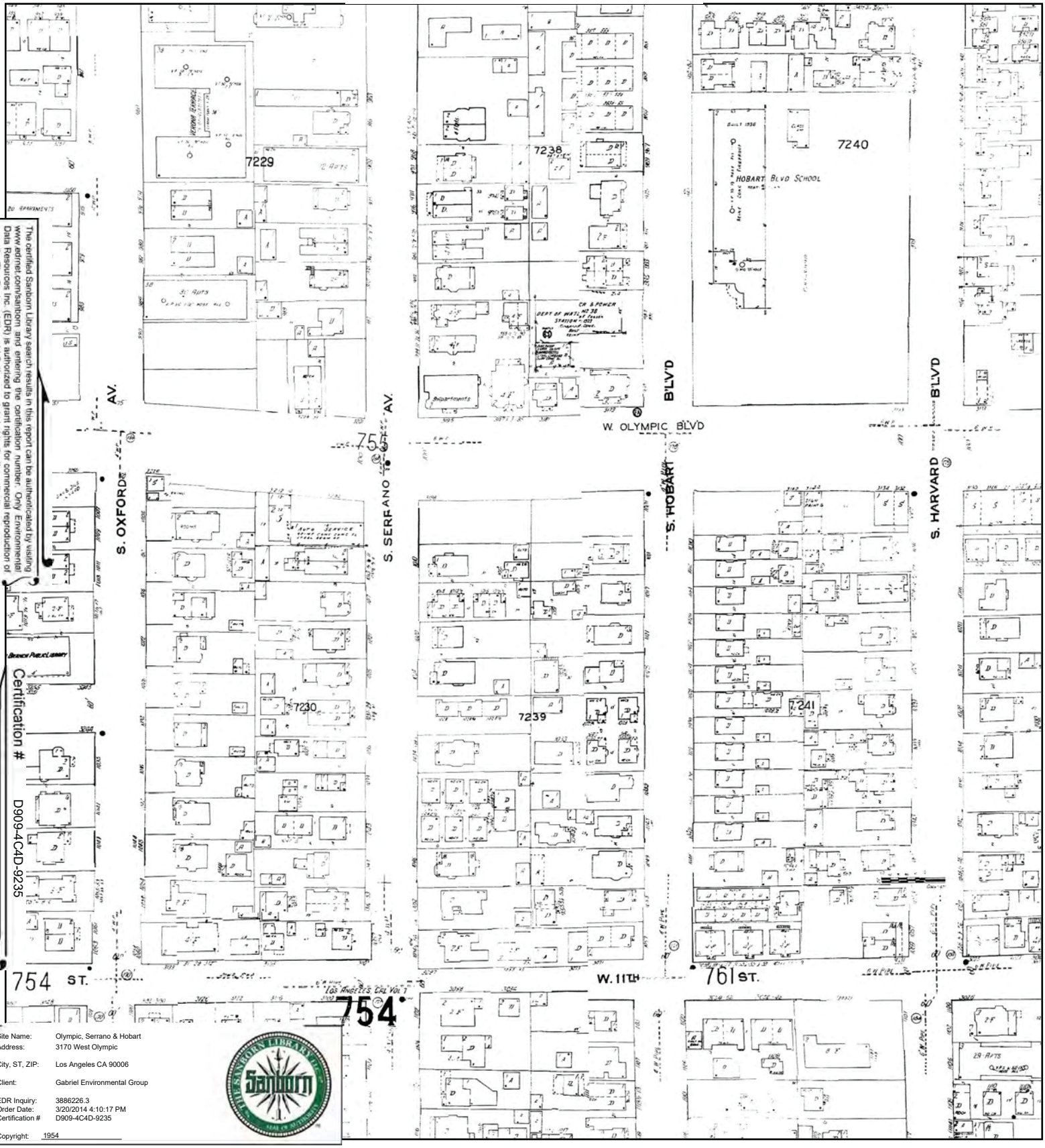




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1954 Certified Sanborn Map



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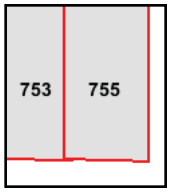
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Site Name:	Olympic, Serrano & Hobart
Address:	3170 West Olympic
City, ST, ZIP:	Los Angeles CA 90006
Client:	Gabriel Environmental Group
EDR Inquiry:	3886226.3
Order Date:	3/20/2014 4:10:17 PM
Certification #	D909-4C4D-9235
Copyright:	1954

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1950 Certified Sanborn Map



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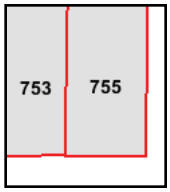
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Site Name:	Olympic, Serrano & Hobart
Address:	3170 West Olympic
City, ST, ZIP:	Los Angeles CA 90006
Client:	Gabriel Environmental Group
EDR Inquiry:	3886226.3
Order Date:	3/20/2014 4:10:17 PM
Certification #	D909-4C4D-9235
Copyright:	1950

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1921 Certified Sanborn Map



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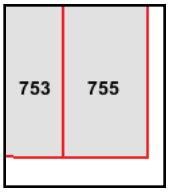
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Site Name: Olympic, Serrano & Hobart
Address: 3170 West Olympic
City, ST, ZIP: Los Angeles CA 90006
Client: Gabriel Environmental Group
EDR Inquiry: 3886226.3
Order Date: 3/20/2014 4:10:17 PM
Certification # D909-4C4D-9235
Copyright: 1921

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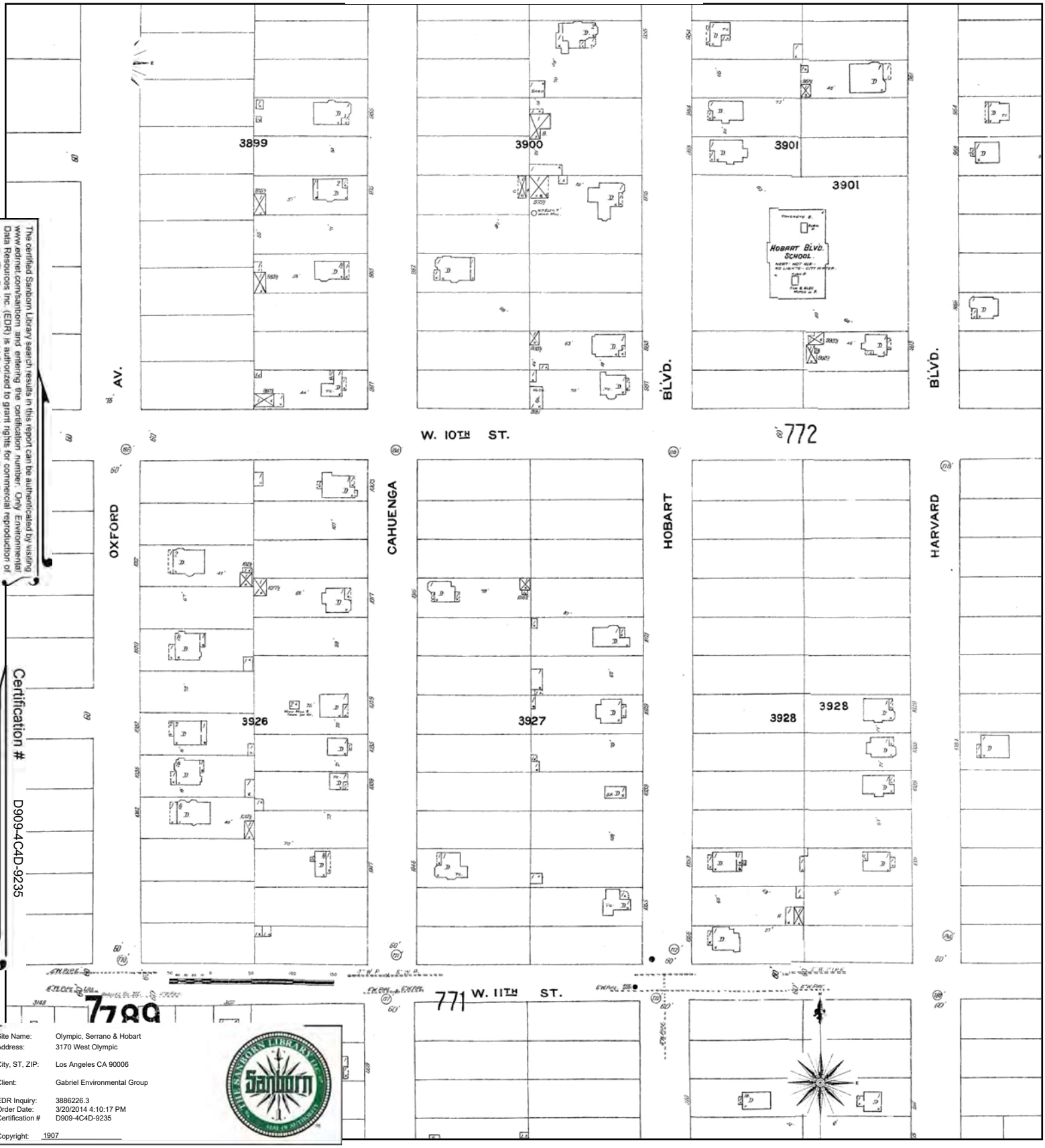




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1907 Certified Sanborn Map



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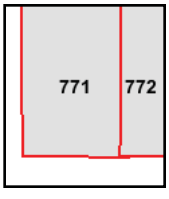
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Site Name: Olympic, Serrano & Hobart
Address: 3170 West Olympic
City, ST, ZIP: Los Angeles CA 90006
Client: Gabriel Environmental Group
EDR Inquiry: 3886226.3
Order Date: 3/20/2014 4:10:17 PM
Certification # D909-4C4D-9235
Copyright: 1907

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N

Olympic, Serrano & Hobart
3170 West Olympic Blvd
Los Angeles, CA 90006

Inquiry Number: 3886226.5
March 24, 2014

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EXECUTIVE SUMMARY

MAP INFORMATION

The Overview Map provides information on nearby property parcel boundaries. Properties on this map that were selected for research are listed below the map.



SELECTED ADDRESSES

The following addresses were selected by the client. Detailed findings are contained in the findings section. An "X" indicates where information was identified.

Address	***Type***	***Findings***
3170 West Olympic Blvd	Map ID: 1	
3170 West Olympic Blvd	Map ID: 2	
3170 West Olympic Blvd	Map ID: 3	
3170 West Olympic Blvd	Map ID: 4	
3170 West Olympic Blvd	Map ID: 5	
3170 West Olympic Blvd	Map ID: 7	
3170 West Olympic Blvd	Map ID: 8	

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

3170 West Olympic Blvd
Los Angeles, CA 90006

FINDINGS DETAIL

Target Property research detail.

3170 West Olympic Blvd

3170 West Olympic Blvd

Year	*Uses*	*Source*

HOBART BLVD S

1015 HOBART BLVD S

Year	*Uses*	*Source*
2000	CHOI Kee Jin	Haines & Company
	KANG Sin	Haines & Company
1951	S Hobrt Takahashi Wm r	Pacific Telephone & Telegraph Co.

1021 HOBART BLVD S

Year	*Uses*	*Source*
2000	PAIK Kangihnn 00 C	Haines & Company
1951	S Hobrt Parker Edw F r	Pacific Telephone & Telegraph Co.

OLYMPIC BLVD W

3170 OLYMPIC BLVD W

Year	*Uses*	*Source*
2000	CHOIS ACUPUNCTURE CUNIC	Haines & Company
	DIVISION AMPAC CO	Haines & Company
	HONMA GOLF	Haines & Company
	JOY CHURCH DEPT STR	Haines & Company
	MODA MILANO	Haines & Company
	PECK SKIN INST THE	Haines & Company
	PLAZA TRAVEL & TOUR	Haines & Company
	UNIVRSL TITLE	Haines & Company
	UNIVRSL TITLE CO	Haines & Company

FINDINGS

3188 OLYMPIC BLVD W

Year	*Uses*	*Source*
2000	CHUNGS FMLY DNTL	Haines & Company
	MARTIN H LEE MD	Haines & Company
	PAIK KANGIHNN MD	Haines & Company

S HOBART

1015 S HOBART

Year	*Uses*	*Source*
1967	Nishida Hama	Pacific Telephone
1962	Nishida Hama	Pacific Telephone

1021 S HOBART

Year	*Uses*	*Source*
1962	Fukuzawa Enichi	Pacific Telephone

S HOBART BLVD

1015 S HOBART BLVD

Year	*Uses*	*Source*
1937	Ninonifya Geo K gdnr	Los Angeles Directory Co.

1021 S HOBART BLVD

Year	*Uses*	*Source*
2008	CASTILLO MAINTENANCE SERVICES	Cole Information Services
2006	e PAIK Kanglhnn	Haines Company, Inc
1990	CHANG MYONG	Pacific Bell
1958	Parker Edw F	Pacific Telephone
1942	Smallbone Julius Albina	Los Angeles Directory Co.
1937	Horiuchi Chohei Kumeno clk	Los Angeles Directory Co.
1933	UYEDA Kitaro fruit	Los Angeles Directory Co.
1929	KELLEY CHAS Reporter L A Times	Los Angeles Directory Co.
	KELLEY Jack M clk	Los Angeles Directory Co.
	KELLY Jack M clk	Los Angeles Directory Co.
	KELLY Winona wid Chas	Los Angeles Directory Co.
1924	Breese J Nelan clk h	Los Angeles Directory Co.
	Smallone Jullus J carp h	Los Angeles Directory Co.

FINDINGS

S SERRANO

1010 S SERRANO

Year	Uses	Source
1933	Dunseth Jas H Mary F carp	Los Angeles Directory Co.

1014 S SERRANO

Year	Uses	Source
1967	Saucedo Juan M	Pacific Telephone
1962	Crusen Freda A Mrs	Pacific Telephone

1020 S SERRANO

Year	Uses	Source
1967	Earl Jack	Pacific Telephone
1937	Truslow Bertha tchr City Sch	Los Angeles Directory Co.
1933	Truslow Bertha tchr City Schs	Los Angeles Directory Co.
1929	Truslow Bertha tchr City Sch h	Los Angeles Directory Co.

S SERRANO AVE

1010 S SERRANO AVE

Year	Uses	Source
1942	Dunseth Jas H Mary F carp	Los Angeles Directory Co.
1929	Dunseth Jas H Mary carp	Los Angeles Directory Co.
1924	Dunseth Jas H bldg contr h	Los Angeles Directory Co.

1014 S SERRANO AVE

Year	Uses	Source
1942	BLUE Stewart Opal	Los Angeles Directory Co.
	LAWRENCE Frank S Frances police	Los Angeles Directory Co.
1937	Cardoza Michl M Mary mech	Los Angeles Directory Co.
	Guthrie Henry W Jessie M brake mech	Los Angeles Directory Co.
1933	Alker Carol B tel opr	Los Angeles Directory Co.
	Hadley Alice wid J B	Los Angeles Directory Co.
1929	Coene Chas mach	Los Angeles Directory Co.
	Mc LAUGHLIN Leland Kath v pres Keystone Electric Co	Los Angeles Directory Co.
1924	Hitt Chas G roadmaster U P System h	Los Angeles Directory Co.
	Jurden Frances I r	Los Angeles Directory Co.
	THOMPSON Agnes N nurse r	Los Angeles Directory Co.
	THOMPSON Frank L aud h	Los Angeles Directory Co.

FINDINGS

1020 S SERRANO AVE

Year	Uses	Source
2006	e CORRAL L	Haines Company, Inc
1990	CORRAL CRUZ	Pacific Bell
1986	CORRAL CRUZ	Pacific Bell
	CORRAL ROBT	Pacific Bell
1981	CORRAL CRUZ	Pacific Telephone
1976	Corral Cruz	Pacific Telephone
1971	Corral Cruz	Pacific Telephone
1942	Truslow Clara V wid W B	Los Angeles Directory Co.
	TRUSLOW Wallace B pres Citrus Exchange Corp	Los Angeles Directory Co.
1937	Truslow Clara Mrs	Los Angeles Directory Co.
1933	Truslow Clara Mrs	Los Angeles Directory Co.
1924	h	Los Angeles Directory Co.
	Truslow Bertha tchr r	Los Angeles Directory Co.

SERRANO AVE S

1010 SERRANO AVE S

Year	Uses	Source
1951	S Serrano Dunseth J H r	Pacific Telephone & Telegraph Co.

1014 SERRANO AVE S

Year	Uses	Source
1951	S Serrano Av Trejo Beatrice r	Pacific Telephone & Telegraph Co.
	S Serrano Grijalva Frank B r	Pacific Telephone & Telegraph Co.

1020 SERRANO AVE S

Year	Uses	Source
2000	CORRAL Cruz	Haines & Company
1951	S Serrano Truslow Clara r	Pacific Telephone & Telegraph Co.

W OLYMPIC BLVD

3170 W OLYMPIC BLVD

Year	Uses	Source
2013	ALL STAR WIRELESS	Cole Information Services
	HAN KOOK TOUR INC	Cole Information Services
	HEALTH FOOT THERAPISTS	Cole Information Services
	JAYS DRUG	Cole Information Services

FINDINGS

Year	Uses	Source
2013	JOY CHURCH DEPARTMENT STORE	Cole Information Services
	PECK SKIN INSTITUTE THE	Cole Information Services
	QRAPHA INC	Cole Information Services
2008	ALL STAR WIRELESS	Cole Information Services
	CHUNG TAI HWAN	Cole Information Services
	JAYS DRUG	Cole Information Services
	O B WIRELESS INC	Cole Information Services
	P2P COMMUNICATION INC	Cole Information Services
	PREMIUM OUTLET	Cole Information Services
2006	ACUPUNCTURE	Haines Company, Inc
	CELLMASTER INC	Haines Company, Inc
	CHOIS	Haines Company, Inc
	CLINIC	Haines Company, Inc
	JOY CHURCH DEPT	Haines Company, Inc
	OB WRELESS	Haines Company, Inc
	PECKSKININST	Haines Company, Inc
	PLAZATRAVEL&	Haines Company, Inc
	STLIFETECH INC	Haines Company, Inc
	WIRELESS	Haines Company, Inc
1986	MONTGOMERY HARDWARE CO	Pacific Bell
	MONTGOMERY VAL F MONTGOMERY HARDWARE CO	Pacific Bell
1981	MONTGOMERY HARDWARE CO	Pacific Telephone
	MONTGOMERY VAL F MONTGOMERY HARDWARE CO	Pacific Telephone
1976	MONTGOMERY HARDWARE CO	Pacific Telephone
	Montgomery Val F Montgomery Hardware Co	Pacific Telephone
1937	Alonzo Harold	Los Angeles Directory Co.

3188 W OLYMPIC BLVD

Year	Uses	Source
2013	CHUNGS FAMILY DENTAL	Cole Information Services
	MARTIN H LEE M D MD	Cole Information Services
	PAIK KANGIHNN MD	Cole Information Services
2008	ART PLAZA INC	Cole Information Services
	CHUNGS FAMILY DENTAL CENTER	Cole Information Services
	MARTIN H LEE MD	Cole Information Services
2006	CHUNGS FAMILY	Haines Company, Inc
	DENTAL	Haines Company, Inc
	LEE MARTIN H MD	Haines Company, Inc

Year	Uses	Source
2006	LEE MARTIN MD	Haines Company, Inc
	MARTIN HLEEMMD	Haines Company, Inc
	PAIK KANGIHNN ND	Haines Company, Inc
1986	WONDER YEARS SCHOOL	Pacific Bell
1981	BUENAFLOR BERNARDO	Pacific Telephone
1976	Buenaflor Bernardo	Pacific Telephone

W OLYMPIC LN

3170 W OLYMPIC LN

Year	Uses	Source
1971	MONTGOMERY HARDWARE CO	Pacific Telephone
	Montgomery Val F Montgomery Hardware Co	Pacific Telephone
1967	Bennett Montgomery Hardware Co Montgomery Hardware Co	Pacific Telephone
	Montgomery Hardware Co	Pacific Telephone
	Montgomery Val F Montgomery Hardware Co	Pacific Telephone
1962	Bennett Montgomery Hdwe Co	Pacific Telephone
	Montgomery Hdwe Co	Pacific Telephone
	Montgomery Val F Montgomery Hdwe Co	Pacific Telephone
1958	Bennett Montgomery Hdwe Co	Pacific Telephone
	Montgomery Hdwe Co	Pacific Telephone
	Montgomery Val F Montgomery Hdwe Co	Pacific Telephone

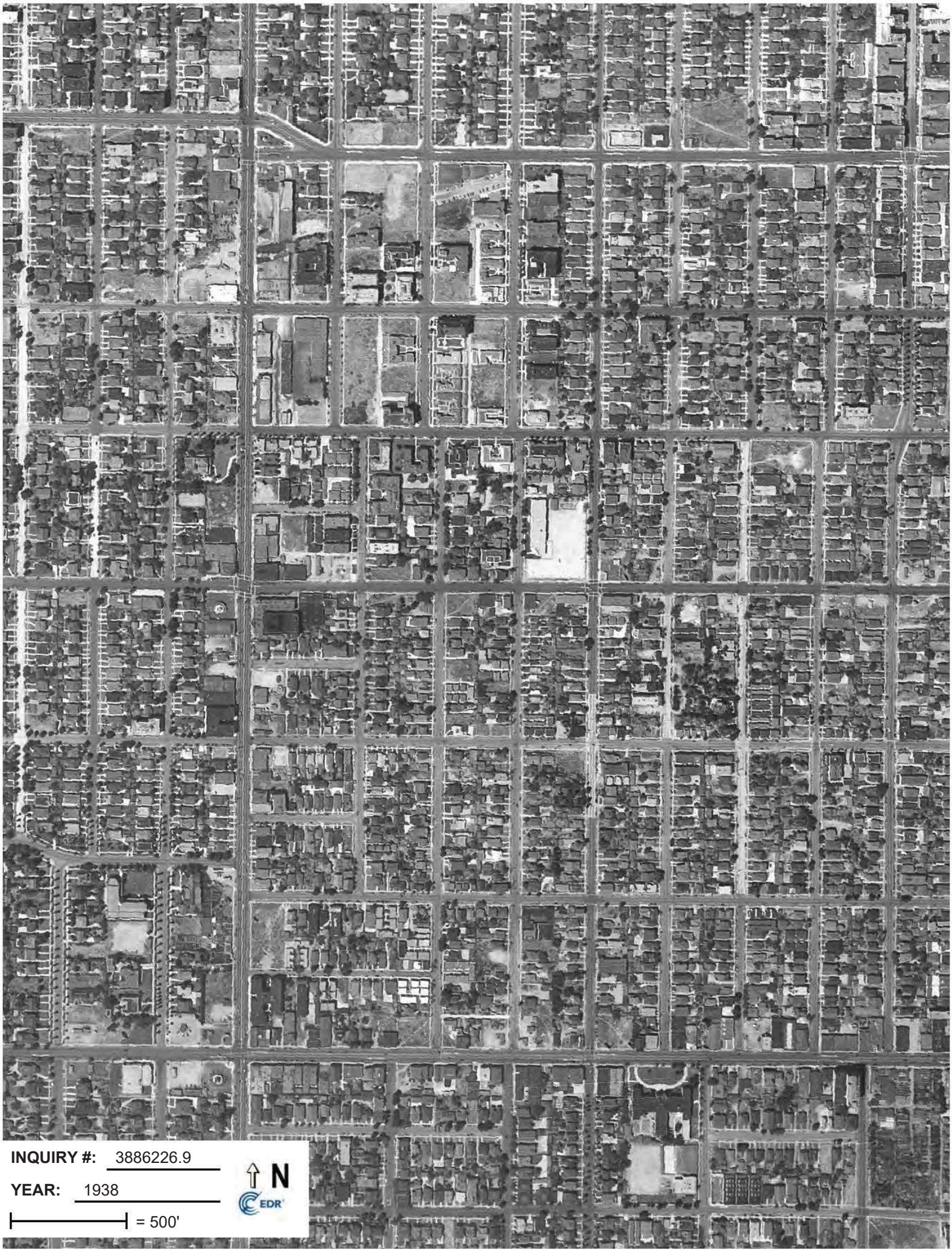
Olympic, Serrano & Hobart
3170 West Olympic
Los Angeles, CA 90006

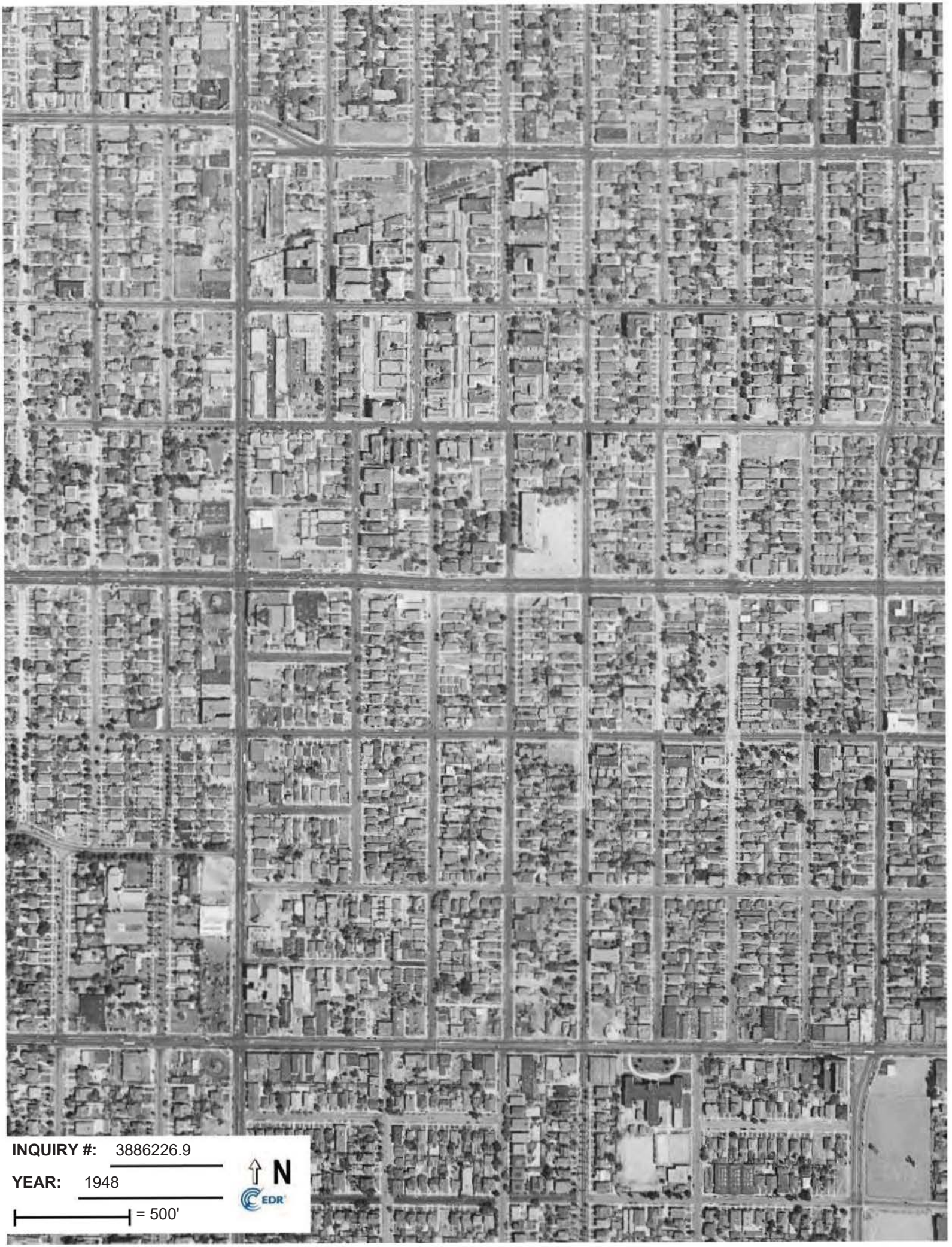
Inquiry Number: 3886226.9
March 24, 2014

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com


INQUIRY #: 3886226.9
YEAR: 1928
= 500'
N
EDR


INQUIRY #: 3886226.9
YEAR: 1938
= 500'
N
EDR

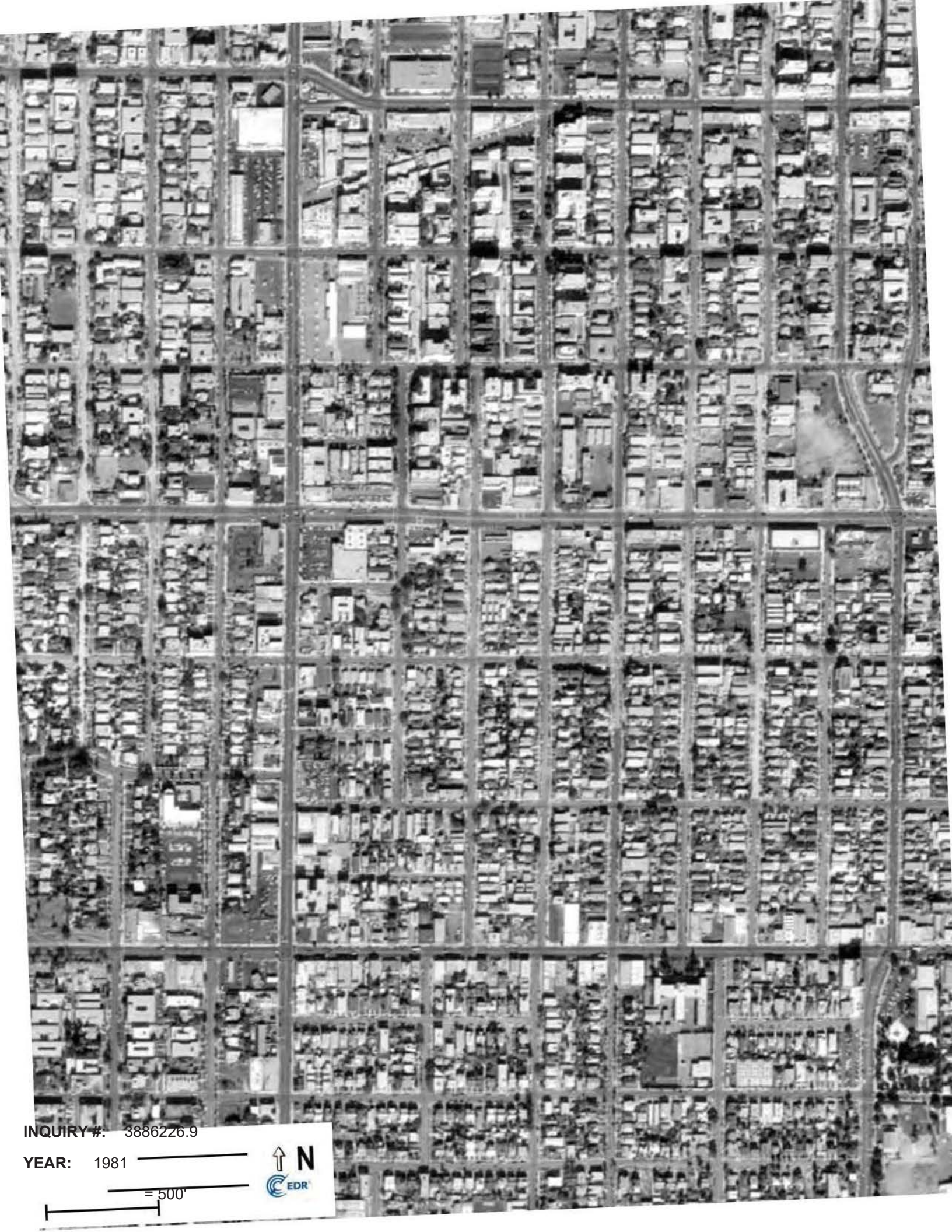

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EDR


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YEAR: 1952
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EDR


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YEAR: 1954
= 500'
N
EDR


INQUIRY #: 3886226.9
YEAR: 1964
= 500'
N
EDR


INQUIRY #: 3886226.9
YEAR: 1972
= 500'
N
EDR



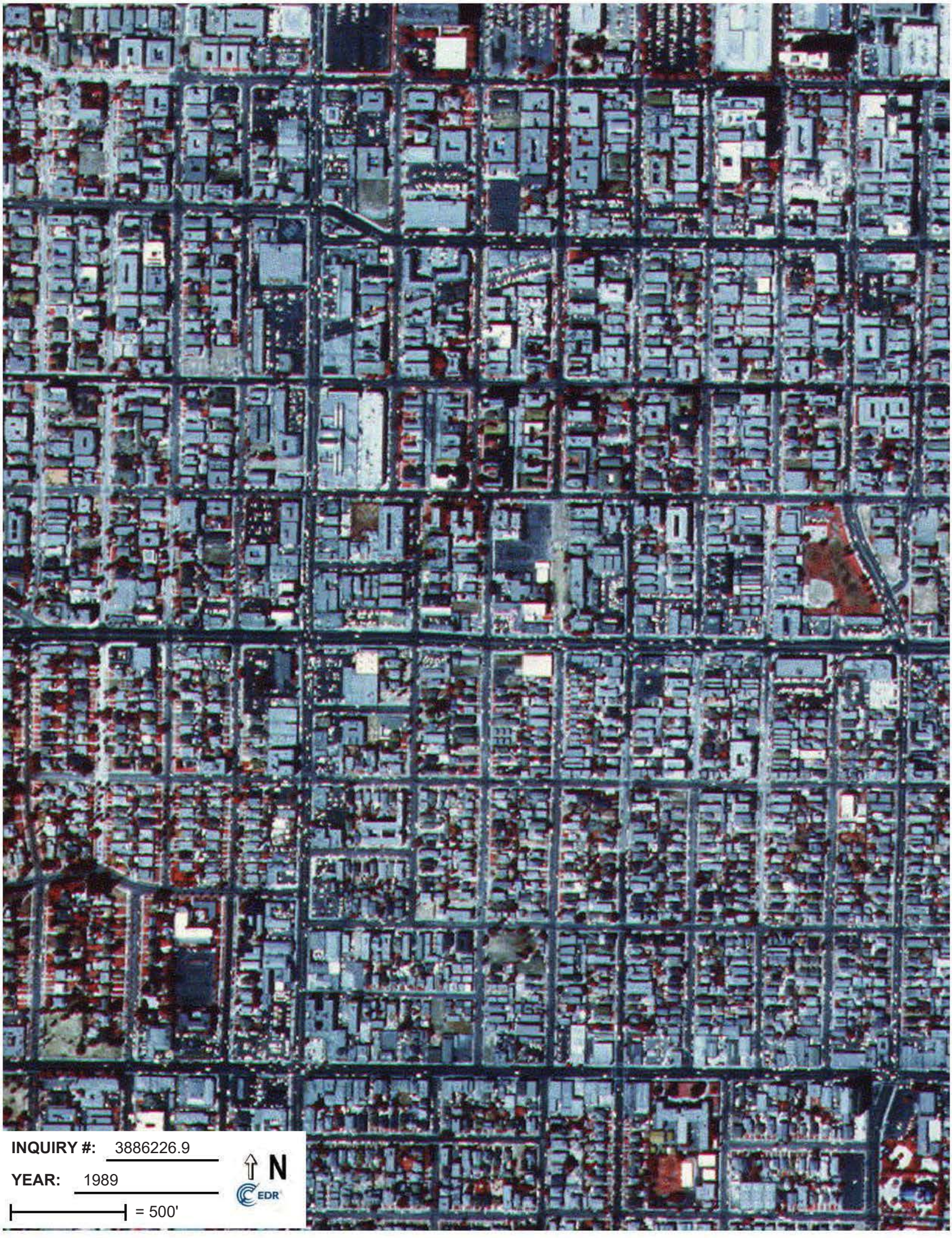
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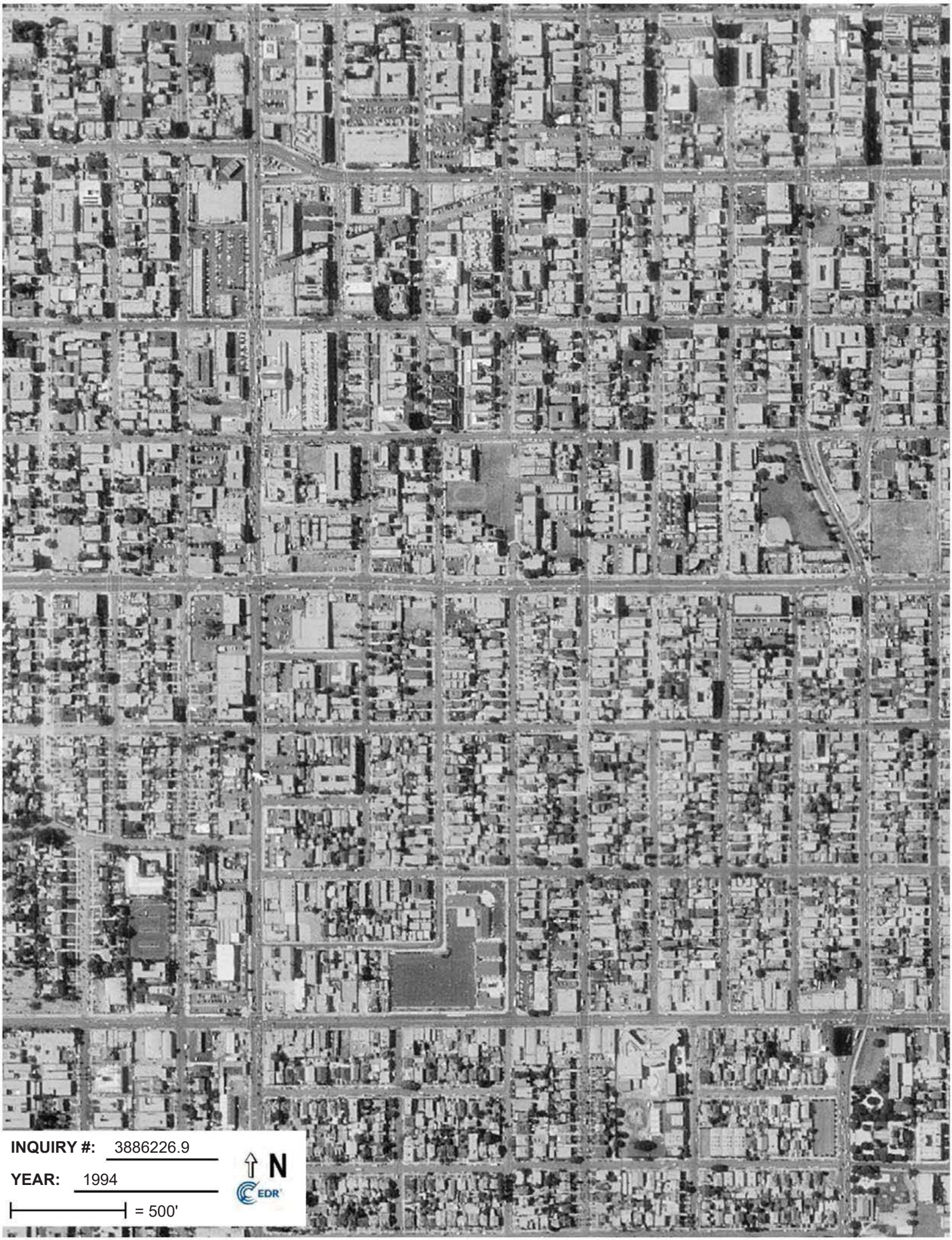
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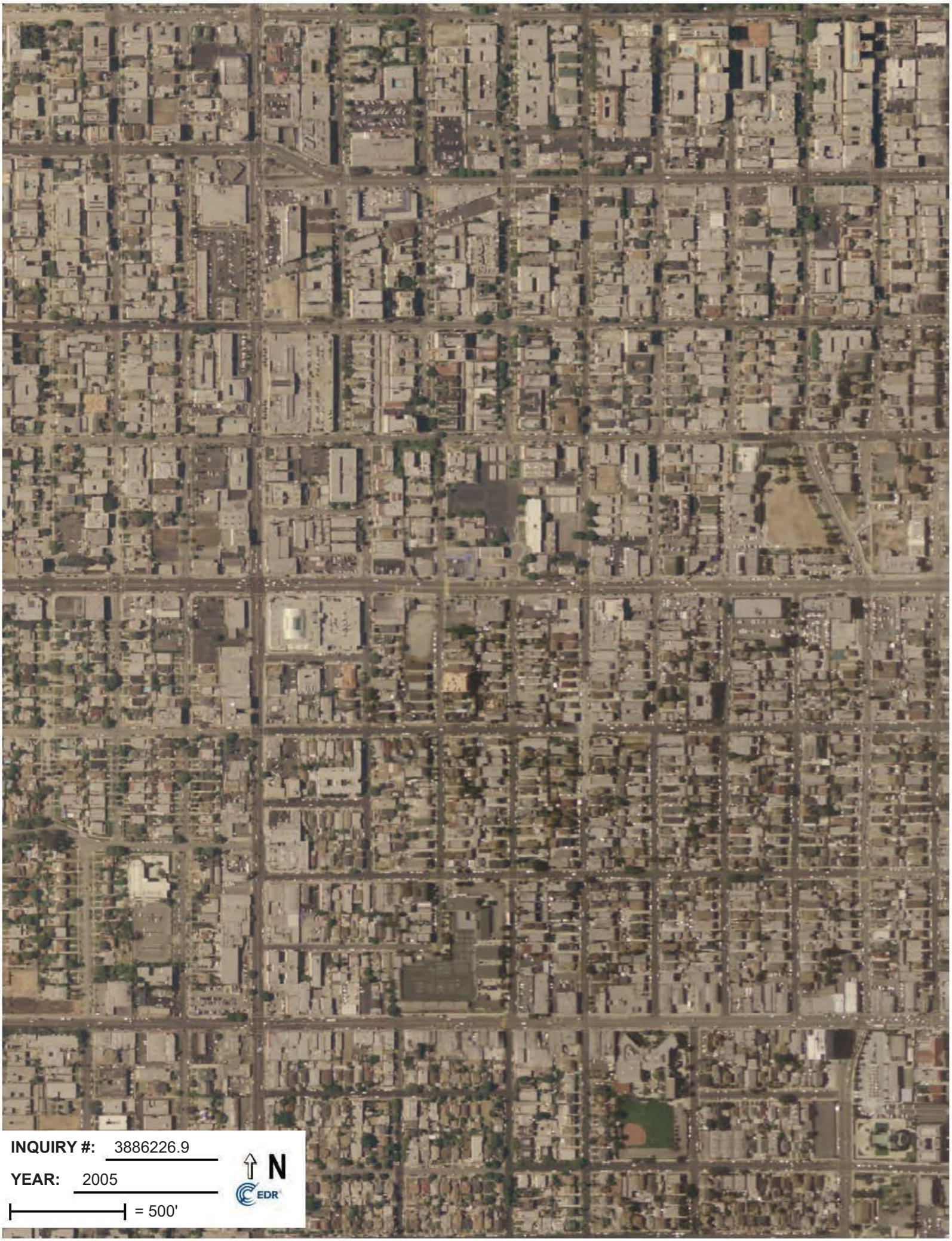
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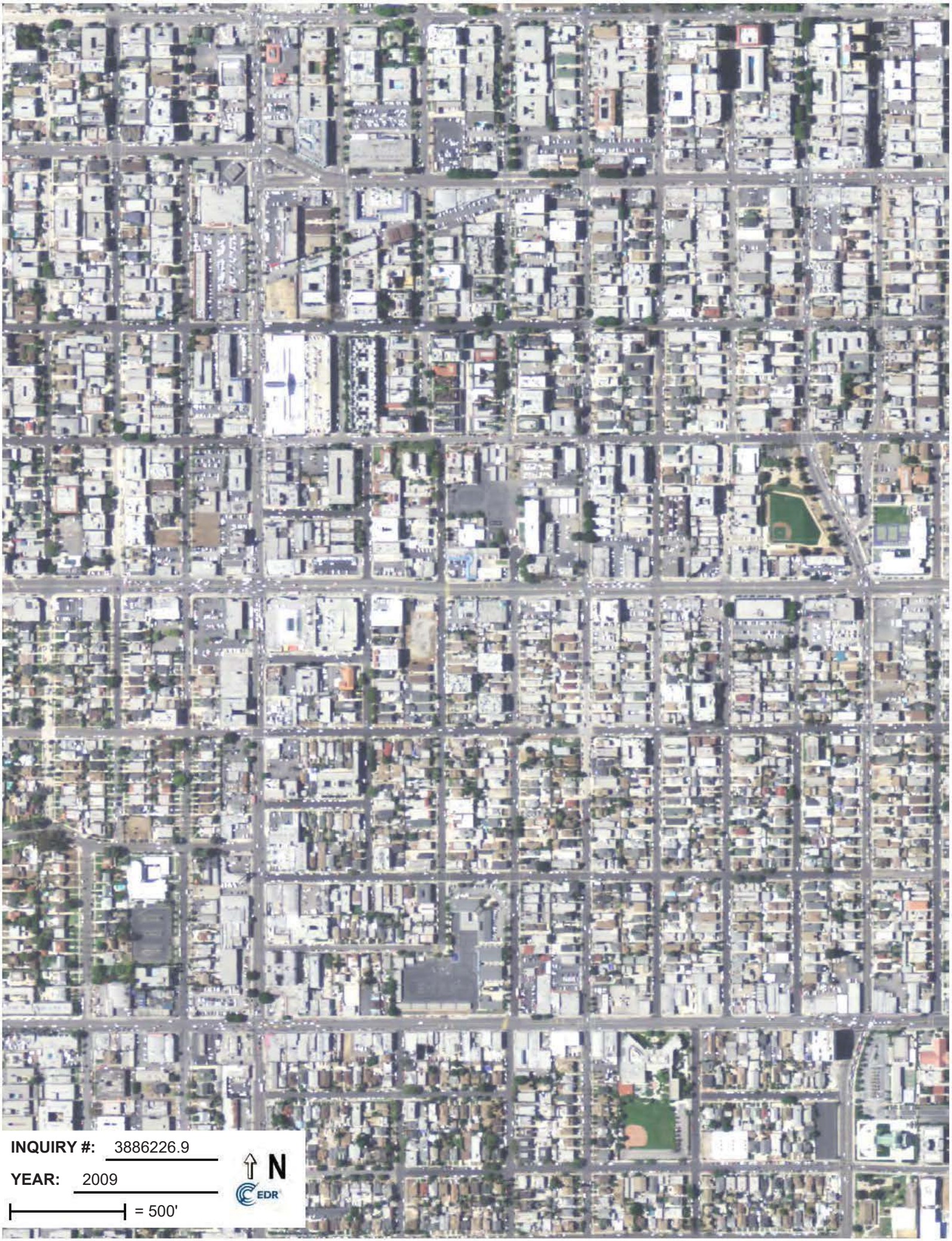
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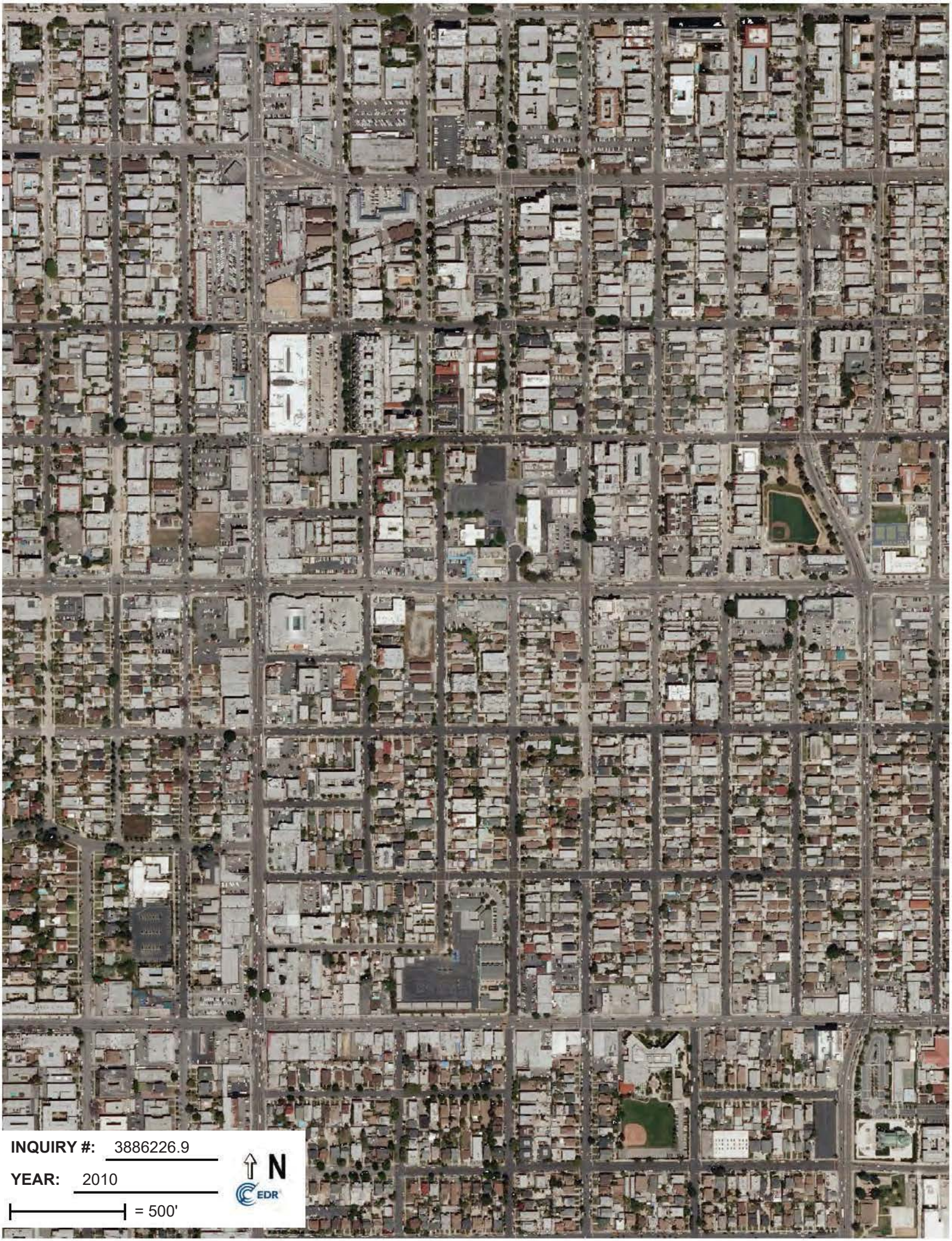
EDR


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YEAR: 1989
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EDR


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YEAR: 1994
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N
EDR


INQUIRY #: 3886226.9
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 3886226.9
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 3886226.9
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 3886226.9
YEAR: 2012
= 500'
N
EDR

APPENDIX 16.5

REGULATORY RECORDS DOCUMENTATION

Choi Bo Sung Inc
3170 West Olympic Boulevard
Los Angeles, CA 90006

Inquiry Number: 4681422.2s
July 22, 2016

The EDR Radius Map™ Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GeoCheck - Not Requested	

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

3170 WEST OLYMPIC BOULEVARD
LOS ANGELES, CA 90006

COORDINATES

Latitude (North):	34.0523250 - 34° 3' 8.37''
Longitude (West):	118.3055510 - 118° 18' 19.98''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	379502.5
UTM Y (Meters):	3768532.0
Elevation:	187 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5630741 HOLLYWOOD, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140515, 20140513
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
3170 WEST OLYMPIC BOULEVARD
LOS ANGELES, CA 90006

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1		3200 W OLYMPIC BLVD	EDR Hist Auto	Higher	56, 0.011, WNW
A2	HOBART E S	980 S HOBART BLVD	RCRA-SQG, FINDS, ECHO	Higher	143, 0.027, NNE
A3	HOWE H M	3138 W OLYMPIC BLVD	EDR Hist Cleaner	Lower	292, 0.055, ENE
B4	INTERNATIONAL AUTO H	1012 OXFORD	HIST CORTESE	Higher	342, 0.065, West
B5	WALKER BROTHERS INC	1012 S OXFORD AVE	SWEEPS UST, HIST UST, CA FID UST, EMI	Higher	342, 0.065, West
B6		1026 S OXFORD AVE	EDR Hist Cleaner	Higher	351, 0.066, WSW
C7		3130 W OLYMPIC BLVD	EDR Hist Auto	Lower	357, 0.068, East
B8	CAL AUTO REPAIR CENT	3225 W OLYMPIC BLVD	UST	Higher	372, 0.070, WNW
B9	WALKER BROS INC	3225 W OLYMPIC BLVD	SWEEPS UST	Higher	372, 0.070, WNW
B10		3225 W OLYMPIC BLVD	EDR Hist Auto	Higher	372, 0.070, WNW
B11	WALKER BROS	3250 W OLYMPIC BLVD	EDR Hist Auto	Higher	373, 0.071, West
12		1050 S HARVARD BLVD	EDR Hist Auto	Lower	379, 0.072, ESE
C13	PAGODA 1 HOUR	3131 W OLYMPIC BLVD	RCRA-SQG, FINDS, ECHO	Lower	424, 0.080, ENE
B14	WALKER BROS AMC INC	3260 W OLYMPIC BLVD	RCRA-SQG, SWEEPS UST, CA FID UST, FINDS, HAZNET,...	Higher	481, 0.091, West
C15	WONG K F	3112 W OLYMPIC BLVD	EDR Hist Cleaner	Lower	527, 0.100, East
16		1106 S HARVARD BLVD	EDR Hist Cleaner	Higher	583, 0.110, SE
D17	TSUTSUI H R	1001 S KINGSLEY DR	EDR Hist Auto	Lower	648, 0.123, East
D18	KINGSLEY-OLYMPIC	3101 WEST OLYMPIC	WMUDS/SWAT	Lower	667, 0.126, East
E19	HOBART ELEM SCHOOL	955 S HARVARD BLVD	RCRA-SQG, FINDS, ECHO	Higher	743, 0.141, NNE
E20	HOBART ELEMENTARY SC	3336 SAN MARINO STRE	ENVIROSTOR, SCH	Higher	753, 0.143, NNE
F21	RALPHS GROCERY CO#4	1010 S WESTERN	RCRA-SQG, FINDS, ECHO	Higher	838, 0.159, West
22	RIDGEWAY BROS AUTO B	1058 S WESTERN AVE	RCRA-SQG, FINDS, EMI, HAZNET, ECHO	Lower	874, 0.166, WSW
F23	YANG SOO KIM	3309 W OLYMPIC BLVD	HIST UST	Higher	878, 0.166, West
F24	MOBIL SERVICE STATIO	3309 W OLYMPIC BLVD	UST	Higher	878, 0.166, West
F25	DAVID TAN	3309 W OLYMPIC BLVD	SWEEPS UST, CA FID UST, HAZNET	Higher	878, 0.166, West
F26	MOBIL OIL CORP LLR	3309 W OLYMPIC	RCRA-SQG	Higher	878, 0.166, West
F27	EXXON MOBIL OIL CORP	3309 W OLYMPIC BLVD	RCRA-LQG	Higher	878, 0.166, West
28	C L PECK	928 S WESTERN AVE	SWEEPS UST, CA FID UST	Higher	1171, 0.222, NW
29	RUTLEYS CLEANERS, WO	3333 W OLYMPIC BL	DRYCLEANERS, EMI	Higher	1233, 0.234, West
30	NADERI ONE HOUR	3030 W OLYMPIC BLVD	RCRA-SQG, FINDS, HAZNET, ECHO	Higher	1301, 0.246, East
G31	WESTERN AUTOBODY	1201 S WESTERN AVE	SWEEPS UST, CA FID UST	Lower	1306, 0.247, SW
G32	WESTERN AUTO BODY	1201 S WESTERN AVE	RCRA-SQG, FINDS, HAZNET, ECHO	Lower	1306, 0.247, SW
H33	HOBART/WILTON PRIMAR	800,820,826 ST. ANDR	ENVIROSTOR, SCH	Lower	1718, 0.325, NW
H34	HOBART/WILTON PRIMAR	9TH STREET/SAINT AND	ENVIROSTOR, SCH	Lower	1728, 0.327, NW
35	HOBART/WILTON PRIMAR	SAN MARINO ST/SAINT	ENVIROSTOR, SCH	Lower	1733, 0.328, WNW
I36	LAUSD	2957 OLYMPIC BLVD. W	LUST, SLIC	Higher	1823, 0.345, East
J37	ROTEX DEVELOPMENT/TR	3411 OLYMPIC BLVD W	LUST	Higher	1852, 0.351, West
J38	ROTEX DEVELOPMENT/TR	3411 OLYMPIC	HIST CORTESE	Higher	1852, 0.351, West
I39	EXXON SERVICE STATIO	2950 OLYMPIC BLVD W	LUST, HIST CORTESE	Higher	1936, 0.367, East

MAPPED SITES SUMMARY

Target Property Address:
3170 WEST OLYMPIC BOULEVARD
LOS ANGELES, CA 90006

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
K40	WESSEN BUICK DEALER	3101 PICO BLVD W	LUST	Higher	1948, 0.369, SSW
L41	PAK'S WESTERN PLAZA	833 WESTERN AVE W	LUST	Higher	1966, 0.372, NNW
K42	SHELL SERVICE STATIO	1303 WESTERN AVE. S.	LUST	Higher	1983, 0.376, SSW
43	KINGSLEY AUTO TEXACO	3401 W 8TH ST	RCRA-SQG, LUST, FINDS, HIST CORTESE, ECHO	Higher	2035, 0.385, NNE
44	HOBART/WILTON PRIMAR	SAN MARINO ST/OLYMPI	ENVIROSTOR, SCH	Higher	2084, 0.395, ENE
M45	ECONO LUBE-N-TUNE	3451 OLYMPIC BLVD.,	LUST	Higher	2146, 0.406, West
L46	JUN CHUL PARK	801 S WESTERN AVE	LUST, SWEEPS UST, CA FID UST, HAZNET	Higher	2175, 0.412, NNW
M47	TOSCO S.S. #S1788	3481 OLYMPIC BLVD W	LUST, HIST CORTESE	Lower	2419, 0.458, West
48	HOBART/WILTON PRIMAR	7TH STREET/HOBART BO	ENVIROSTOR, SCH	Higher	2615, 0.495, North
49	BELMONT NEW ELEMENTA	WILSHIRE BOULEVARD/H	ENVIROSTOR, SCH	Higher	3364, 0.637, North
50	MONSENOR OSCAR ROMER	1157 SOUTH BERENDO S	ENVIROSTOR, SCH	Higher	3579, 0.678, ESE
N51	HOBART/WILTON PRIMAR	WILSHIRE BOULEVARD/B	ENVIROSTOR, SCH	Higher	3964, 0.751, NW
52	AMBASSADOR HOTEL (FO	3400 WILSHIRE BLVD	ENVIROSTOR, LUST, SCH, HIST CORTESE	Higher	4040, 0.765, NE
N53	LOS ANGELES NEW PRIM	WILSHIRE BLVD./INGRA	ENVIROSTOR, SCH	Higher	4148, 0.786, NW
54	HOBART/WILTON PRIMAR	WILSHIRE BOULEVARD/B	ENVIROSTOR, SCH	Higher	4430, 0.839, NW
O55	HOBART/WILTON PRIMAR	INGRAHAM STREET/7TH	ENVIROSTOR, SCH	Higher	4493, 0.851, NW
O56	LOS ANGELES PRIMARY	WILSHIRE BOULEVARD/I	ENVIROSTOR, SCH	Higher	4565, 0.865, NW
57	CAHUENGA ELEMENTARY	MARIPOSA AVENUE/FIFT	ENVIROSTOR, SCH	Higher	5135, 0.973, NNE
58	CENTRAL REGION ELEME	WEST WASHINGTON BLVD	ENVIROSTOR, SCH	Higher	5146, 0.975, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST Underground Storage Tank Listing
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing
VCP Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
AOCONCERN San Gabriel Valley Areas of Concern
HIST Cal-Sites Historical Calsites Database
CDL Clandestine Drug Labs
Toxic Pits Toxic Pits Cleanup Act Sites
US CDL National Clandestine Laboratory Register

Local Land Records

LIENS Environmental Liens Listing

LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data

LOS ANGELES CO. HMS - HMS: Street Number List
HWP - EnviroStor Permitted Facilities Listing
HWT - Registered Hazardous Waste Transporter Database
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
NPDES - NPDES Permits Listing
PEST LIC - Pesticide Regulation Licenses Listing
PROC - Certified Processors Database
Notify 65 - Proposition 65 Records
LA Co. Site Mitigation - Site Mitigation List
UIC - UIC Listing
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
FUELS PROGRAM - EPA Fuels Program Registered Listing
ECHO - Enforcement & Compliance History Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP - EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF - Recovered Government Archive Solid Waste Facilities List
RGA LUST - Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or

dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/09/2015 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXON MOBIL OIL CORP	3309 W OLYMPIC BLVD	W 1/8 - 1/4 (0.166 mi.)	F27	39

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 9 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOBART E S	***980 S HOBART BLVD***	***NNE 0 - 1/8 (0.027 mi.)***	***A2***	***8***
WALKER BROS AMC INC	***3260 W OLYMPIC BLVD***	***W 0 - 1/8 (0.091 mi.)***	***B14***	***19***
HOBART ELEM SCHOOL	***955 S HARVARD BLVD***	***NNE 1/8 - 1/4 (0.141 mi.)***	***E19***	***23***
RALPHS GROCERY CO#4	***1010 S WESTERN***	***W 1/8 - 1/4 (0.159 mi.)***	***F21***	***29***
MOBIL OIL CORP LLR	3309 W OLYMPIC	W 1/8 - 1/4 (0.166 mi.)	F26	38
NADERI ONE HOUR	***3030 W OLYMPIC BLVD***	***E 1/8 - 1/4 (0.246 mi.)***	***30***	***42***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
PAGODA 1 HOUR	***3131 W OLYMPIC BLVD***	***ENE 0 - 1/8 (0.080 mi.)***	***C13***	***17***
RIDGEWAY BROS AUTO B	***1058 S WESTERN AVE***	***WSW 1/8 - 1/4 (0.166 mi.)***	***22***	***30***
WESTERN AUTO BODY	***1201 S WESTERN AVE***	***SW 1/8 - 1/4 (0.247 mi.)***	***G32***	***45***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/02/2016 has revealed that there are 16 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOBART ELEMENTARY SC	***3336 SAN MARINO STRE***	***NNE 1/8 - 1/4 (0.143 mi.)***	***E20***	***25***

Facility Id: 19650013
Status: Certified

HOBART/WILTON PRIMAR	***SAN MARINO ST/OLYMPI***	***ENE 1/4 - 1/2 (0.395 mi.)***	***44***	***77***
Facility Id: 19750097 Status: Inactive - Needs Evaluation				
HOBART/WILTON PRIMAR	***7TH STREET/HOBART BO***	***N 1/4 - 1/2 (0.495 mi.)***	***48***	***101***
Facility Id: 19590015 Status: Inactive - Withdrawn				
BELMONT NEW ELEMENTA	***WILSHIRE BOULEVARD/H***	***N 1/2 - 1 (0.637 mi.)***	***49***	***104***
Facility Id: 19550023 Status: Inactive - Needs Evaluation				
MONSENOR OSCAR ROMER	***1157 SOUTH BERENDO S***	***ESE 1/2 - 1 (0.678 mi.)***	***50***	***107***
Facility Id: 60001988 Status: Inactive - Action Required				
HOBART/WILTON PRIMAR	***WILSHIRE BOULEVARD/B***	***NW 1/2 - 1 (0.751 mi.)***	***N51***	***111***
Facility Id: 19880065 Status: Inactive - Needs Evaluation				
AMBASSADOR HOTEL (FO	***3400 WILSHIRE BLVD***	***NE 1/2 - 1 (0.765 mi.)***	***52***	***114***
Facility Id: 19700001 Status: Certified / Operation & Maintenance				
LOS ANGELES NEW PRIM	***WILSHIRE BLVD./INGRA***	***NW 1/2 - 1 (0.786 mi.)***	***N53***	***139***
Facility Id: 60000010 Status: Inactive - Withdrawn				
HOBART/WILTON PRIMAR	***WILSHIRE BOULEVARD/B***	***NW 1/2 - 1 (0.839 mi.)***	***54***	***141***
Facility Id: 19880068 Facility Id: 19880069 Status: Inactive - Withdrawn Status: Inactive - Needs Evaluation				
HOBART/WILTON PRIMAR	***INGRAHAM STREET/7TH***	***NW 1/2 - 1 (0.851 mi.)***	***O55***	***147***
Facility Id: 19880067 Status: Inactive - Withdrawn				
LOS ANGELES PRIMARY	***WILSHIRE BOULEVARD/I***	***NW 1/2 - 1 (0.865 mi.)***	***O56***	***149***
Facility Id: 19670001 Status: Inactive - Withdrawn				
CAHUENGA ELEMENTARY	***MARIPOSA AVENUE/FIFT***	***NNE 1/2 - 1 (0.973 mi.)***	***57***	***152***
Facility Id: 19890016 Status: Inactive - Needs Evaluation				
CENTRAL REGION ELEME	***WEST WASHINGTON BLVD***	***SSE 1/2 - 1 (0.975 mi.)***	***58***	***155***
Facility Id: 60000072 Status: Certified				

Lower Elevation	Address	Direction / Distance	Map ID	Page
HOBART/WILTON PRIMAR	***800,820,826 ST. ANDR***	***NW 1/4 - 1/2 (0.325 mi.)***	***H33***	***47***
Facility Id: 19880073 Status: Inactive - Withdrawn				
HOBART/WILTON PRIMAR	***9TH STREET/SAINT AND***	***NW 1/4 - 1/2 (0.327 mi.)***	***H34***	***50***
Facility Id: 19880071 Status: Inactive - Withdrawn				
HOBART/WILTON PRIMAR	***SAN MARINO ST/SAINT***	***WNW 1/4 - 1/2 (0.328 mi.)***	***35***	***52***

Facility Id: 19880072
Status: Inactive - Withdrawn

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 03/14/2016 has revealed that there are 10 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAUSD Facility Id: 900060116 Status: Leak being confirmed Global ID: T0603741009	***2957 OLYMPIC BLVD. W***	***E 1/4 - 1/2 (0.345 mi.)***	***I36***	***55***
ROTEX DEVELOPMENT/TR Status: Completed - Case Closed Facility Id: 900190016 Status: Case Closed Global Id: T0603700611 Global ID: T0603700611	3411 OLYMPIC BLVD W	W 1/4 - 1/2 (0.351 mi.)	J37	56
EXXON SERVICE STATIO Status: Completed - Case Closed Facility Id: 900060025 Status: Case Closed Global Id: T0603700471 Global ID: T0603700471	***2950 OLYMPIC BLVD W***	***E 1/4 - 1/2 (0.367 mi.)***	***I39***	***59***
WESSEN BUICK DEALER Status: Completed - Case Closed Facility Id: 900190034 Status: Case Closed Global Id: T0603700613 Global ID: T0603700613	3101 PICO BLVD W	SSW 1/4 - 1/2 (0.369 mi.)	K40	61
PAK'S WESTERN PLAZA Status: Open - Remediation Global Id: T10000006007	833 WESTERN AVE W	NNW 1/4 - 1/2 (0.372 mi.)	L41	64
SHELL SERVICE STATIO Status: Completed - Case Closed Global Id: T0603708316	1303 WESTERN AVE. S.	SSW 1/4 - 1/2 (0.376 mi.)	K42	66
KINGSLEY AUTO TEXACO Status: Completed - Case Closed Facility Id: 900050061 Status: Remediation Plan Global Id: T0603700468 Global ID: T0603700468	***3401 W 8TH ST***	***NNE 1/4 - 1/2 (0.385 mi.)***	***43***	***69***
ECONO LUBE-N-TUNE Status: Open - Eligible for Closure	3451 OLYMPIC BLVD.,	W 1/4 - 1/2 (0.406 mi.)	M45	80

Global Id: T0603725149

JUN CHUL PARK	***801 S WESTERN AVE***	***NNW 1/4 - 1/2 (0.412 mi.)***	***L46***	***83***
Status: Open - Remediation Facility Id: 900050052 Status: Pollution Characterization Global Id: T0603700467 Global ID: T0603700467				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOSCO S.S. #S1788	***3481 OLYMPIC BLVD W***	***W 1/4 - 1/2 (0.458 mi.)***	***M47***	***95***
Status: Completed - Case Closed Facility Id: 900190152 Status: Leak being confirmed Global Id: T0603700625 Global Id: T0603721365 Global ID: T0603700625				

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 03/14/2016 has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAUSD	***2957 OLYMPIC BLVD. W***	***E 1/4 - 1/2 (0.345 mi.)***	***I36***	***55***
Facility Status: Open - Inactive Global Id: T0603741009				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 03/14/2016 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAL AUTO REPAIR CENT Facility Id: 25140	3225 W OLYMPIC BLVD	WNW 0 - 1/8 (0.070 mi.)	B8	15
MOBIL SERVICE STATIO Facility Id: 25145	3309 W OLYMPIC BLVD	W 1/8 - 1/4 (0.166 mi.)	F24	36

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there is 1 WMUDS/SWAT site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KINGSLEY-OLYMPIC	3101 WEST OLYMPIC	E 1/8 - 1/4 (0.126 mi.)	D18	22

Local Lists of Hazardous waste / Contaminated Sites

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 05/02/2016 has revealed that there is 1 SCH site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOBART ELEMENTARY SC Facility Id: 19650013 Status: Certified	***3336 SAN MARINO STRE***	***NNE 1/8 - 1/4 (0.143 mi.)***	***E20***	***25***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 6 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALKER BROTHERS INC Status: A Tank Status: A Comp Number: 2735	***1012 S OXFORD AVE***	***W 0 - 1/8 (0.065 mi.)***	***B5***	***10***
WALKER BROS INC Status: A Comp Number: 8270	3225 W OLYMPIC BLVD	WNW 0 - 1/8 (0.070 mi.)	B9	16
WALKER BROS AMC INC Status: A	***3260 W OLYMPIC BLVD***	***W 0 - 1/8 (0.091 mi.)***	***B14***	***19***

Comp Number: 6209

DAVID TAN Status: A Tank Status: A Comp Number: 2053	***3309 W OLYMPIC BLVD***	***W 1/8 - 1/4 (0.166 mi.)***	***F25***	***36***
C L PECK Comp Number: 6911	***928 S WESTERN AVE***	***NW 1/8 - 1/4 (0.222 mi.)***	***28***	***40***

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN AUTOBODY Status: A Comp Number: 4259	***1201 S WESTERN AVE***	***SW 1/8 - 1/4 (0.247 mi.)***	***G31***	***44***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALKER BROTHERS INC YANG SOO KIM Facility Id: 00000039794	***1012 S OXFORD AVE*** 3309 W OLYMPIC BLVD	***W 0 - 1/8 (0.065 mi.)*** W 1/8 - 1/4 (0.166 mi.)	***B5*** F23	***10*** 35

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 5 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WALKER BROTHERS INC Facility Id: 19055534 Status: A	***1012 S OXFORD AVE***	***W 0 - 1/8 (0.065 mi.)***	***B5***	***10***
WALKER BROS AMC INC Facility Id: 19015796 Status: A	***3260 W OLYMPIC BLVD***	***W 0 - 1/8 (0.091 mi.)***	***B14***	***19***
DAVID TAN Facility Id: 19002110 Status: A	***3309 W OLYMPIC BLVD***	***W 1/8 - 1/4 (0.166 mi.)***	***F25***	***36***
C L PECK Facility Id: 19020317 Status: A	***928 S WESTERN AVE***	***NW 1/8 - 1/4 (0.222 mi.)***	***28***	***40***

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN AUTOBODY Facility Id: 19032162 Status: A	***1201 S WESTERN AVE***	***SW 1/8 - 1/4 (0.247 mi.)***	***G31***	***44***

Other Ascertainable Records

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, and dated 02/08/2016 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RUTLEYS CLEANERS, WO EPA Id: CAL000410978 EPA Id: CAL000006249	***3333 W OLYMPIC BL***	***W 1/8 - 1/4 (0.234 mi.)***	***29***	***41***

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 5 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
INTERNATIONAL AUTO H Reg Id: 2506	1012 OXFORD	W 0 - 1/8 (0.065 mi.)	B4	10
ROTEX DEVELOPMENT/TR Reg Id: 900190016	3411 OLYMPIC	W 1/4 - 1/2 (0.351 mi.)	J38	59
EXXON SERVICE STATIO Reg Id: 900060025	***2950 OLYMPIC BLVD W***	***E 1/4 - 1/2 (0.367 mi.)***	***I39***	***59***
KINGSLEY AUTO TEXACO Reg Id: 900050061	***3401 W 8TH ST***	***NNE 1/4 - 1/2 (0.385 mi.)***	***43***	***69***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOSCO S.S. #S1788 Reg Id: 900190152	***3481 OLYMPIC BLVD W***	***W 1/4 - 1/2 (0.458 mi.)***	***M47***	***95***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk

Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 6 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	3200 W OLYMPIC BLVD	WNW 0 - 1/8 (0.011 mi.)	1	8
Not reported	3225 W OLYMPIC BLVD	WNW 0 - 1/8 (0.070 mi.)	B10	16
WALKER BROS	3250 W OLYMPIC BLVD	W 0 - 1/8 (0.071 mi.)	B11	17
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
Not reported	3130 W OLYMPIC BLVD	E 0 - 1/8 (0.068 mi.)	C7	15
Not reported	1050 S HARVARD BLVD	ESE 0 - 1/8 (0.072 mi.)	12	17
TSUTSUI H R	1001 S KINGSLEY DR	E 0 - 1/8 (0.123 mi.)	D17	22

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 4 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

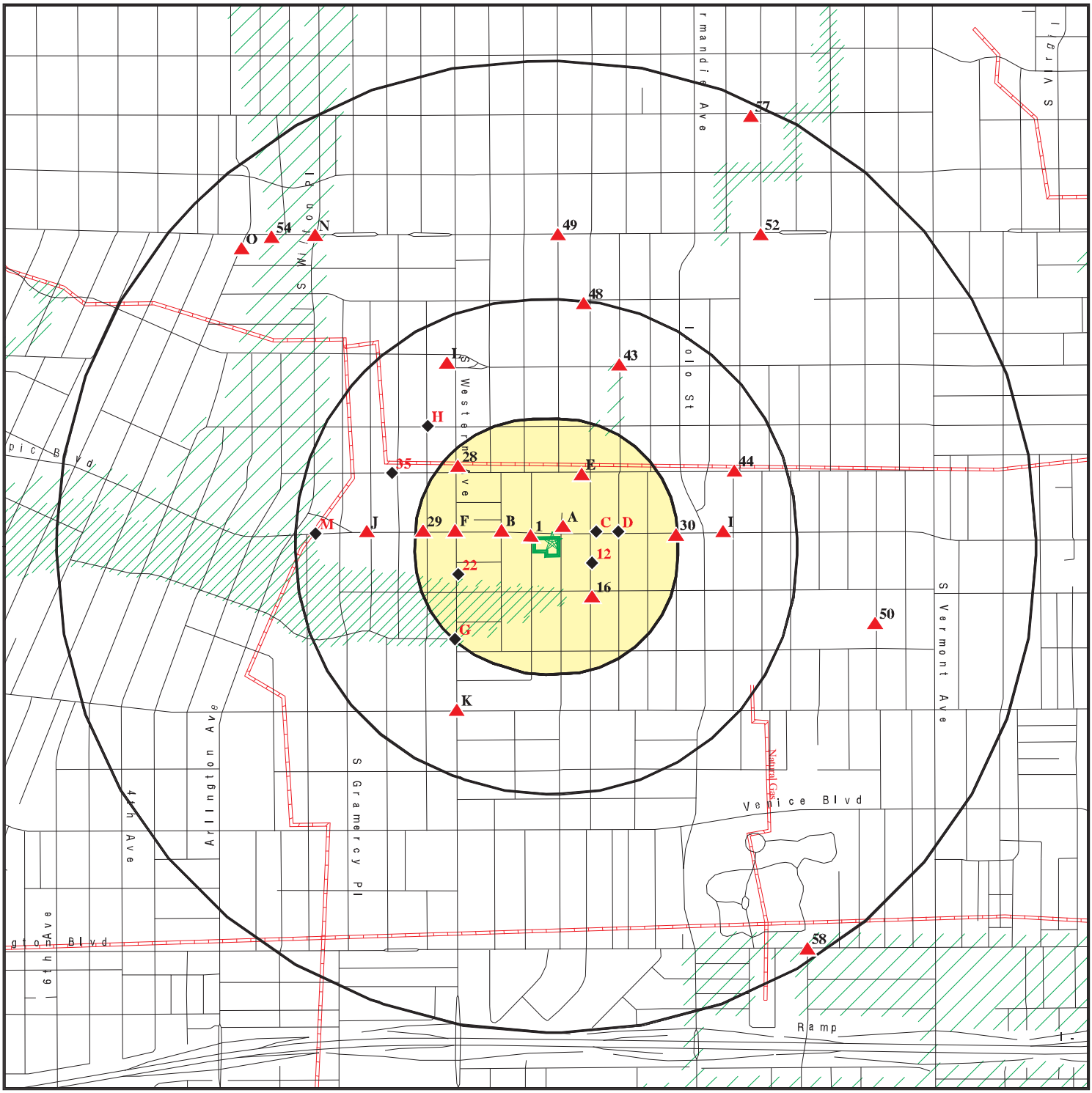
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1026 S OXFORD AVE	WSW 0 - 1/8 (0.066 mi.)	B6	15
Not reported	1106 S HARVARD BLVD	SE 0 - 1/8 (0.110 mi.)	16	22
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
HOWE H M	3138 W OLYMPIC BLVD	ENE 0 - 1/8 (0.055 mi.)	A3	10
WONG K F	3112 W OLYMPIC BLVD	E 0 - 1/8 (0.100 mi.)	C15	21

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 5 records.

Site Name	Database(s)
MANUAL ARTS NEW ELEMENTARY SCHOOL	ENVIROSTOR, SCH
LOS ANGELES PRIMARY CENTER NO. 5	ENVIROSTOR, SCH
HOBART/WILTON PRIMARY SCHOOL NO. 1	ENVIROSTOR, SCH
CENTRAL LOS ANGELES MIDDLE SCHOOL	ENVIROSTOR, SCH
LOS ANGELES ELEMENTARY SCHOOL NO.	ENVIROSTOR, SCH

OVERVIEW MAP - 4681422.2S

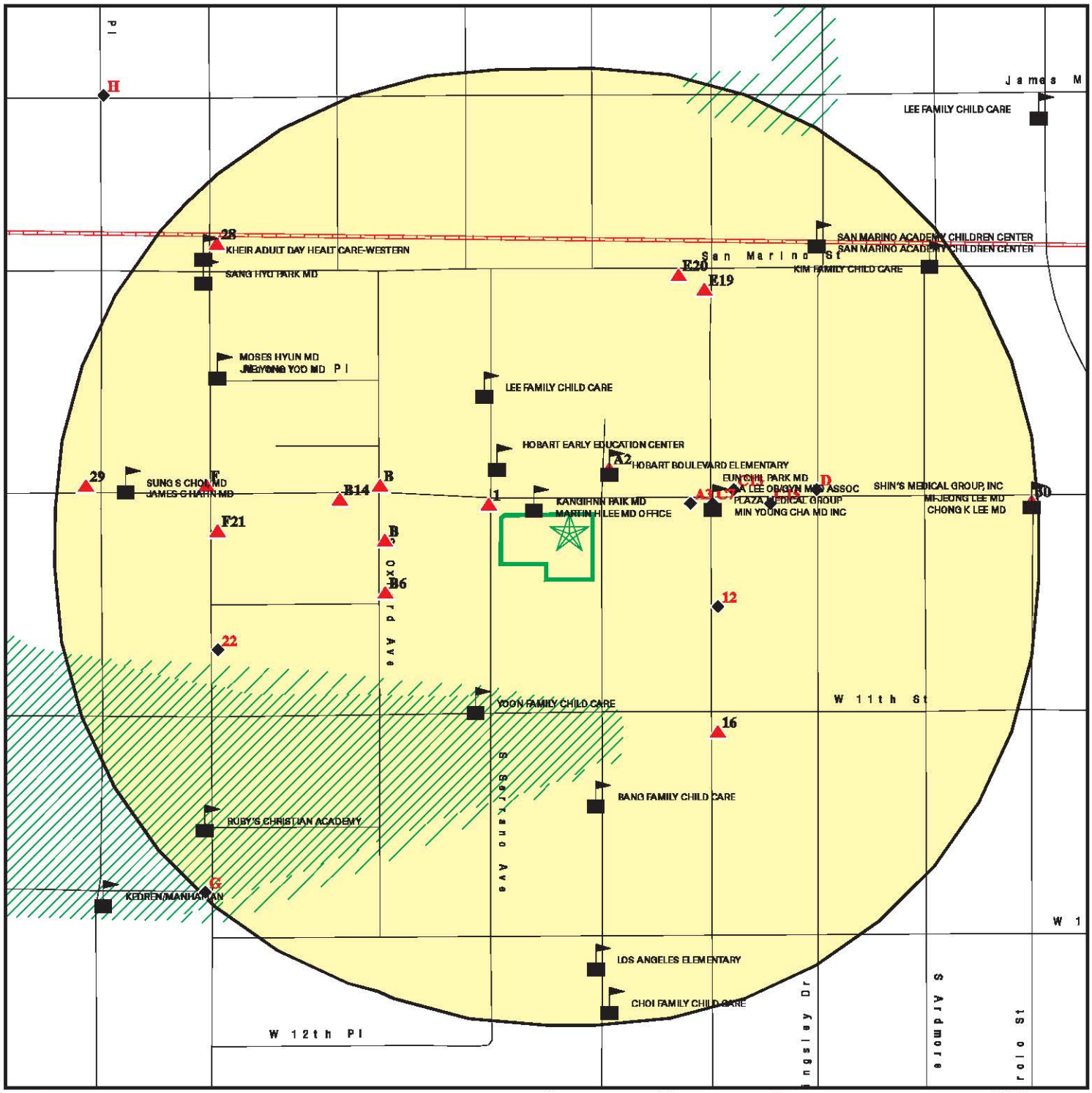


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Choi Bo Sung Inc ADDRESS: 3170 West Olympic Boulevard Los Angeles CA 90006 LAT/LONG: 34.052325 / 118.305551	CLIENT: Gabriel Environmental Group CONTACT: Hani Gabriel INQUIRY #: 4681422.2s DATE: July 22, 2016 1:48 pm

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DETAIL MAP - 4681422.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Choi Bo Sung Inc	CLIENT: Gabriel Environmental Group
ADDRESS: 3170 West Olympic Boulevard Los Angeles CA 90006	CONTACT: Hani Gabriel
LAT/LONG: 34.052325 / 118.305551	INQUIRY #: 4681422.2s DATE: July 22, 2016 1:51 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250		3	6	NR	NR	NR	9
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	1	5	10	NR	16
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	10	NR	NR	10

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	1	NR	NR	1
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	1	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	1	0	NR	NR	1
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
AOCONCERN	1.000		0	0	0	0	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	1	NR	NR	NR	1
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		3	3	NR	NR	NR	6
HIST UST	0.250		1	1	NR	NR	NR	2
CA FID UST	0.250		2	3	NR	NR	NR	5
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	1	NR	NR	NR	1
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	4	NR	NR	5
LOS ANGELES CO. HMS	0.001		0	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
LA Co. Site Mitigation	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		6	NR	NR	NR	NR	6
EDR Hist Cleaner	0.125		4	NR	NR	NR	NR	4
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	21	19	20	10	0	70

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

APPENDIX 16.7

SPECIAL CONTRACTUAL CONDITIONS

CONTRACT FOR SERVICES
GABRIEL ENVIRONMENTAL GROUP

I hereby authorize Gabriel Environmental Group (GEG) to proceed with the project (Phase I ESA) on properties addressed as follows: 3170 & 3188 W. Olympic, 1010, 1014 & 1020 S. Serrano and 1015 & 1021 S. Hobart, Los Angeles, CA. The cost of the update report is $1,300 with a two week turnaround period.

I understand that the Scope of Work is based on a limited investigation(s) of conditions as they existed at the time of such investigation(s), and that the Scope of Work may change as new information is obtained before or during the investigative process. Further, the conclusions in an environmental consulting report are based on the findings of the investigation described in an industry accepted or specified scope. An assessment can not absolutely conclude that a site does not contain hazardous materials inside structures or on its surface, in cavities or in its subsurface or any such materials have not impacted the condition of the site. As long as the assessment is conducted properly and within standards and/or regulations, and all due considerations are made, a degree of assurance can be achieved. The degree of assurance is determined by the amount of available information, scope of the assessment and complexity of analyses performed. An absolute warranty can not be expressed or implied that no environmental liabilities exist on the site.

NES does not represent that the site referred to herein contains hazardous or toxic substances or other latent conditions beyond those observed during the site assessment. NES does not assume responsibility for the discovery of any special resources, nor does it assume responsibility for the elimination of hazards or adverse conditions that may cause accidents, injuries, damage, client liabilities, or environmentally adverse conditions.

During the survey, only materials readily accessible or requested to be analyzed by the client will be evaluated. Any materials not readily accessible and not assessed in this survey should be evaluated if and when they are located during building renovation and demolition.

The report will be prepared for the sole and exclusive use of the clients and their representatives, and may not be dispersed, disclosed to, or relied upon, in whole or in part, by any other persons or entities without the prior written consent of NES.

Payment: I understand that Payment is due and payable 30 days upon receipt of Invoice from NES. Should my project entail work progress funds; these funds will be paid as Invoiced.

Delinquent Accounts: The customer agrees to pay all reasonable expenses incurred by NES in collecting or attempting to collect the amounts that the customer owes NES under this Authorization, including court costs and reasonable attorney's fees.

Warranty and Limitation on Consultant's Liability: Consultant's work will be performed, its findings obtained, and its reports prepared in accordance with this Agreement and with generally accepted procedures, standards, and industry practices. Client agrees that the maximum liability of Consultant, whether under contract or negligence, shall be limited to the total amount of the fee paid to Consultant under the proposal. This warranty is in lieu of all other warranties or presentations, either expressed or implied. Client and Consultant agree that the sum stipulated in the proposal reflects these warranties.

Client Signature: _____ Date: 7/21/16

Client Printed Name: Kyoung Lan Choi

NES Representative Signature: _____ Date: _____

Printed Name: _____

APPENDIX 16.8

RESUMES

Hani W. Gabriel, REM, EA, MSME. Licensed Asbestos Consultant, Environmental Professional

EDUCATION

M.S. Mechanical Engineering, CSULB, Long Beach, California - November 1988

B.S. Engineering, University of Redlands, Redlands, California - December 1985

EXPERIENCE

General Manager/Environmental Professional, Registered Environmental Manager, Licensed Asbestos & Mold Consultant, National Environmental Services/Gabriel Environmental Group - March 1999 – March 2013

- **Responsible for running mid-size environmental consulting operation providing services nationwide; clients consist of Banks, Lending Institutions, CDCs, REITs, Funds, investors, developers, property management companies, City governments, County governments, School Districts, Colleges/Universities and Hospitals**
- **14 years experience conducting environmental investigations/assessments and preparing reports (Phase Is, Phase IIs, Phase IIIs, Closure Requests, Wetlands Studies, EIRs, Asbestos, Mold & Lead Surveys) at over 8,500 properties throughout the Continental U.S.**
- **Conduct and prepare RSRAs, Transaction Screens, Phase I and Phase II Environmental Site Assessments (per AAI/ASTM standards), conduct remediation and corrective projects/activities**
- **Conduct and prepare Vapor Intrusion Assessments (VIAs)**
- **Conduct and prepare environmental impact statements and reports**
- **Conduct and prepare CEQA and NEPA documentation and reports**
- **Conduct and prepare reports, design abatement specifications and manage abatement projects for mold (Indoor Air Quality), Asbestos and Lead Based Paint**
- **Perform work as consulting Health & Safety Engineers for several property management companies (apartment complexes, medical facilities, office complexes and commercial facilities), managing all environmental matters pertaining to air quality (Title V, RECLAIM), water/wastewater discharge (NPDES) and waste**
- **Interact with County, Fire and State agencies responsible for oversight of soil impacts, groundwater impacts, underground storage tank removal, focused subsurface assessments, corrective/remediative activities and closure for leaking UST sites and voluntary cleanup sites (including the CA Regional Water Quality Control Board and TX Commission on Environmental Quality)**
- **Interact with State agencies responsible for oversight of asbestos, mold and lead surveys, abatement and disposal (including the CA EPA Air Resources Board, CA South Coast Air Quality Management District and TX Department of Health Services)**
- **Prepare Environmental Policy documents and manuals for lender, bank and institutional clients, conduct training on environmental policies**
- **Prepare and conduct Awareness Training courses on Asbestos, Mold and Lead**
- **Conduct and prepare Wetlands studies and Geologic studies**

President/Executive Officer, Unovate Environmental Services/Gabriel Environmental Group - March 1999-November 2009

- **Was responsible for running entire environmental consulting operation providing services nationwide with a full time staff of 10 persons**
- **Conducted Phase I and Phase II inspections (subsurface investigations, conducted corrective activities, prepared reports, conducted and prepared reports for mold surveys, asbestos surveys and lead surveys**

Redevelopment Manager, City of Glendale, AZ - December 1996-March 1999

- **Responsible for all redevelopment activity in the third largest city in the Phoenix Metropolitan area, the fourth largest in the State; population of over 200,000**
- **Worked on the expansion of the redevelopment areas by studying a 9 square mile area surrounding the core & formulating a redevelopment vision plan**
- **Worked on the implementation of redevelopment plans for 2 neighborhoods surrounding the downtown**
- **Attracted the first bed & breakfast to the downtown (10 units) and presently working on attracting a Marriott or Hilton hotel to accommodate the needs of the City's Civic Center**
- **Relocated the world's largest Bead Museum from Prescott to downtown Glendale**
- **Obtained a $425,000 state grant for the renovation of the City's landmark, a 100 year old sugar beet factory, located at the entry to the downtown, to be renovated as part of a newly created 20 acre entertainment district**
- **Worked on the attraction of a 16-20 screen Cineplex to the entertainment district downtown**
- **Assisted in the redevelopment of a 550,000 SF mall (on 54 acres) in the core of the City**
- **Managed all downtown development projects and programs (Downtown Facade)**
- **Formulated and presently implementing a residential infill program in the core**

- **Prepared the city's first home ownership assistance program, the Dream Maker, and working on additional home ownership incentive programs**
- **Prepared several development agreements with developers in the redevelopment area to provide for public improvements, sales tax sharing and other forms of assistance**
- **Developed the work program and prepare the budget for the redevelopment division**

Economic Development Director, City of Colton, CA - May 1993-August 1996

- **Responsible for all activities relating to redevelopment, economic development, business attraction and retention and the promotion of affordable housing**
- **Managed a staff of 12 persons and redevelopment activities in 7 redevelopment project areas**
- **Responsible for the creation of the 7th redevelopment project area in the city**
- **Organized, prepared and implemented the redevelopment budget for the Agency**
- **Negotiated several owner participation, disposition and development and executive negotiating agreements**
- **Prepared agendas and staff reports and presented all reports to the Agency Board**
- **Created and implemented the downtown facade program and downtown improvement program**
- **Attracted or retained over 750,000 square feet of commercial, office and industrial uses**

Principal Planner, City of Colton, CA - September 1990-May 1993

- **Responsible for all activities relating to the Planning, Code Enforcement and Business License Divisions with a full staff of 8 persons**

Associate/Assistant Planner, City of Colton, CA - January 1989-September 1990

- **Performed planning related functions including preparing reports, providing planning information, plans checking for the planning division and working with historic preservation**

MEMBERSHIPS/CERTIFICATIONS

- **Registered Environmental Manager – National Registry of Environmental Professionals**
- **Environmental Assessor I – State of California Department of Toxic Substance Control**
- **Certified Mold Consultant/Remediation Contractor**
- **Certified Indoor Air Quality consultant**
- **AICP - American Institute of Certified Planners, June 1993**
- **Member of the California Redevelopment Association (also a Committee Member of the Redevelopment Institute for the CRA), American Economic Development Council, Urban Land Institute, International Downtown Association, International Council of Shopping Centers and National Association of Housing and Redevelopment Officials**

Mary Foote, REM, Licensed Mold Consultant, Licensed Asbestos Consultant, Environmental Professional

EDUCATION

B.S. Microbiology, the University of Washington, Seattle, WA - 1976

- **Completed graduate courses in environmental regulations and in environmental assessments at the University of Hawaii**
- **Completed courses toward a Bachelor of Science Degree in Chemical Engineering, the University of Houston, Houston, TX.**
- **Completed short courses in risk assessment, air pollution control, advanced water pollution control, and GC and HPLC. Completed a geology training course on clastics, carbonates, and stratigraphy at Shell's training center in Houston.**

EXPERIENCE

Mold/Asbestos Project Manager, National Environmental Services/Gabriel Environmental Group - December 2009-Present

- **Responsible for overseeing environmental surveys (asbestos, mold, lead)**
- **Responsibilities include reviewing environmental reports, preparing proposals and cost estimates, scoping projects, and interfacing with clients**

General Operations Manager, Unovate Environmental Services/Gabriel Environmental Group - November 2003-November 2009

- **Responsible for overseeing all environmental services (asbestos, mold, Phase I and Phase II Environmental Site Assessments)**
- **Responsibilities included reviewing environmental reports, preparing proposals and cost estimates, scoping projects, and interfacing with clients**

Project Manager, Envirotest, Ltd., Houston, TX - November 2000-November 2003

- **Performed hundreds of mold investigations for single and multi-family residential and commercial properties in TX, mostly in the Houston area**
- **Prepared proposals and cost estimates**
- **Provided expert witness consulting services for litigated structures**

Brewer Environmental Industries, Inc. (BEI), Honolulu, Hawaii - 1987 –1992

- **Responsible for the formulation of environmental policy, goals, and objectives for the largest chemical company in Hawaii**
- **Wrote an environmental compliance program for the company**
- **Responsible for identifying, prioritizing, and managing all in-house environmental projects and programs (including facility audits, facility modifications, site cleanups, permits, waste disposal, etc). Assessed the company's environmental risks and liabilities**
- **Responsible for emissions inventory reporting for manufacturing and storage facilities on five islands**
- **Oversaw the preparation of cost estimates for capital budgeting**
- **Provided technical support in emergency response situations**
- **Hired and worked with outside counsel, as needed, to negotiate consent orders and permit parameters**
- **Monitored and targeted key legislation affecting BEI. Lobbied legislators and wrote and presented testimony**
- **Represented C. Brewer (BEI's parent company) on the Environmental Standards Committee of the Hawaii Sugar Planters Association (HSPA).**
- **Established and managed the Brewer Environmental Services Division (BESD) to provide environmental consulting services to outside clients, including water quality studies; underground storage tank closures/investigations; site assessments for property transactions; facility audits; remedial investigations; feasibility studies; remedial design; environmental permit acquisitions; golf course assessments and monitoring plans; regulatory compliance; hazardous waste management; field sampling; groundwater monitoring; and pilot scale treatability studies**
- **For BESD, was responsible for: departmental policy and program development; overall coordination of all services; strategic and long and short range planning efforts; capital and operating budgets, business plan and marketing plan preparation; and revenue and profit projections. Directed marketing/sales activities**
- **Directed the Honolulu lab. This lab did new product research and development and reformulated proprietary BEI products. It also performed QA/QC testing oversight on many of the 5000 items that BEI manufactured, blended, or sold**

- **Formerly, managed the Papaikou lab, an environmental service and tissue and soil lab where inorganic, organic, and microbial analyses were performed on ground and surface water, wastewater, solid waste, hazardous waste, petroleum products, feed, food, other crop tissue, and many other matrices. Tripled revenue and quadrupled profit**

Brown & Root, Inc., Houston, TX - 1980-1987

- **Served as Industry Representative for the Civil Engineering Department, a 225 person industry group consisting of civil, structural, environmental, architectural, and HVAC/plumbing personnel. Was responsible for proposal preparation and for reporting of business development activity for this entity**
- **Responsibilities included: preparation of proposals, bids, SF's 254 and 255, and business development presentations for civil and environmental engineering; generation of short and long range strategic plans for department and corporate business development; and development of input for the Halliburton Annual Report**
- **As a scientist in the Environmental Department, designed the dust collection system for nine air pollution systems for a major lime plant expansion. Prepared vendor inquiry packages; reviewed drawings; prepared technical bid evaluations; and made equipment recommendations. Served as air pollution and health technical consultant to the Metropolitan Transit Authority (MTA) Community Relations Department. Analyzed the impact of a proposed bus maintenance facility on health and environment including wind dispersion data, types and quantities of emissions, and existing pollution levels at the site. Determined permit compliance requirements for hazardous and toxic materials identified under 40 CFR Part 261. Helped lay out the waste treatment facilities for a large cattle distribution center. Conducted a feasibility study for a pulp and paper mill incinerator.**

Shell Development Company, Houston, TX - 1976-1980

- **Conducted source rock characterization studies using gas chromatography, liquid chromatography, and organic extraction techniques. Analyzed ocean bottom samples (for oil plays) using ultraviolet spectrometry for oil plays. Developed high pressure liquid chromatography separation techniques for aromatic hydrocarbon fractions**

The University of Washington, Seattle, WA - 1972-1976

- **Four years of medical and research laboratory experience in immunology and chemistry. Responsible for all aspects of various research projects, including the synthesis of a chemical compound using dialysis, column chromatography, spectrometry, and electrophoretic techniques. Developed a microculture method for growing blood cells from NZB mice. Performed RIA's on blood from patients with hypertension problems**

Children's Orthopedic Hospital, Seattle, WA - 1972-1973

- **Inoculated media. Isolated and identified pathogenic and nonpathogenic microorganisms. Performed antibiotic sensitivity testing. Prepared growth media**

PUBLICATIONS

- **The Effect of Sludge Residence Time on Biotreater Activity; WRC-MRS; Shell Development Company; April 1980.**

OTHER

- **Secretary of the Irish Setter Club of TX, Inc. from 1999 to the present**
- **Director, Hawaii Irish Setter Club, 1991**
- **Secretary, Environmental Association of Hawaii, 1991.**
- **Secretary-Treasurer of the Hawaii Section of the Institute of Food Technologists, 1990 - 1991**
- **In 1987, was on the Harris County Municipal Utility District No. 107's Board of Directors. The Board oversaw financing, developing, and operating water and sanitary sewer systems for a 500 home community with commercial users**

June 30, 2016

PROJECT NO. S-1652

GEOTECHNICAL INVESTIGATION REPORT

Site of Proposed Mixed-Use Building
3170 W. Olympic Blvd.
Los Angeles, California
(Tract: Pellissier Tract, Lot: 9-12, Portion of lot 13 and Lot 14, and 15-18)

DON SOILS ENGINEERING CO.

DON SOILS ENGINEERING, CO
CONSULTING GEOTECHNICAL ENGINEERS
2225 S. LA BREA AVE. LOS ANGELES, CA900016
TEL. (323) 936-6763 FAX. (323) 936-6581

June 30, 2016

Project No.: S-1652

Archeon Group
3530 Wilshire Blvd.
Los Angeles, CA 90010

Subject: Geotechnical Investigation,
Proposed Mixed-Use Building
3170 W. Olympic Blvd.
Los Angeles, California

Gentlemen:

Submitted herewith is our geotechnical report summarizing the results of the subject investigation we performed at the site of your proposed mixed-use building.

Based on the findings of this investigation we conclude that the site is suitable for the proposed construction provided that the specific recommendations set forth herein are implemented. The proposed structure may be supported by conventional spread footings.

The accompanying report presents relevant conclusions and recommendations for preliminary planning and foundation design.

We appreciate the opportunity to be of service on this project and we look forward to serving you again. If any questions arise concerning the interpretation of this report, please feel free to call.

Very truly yours,

DON SOILS ENGINEERING, CO.
Donghyun Yim
Civil Engineer



1. INTRODUCTION

This report presents the results of a geotechnical investigation performed at the site of your proposed mixed-use building to be constructed 3170 W. Olympic Blvd. in the Korea Town District of the City of Los Angeles, California.

The purpose of this investigation was to determine the nature and engineering properties of the subsurface materials and to provide recommendations for the design and construction of foundations, slabs and earthwork.

The locations of our borings are shown with respect to the property lines and proposed structure depicted on Drawing A.

It is understood that the proposed development will consist of a new 7-/8-story mixed-use building over two-/ three-level of subterranean parking (see Drawing A&B).

Structural loads are not decided yet. However, the structural load will be on the order of 10.0 kips per lineal foot and 1000 kips for square footings, respectively.

2 SCOPE OF WORK

Our investigations included subsurface field exploration, soil sampling, laboratory testing, engineering analyses, site evaluation and preparation of this report. The scope of work included the followings tasks:

- Four (4) test borings were drilled to depths of ranging from 30 to 60 feet below the existing ground surface. The approximate locations of the test borings are shown on Drawing A, Plot Plan and Boring Locations. Subsurface conditions encountered in the test borings were logged at the time of drilling. Relatively undisturbed samples of the subsurface materials were obtained from the borings at

various intervals for laboratory testing. More detailed descriptions of the field exploration procedures and boring summaries are presented in Appendix A.

- Laboratory tests were conducted on selected soil samples. The tests included moisture-density determinations, shear strength tests, consolidation tests and expansion tests. Descriptions and results of the laboratory tests are presented in Appendix B.

- Engineering analyses to evaluate the results of the field exploration, laboratory testing, earth work and development of recommendations for foundations.

- The findings and recommendations developed during our site investigation are documented in this written report

3. EXISTING SITE CONDITIONS

The subject site is located at the southeast corner of the junction of Olympic Blvd. and Serrano Ave. in the Korea Town District of the City of Los Angeles. The approximate site location is shown on the Vicinity Map, Figure A.

At the time of our field investigation, the site was occupied by a 1-story commercial building at north and three 1-story residences at south of the site. These structures will be demolished for the proposed development.

The site is almost rectangular in shape, measuring 270 feet wide along Olympic Blvd. and 189 feet deep. The subject site is situated on mild down-slope to the east. The total relief on the site is approximately 6.7 feet.

The lot is bounded to the south by 1-/2-story residences, to the west by Serrano Ave., to the north by Olympic Blvd. and by Hobart Blvd. along east property line.

3.1 Subsurface Material

The subsurface material encountered at the test boring locations consisted of undocumented fill overlying native soils.

The undocumented fill consisted of brown, moderately compact, silty sand. The depth of this unit ranged to 1 foot.

Native soils underlying the existing fill consist of brown to red brown to gray brown to light brown to gray white to green, firm to dense to dense, scattered gravels, clayey to slightly clayey to trace clay, sand to the depth explored.

More detailed descriptions of the subsurface materials encountered are shown in the logs of borings at Plate A-1 through A-11.

3.2 Groundwater

Groundwater was encountered at 57 feet below surface during the test borings. According to Open-file Report 98-17, historical shallow groundwater depth is approximately 20 feet below surface (See Figure C). However we did not find any indications of shallow groundwater, such as high moisture content, to 50 feet below surface.

3.3 Liquefaction Potential

From the State of California, Seismic Hazard Zones Official Map: Hollywood Quadrangle released March 25, 1999, the site is not located in the area as delineated by the State Geologist to have potential of soil liquefaction during strong earthquakes (Figure B). Due to dense deposit, the soil liquefaction potential at the subject lot is considered to be negligible.

3.4 Subsurface Variations

Based on the results of our subsurface exploration and experience, variations in the continuity and depth of subsurface deposits should be anticipated in interpolating or extrapolating subsurface soils conditions between or beyond test borings.

4. EVALUATION AND RECOMMENDATIONS

4.1 General Evaluation

Based on the evaluation of the site conditions, the proposed structure may be supported by means of spread footings bearing into firm natural soils in accordance with the following recommendations.

4.2 Spread Footing

Shallow footings may be designed for a bearing value of 5,000 pounds per square foot and should be a minimum of 12 inches in width, 24 inches in depth below the lowest adjacent grade, and 24 inches into the recommended bearing material. These values may

be increased by 400 psf for each additional foot of embedment over 24 inches and 400 psf for each additional foot of width over the minimum, to a maximum of 7,000psf.

The bearing values are for dead plus live load and may be increased by one-third for momentary wind or seismic loads.

The weight of the concrete in the footings may be taken as 50 pounds per cubic foot and weight of the soil backfill may be neglected when determining the downward load on the footings.

The edge pressure of any eccentrically loaded footing should not exceed the bearing values recommended for either permanent or momentary loads.

Continuous footings shall be reinforced with at least four continuous No. 4 reinforcing bars, two placed near the bottom and the other two placed near the top.

Settlements of footings up to 3 feet wide continuous and 7 feet square are not expected to exceed 0.75 of an inch under the recommended fully applied bearing pressure.

Differential settlements between adjacent footings are not expected to exceed 1/4 of an inch.

4.3 Lateral Design

Resistance to lateral loading may be provided by friction acting at the base of the footing and by passive earth pressure against the sides of the footing.

Friction between the base of the footing and the underlying soils may be assumed as 0.4 times the dead load. The allowable passive earth pressure computed as 350 psf per foot

of depth below lowest adjacent subgrade, to a maximum of 7,000 psf. Friction and passive pressure may be combined provided that the latter is limited to two-thirds of the allowable.

4.4 Floor Slabs on Grade

The firm natural soil or compacted fill is suitable for structural support. Any loose soil disturbed by removal of structural elements and piping, etc. should be removed and replaced with properly compacted fill. If the recommendations presented herein are followed, the floor slab may be designed in a normal manner with steel reinforcing determined by the structural engineer.

The subsurface soils at floor level consist primarily of slightly clayey to trace clay sand (expand index=19)and clayey sand (expansion index=39) at basement level. Expansion testings fall within the very low to low expansion category. However, in order to minimize cracking of concrete slab on grade, it is recommended that slabs-on-grade be a minimum of 4 inches thick and reinforced with at least No. 4 rebar, 16 inches on center each way.

A moisture barrier beneath slabs-on-grade, preferably consisting of a water-proof vapor barrier such as a polyethylene membrane of at least 10 mils in thickness, protected with at least one inch of clean sand over and under the membrane, is recommended in areas where concrete floor slabs will be covered with moisture sensitive coverings. The membrane should be properly lapped and sealed.

4.5 Seismic Design Criteria

Based on the Los Angeles Building Code, design information as follows:

Short Period Map Value Ss= 2.245g

1.0 sec Period Map Value S_1=0.793 g

Seismic Category E

The Site Class D

Value of Site Coefficient Fa=1.0

Value of Site Coefficient Fv=1.5

SMs = Fa x Ss = 2.245

SM1=Fv x S_1= 1.190

SDs =2/3 x SMs =1.496

SD1=2/3 x SDs =0.793

4.6 Retaining Wall

Lateral Pressure

Based on the calculation on Plate D-1 retaining wall analyses, it is recommended that the basement walls be designed to resist a trapezoidal distribution of lateral earth pressure. The recommended pressure distribution, for the case where the grade is level behind the walls, is illustrated below with the maximum pressure equal to 39 H pounds per square foot, where H is the height of the in feet.

Cantilevered (Active) walls to 10 ft high, such as for ramp construction, supporting a level backslope may be designed utilizing a triangular distribution of pressure. It may be designed using equivalent fluid pressure of 30 pounds per square foot per foot of depth (see Plate D-2 and D-3 for calculations).

Even though there is no indication of shallow groundwater, it is considered that historical shallow ground water depth is approximately 20 feet below surface. If permanent drain system is not installed, hydraulic static pressure starting 20 feet below surface, should be considered.

The seismic load can be modeled as a thrust load applied at a point of 0.6H above the base of the wall. The peak ground acceleration was determined to be one-half of two-thirds of the maximum peak ground acceleration Ag=0.827x0.67x0.5=0.277. Earthquake load may be designed using equivalent fluid pressure of 25 pounds per square (see Plate D-1).

Sub-drainage

Building walls below grade should be waterproofed or at least damp proofed, depending on the degree of moisture protection desired.

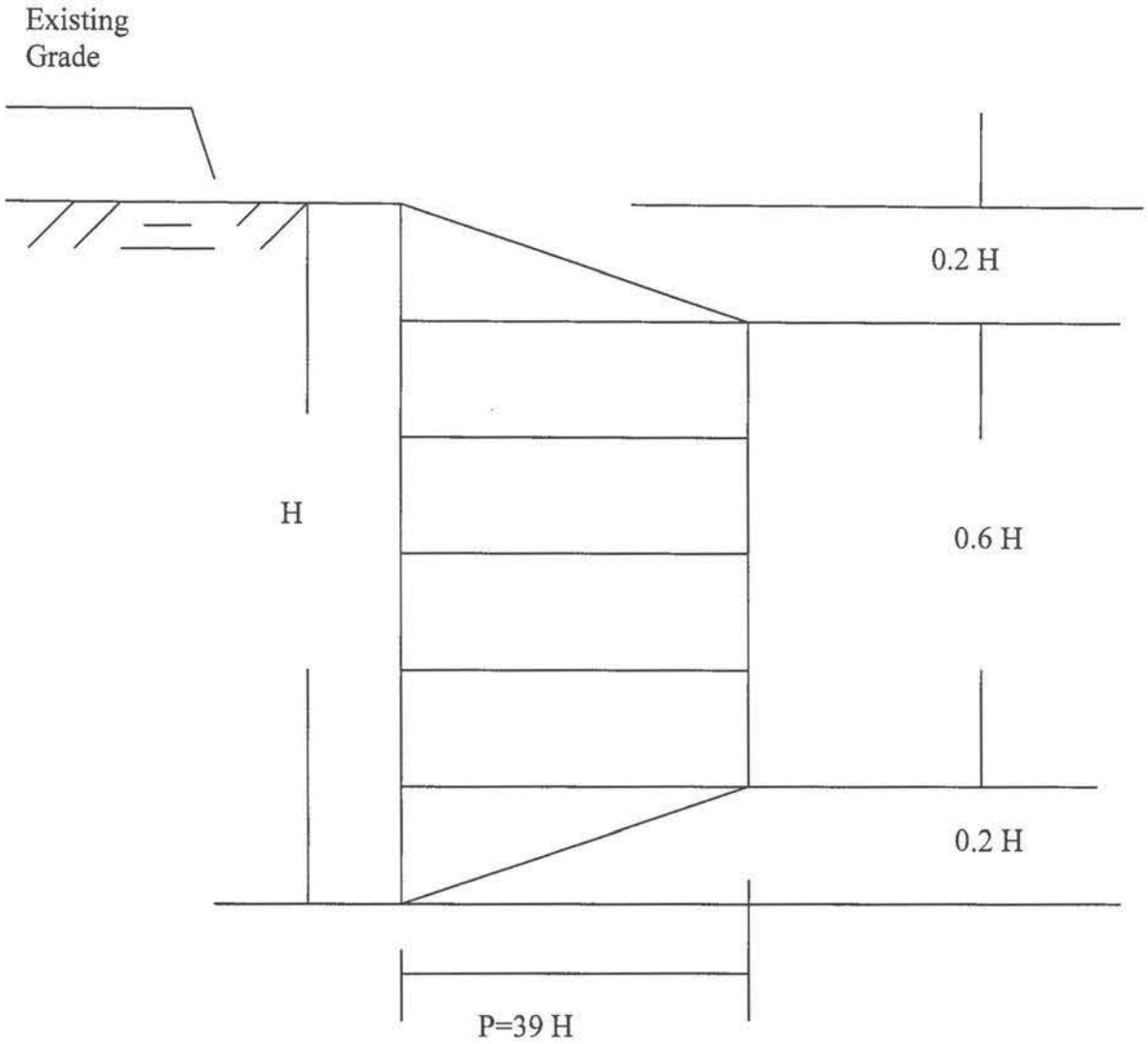
An adequate drainage system should be provided behind the walls to prevent the build-up of hydrostatic pressure. The drainage system may consist of a 4-inch perforated drain pipe, PVC Schedule 40 or ABS SDR-3, encased in two cubic feet per lineal foot of coarse gravel or No. 4 crushed rock placed above and adjacent to the heel of the retaining wall footings.

Also a drainage system consisting of a manufactured drainage composite such as Miradrain along wall with gravel pocket (12"x12"x12") at drain location behind the wall can be usable.

Backfill

Prior to backfilling, the excavated ground between the retaining wall and the temporary cut bank should be cleared of all loose materials, construction debris, etc. Soil backfill

should be compacted by mechanical means to at least 90 percent of ASTM D-1557-12 laboratory standard. In-lieu of mechanical compaction, pea gravel or clean sand vibrated in suitable layers may be employed as backfill. Ideally, the top of two feet of back fill exposed to water infiltration should be consist of non-expansive and fine-grained material that will serve as a relatively impervious soil cover. Otherwise, the surface of the backfill should be mantled with concrete paving.



Any required soil backfill should be mechanically compacted, in layers not more than eight inched in thickness, to at least 90% of the maximum density obtainable by the ASTM Designation D1557-12 method of compaction. Flooding should not be permitted.

Properly compaction of backfill will be necessary to minimize settlement of the backfill and to minimize settlement of overlying walks and paving. The excavated soils may be used for backfill; however, cobbles larger than three inches in diameter should be omitted from backfill to minimize possible damage to the walls and water proofing.

4.7 Temporary Excavations

Temporary excavations to a maximum depth of approximately 32 feet below the existing ground surface including perimeter footing excavation are anticipated for the subterranean parking.

Unsurcharged temporary cuts can be made vertically to a maximum depth of 7 feet without support. Cut deeper than 7 feet shall have upper portion trimmed back to 1H:1V. The opinion expressed above is based on the stability calculation for 7-feet high vertical cuts, presented on Plates D-8 and Plate D-9.

Excavation for the proposed subterranean parking will require shoring to provide a stable excavation due to the depth of the excavation, and the proximity of the adjacent structures and traffic.

Shoring

The method of shoring would consist of steel soldier piles, placed in drilled holes and backfilled with concrete. The following information on the design and installation of the shoring is necessarily general.

Lateral Pressures

For the design of shoring, we recommend the use of a trapezoidal distribution of earth pressure. The recommended pressure distribution, for the case where the grade is level

behind the shoring will be similar to that recommended for design of basement wall that the lateral pressure will be 20H in pounds per square foot, where H is the height of the shoring in feet, and plus applicable surcharges not including in the analysis (see Plate D-4 through D-7).

Cantilevered shoring supporting a level backslope may be designed utilizing a triangular distribution of pressure. Shoring may be designed using equivalent fluid pressure of 25 pounds per square foot per foot of depth, and plus applicable surcharges not including in the analysis

Anchor Design

Tie-back anchors may be used to resist lateral loads. Either friction anchors or belled anchors could be used. However, it has been our experience that friction anchors involve fewer installation problems and provide more uniform support than belled anchors.

For design purposes, it may be assumed that the active wedge adjacent to the shoring is defined by a plane drawn at 60 degrees with the vertical through the bottom of the excavation. Friction anchors would extend at least 20 feet beyond the potential active wedge and to a greater length if necessary to develop the desire capacities.

The capacities of the anchors should be determined by testing of the initial anchors as outlined in a following paragraph. For preliminary design purposes, it may be estimated that drilled friction anchors will develop an average friction value of 600 pounds per square foot. Only the frictional resistance developed beyond the active wedge would be effective in resisting lateral loads. If the anchors are spaced at least six feet on centers, no reduction in the capacity of the anchors need be considered due to group action.

Anchor Installation

The anchors may be installed at angles of 15 to 40 degrees below the horizontal. Caving of the anchor holes, particularly within sand deposits, should be anticipated and provisions made to minimize such caving. The use of special drilling techniques, including hollow stem auger drilling equipment, should be considered to minimize problems due to caving. The anchors should be filled with concrete placed by pumping from the tip out, and the concrete should extend from the tip of the anchor to the active wedge. In order to minimize chances of caving, we suggest that the portion of the anchor shaft within the active wedge be backfilled with sand before testing the anchor. This portion of the shaft should be filled tightly and flush with the face of the excavation. The sand backfill should be placed by pumping; the sand may contain a small amount of cement to facilitate pumping.

Anchor Testing

Our firm should select at least one of the initial anchors for a 24-hour 200% test and four additional anchors for quick 200% tests. The purpose of the 200% tests is to verify the friction value assumed in design. The anchors should be tested to develop twice the assumed friction value. Where satisfactory tests are not achieved on the initial anchors, the anchor diameter and/or length should be increased until satisfactory test results are obtained.

The total deflection during the 24-hour 200% test should not exceed 12 inches. During the 24-hour test, the anchor deflection should not exceed 0.75 inch measured after the 200% load is applied. If the anchor movement after the 200% load has been applied for 12 hours is less than one-half inch, and the movement over the previous 4 hours has been less than 0.1 inch, the 24-hour test may be terminated.

For the quick 200% tests, the 200% test load should be maintained for 30 minutes. The

total deflection of the anchor during the 200% quick test should not exceed 12 inches; the deflection after the 200% test load has been applied should not exceed 0.25 inch during the 30-minute period.

All of the anchors should be pre-tested to at least 150% of the design load; the total deflection during the test should not exceed 12 inches. The rate of creep under the 150% should not exceed 0.1 inch over a 15-minute period in order for the anchor to be approved for the design loading.

After a satisfactory test, each anchor should be locked-off at the design load. The locked-off should be verified by rechecking the load in the anchor. If the locked-off load varies by more than 10% from the design load, the load should be reset until the anchor is locked-off within 10% of the design load.

The installation of the anchors and the testing of the completed anchor should be observed by our firm.

Design of Soldier Piles

For the design of soldier piles spaced at least two diameters on centers, the allowable lateral bearing value (passive value) of the soils below the level of excavation may be assumed to be 350 pounds per square foot per foot of depth, up to a maximum of 7000 pounds per square foot. To develop the full lateral value, provision should be taken to assure firm contact between the solider piles and the undisturbed soils. Structural concrete should be used for the portion of a solider pile that is below the excavation level: lean mix concrete may be used above that level. The fixed point for shoring design might be enough for 3 feet.

The frictional resistance between the solider piles and the retained earth may be used in resisting a portion of the downward component of the anchor load. The coefficient of

friction between the soldier piles and the retained earth may be taken as 0.40. This value is based on the assumption that uniform full bearing will be developed between the steel soldier beam, the lean-mix concrete, and the retained earth. In addition, the soldier piles below the excavation level may be used to resist downward loads. The frictional resistance between the concrete solider piles and the soils below the excavation level may be taken as equal to 600 pounds per square foot.

Lagging

Continuous lagging should be used adjacent to the existing building or traffic load.
Lagging shall be installed every 4-foot of excavation

If the clear spacing between soldier piles does not exceed four feet, lagging between soldier piles could be omitted within the cohesive earth materials. In the less cohesive earth materials such as the sands and gravels, lagging would be necessary. It is recommend that the exposed earth materials be observed by soil engineer to verify the cohesive nature of the earth materials and the area where lagging would be omitted.

The soldier piles and anchor should be designed for the full anticipated pressures. However, the pressure on the lagging will be less due to arching in the soils. We recommend that the lagging be designed for the recommended earth pressure but limited to a maximum value of 400 pounds per square foot.

Deflection

It is difficult to accurately predict the amount of deflection of a shored embankment. It should be realized, however, that some deflection will occur. It is estimated that the deflection could be on the order of half inch at the top of the shored embankment for surcharged area from adjacent structures or traffic, and one inch for non-surcharged area

from adjacent structure or traffic. If greater deflection occurs during construction, additional bracing may be necessary to minimize settlement of the adjacent building and the utilities in the adjacent streets. If desired to reduce the deflection of the shoring, a greater active pressure could be used in the shoring design.

Monitoring

Some means of monitoring the performance of the shoring system is recommended. The monitoring should consist of periodic surveying of lateral and vertical locations of the tops of all the soldier piles and the lateral movement along the entire lengths of selected soldier piles. Also, some means of periodically checking the load on selected anchors may be necessary. We will be pleased to discuss this further with the design consultants and the contractor when the design of the shoring system has been finalized.

4.8 Earthwork

Site grading is expected to consist primarily of excavation of the site for construction of subterranean parking within the proposed construction and utility trenches. Suggested guidelines for backfill, site drainage, and utility trench backfill are presented below:

Backfill

Where backfilling is required, excavated on site sandy fill soils are probably suitable for backfill. Any required soil backfill should be mechanically compacted, in layers not more than eight inches in thickness, to at least 90% of the maximum density obtainable by the ASTM D1557-12 method of compaction. Flooding should not be permitted. Properly compaction of backfill will be necessary to minimize settlement of the backfill and to minimize settlement of overlying walks and paving.

Loose soil, organics, and debris should be removed prior to backfilling. Cobbles larger than four inches in diameter should be omitted from the backfill to minimize possible damage to the walls and waterproofing.

Backfill should be placed and compacted in accordance with the recommended specifications of Appendix C.

Site Drainage: Adequate positive drainage should be provided from the structure to prevent ponding and percolation of water into the soil. The ground immediately adjacent to the foundation shall be sloped away from the building at slope not less than 5 percent for a minimum distance of 10 feet from the structure. If it is not possible due to physical obstruction or property lines, alternative method of diverting water away from the foundation should be provided. Swale might be usable with a minimum 2 % of slope within 10 feet of building foundation. Paved areas within 10 feet of the building foundation shall be sloped a minimum of 2 % away from the building.

Utility Trenches: Buried utility conduits should be bedded and backfilled around the conduit in accordance with the project specifications.

If utility contractors indicate that it is undesirable to use compaction equipment in close proximity to a buried conduit, we would recommend the utilization of lightweight mechanical equipment or shading of the conduit with clean granular material which could be thoroughly jetted in-place above the conduit prior to initiating mechanical compaction procedures. Where conduit underlies concrete slabs-on-grade and pavement, the remaining trench backfill above the pipe should be placed and compacted in accordance with Appendix C.

4.9 Plan Review and Observations During Construction

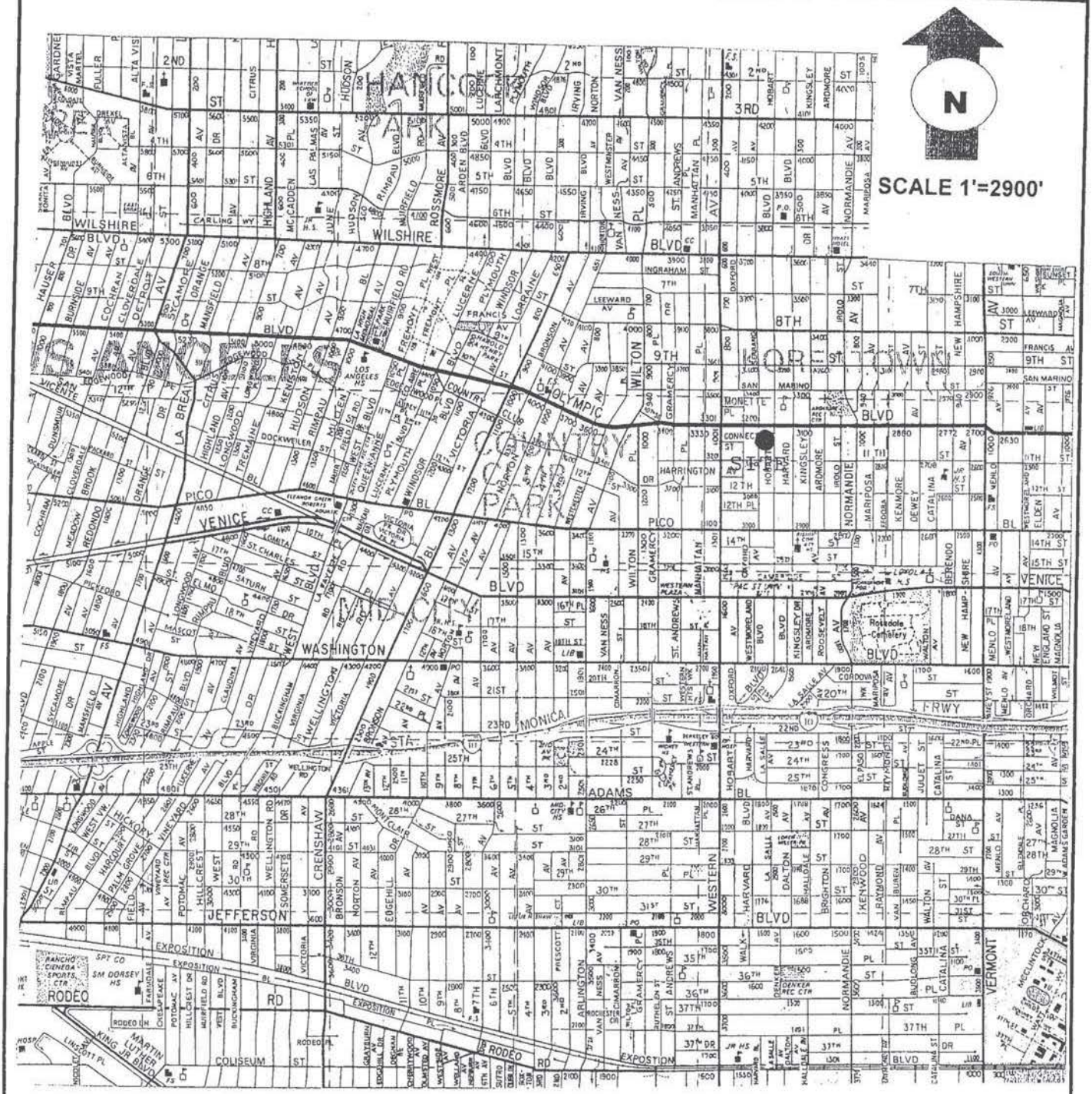
This report has been prepared to aid in the evaluation of this site and to assist the structural engineer in the design of the structure. It is recommended that this office be provided the opportunity to review the final design drawings and specifications to determine if the recommendations of this report have been properly implemented.

All temporary excavations, footing and piles excavations should be observed by a representative of this office to see that construction procedures follow the design recommendations.

5.0 CLOSURE

The findings and recommendations of this report were prepared in accordance with generally accepted professional engineering principles and practices. We make no other warranty, either expressed or implied. Our conclusions and recommendations are based on the results of the field and laboratory investigations, combined with an interpolation of subsurface conditions between and beyond boring locations. If conditions encountered during construction appear to be different from those shown by the borings, this office should be notified so we may take appropriate measures.

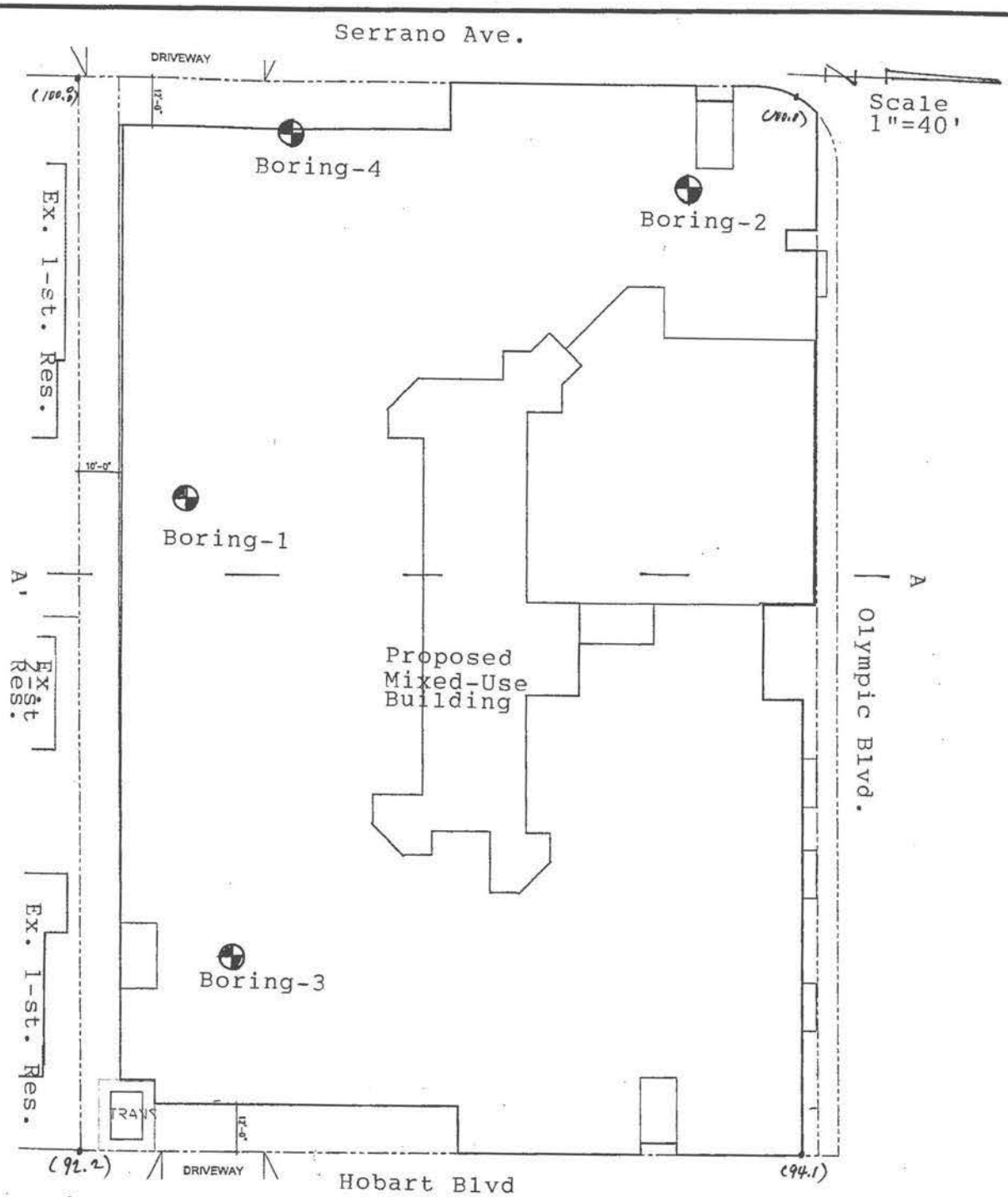
VICINITY MAP



PROPOSED MIXED-USE BUILDING **3170 W. OLYMPIC BLVD.** **LOS ANGELES, CALIFORNIA**	**PROJECT NO.**	**S-1652**
	FIGURE	**A**

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PLOT PLAN AND BORING LOCATIONS



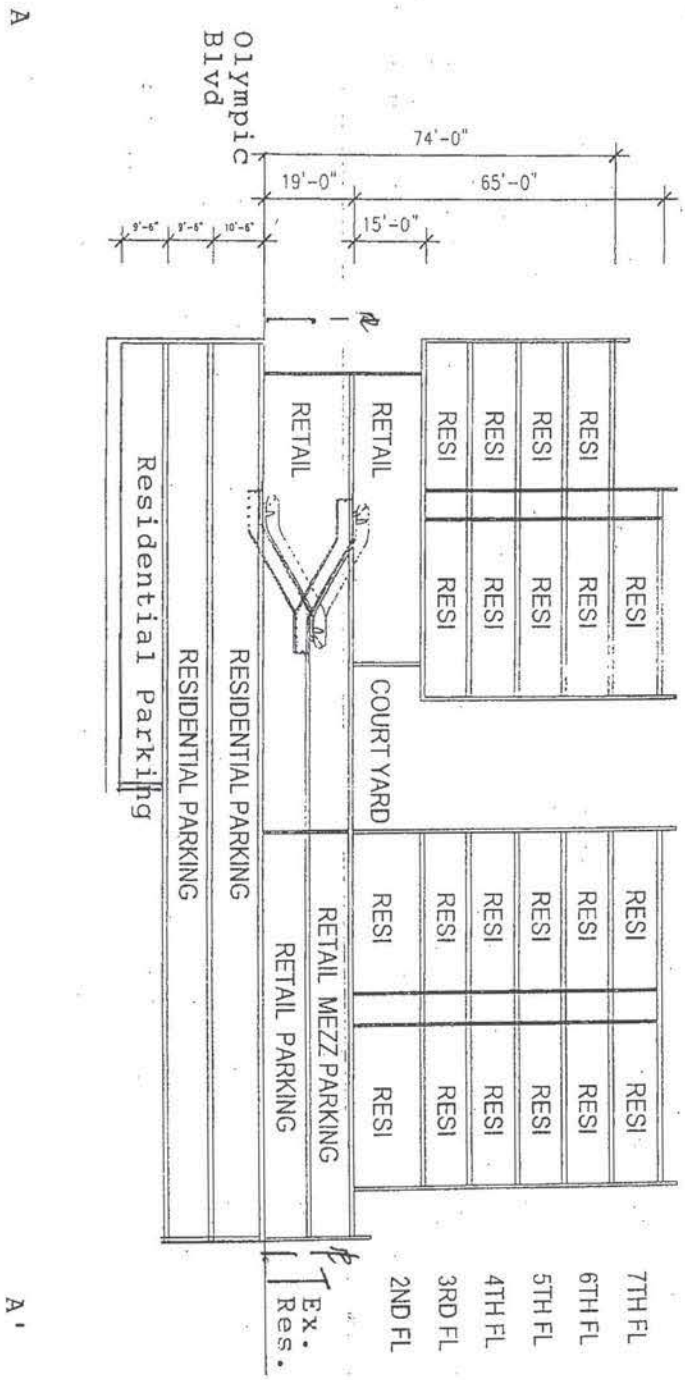
Approximate Boring Locations

(100.9): Elevation of the point

PROPOSED MIXED-USE BUILDING **3170 W. OLYMPIC BLVD.** **LOS ANGELES, CALIFORNIA**	**PROJECT NO.**	
	DRAWING	**A**

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CROSS SECTION

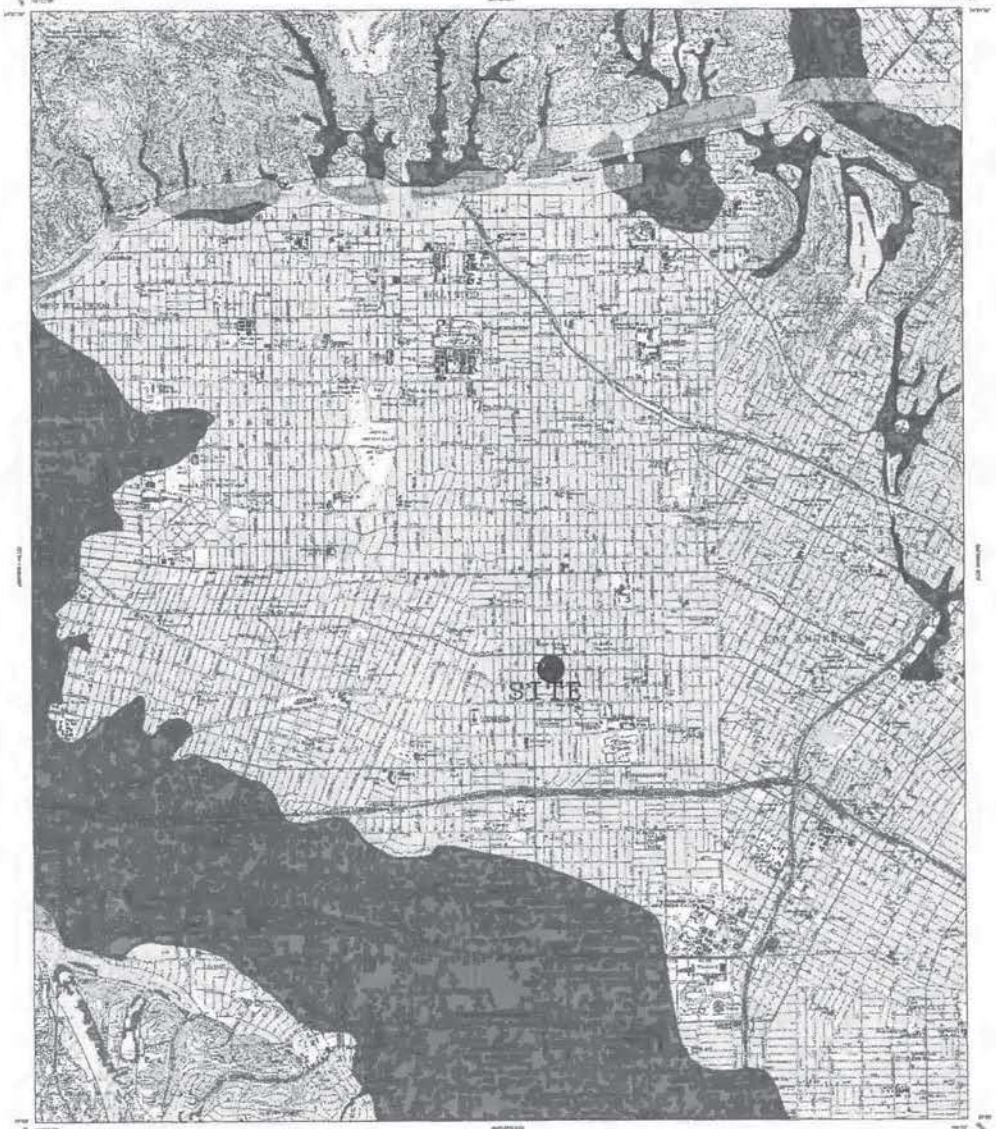


Section A-A'

(scale 1"=40')

PROPOSED MIXED-USE BUILDING 3170 W. OLYMPIC BLVD. LOS ANGELES, CALIFORNIA	PROJECT NO.	S-1652
	DRAWING	B

DON SOILS ENGINEERING, INC.
CONSULTING FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST



STATE OF CALIFORNIA

California Geological Survey

Earthquake Zones of Required Investigation
Hollywood Quadrangle

THIS MAP SHOWS BOTH ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES AND SEISMIC HAZARD ZONES ISSUED FOR THE HOLLYWOOD QUADRANGLE

This map shows the location of Alquist-Priolo (AP) Earthquake Fault Zones and Seismic Hazard Zones, collectively referred to here as Earthquake Zones of Required Investigation. The Geographic Information System (GIS) digital files of these regulatory zones relevant by the California Geological Survey (CGS) are the "Official Maps." GIS files are available at the CGS website http://gmw.consrvation.ca.gov/shp/EQZApp/app/viewer.html. These zones will assist cities and counties in fulfilling their responsibilities for protecting the public from the effects of surface fault rupture and earthquake-triggered ground failure as required by the AP Earthquake Fault Zoning Act (Public Resources Code Sections 2621-2630) and the Seismic Hazards Mapping Act (Public Resources Code Sections 2690-2699.6). For information regarding the general approach and recommended methods for preparing these zones, see California Geological Survey (CGS) Special Publication 42, *Fault-Rupture Hazard Zones in California*, and Special Publication 118, *Recommended Criteria for Delineating Seismic Hazard Zones in California*.

For information regarding the scope and recommended methods to be used in conducting required site investigations, see CGS Special Publication 42, Appendix C. Guidelines for Evaluating the Hazard of Surface Rupture, and CGS Special Publication 117A, *Guidelines for Evaluating and Mitigating Seismic Hazards in California*. For a general description of the AP and Seismic Hazards Mapping acts, the zoning programs, and related information, please refer to this website at www.conservation.ca.gov/cgs/rgm.

MAP EXPLANATION

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES

Earthquake Fault Zones
Zone boundaries are delineated by straight-line segments that connect locations where the zone encompassing active faults that constitute a potential hazard to structures from surface faulting or fault creep such that avoidance as described in Public Resources Code Section 2621.5(a) would be required.

Active Fault Traces
Faults considered to have been active during Holocene time and to have potential for surface rupture; Solid Line in Black or Red where Accurately Located; Long Dash in Black or Solid Line or Purple where Approximately Located; Short Dash in Black or Solid Line in Orange where Inferred; Dotted Line in Black or Solid Line in Rose where Concealed; Query (?) indicates additional uncertainty. Evidence of historic offset (indicated by dash of earthquake-association event) or C for displacement caused by fault creep.

SEISMIC HAZARD ZONES

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

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

OVERLAP AREAS ALQUIST-PRIOLO AND SEISMIC HAZARD ZONES

Overlap of Earthquake Fault Zone and Liquefaction Zone
Areas that are covered by both Earthquake Fault Zone and Liquefaction Zone.

Overlap of Earthquake Fault Zone and Earthquake-Induced Landslide Zone
Areas that are covered by both Earthquake Fault Zone and Earthquake-Induced Landslide Zone.

Note: Mitigation measures differ for each zone.
AP Act only allows avoidance as Seismic Hazard Mapping Act allows mitigation by engineering/geotechnical design as well as avoidance.

ADDITIONAL INFORMATION

For additional information on the zones of required investigation presented on this map, the data and methodology used to prepare them, and additional references consulted, please refer to the following:

This Hollywood Fault is the Hollywood 7.5' Quadrangle,
Los Angeles County, California, California Geological Survey, Fault Evaluation Report FER-033,
by #2006 070.188.1http://pubs.library.ca.gov/fer/fer033/

For more information on the Alquist-Priolo Earthquake Fault Zoning Act please refer to:
http://www.conservation.ca.gov/cgs/rgm/ap/Pages/Fault_maps.aspx

Seismic Hazard Zone Report for the Hollywood 7.5-minute Quadrangle, Los Angeles County, California
California Geological Survey, Seismic Hazard Zone Report 026,
http://gmw.consrvation.ca.gov/shp/EQZApp/data/seismic/HOLLYWOOD/Documents/Hollywood_pdf.pdf

For more information on the Seismic Hazards Mapping Act please refer to:
http://www.consrvation.ca.gov/cgs/shmp/Pages/SHMPpamphlet_paper.aspx

HOLLYWOOD QUADRANGLE

EARTHQUAKE FAULT ZONES	SEISMIC HAZARD ZONES
Delineated in compliance with Chapter 7.5 Division 2 of the California Public Resources Code (*Alquist-Priolo Earthquake Fault Zoning Act*)	Delineated in compliance with Chapter 7.8, Division 2 of the California Public Resources Code (*Seismic Hazards Mapping Act*)
OFFICIAL MAP	**OFFICIAL MAP**
Released: November 6, 2014	**Released: March 25, 1999**
STATE GEOLOGIST	STATE GEOLOGIST

IMPORTANT
PLEASE NOTE THE FOLLOWING FOR ZONES SHOWN ON THIS MAP

1) This map only has shown all faults that have the potential for surface fault rupture, other than Earthquake Fault Zones, or outside their boundaries. Additionally, this map may not show all areas that have the potential for liquefaction, landsliding, strong earthquake ground shaking or other inadequate soil or shaky hazards. Also, a single earthquake capable of causing surface fault or triggering landslide failure and such commonly affect the entire area joined.

2) Faults shown on this map are considered to be approximate or of this Earthquake Fault Zones.

3) The identification and location of these faults are based on the best available data, however, the quality of data varied by report. Some have been accurately as possible on a map scale of 1:24,000.

4) Liquefaction based only after certain areas susceptible to the effects of earthquake-induced landslides. This classification typically covers an area that has some of existing landslides, however there may be or may be future source areas, or exposure to steep slopes nearby.

5) Landslide zones on this map were determined, in part, by selecting surfaces that developed by the U.S. Geological Survey (USGS). Landslide hazard maps prepared by the USGS both rely and experimental approaches to analyze earthquake-induced and other types of landslide hazards. Although aspects of these new methodologies may be incorporated in future CGS seismic hazard zone maps, USGS maps should not be used as substitutes for those official SHMMAP HAZARD ZONE maps.

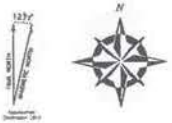
6) USGS have also developed a probability that 90 percent of outlined features, on isolated within 50 feet (horizontal and vertical) of this map. The identification and location of liquefaction and earthquake-induced landslide zones are based on available data, however, the quality of data varied by report. The zone boundaries, examined from faces shown as accurately as possible at this scale.

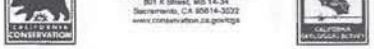
7) Information on this map is not sufficient to serve as a substitute for the geologic and geotechnical investigations required under Chapters 7.5 and 7.8 of Division 2 of the California Public Resources Code.

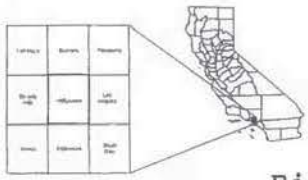
8) Existing effects [also identified on this map may require structural investigations, additionally a majority have already been mitigated to fully or partly standards. Check with your local building/planning department for information regarding the location of such mitigation areas.

9) DISCLAIMER: The State of California and the Department of Conservation make no representation or warranties regarding the accuracy of the data from which these maps were derived. Neither the State nor the Department shall be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.









California Geological Survey
Geologic Information and Publications
801 K Street, MS 14-34
Sacramento, CA 95814-3532
www.consrvation.ca.gov/cgs

Figure B

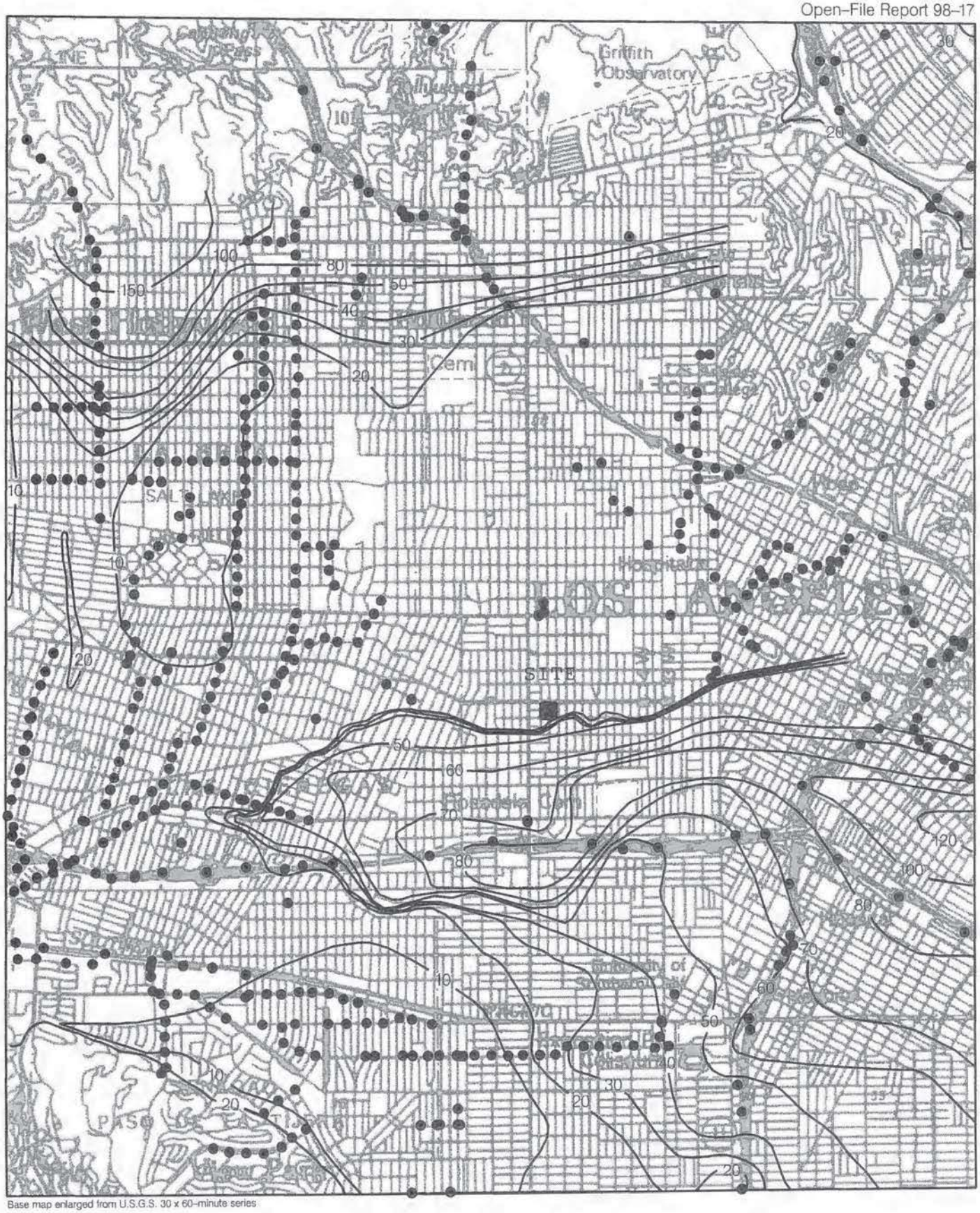


Plate 1.2 Historically Highest Ground Water Contours and Borehole Log Data Locations, Hollywood Quadrangle.

Figure C

● Borehole Site

— 30 — Depth to ground water in feet

ONE MILE

SCALE

APPENDIX A

FIELD EXPLORATION

APPENDIX A

Field Exploration

The field exploration included a site reconnaissance and subsurface drilling program. During the site reconnaissance, the surface conditions were noted, and the location of the boring was determined. The borings were approximately located using existing boundary features as a guide.

Borings were advanced using hollow stem auger drilling equipment. Soils were continuously logged by an experienced engineer and classified in the field by visual examination in accordance with the Unified Soil Classification System. The field descriptions have been modified, where appropriate, to reflect laboratory test results.

Relatively undisturbed samples of the subsurface soils were obtained at frequent intervals in the borings using a drive sampler (2.4-inch diameter, 3-inch outside diameter) lined with sample rings. The thin-walled steel sampler was driven into the bottom of the bore hole with successive drops of a driving weight. The driving energy required for one foot of sampler penetration, computed from the recorded driving blows for each sample, is shown on the log of boring sheets, in the column "N." The soil was retained in brass rings (2.4-inch in diameter, 1.0-inch in height). The central portion of the sample was retained and carefully sealed in waterproof plastic containers for shipment to the laboratory.

Logs of the borings are presented on the log of test boring Plates A-1 through A-11. The test boring summary sheet also includes descriptions of the soils, pertinent filed data, and supplementary laboratory results.

LOG OF BORING 1

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
					Fill, sand, silty, brown. 4" asphalt, 6" gravel, cmpacted				
				SC	**Sand,** fine, clayey, brown, slightly moist, firm				
5	X		28		f-m, scattered gravels, slightly clayey red brown	113.3	7.0		
					fine, gray brown, firm to dense				
10	X		38			113.2	13.1		
					mottled yellow brown, dense				
15	X		58			118.2	14.4		
					f-m, slightly clay to trace clay, lt brown				
20	X		76			120.3	5.6		
					continue				

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: **S-1652**
PLATE: **A-1**

DON SOILS ENGINEERING, CO.

CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 1

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
					Fill, sand, silty, brown. 4" asphalt, 6" gravel, compacted				
				SC	**Sand,** fine, clayey, brown, slightly moist, firm				
5 X			28		f-m, scattered gravels, slightly clayey red brown	113.3	7.0		
					fine, gray brown, firm to dense				
10 X			38			113.2	13.1		
					mottled yellow brown, dense				
15 X			58			118.2	14.4		
					f-m, slightly clay to trace clay, lt brown				
20 X			76			120.3	5.6		
					continue				

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: **S-1652**
PLATE: **A-1**

DON SOILS ENGINEERING, CO.

CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 1 (cont.)

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
				SW	trace clay, gray white, f-c scattered gravels				
25 X			85			117.3	3.6		
				SP	yellow brown, f-m				
30 X			50			119.6	3.5		
					sligtly clayey to clayey, green				
35 X			71			122.0	13.5		
				SC	clayey, fine, dark green, very dense				
						118.4	11.7		
40			80 for 10"		slightly clayey to trace clay				
					continue				

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: S-1652
PLATE: A-2

DON SOILS ENGINEERING, CO.
CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 1 (cont.)

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
45 X			80 for 10"		light green	106.2	12.0		
50 X			90 for 10"		dark green, moist	100.7	25.7		
55 X			43			103.5	7.2		
					Groundwater				
						108	20.7		
60 X			74		End of Boring at 60 feet below surface				
					Groundwater at 57 ft below surface surdface				

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: S-1652
PLATE: A-3

DON SOILS ENGINEERING, CO.

CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 2

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
					Fill, sand, silty, brown. 4" asphalt, 6" gravel, compacted				
				SC	**Sand,** fine, clayey, yellow brown, slightly moist, firm				
					firm to dense, brown, slightly clayey to clayey				
5 X			31			119.7	12.9		
					f-m, clayey, gray brown, dense				
10 X			55		slightly clayey, scattered gravels	118.8	11.9		
					clayey, red brown				
					slightly clayey				
15 X			50			116.9	7.3		
					f-m, clayey, gray brown				
20 X			54			118.8	14.1		

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: **S-1652**
PLATE: **A-4**

DON SOILS ENGINEERING, CO.

CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 2 (cont.)

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
				SW	trace clay, f-c, scattered gravels				
25 X			57			119.1	4.1		
				SC	white gray, f-m,sli. clayey to trace clay				
30 X			74			119.4	7.8		
					sligtly clayey to clayey, green				
35 X			45			108.3	19.7		
					slightly clayey				
40			52			112.8	15.4		
					continue				

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: S-1652
PLATE: A-5

DON SOILS ENGINEERING, CO.
CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 2 (cont.)

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
				SP	f-m, trace clay				
45	X		75 for 10"		light green	112.0	5.7		
50	X		85		dark green, moist	106.6	5.5		
					End of Boring at 50 feet below surface No Groundwater				
55									
60									

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: S-1652
PLATE: A-6

DON SOILS ENGINEERING, CO.
CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 3

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
					Fill, sand, silty, brown. 4" asphalt, 6" gravel, compacted				
				SC	**Sand,** fine, clayey, brown, slightly moist, firm to dense				
5 X			45		f-m, scattered gravels, slightly clayey red brown	118.8	6.5		
					fine, gray brown				
10 X			36			119.4	11.5		
					mottled yellow brown, dense				
15 X			65			122.2	11.6		
				SP	f-m, trace clay, lt brown				
20 X			56			116.2	3.5		
					continue				

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: S-1652
PLATE: A-7

DON SOILS ENGINEERING, CO.
CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 3 (cont.)

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
				SW	trace clay, gray white, f-c, scattered gravels				
25 X			79 for 11"			116.8	3.3		
				SP	yellow brown,f-m				
30 X			100 for 9"			113.2	3.5		
				SC	sligtly clayey to clayey, green				
35 X			77			123.8	13.5		
					clayey, fine, dark green				
40			90		slightly clayeye to trace clay	105.8	7.9		
					continue				

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: S-1652
PLATE: A-8

DON SOILS ENGINEERING, CO.

CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 3 (cont.)

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
				SP					
45 X			76 for 11"		light green	109.7	6.6		
50 X			71 for 11"		dark green, moist	104.3	16.6		
55					End of Boring at 50 feet below surface No Groundwater				
60									

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.:	**S-1652**
PLATE:	**A-9**

DON SOILS ENGINEERING, CO.

CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 4

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
					Fill, sand, silty, brown. modeartaely compacted				
				SC	**Sand,** fine, silty, yellow brown, slightly moist				
					firm				
5 X			29		slightly clayey, brown	118.1	11.9		
10 X			40		f-m, scat. gravels, red brown, firm to dense	109.6	8.3		
15 X			65		gray brown, dense	117.3	7.8		
					clayey				
20 X			30			108.3	24.5		
					continue				

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.: **S-1652**
PLATE: **A-10**

DON SOILS ENGINEERING, CO.

CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

LOG OF BORING 4 (cont.)

DIGGING EQUIPMENT: 8" Hollow-Stem Auger
DRIVING WEIGHT: 140 lb w/30" drop
DATE EXCAVATED: June 3, 2016
SURFACE ELEVATION:

DEPTH IN FEET	UND.	BULK	N	USC	MATERIAL DESCRIPTION	γ	MC	S	RC
				SC					
					light brown to yellow brown				
25 X			33			117.9	15.4		
					sligtly clayey to clayey				
					yellow brown				
30 X			50			115.8	15.7		
					End of Boring at 30 feet below surface No groundwater, No Caving				
35									
40									

LEGEND: B = bedding; J = joint; F = fault; SS = slide surface;
γ = dry unit weight(pcf); MC = moisture content(%);
S = degree of saturation(%); Rc = relative compaction(%);
N = blows per foot; USC = unified soil classification

PROPOSED MIXED-USE BUILDING
3170 W. OLYMPIC BLVD.
LOS ANGELES, CALIFORNIA

PROJECT NO.:	**S-1652**
PLATE:	**A-11**

DON SOILS ENGINEERING, CO.

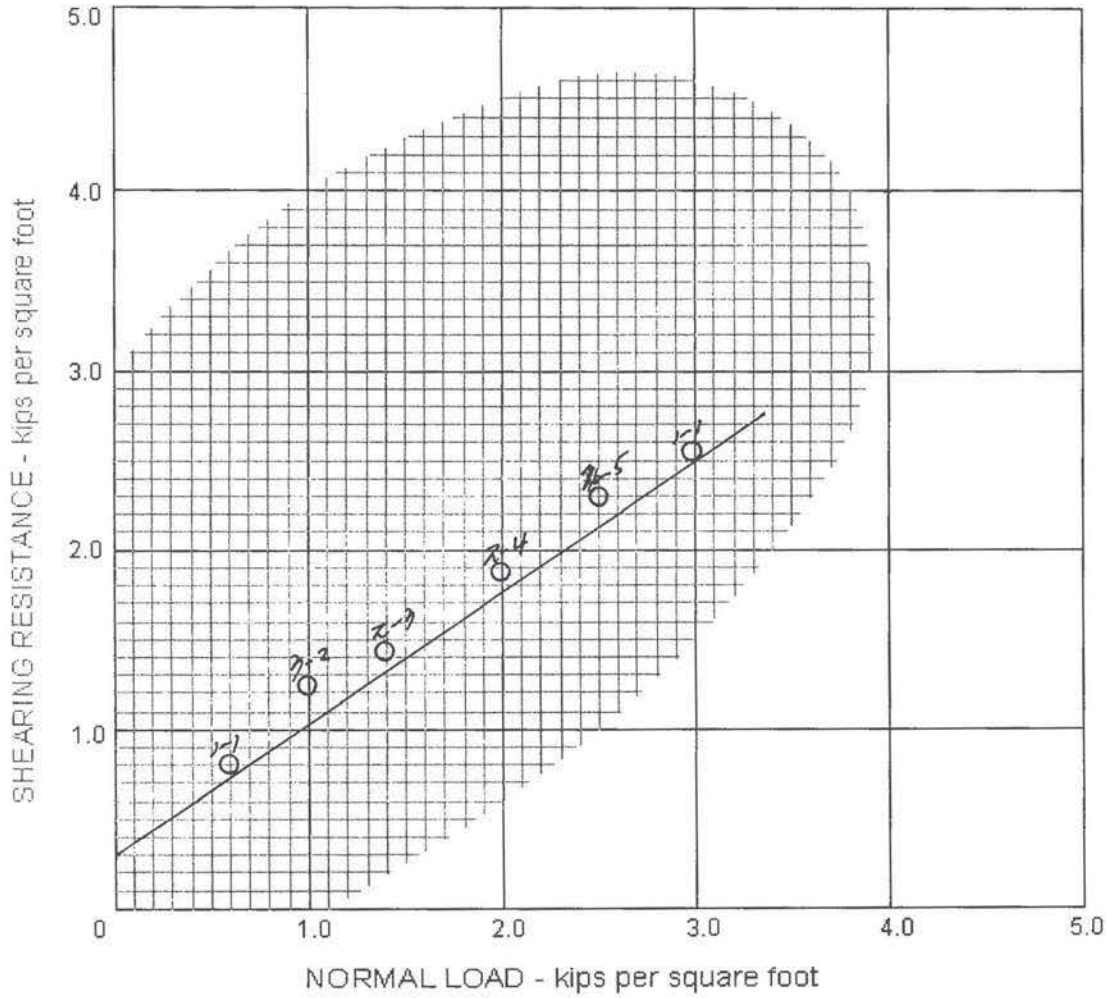
CONSULTANT FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

APPENDIX B

LABORATORY TEST PROGRAM

DIRECT SHEAR TEST

TEMPORARY EXCAVATION (RESIDUAL)



BORING NO	DEPTH(FT)	DRY DENSITY(PCF)	FIELD/TEST MOISTURE(%)	COHESION(P.S.F)	FRICTION(DEG.)
1-1	5	113.3	7.0/13.9	300	37
3-2	10	119.4	11.5/23.3		
2-3	15	116.9	7.3/12.8		
2-4	20	118.1	14.1/25.3		
2-5	25	119.1	4.1/12.2		

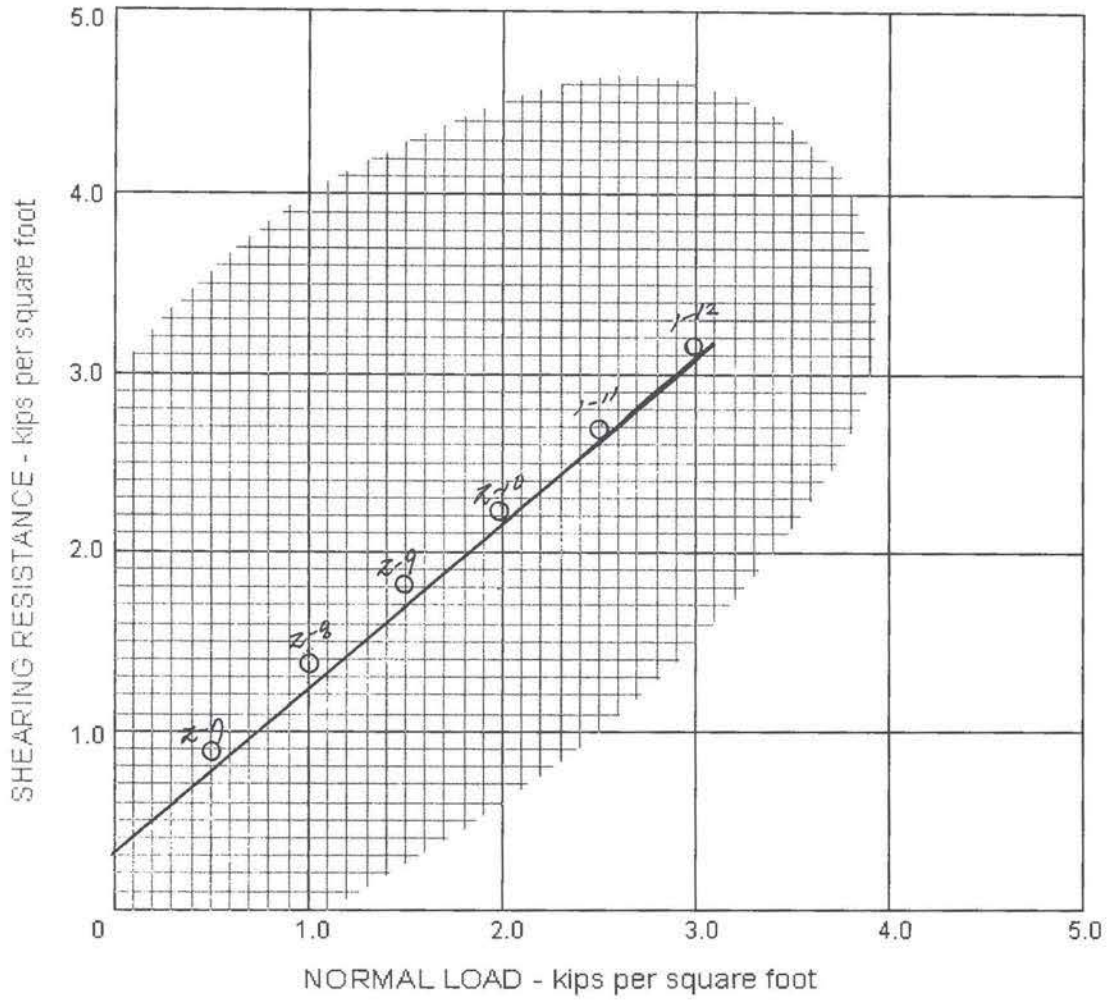
Tested under saturated-drained condition

PROPOSED MIXED-USE BUILDING **3170 W. OLYMPIC BLVD.** **LOS ANGELES, CALIFORNIA**	**PROJECT NO.**	**S-1652**
	PLATE	**B-1**

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DIRECT SHEAR TEST

BEARING SOIL (RESIDUAL)



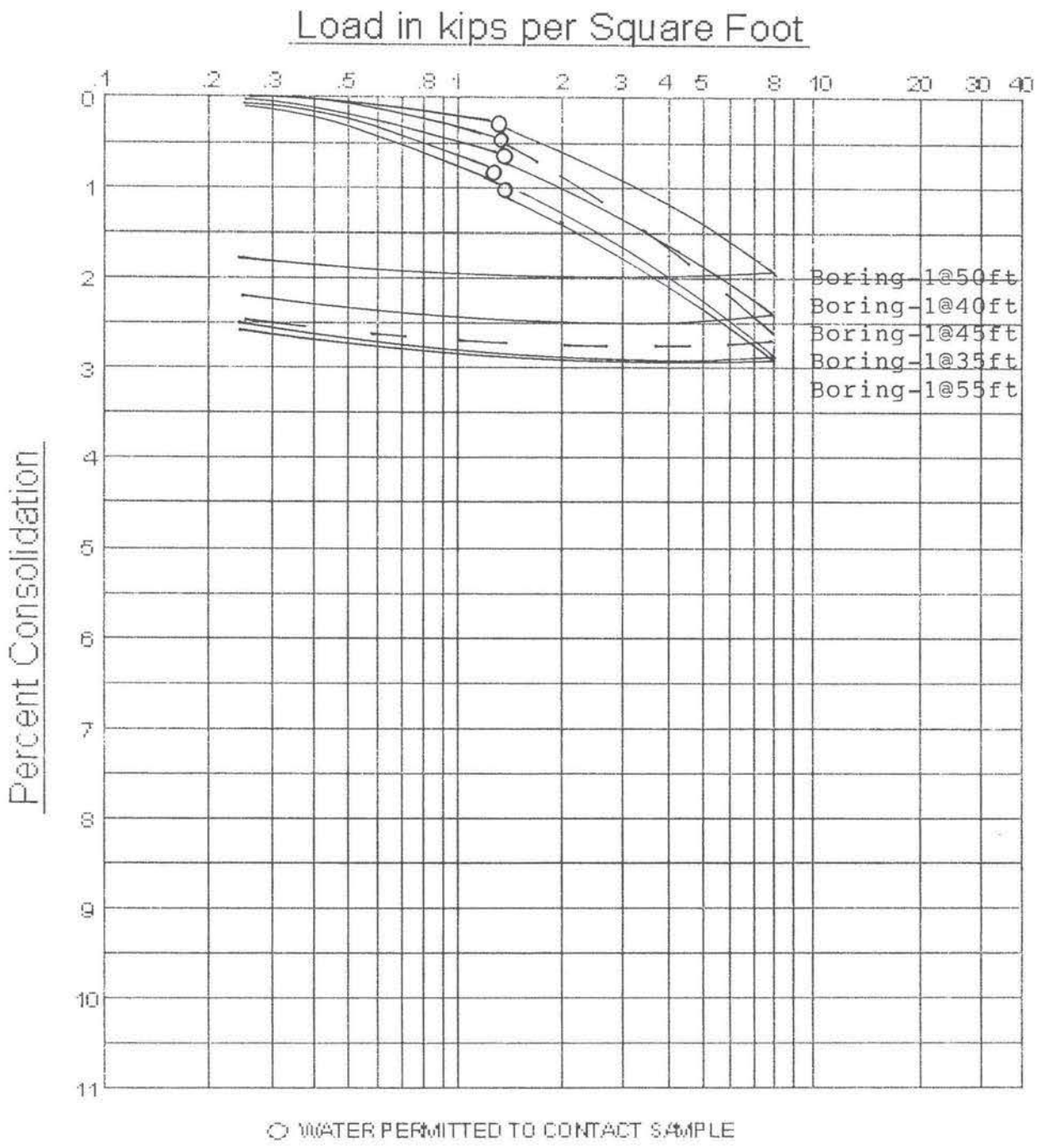
BORING NO	DEPTH(FT)	DRY DENSITY(PCF)	FIELD/TEST MOISTURE(%)	COHESION(P.S.F)	FRICTION(DEG.)
2-7	35	108.3	19.7		
2-8	40	112.8	15.4		
2-9	45	112.0	5.7	350	42
2-10	50	106.6	5.5		
1-11	55	103.5	7.2		
1-12	60	108.0	20.7		

Tested under field moisture condition

PROPOSED MIXED-USE BUILDING 3170 W. OLYMPIC BLVD. LOS ANGELES, CALIFORNIA	**PROJECT NO.**	**S-1652**
	PLATE	**B-2**

DON SOILS ENGINEERING, CO.
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CONSOLIDATION TESTS

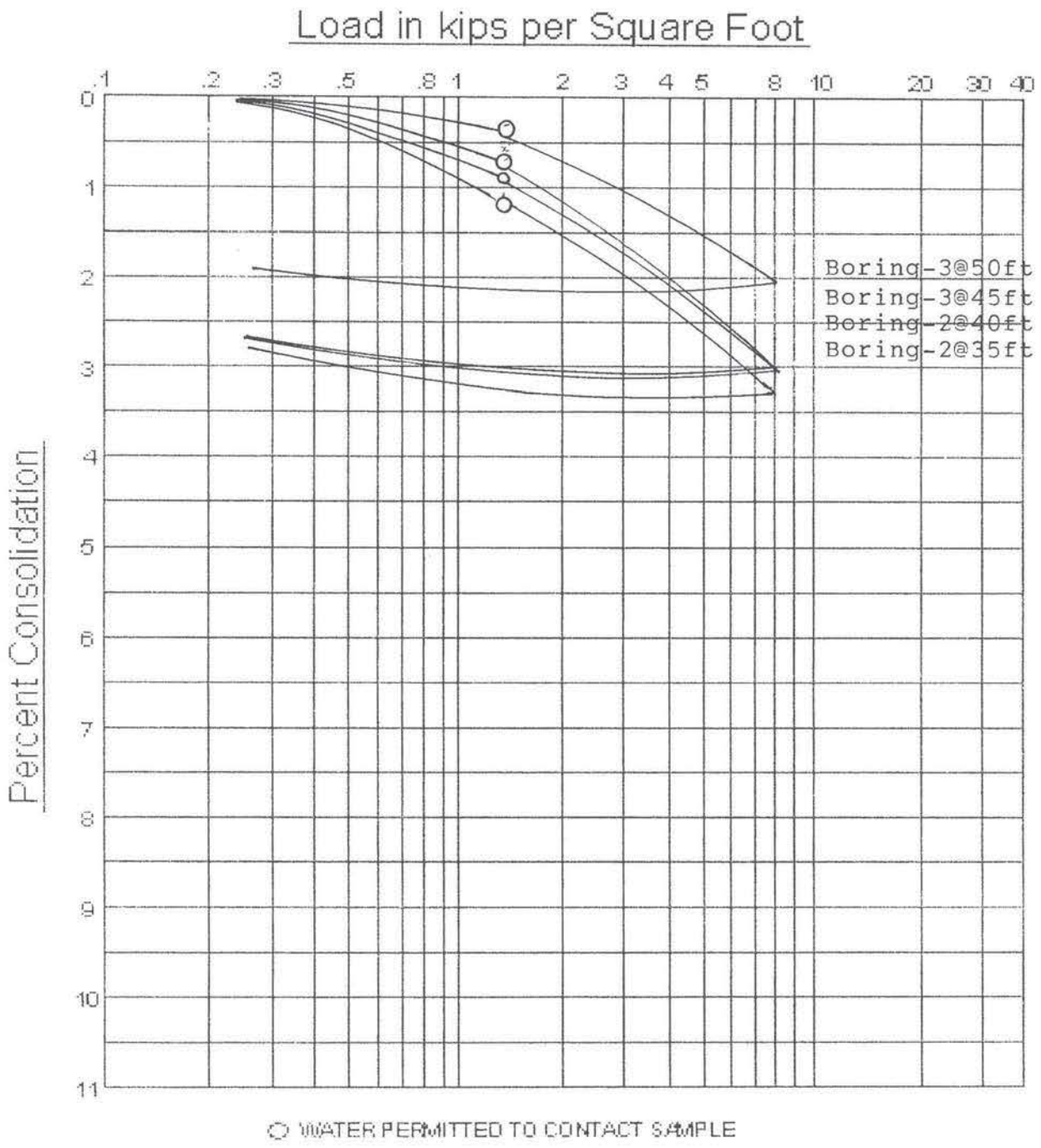


○ WATER PERMITTED TO CONTACT SAMPLE

PROPOSED MIXED-USE BUILDING **3170 W. OLYMPIC BLVD.** **LOS ANGELES, CALIFORNIA**	**PROJECT NO.**	**S-1652**
	PLATE	B-3

DON SOILS ENGINEERING, CO.
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CONSOLIDATION TESTS



PROPOSED MIXED-USE BUILDING **3170 W. OLYMPIC BLVD.** **LOS ANGELES, CALIFORNIA**	**PROJECT NO.**	**S-1652**
	PLATE	B-4

DON SOILS ENGINEERING, CO.
CONSULTING FOUNDATION ENGINEERS & ENGINEERING GEOLOGIST

APPENDIX B

Sampling

Undisturbed samples are obtained by driving a sampling tube by means of a heavy driving weight into undisturbed soils at various intervals below the surface. The number of blows of the weight falling from a specified height required to drive the sample tube through a measured distance, is shown on the Log of Borings. The sampling tube consists of steel barrel 2.50 inches inside diameter with a lining of one-inch long thin brass rings. A special cutting tip is placed on one end and a ball valve on the other. The sampling tube is driven approximately 18 inches into the soil and a section of the central portion of the sample is taken for laboratory tests, the soil being still confined in the brass rings after extraction from the sampling tube. The samples are taken to the laboratory in close fitting water-proof containers in order to maintain field conditions until completion of tests.

Classification

The soils are visually classified in accordance with the Unified Soil Classification System. For particular samples, classification tests such as sieve and hydrometer analysis to determine grain size distribution, liquid and plastic limits and shrinkage are used as an aid in substantiating the visual field and laboratory identifications.

Unit of Weight and Moisture

One or more one-inch long sections of the sample are cut, trimmed, weighed, oven-dried and reweighed. From these measurements, the equivalent unit weight of the solids in pounds per cubic foot and the percent moisture are calculated.

Shearing Resistance

Direct shear tests are most often employed, using a controlled rate of strain. Each sample is sheared under a load approximately equivalent to the expected overburden pressure. By varying the load on particular sample the internal angle of friction and cohesion are computed. Where applicable, the shear tests samples are saturated to simulate expected extreme moisture conditions.

Consolidation

A one-inch high ring of soil is placed in the consolidation apparatus. Loads are applied in increments to the face of the specimen. Deformation, or changes in thickness of the specimens are recorded at selected time intervals. Water is introduced or extracted from the sample through porous disks placed against the top and bottom faces of the specimen.

Expansion

UBC Standard No. 18-2 is employed in which sample is compacted in 4-inch internal diameter mold at near 50 percent saturation and then, under a surcharged load of 144 psf, allowed to absorb moisture until saturated. The amount of vertical deformation or swell is measured.

APPENDIX C

GRADING SPECIFICATIONS

APPENDIX C

Grading Specification

The bottom of all excavation shall be inspected and approved by the Soil Engineer prior to placement of new fill. Certain cities require their Grading Inspector to approve the bottom of excavation prior to placement of new fill. The contractor shall request such inspections in timely manner.

1. Areas to be graded or paved shall be grubbed and stripped of all vegetation, debris and other deleterious material. All loose soil and soil disturbed by removal of structural elements, piping, cesspools and trees, if any, shall be removed.

2. Within the proposed building pad areas to be graded, all of the unsuitable soils for foundation and slabs support as described in General Evaluation shall be removed.

3. All imported soil shall consist of clean, granular, nonexpansive soil free of vegetation and other deleterious material. No rock over 3 inches in greatest dimension shall be used in the upper 3 feet of the fill, and no rock over 6 inches in greatest dimension will be permitted below that except with specific approval of the Soil Engineer of the type, amount and manner of placement. No soil shall be imported to the site without prior approval by the Soil Engineer.

4. The existing subgrade soils which are to support paving shall be compacted prior to construction of paving. It is recommended that the degree of compaction within the upper 12 inches be at least 90 percent.

5. All other fills and backfills shall be compacted to at least 90 percent.

6. The compaction characteristics of all fill soils shall be determined by ASTM D-1557-12. The field density and degree of compaction shall be determined by ASTM D-1556. The compacted fill should be tested and approved.

7. Density tests for compacted fill shall be made at intervals not exceeding 2 feet of fill height or every 500 cubic yards of earth material.

8. No jetting or water tamping of fill soils shall be permitted.

9. In all cases, where the ground slope is steeper than 5 horizontal to 1 vertical, the existing ground shall be benched as the fill thereon is brought up in layers. That existing ground with slopes flatter than 5 to 1 may also require benching if the Soil Engineer considers such to be necessary. The toe of the compacted fill slope should be keyed at least 2 feet into the bedrock with a minimum width of 12 feet.

10. Care shall be exercised during rough grading so that areas involved will drain properly. Water shall be prevented from running over slopes by temporary berms.

11. Observation and testing of all compaction shall be under the direction of the Soil Engineer, who shall be notified at least 24 hours in advance of the start of grading. A joint meeting between a representative of the client, the contractor, and the Soil Engineer is recommended prior to grading to discuss specific procedures and scheduling.

12. At all times, the contractor shall have a responsible field superintendent on the project, in full charge of the work, with authority to make decisions. He shall cooperate fully with the Soil Engineer in carrying out the work.

13. No fill shall be placed, spread or rolled during unfavorable weather. When the work is interrupted by rain, operations shall not be resumed until the Soil Engineer indicates that conditions will permit satisfactory results.

Preparation of Slab and Paving Areas: All surfaces to receive asphalt concrete paving or exterior concrete slabs-on-grade, should be underlain by a minimum compacted fill thickness of 12 inches. This may be accomplished by a combination of excavation, scarification and recompaction of surface soils, and replacement of the excavated material as controlled compacted fill. Compaction of the slab areas shall be to a minimum of 90 percent relative compaction. Compaction within the proposed roadway areas shall be to a minimum of 90 percent relative compaction

APPENDIX D

ENGINEERING ANALYSES

RETAINING WALL ANALYSIS

(Restraint, three basement level)

Input Data

Cohesion (psf) $C := 300$

Friction Angle(deg) $\phi := 37$ $\phi := \phi \cdot deg$

Density(pcf) $\gamma := 120$

Tension crack

$N\phi := \tan\left(\frac{\pi}{4} + \frac{\phi}{2}\right)$ $Zo := 2 \cdot \frac{C \cdot N\phi}{\gamma}$ Zo = 10.03 (use 2.0 ft)



Wall height(ft) $H := 30$

Tension Crack (ft) $Hc := 3$

(1) At Rest

$H1 := H - Hc$ (ft)

$Ko := 1.0 - \sin(\phi)$ Ko = 0.398

$Po1 := Hc \cdot \frac{\gamma \cdot H1 \cdot Ko}{1000}$

$Po2 := 0.5 \cdot \frac{\gamma \cdot Ko \cdot H^2}{1000}$

$Po := Po1 + Po2$ Kips

$EFP := 2 \cdot (Po1 + Po2) \cdot \frac{1000}{H^2}$ EFP = 56.383 pcf

(2) Earthquake

Peak ground acceration PGA := 0.277 g

Horizontal Acceleration(g) kh := PGA

Wall Height(ft) H = 30

$Pe := \frac{3}{8} \cdot \gamma \cdot H^2 \cdot kh$ $Pe = 1.12 \cdot 10^4$ pcf

$EFPEQ := 2 \cdot Pe \cdot \frac{1}{H^2}$ EFPEQ = 24.93

Plate D-1(A)

RETAINING WALL ANALYSIS

(restraint, two basement level)



Input Data

Cohesion (psf) $C := 300$

Friction Angle(deg) $\phi := 37$ $\phi := \phi \cdot deg$

Density(pcf) $\gamma := 120$

Tension crack

$N\phi := \tan\left(\frac{\pi}{4} + \frac{\phi}{2}\right)$ $Zo := 2 \cdot \frac{C \cdot N\phi}{\gamma}$ Zo = 10.03 (use 2.0 ft)

Wall height(ft) $H := 20$

Tension Crack (ft) $Hc := 3$

(1) At Rest

$H1 := H - Hc$ (ft)

$Ko := 1.0 - \sin(\phi)$ Ko = 0.398

$Po1 := Hc \cdot \frac{\gamma \cdot H1 \cdot Ko}{1000}$

$Po2 := 0.5 \cdot \frac{\gamma \cdot Ko \cdot H^2}{1000}$

$Po := Po1 + Po2$ Kips

$EFP := 2 \cdot (Po1 + Po2) \cdot \frac{1000}{H^2}$ EFP = 59.967 pcf

(2) Earthquake

Peak ground acceration PGA := 0.277 g

Horizontal Acceleration(g) kh := PGA

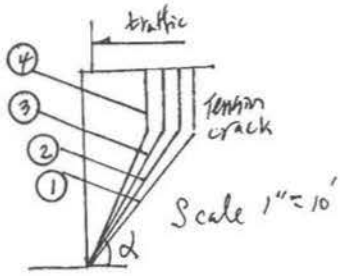
Wall Height(ft) H = 20

$Pe := \frac{3}{8} \cdot \gamma \cdot H^2 \cdot kh$ $Pe = 4.99 \cdot 10^3$ pcf

$EFPEQ := 2 \cdot Pe \cdot \frac{1}{H^2}$ EFPEQ = 24.93

Plate D-1(B)

RETAINING ANALYSIS
(Active)



Input Data

Cohesion (psf) $C := 300$

Friction Angle(deg) $\phi := 37$ $\phi := \phi \cdot deg$

Density(pcf) $\gamma := 120$

Tension crack

$N\phi := \tan\left(\frac{\pi}{4} + \frac{\phi}{2}\right)$ $Zo := 2 \cdot \frac{C \cdot N\phi}{\gamma}$ $Zo = 10.03$ (use 3.0 ft)

1) For $\alpha := 50^{o}$

$\alpha := \alpha \cdot deg$

$L := 9.14$ ft $H := 10$ ft $W := 5.33$ k (including traffice surcharge)
surcharge=0.3 k

$FS := 1.5$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := \operatorname{atan}\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = 0.52$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = 10.4$ pcf

2) For $\alpha := 55^{o}$

$\alpha := \alpha \cdot deg$

$L := 8.55$ ft $H := 10$ ft $W := 4.50$ k (including surcharge)

$FS := 1.5$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := \operatorname{atan}\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = 0.69$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = 13.8$ pcf

CONTINUE

RETAINIG WALL ANALYSIS (Active)

3) For $\alpha := 60$ o

$\alpha := \alpha \cdot deg$

$L := 8.08$ ft $H := 10$ ft $W := 3.76$ k (including surcharge)

$FS := 1.5$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := atan\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = 0.744$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = 14.9$ pcf

4) For $\alpha := 65$ o

$\alpha := \alpha \cdot deg$

$L := 7.72$ ft $H := 10$ ft $W := 3.10$ k (including surcharge)

$FS := 1.5$

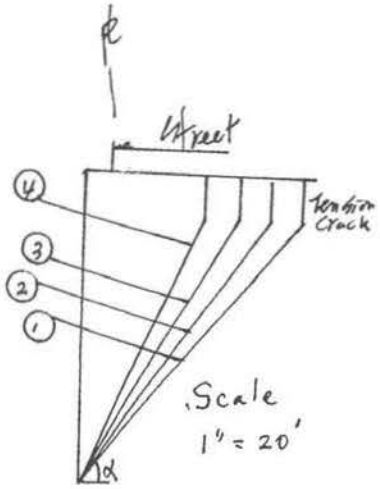
$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := atan\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = 0.692$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = 13.84$ pcf

TEMPORARY EXCAVATION ANALYSIS
(along three-basement Level)



Input Data

Cohesion (psf) $C := 300$

Friction Angle(deg) $\phi := 37$ $\phi := \phi \cdot deg$

Density(pcf) $\gamma := 120$

Tension crack

$N\phi := \tan\left(\frac{\pi}{4} + \frac{\phi}{2}\right)$ $Zo := 2 \cdot \frac{C \cdot N\phi}{\gamma}$ Zo = 10.03 (use 3.0 ft)

1) For $\alpha := 50^{o}$

$\alpha := \alpha \cdot deg$

$L := 36.55$ ft $H := 32$ ft $W := 52.05$ k (including traffic surchage)
surcharge 0.5 k

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := \operatorname{atan}\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

Pa = 9.896 kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ EFP = 19.3 pcf

2) For $\alpha := 55^{o}$

$\alpha := \alpha \cdot deg$

$L := 34.18$ ft $H := 32$ ft $W := 39.53$ k (including surcharge)

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := \operatorname{atan}\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

Pa = 9.846 kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ EFP = 19.2 pcf

CONTINUE

TEMPORARY EXCAVATION ANALYSIS (along three basement level)

3) For $\alpha := 60$ o

$\alpha := \alpha \cdot deg$

$L := 32.33$ ft $H := 32$ ft $W := 35.97$ k (including surcharge)

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := atan\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = 12.279$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = 24$ pcf

4) For $\alpha := 65$ o

$\alpha := \alpha \cdot deg$

$L := 30.89$ ft $H := 32$ ft $W := 29.14$ k (including surcharge)

$FS := 1.25$

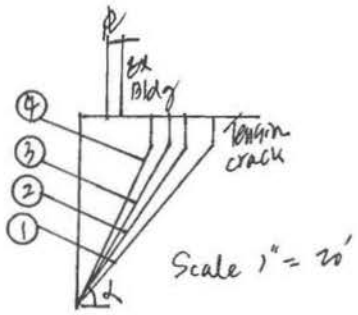
$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := atan\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = 11.943$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = 23.33$ pcf

TEMPORARY EXCAVATION ANALYSIS
(along two-basement Level)



Input Data

Cohesion (psf) $C := 300$

Friction Angle(deg) $\phi := 37$ $\phi := \phi \cdot deg$

Density(pcf) $\gamma := 120$

Tension crack

$N\phi := \tan\left(\frac{\pi}{4} + \frac{\phi}{2}\right)$ $Zo := 2 \cdot \frac{C \cdot N\phi}{\gamma}$ Zo = 10.03 (use 3.0 ft)

1) For $\alpha := 50^{o}$

$\alpha := \alpha \cdot deg$

$L := 24.80\ ft$ $H := 22\ ft$ $W := 25.9$ k (including building surchage)
surcharge 1.5 k

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := \operatorname{atan}\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

Pa = 3.488 kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ EFP = 14.4 pcf

2) For $\alpha := 55^{o}$

$\alpha := \alpha \cdot deg$

$L := 23.19\ ft$ $H := 22\ ft$ $W := 21.83$ k (including surcharge)

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := \operatorname{atan}\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

Pa = 4.467 kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ EFP = 18.5 pcf

PLATE D-6

CONTINUE

TEMPORARY EXCAVATION ANALYSIS (along two basement level)

CONTINUED

3) For $\alpha := 60$ o

$\alpha := \alpha \cdot deg$

$L := 21.94$ ft $H := 22$ ft $W := 18.27$ k (including surcharge)

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := atan\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = 4.941$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = 20.4$ pcf

4) For $\alpha := 65$ o

$\alpha := \alpha \cdot deg$

$L := 20.96$ ft $H := 22$ ft $W := 15.04$ k (including surcharge)

$FS := 1.25$

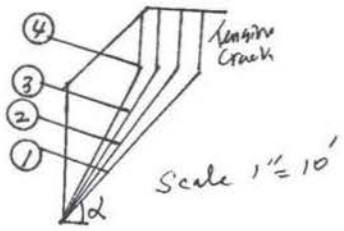
$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := atan\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = 4.921$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = 20.34$ pcf

EXCAVATION ANALYSIS



Input Data

Cohesion (psf) $C := 300$

Friction Angle(deg) $\phi := 37$ $\phi := \phi \cdot deg$

Density(pcf) $\gamma := 120$

Tension crack

$N\phi := \tan\left(\frac{\pi}{4} + \frac{\phi}{2}\right)$ $Zo := 2 \cdot \frac{C \cdot N\phi}{\gamma}$ $Zo = 10.03$ (use 3.0 ft)

$H := 7$ (ft) $H1 := 4$ ft

1) For $\alpha := 50^{o}$

$\alpha := \alpha \cdot deg$

$L := 10.44$ ft $H := 7$ ft $W := 1.56$ k (no surcharge)

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := \operatorname{atan}\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = -1.734$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = -70.8$ pcf

2) For $\alpha := 55^{o}$

$\alpha := \alpha \cdot deg$

$L := 9.77$ ft $H := 7$ ft $W := 1.14$ k (no surcharge)

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := \operatorname{atan}\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = -1.691$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = -69$ pcf

CONTINUE

EXCAVATION ANALYSIS

CONTINUED

3) For $\alpha := 60$ o

$\alpha := \alpha \cdot deg$

$L := 9.24$ ft $H := 7$ ft $W := 0.76$ k (no surcharge)

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := atan\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = -1.75$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = -71.4$ pcf

4) For $\alpha := 65$ o

$\alpha := \alpha \cdot deg$

$L := 6.62$ ft $H := 6$ ft $W := 0.66$ k (no surcharge)

$FS := 1.25$

$Cm := \frac{C}{FS \cdot 1000}$ (ksf) $\phi m := atan\left(\frac{\tan(\phi)}{FS}\right)$

$Pa := (W - Cm \cdot L \cdot \sin(\alpha)) \cdot \tan(\alpha - \phi m) - (Cm \cdot L \cdot \cos(\alpha))$

$Pa = -1.196$ kips

$EFP := 2 \cdot \frac{Pa \cdot 1000}{H^2}$ $EFP = -66.44$ pcf

APPENDIX D

Traffic Study

FORM GEN. 160A (Rev. 1/82)

CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

3170 W. Olympic Blvd
DOT Case No. CEN 16-44375

Date: October 19, 2016

To: Karen Hoo, City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRAFFIC IMPACT STUDY FOR THE PROPOSED MIXED USE DEVELOPMENT PROJECT LOCATED AT 3170 WEST OLYMPIC BOUEVARD**

The Department of Transportation (DOT) has reviewed the traffic analysis dated August 30, 2016 prepared by Linscott Law & Greenspan, Engineers for the proposed mixed use development project located at 3170 West Olympic Boulevard. In order to evaluate the effects of the project's traffic on the available transportation infrastructure, the significance of the project's traffic impacts is measured in terms of change to the volume-to-capacity (V/C) ratio between the "future no project" and the "future with project" scenarios. This change in the V/C ratio is compared to DOT's established threshold standards to assess the project-related traffic impacts. The traffic study included the detailed analysis of nine intersections. Based on DOT's traffic impact criteria[1], none of the study intersections included in the traffic analysis are expected to be significantly impacted by project-related traffic, as noted in **Attachment 1**. The results of the traffic analysis accounted for other known development projects in evaluating potential cumulative impacts and adequately evaluated the project's traffic impacts on the surrounding community.

DISCUSSION AND FINDINGS

A. Project Description

The project will replace approximately 15,135 square feet of retail/restaurant space and three single family homes with a mixed-use development consisting of 252 apartment units and approximately 33,280 square feet of retail/restaurant space. The proposed site will provide subterranean parking, at grade parking and upper level parking. Vehicular access to the site will be provided by two driveways located along Hobart Boulevard and Serrano Avenue. The project is expected to be completed by 2018.

B. Trip Generation

The project is estimated to generate a net increase of 1,639 daily trips, a net increase of 113 trips in the a.m. peak hour, and a net decrease of 151 trips in the p.m. peak hour. The trip generation estimates are based on formulas published by the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition, 2012. A copy of the trip generation table can be found in **Attachment 2**.

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[1] Per the DOT Traffic Study Policies and Procedures, a significant impact is identified as an increase in the Critical Movement Analysis (CMA) value, due to project related traffic, of 0.01 or more when the final ("with project") Level of Service (LOS) is LOS E or F; an increase of 0.020 or more when the final LOS is LOS D; or an increase of 0.040 or more when the final LOS is LOS C.

C. Traffic Signal Warrant Analysis

In the preparation of traffic studies, DOT guidelines indicate that unsignalized intersections should be evaluated solely to determine the need for the installation of a traffic signal or other traffic control device. When choosing which unsignalized intersections to evaluate in the study, intersections that are adjacent to the project or that are integral to the project's site access and circulation plan, or that facilitate pedestrian access should be identified. This traffic study included a traffic signal warrant analysis for the intersections of **Olympic Boulevard and Serrano Avenue**. The study found that the intersections did not meet the warrants necessary for the approval of a new traffic signal at either location.

D. Freeway Analysis

The traffic study included a freeway impact analysis that was prepared in accordance with the State-mandated Congestion Management Program (CMP) administered by the Los Angeles County Metropolitan Transportation Authority (MTA). According to this analysis, the project would not result in significant traffic impacts on any of the evaluated freeway mainline segments. To comply with the Freeway Impact Analysis Agreement executed between Caltrans and DOT in October 2013, the study also included a screening analysis to determine if additional evaluation of freeway mainline and ramp segments was necessary beyond the CMP requirements. The project did not meet or exceed any of the four thresholds defined in the latest agreement, updated in December 2015. Exceeding one of the four screening criteria would require the applicant to work directly with Caltrans to prepare more detailed freeway analyses. No additional freeway analysis was required.

PROJECT REQUIREMENTS

A. Construction Impacts

DOT recommends that a construction work site traffic control plan be submitted to DOT for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that all construction related traffic be restricted to off-peak hours.

B. Highway Dedication And Street Widening Requirements

On January 20, 2016, the City Council adopted the Mobility Plan 2035 which is the new Mobility Element of the General Plan. A key feature of the updated plan is to revise street standards in an effort to provide a more enhanced balance between traffic flow and other important street functions including transit routes and stops, pedestrian environments, bicycle routes, building design and site access, etc. Per the new Mobility Element, **Olympic Boulevard** has been designated as Boulevard II (Major Highway Class II) which would require a 40-foot half-width roadway within a 55-foot half-width right-of-way, **Hobart Boulevard and Serrano Avenue** have been designated as Local Streets which would require an 18-foot half-width roadway and a 30-foot half-width right-of-way. The applicant should check with BOE's Land Development Group to determine if there are any other applicable highway dedication, street widening and/or sidewalk requirements for this project.

C. Parking Requirements

The traffic study did not indicate the number of parking spaces that would be provided.

Vehicular access to site parking would be provided via two proposed driveways located along Serrano Avenue and Hobart Avenue. The applicant should check with the Department of Building and Safety on the number of code-required parking spaces needed for the project.

D. Driveway Access and Circulation

The proposed site plans illustrated in **Attachment 3** is acceptable to DOT; however, review of the study does not constitute approval of internal circulation schemes and driveway dimensions. Those require separate review and approval and should be coordinated with DOT's Citywide Planning Coordination Section 201 N. Figueroa Street, 5th Floor, Room 550, at (213) 482-7024. In order to minimize potential building design changes, the applicant should contact DOT for driveway width and internal circulation requirements so that such traffic flow considerations are designed and incorporated early into the building and parking layout plans. All new driveways should be Case 2 driveways and any security gates should be a minimum 20 feet from the property line.

E. Development Review Fees

An ordinance adding Section 19.15 to the Los Angeles Municipal Code relative to application fees paid to DOT for permit issuance activities was adopted by the Los Angeles City Council in 2009. This ordinance identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Eduardo Hermoso of my staff at (213) 972-8473.

Attachments

J:\Letters\2016CEN16-44375_3170 W. Olympic Blvd ts ltr.docx

c: Jordan Beroukhim, Council District No. 10
Jeannie Shen, Hollywood-Wilshire District Office, DOT
Taimour Tanavoli, Case Management Office, DOT
Carl Mills, Central District, BOE
Tin T. Nguyen, Linscott Law & Greenspan, Engineers

Table 9-1
CITY OF LOS ANGELES LEVELS OF SERVICE SUMMARY
AND VOLUME TO CAPACITY RATIOS
AM AND PM PEAK HOURS

24-Aug-16

NO.	INTERSECTION	PEAK HOUR	[1] EXISTING V/C	LOS	[2] EXISTING W/ PROJECT V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT [a]	[3] FUTURE PRE-PROJECT V/C	LOS	[4] FUTURE WITH PROJECT V/C	LOS	CHANGE V/C [(4)-(3)]	SIGNIF. IMPACT [a]
1	Western Avenue / 8th Street	AM	0.494	A	0.495	A	0.001	NO	0.545	A	0.545	A	0.000	NO
		PM	0.565	A	0.567	A	0.002	NO	0.633	B	0.637	B	0.004	NO
2	Western Avenue / Olympic Boulevard	AM	0.748	C	0.755	C	0.007	NO	0.793	C	0.800	C	0.007	NO
		PM	0.803	D	0.814	D	0.011	NO	0.873	D	0.883	D	0.010	NO
3	Western Avenue / 11th Street	AM	0.439	A	0.457	A	0.018	NO	0.485	A	0.503	A	0.018	NO
		PM	0.465	A	0.475	A	0.010	NO	0.521	A	0.531	A	0.010	NO
4	Western Avenue / Pico Boulevard	AM	0.666	B	0.668	B	0.002	NO	0.695	B	0.697	B	0.002	NO
		PM	0.669	B	0.675	B	0.006	NO	0.713	C	0.719	C	0.006	NO
5	Hobart Boulevard / Pico Boulevard	AM	0.367	A	0.374	A	0.007	NO	0.383	A	0.389	A	0.006	NO
		PM	0.371	A	0.381	A	0.010	NO	0.384	A	0.395	A	0.011	NO
6	Harvard Boulevard / Olympic Boulevard	AM	0.535	A	0.541	A	0.006	NO	0.560	A	0.566	A	0.006	NO
		PM	0.683	B	0.693	B	0.010	NO	0.718	C	0.728	C	0.010	NO
7	Harvard Boulevard / 11th Street	AM	0.157	A	0.157	A	0.000	NO	0.167	A	0.168	A	0.001	NO
		PM	0.324	A	0.327	A	0.003	NO	0.345	A	0.348	A	0.003	NO
8	Normandie Avenue / Olympic Boulevard	AM	0.669	B	0.673	B	0.004	NO	0.699	B	0.703	C	0.004	NO
		PM	0.705	C	0.711	C	0.006	NO	0.784	C	0.790	C	0.006	NO
9	Normandie Avenue / Pico Boulevard	AM	0.661	B	0.665	B	0.004	NO	0.691	B	0.695	B	0.004	NO
		PM	0.608	B	0.612	B	0.004	NO	0.660	B	0.664	B	0.004	NO

[a] According to LADOT's "Traffic Study Policies and Procedures", August 2014, a transportation impact on an intersection shall be deemed significant in accordance with the following table:

Final v/c	LOS	Project Related Increase in v/c
> 0.701 - 0.800	C	equal to or greater than 0.040
> 0.801 - 0.900	D	equal to or greater than 0.020
> 0.901	E, F	equal to or greater than 0.010

Table 7-1
PROJECT TRIP GENERATION [1]

29-Aug-16

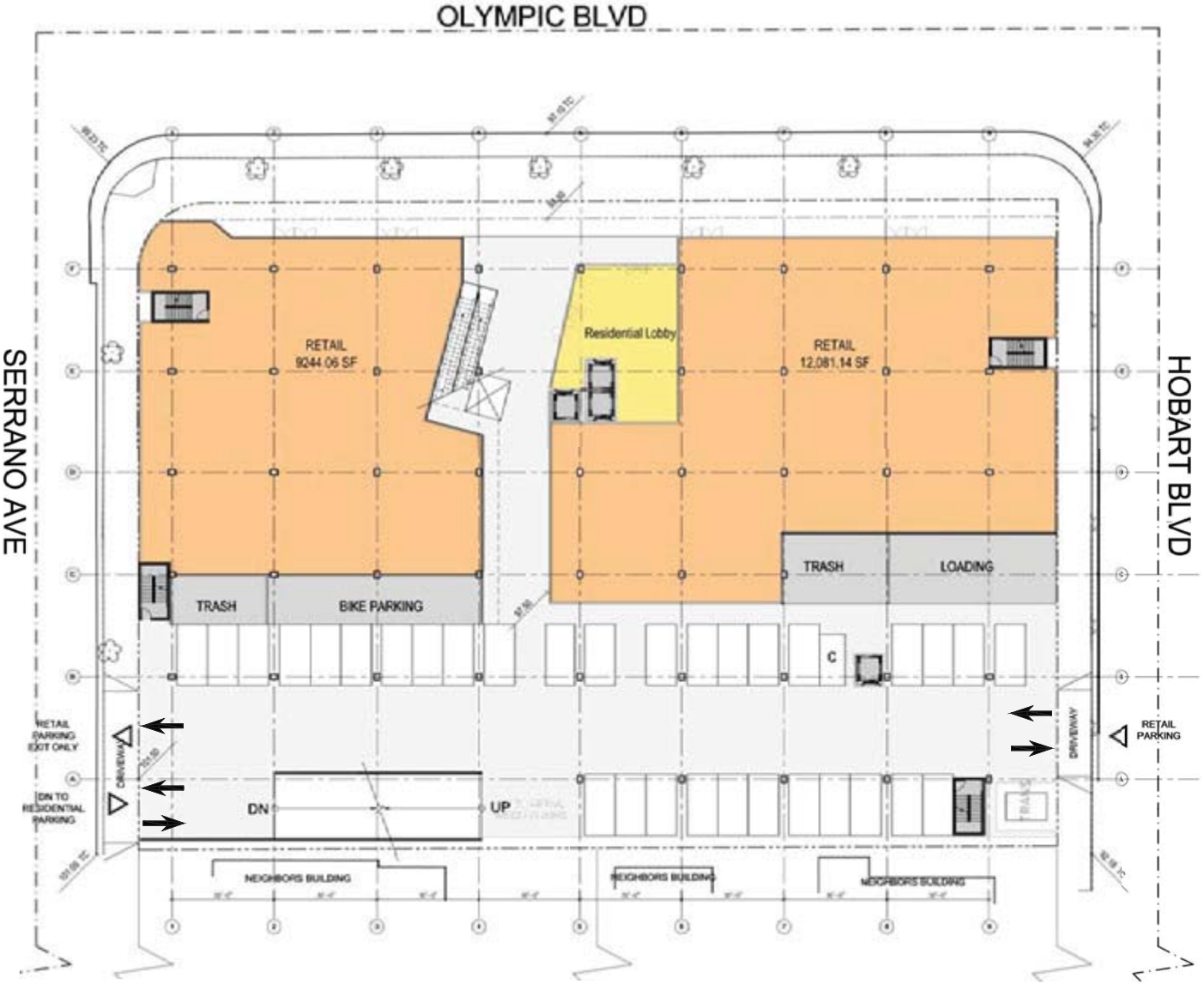
LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2] IN	AM PEAK HOUR VOLUMES [2] OUT	AM PEAK HOUR VOLUMES [2] TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM PEAK HOUR VOLUMES [2] OUT	PM PEAK HOUR VOLUMES [2] TOTAL
Proposed Project								
Apartments [3]	252 DU	1,676	26	103	129	101	55	156
Retail/Restaurant [4]	33,280 GLSF	1,421	20	12	32	59	64	123
Subtotal		3,097	46	115	161	160	119	279
Proposed Internal Capture								
Retail/Restaurant [6] (15%)		(213)	(3)	(2)	(5)	(9)	(10)	(19)
Proposed Transit Trips [5]								
Apartments (15%)		(251)	(4)	(15)	(19)	(15)	(8)	(23)
Retail/Restaurant (15%)		(181)	(3)	(2)	(5)	(8)	(8)	(16)
Subtotal		(432)	(7)	(17)	(24)	(23)	(16)	(39)
Existing Land Use								
Retail/Restaurant [4]	(15,135) GLSF	(646)	(9)	(6)	(15)	(27)	(29)	(56)
Single-Family Homes [7]	(3) DU	(29)	(1)	(1)	(2)	(2)	(1)	(3)
Subtotal		(675)	(10)	(7)	(17)	(29)	(30)	(59)
Existing Transit Trips [5]								
Retail/Restaurant (15%)		97	1	1	2	4	4	8
Single-Family Homes (15%)		4	0	0	0	0	0	0
Subtotal		101	1	1	2	4	4	8
Net Project Driveway Subtotal		**1,878**	**27**	**90**	**117**	**103**	**67**	**170**
Proposed Pass-By Trips [8]								
Retail/Restaurant (50%)		(514)	(7)	(4)	(11)	(21)	(23)	(44)
Existing Pass-By Trips [8]								
Retail/Restaurant (50%)		275	4	3	7	12	13	25
NET PROJECT TRIPS		**1,639**	**24**	**89**	**113**	**94**	**57**	**151**

[1] Source: ITE "Trip Generation", 9th Edition, 2012.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 220 (Apartment) trip generation average rates.
- Daily Trip Rate: 6.65 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.51 trips/dwelling unit; 20% inbound/80% outbound
- PM Peak Hour Trip Rate: 0.62 trips/dwelling unit; 65% inbound/35% outbound

[4] ITE Land Use Code 820 (Shopping Center) trip generation equation rates.
- Daily Trip Rate: 42.70 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.96 trips/1,000 SF of floor area; 62% inbound/38% outbound
- PM Peak Hour Trip Rate: 3.71 trips/1,000 SF of floor area; 48% inbound/52% outbound

[5] The transit reduction is based on the site's location within 1/4 miles of a Metro rapid bus stop.
[6] The internal capture reduction for the commercial uses is based on the synergy between the residential and commercial uses provided within the Project site.
[7] ITE Land Use Code 210 (Single-Family Detached Housing) trip generation average rates.
- Daily Trip Rate: 9.52 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.75 trips/dwelling unit; 25% inbound/75% outbound
- PM Peak Hour Trip Rate: 1.00 trips/dwelling unit; 63% inbound/37% outbound

[8] Pass-by trips are made as intermediate stops of the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. The trip reduction for pass-by trips has been applied to the commercial component of the project based on a review of the recommended practice in the ITE "Trip Generation Handbook", June 2004, the project characteristics, and the characteristics of the surrounding project area, and the "LADOT Traffic Study Policies and Procedures", August 2014 for shopping centers less than 50,000 SF.



Attachment 3

MAP SOURCE: ARCHEON

NOT TO SCALE

FIGURE 2-1
SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

3170 W. OLYMPIC BOULEVARD PROJECT

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LINSCOTT LAW & GREENSPAN
engineers

Providing Mobility Solutions for 50 YEARS 1966-2016

TRAFFIC IMPACT STUDY

HERA OLYMPIA

3170 W. OLYMPIC BOULEVARD

PROJECT

City of Los Angeles, California
August 30, 2016

Prepared for:

CBS Property Group
3170 West Olympic Boulevard, Suite G
Los Angeles, CA 90006

LLG Ref. 5-16-0262-1



Prepared Under Supervision of:

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APPENDIX	
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C.	LADOT Traffic Signal Warrant Worksheets

3170 W. OLYMPIC BOULEVARD PROJECT

City of Los Angeles, California
August 30, 2016

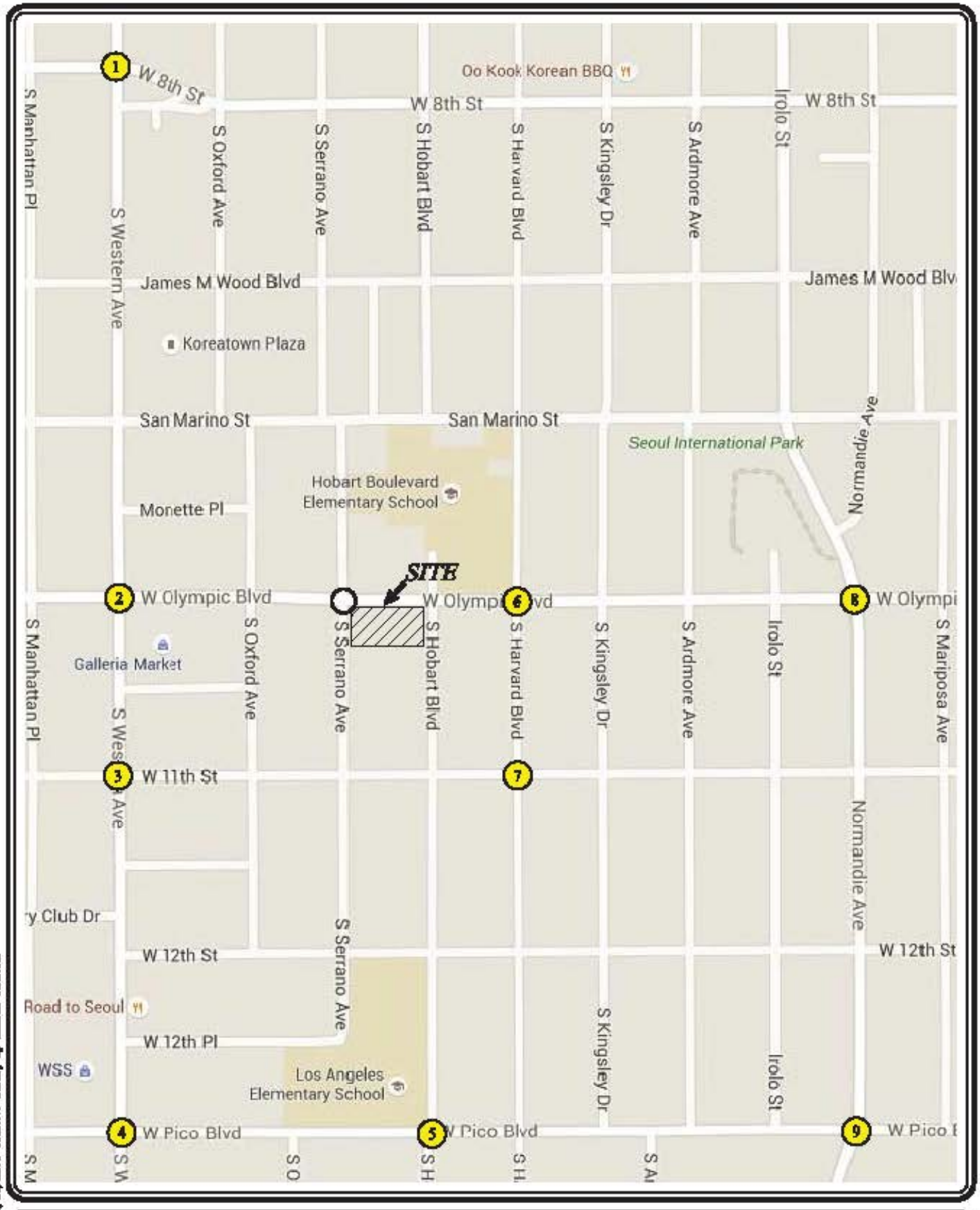
1.0 INTRODUCTION

This traffic analysis has been conducted to identify and evaluate the potential traffic impacts of the proposed "HERA OLYMPIA" project located at 3170 W. Olympic Boulevard. The project applicant seeks to obtain entitlements to construct a mixed-use residential project located at 3170 West Olympic Boulevard in the Koreatown area of the City of Los Angeles, California. The proposed project site is located between Serrano Avenue and S. Hobart Boulevard, north of a residential apartment building located at 1029 S. Hobart Boulevard and south of Olympic Boulevard. The project site location and general vicinity are shown in ***Figure 1–1***.

The traffic analysis follows City of Los Angeles traffic study guidelines[1] and is consistent with traffic impact assessment guidelines set forth in the Los Angeles County Congestion Management Program[2]. This traffic analysis evaluates potential project-related impacts at nine key intersections in the vicinity of the project site. The study intersections were determined in consultation with City of Los Angeles Department of Transportation (LADOT) staff. The Critical Movement Analysis method was used to determine Volume-to-Capacity ratios and corresponding Levels of Service for all nine study intersections. A review was also conducted of Los Angeles County Metropolitan Transportation Authority freeway and intersection monitoring stations to determine if a Congestion Management Program transportation impact assessment analysis is required for the proposed project.

This study (i) presents existing traffic volumes, (ii) includes existing traffic volumes with the forecast net new traffic volumes from the proposed project, (iii) recommends mitigation measures, where necessary, (iv) forecasts future cumulative baseline traffic volumes, (v) forecasts future traffic volumes with the proposed project, (vi) determines future forecast with project-related impacts, and (vii) recommends mitigation measures, where necessary.

[1] *Traffic Study Policies and Procedures*, City of Los Angeles Department of Transportation, August 2014.
[2] *2010 Congestion Management Program for Los Angeles County*, Los Angeles County Metropolitan Transportation Authority, 2010.



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MAP SOURCE: GOOGLE MAPS

XX STUDY INTERSECTION

PROJECT SITE

EVALUATE FOR TRAFFIC SIGNAL CONTROL

FIGURE 1-1
VICINITY MAP

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3170 W. OLYMPIC BOULEVARD PROJECT

1.1 Study Area

Upon coordination with LADOT staff, nine study intersections have been identified for evaluation during the weekday morning and afternoon peak hours. The nine study intersections provide local access to the study area and define the extent of the boundaries for this traffic impact analysis. Further discussion of the existing street system and study area is provided in Section 3.0.

The general location of the project in relation to the study locations and surrounding street system is presented in *Figure 1–1*. The traffic analysis study area is generally comprised of those locations which have the greatest potential to experience significant traffic impacts due to the proposed project as defined by the Lead Agency. In the traffic engineering practice, the study area generally includes those intersections that are:

a. Immediately adjacent or in close proximity to the project site;

b. In the vicinity of the project site that are documented to have current or projected future adverse operational issues; and

c. In the vicinity of the project site that are forecast to experience a relatively greater percentage of project-related vehicular turning movements (e.g., at freeway ramp intersections).

The locations selected for analysis were based on the above criteria, proposed 3170 W. Olympic Boulevard project peak hour vehicle trip generation, the anticipated distribution of project vehicular trips and existing intersection/corridor operations.

2.0 PROJECT DESCRIPTION

2.1 Site Location

The proposed 3170 W. Olympic Boulevard project is located at 3170 W. Olympic Boulevard in the Koreatown area of the City of Los Angeles, California. The proposed project site is bounded by Serrano Avenue to the west, S. Hobart Boulevard to the east, a residential building to the south at 1029 S. Hobart Boulevard, and Olympic Boulevard to the north, respectively. The project site location and general vicinity are shown in *Figure 1–1*.

2.2 Existing Project Site

The existing project site is currently occupied by commercial and residential buildings. Access to the existing project site is provided via one driveway on Serrano Avenue along the westerly property frontage; street parking is provided on S. Hobart Boulevard along the easterly property frontage and on Olympic Boulevard along the northerly property frontage.

2.3 Proposed Project Description

The project applicant seeks to obtain entitlements to construct a mixed-use development consisting of apartments and retail/restaurant uses. The project proposes to develop 252 apartment units and 33,280 square feet of retail/restaurant floor area. Construction and occupancy of the proposed project is planned to be completed by the year 2018. The site plan for the proposed project is illustrated in ***Figure 2-1***.



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MAP SOURCE: ARCHEON

FIGURE 2-1
SITE PLAN

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3170 W. OLYMPIC BOULEVARD PROJECT

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3.0 SITE ACCESS AND CIRCULATION

The proposed site access scheme for the 3170 W. Olympic Boulevard project is displayed in *Figure 2-1*. A description of the proposed site access and circulation scheme is provided in the following subsections.

3.1 Vehicular Project Site Access

Vehicular access to the site will be provided via two proposed site driveways on Serrano Avenue and one proposed site driveway on S. Hobart Boulevard. Descriptions of the project site driveways are provided in the following paragraphs.

Serrano Avenue Site Driveways:

- *Northerly Project Access*:

  The Northerly project site access is located along the east side of Serrano Avenue, near the center of the project property. The Northerly project site access will serve as the exit from the retail floor parking area and will accommodate limited vehicular access (i.e., left-turn and right-turn egress movements).

- *Southerly Project Access*:

  The Southerly project site access is located along the east side of Serrano Avenue, at the southwest corner of the project property. The Southerly project site access will serve the residential subterranean parking area and will accommodate full vehicular access (i.e., left-turn and right-turn ingress and egress movements).

S. Hobart Boulevard Site Driveway:

The S. Hobart Boulevard project site access is located along the west side of S. Hobart Boulevard, near the southwest corner of the project property. The project site access will serve as the entrance to the retail ground floor parking area and to the upper level parking area and will accommodate full vehicular access (i.e., left-turn and right-turn ingress and egress movements).

All of the existing site driveways located on Serrano Avenue and Hobart Boulevard along the westerly and easterly property frontage will be closed and removed as part of the proposed project.

4.0 EXISTING STREET SYSTEM

4.1 Regional Highway System

Regional access to the project site is provided by the I-10 (Santa Monica) Freeway. A brief description of the I-10 Freeway is provided in the following paragraph.

I-10 (Santa Monica) Freeway is an east-west freeway connecting the City of Santa Monica with the City of Los Angeles and the municipalities of the San Gabriel Valley and San Bernardino County to the east. In the project vicinity, three to four mixed-flow freeway lanes are generally provided in each direction on the I-10 Freeway with auxiliary merge/weave lanes provided between some interchanges. Eastbound and westbound ramps are provided on the I-10 Freeway at Western Avenue and Normandie Avenue in the project area.

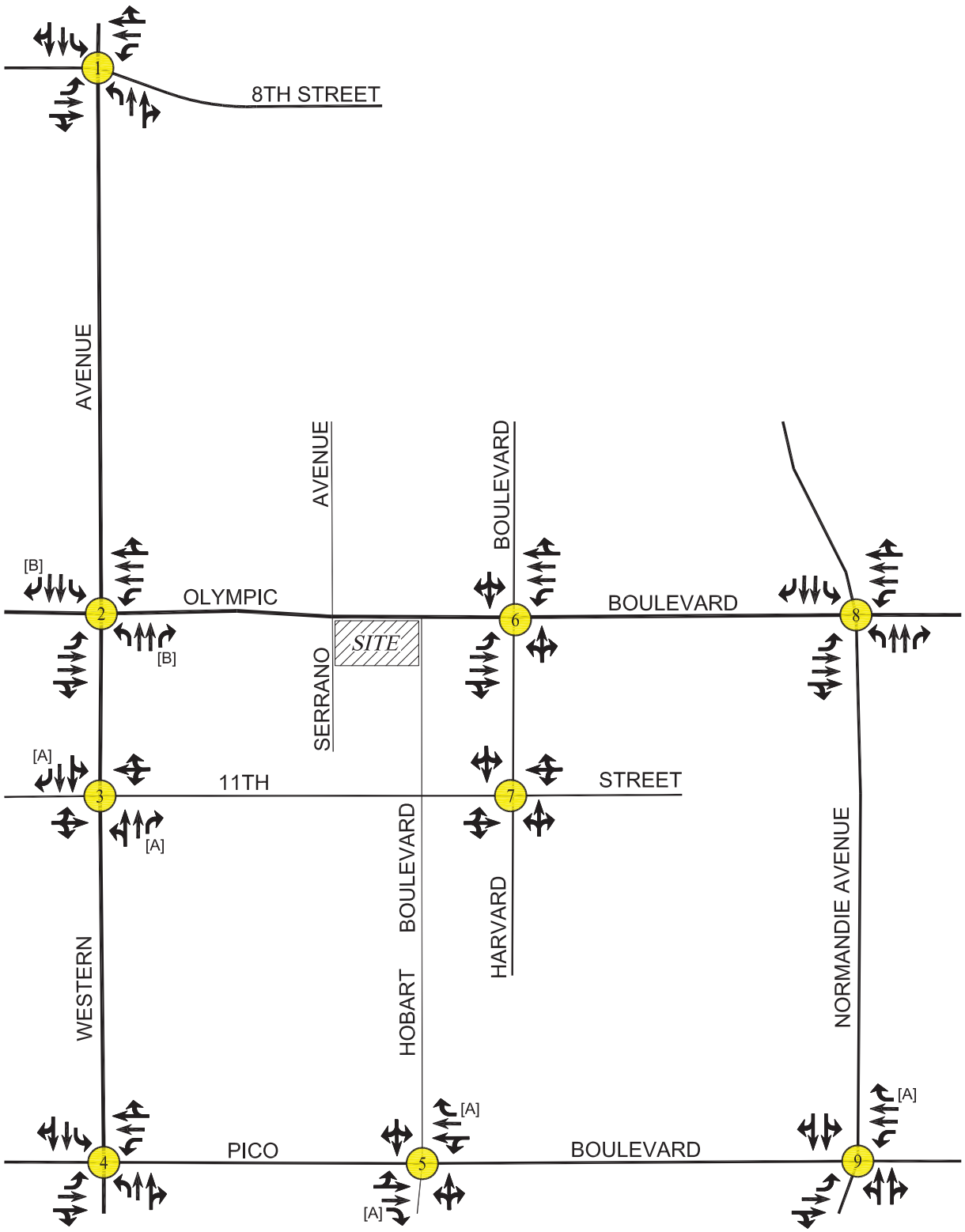
4.2 Local Roadway System

Immediate access to the project site is provided via Olympic Boulevard. The following study intersections were selected in consultation with LADOT staff for analysis of potential impacts due to the proposed project:

1. Western Avenue / 8th Street
2. Western Avenue / Olympic Boulevard
3. Western Avenue / 11th Street
4. Western Avenue / Pico Boulevard
5. Hobart Boulevard / Pico Boulevard
6. Harvard Boulevard / Olympic Boulevard
7. Harvard Boulevard / 11th Street
8. Normandie Avenue / Olympic Boulevard
9. Normandie Avenue / Pico Boulevard

Traffic Signal Warrant: Serrano Avenue / Olympic Boulevard

All nine study intersections selected for analysis are presently controlled by traffic signals; the intersection selected for the traffic signal warrant is presently controlled by a 2-way stop on Serrano Avenue. The existing lane configurations at the study intersections are displayed in ***Figure 4–1***.



N
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PROJECT SITE
XX STUDY INTERSECTION
NOTE: ALL STUDY INTERSECTIONS ARE SIGNALIZED
[A] DEFACTO RIGHT-TURN
[B] RIGHT-TURN OVERLAP

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FIGURE 4-1
EXISTING LANE CONFIGURATIONS

3170 W. OLYMPIC BOULEVARD PROJECT

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4.3 Roadway Descriptions

A brief description[3] of the important roadways in the project vicinity is provided in the following paragraphs.

Western Avenue is a north-south oriented roadway that is located west of the project site. Within the project study area, Western Avenue is designated as a Major Highway Class II/Avenue II by the City of Los Angeles. Two through travel lanes are generally provided in each direction on Western Avenue within the project study area. Separate exclusive left-turn lanes are provided in both directions on Western Avenue at major intersections. Separate exclusive right-turn lanes are provided on Western Avenue at the intersection of Western Avenue and Olympic Boulevard. Western Avenue is posted for a 35 miles per hour speed limit in the project vicinity.

Serrano Avenue is a north-south oriented roadway that borders the project site to the west. Within the project study area, Serrano Avenue is designated as a Local Street by the City of Los Angeles. One through travel lane is generally provided in each direction on Serrano Avenue within the project study area. There is no posted speed limit on Serrano Avenue, thus it is assumed to be a prima-facie speed limit of 25 miles per hour.

Hobart Boulevard is a north-south oriented roadway that borders the project site to the east. Within the project study area, Hobart Boulevard is designated as a Local Street by the City of Los Angeles. One through travel lane is provided on Hobart Boulevard within the project study area. There is no posted speed limit on Hobart Boulevard, thus it is assumed to be a prima-facie speed limit of 25 miles per hour.

Harvard Boulevard is a north-south oriented roadway that is located east of the project site. Within the project study area, Harvard Boulevard is designated as a Collector Street by the City of Los Angeles. One through travel lane is generally provided in both directions on Harvard Boulevard. There is no posted speed limit on Harvard Avenue, thus it is assumed to be a prima-facie speed limit of 25 miles per hour.

Normandie Avenue is a north-south oriented roadway that is located east of the project site. Within the project study area, Normandie Avenue is designated as a Secondary Highway/Avenue III by the City of Los Angeles. Two through travel lanes are provided in both directions on Normandie Avenue. Separate exclusive left-turn and right-turn lanes are provided at the Normandie Avenue/Olympic Boulevard intersection within the project study area. Normandie Avenue posted for a 25 miles per hour speed limit north of Olympic Boulevard and 35 miles per hour speed limit south of Olympic Boulevard in the project vicinity.

8th Street is an east-west oriented roadway that is located north of the project site. Within the project study area, 8th Street is designated as a Secondary Highway/Avenue II by the City of Los Angeles. Two through travel lanes are provided in both directions on 8th Street within the project study area. Separate exclusive left-turn lanes are provided on 8th Street at major intersections

[3] The street designations provided refer to both the street standards adopted by the City in 1999, as well as the Mobility Plan 2035 adopted by the City Council in August 2015.

within the project study area. 8th Street is posted for a 35 miles per hour speed limit in the project vicinity.

Olympic Boulevard is an east-west oriented roadway that borders the project site to the north. Within the project study area, Olympic Boulevard is designated as a Secondary Highway/Boulevard II by the City of Los Angeles. Three through travel lanes are provided in each direction on Olympic Boulevard within the project study area. Separate exclusive left-turn lanes are provided on Olympic Boulevard at major intersections. Olympic Boulevard is posted for a 35 miles per hour speed limit in the project vicinity.

11th Street is an east-west oriented roadway that is located south of the project site. Within the project study area, 11th Street is designated as a Collector Street by the City of Los Angeles. One through travel lane is generally provided in each direction on 11th Street within the project study area. There is no posted speed limit on 11th Street, thus it is assumed to be a prima-facie speed limit of 25 miles per hour.

Pico Boulevard is an east-west oriented roadway that is located south of the project site. Within the project study area, Pico Boulevard is designated as a Secondary Highway/Avenue II by the City of Los Angeles. Two through travel lanes are generally provided in each direction on Pico Boulevard within the project study area. Separate exclusive left-turn lanes are provided on Pico Boulevard at major intersections. Pico Boulevard is posted for a 35 miles per hour speed limit in the project vicinity.

4.4 Public Bus and Light-Rail Transit Services

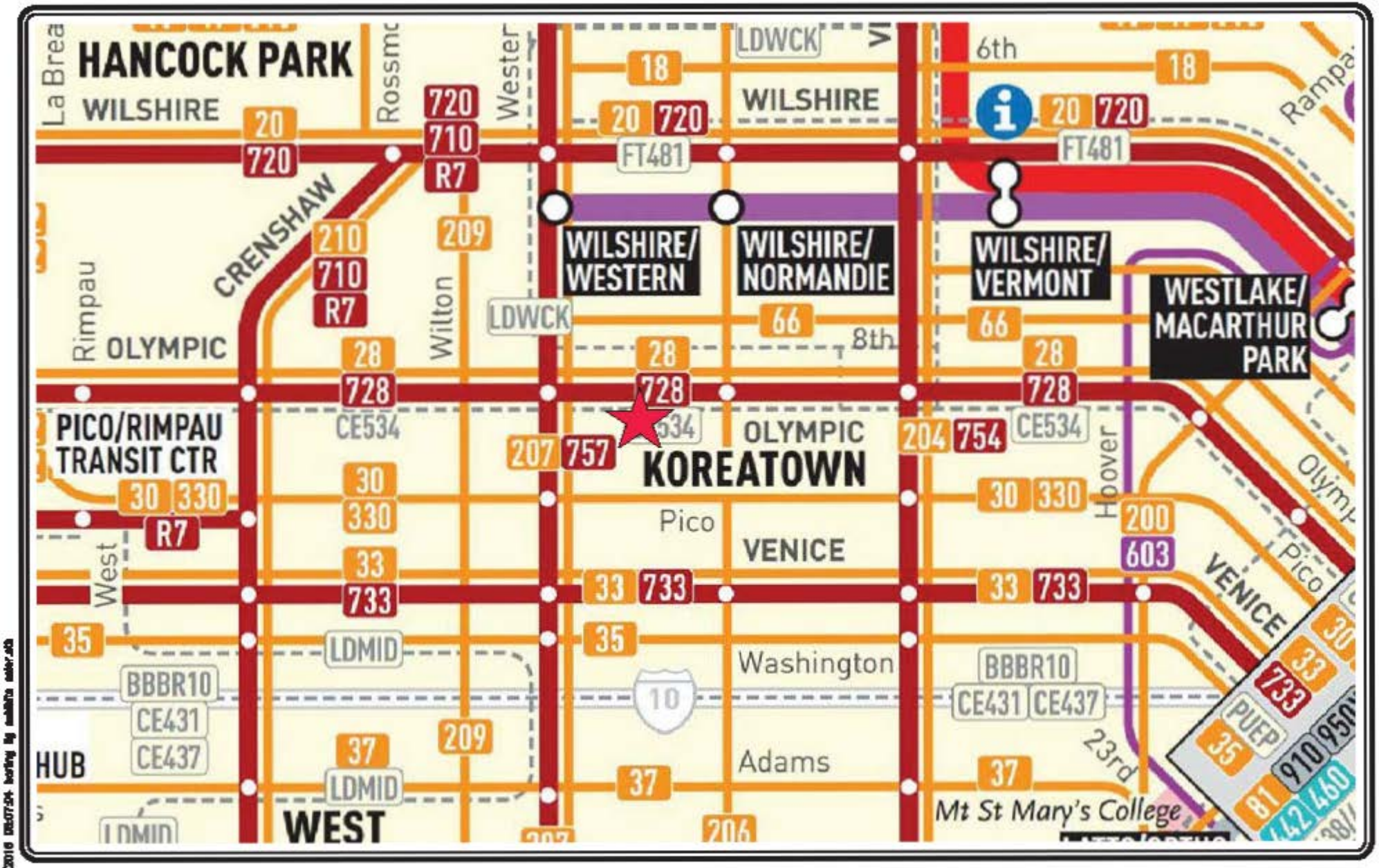
Public bus transit service within the 3170 W. Olympic Boulevard project study area is currently provided by Los Angeles County Metropolitan Transit Authority (Metro). A summary of the existing transit services, including the transit route, destinations and peak hour headways is presented in ***Table 4–1***. The existing public transit routes in the 3170 W. Olympic Boulevard project site vicinity are illustrated in ***Figure 4–2***.

Near the project site, light-rail transit access is provided by the Metro Purple Line. During the AM and PM peak hours, the Metro Purple Line provides headways of approximately 10 minutes per train (i.e., 12 trains per hour).

Table 4-1
EXISTING TRANSIT ROUTES [1]

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES/TRAINS DURING PEAK HOUR		
			DIR	AM	PM
Metro 28	Eagle Rock to Downtown Los Angeles to Century City (via Olympic Boulevard & Eagle Rock Boulevard)	Olympic Boulevard	EB WB	6 7	4 5
Metro 30/330	East Los Angeles to West Hollywood (via San Vicente Boulevard & Pico Boulevard)	Pico Boulevard	EB WB	11 8	9 10
Metro 33	Santa Monica to Downtown Los Angeles (via Venice Boulevard)	Venice Boulevard	EB WB	3 7	6 4
Metro 66	Montebello to Wilshire Center (via 8th Street & Olympic Boulevard)	Olympic Boulevard	EB WB	17 7	6 8
Metro 206	Hollywood to Athens (via Normandie Avenue)	Normandie Avenue	NB SB	7 7	6 7
Metro Rapid 728	Century City to Downtown Los Angeles (via Olympic Boulevard)	Olympic Boulevard	NB SB	6 7	5 5
Metro Rapid 733	Santa Monica to Downtown Los Angeles (via Venice Boulevard)	Venice Boulevard	EB WB	3 7	6 4
Metro Rapid 754	Hollywood to Athens (via Vermont Avenue)	Olympic Boulevard	NB SB	12 12	11 11
Metro Purple Line	Koreatown to Union Station (via Wilshire Boulevard & 7th Street)	Western Avenue & Normandie Avenue	EB WB	6 5	6 5
			Total	138	118

[1] Sources: Los Angeles County Metropolitan Transportation Authority (Metro), website 2016.



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MAP SOURCE: METROPOLITAIN TRANSPORTATION AUTHORITY

PROJECT SITE

FIGURE 4-2
EXISTING PUBLIC TRANSIT ROUTES

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3170 W. OLYMPIC BOULEVARD PROJECT

5.0 TRAFFIC COUNTS

Manual traffic counts of vehicular turning movements were conducted at each of the study intersections during the weekday morning and afternoon commuter periods to determine the peak hour traffic volumes. The manual traffic counts at the study intersections were conducted from 7:00 AM to 10:00 AM to determine the AM peak commuter hour and from 3:00 PM to 6:00 PM to determine the PM peak commuter hours.

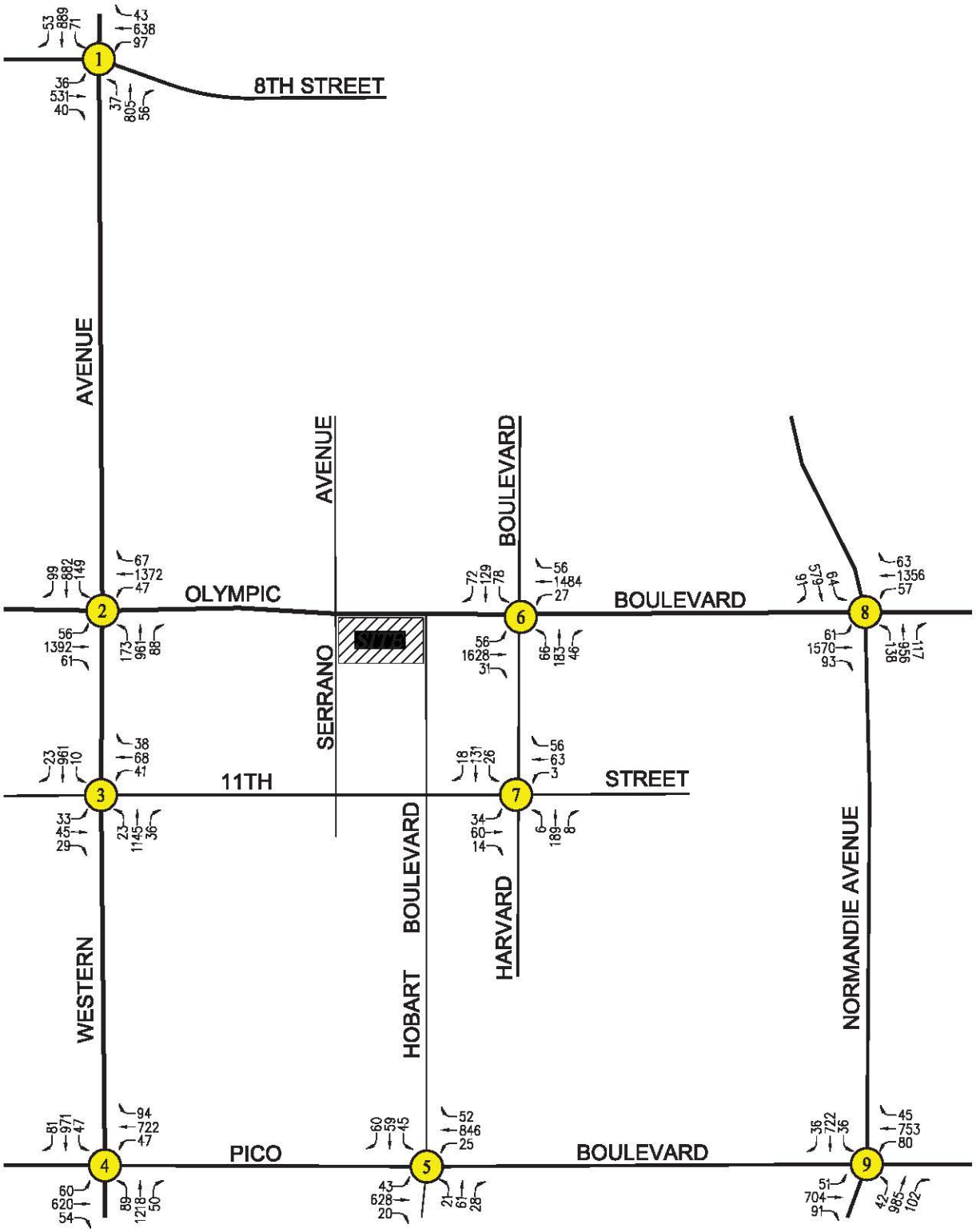
The weekday AM and PM peak period manual counts of vehicle movements at the study intersections are summarized in ***Table 5–1***. The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are shown in ***Figures 5–1*** and ***5–2***, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in ***Appendix A***.

Table 5-1
EXISTING TRAFFIC VOLUMES [1]

27-Jun-16

NO.	INTERSECTION	DATE	DIR	AM PEAK HOUR		PM PEAK HOUR	
				BEGAN	VOLUME	BEGAN	VOLUME
1	Western Avenue / 8th Street	05/25/2016	NB	7:45	898	5:00	871
			SB		1,013		1,039
			EB		607		757
			WB		778		839
2	Western Avenue / Olympic Boulevard	05/25/2016	NB	7:45	1,222	5:00	1,175
			SB		1,130		1,099
			EB		1,509		1,761
			WB		1,486		1,435
3	Western Avenue / 11th Street	05/25/2016	NB	7:45	1,204	4:15	1,115
			SB		994		1,059
			EB		107		174
			WB		147		176
4	Western Avenue / Pico Boulevard	05/25/2016	NB	7:30	1,357	5:00	1,207
			SB		1,099		1,081
			EB		734		985
			WB		863		662
5	Hobart Boulevard / Pico Boulevard	05/25/2016	NB	7:15	110	5:00	105
			SB		164		147
			EB		691		946
			WB		923		673
6	Harvard Boulevard / Olympic Boulevard	05/25/2016	NB	8:00	295	5:00	357
			SB		279		451
			EB		1,715		1,940
			WB		1,567		1,546
7	Harvard Boulevard / 11th Street	05/25/2016	NB	7:45	203	5:00	259
			SB		175		355
			EB		108		185
			WB		122		219
8	Normandie Avenue / Olympic Boulevard	05/25/2016	NB	8:00	1,211	5:00	969
			SB		734		1,014
			EB		1,724		1,892
			WB		1,476		1,617
9	Normandie Avenue / Pico Boulevard	05/25/2016	NB	7:30	1,129	4:45	899
			SB		794		1,101
			EB		846		841
			WB		878		794

[1] Counts conduted by National Data & Surveying Services



PROJECT SITE

XX STUDY INTERSECTION

N

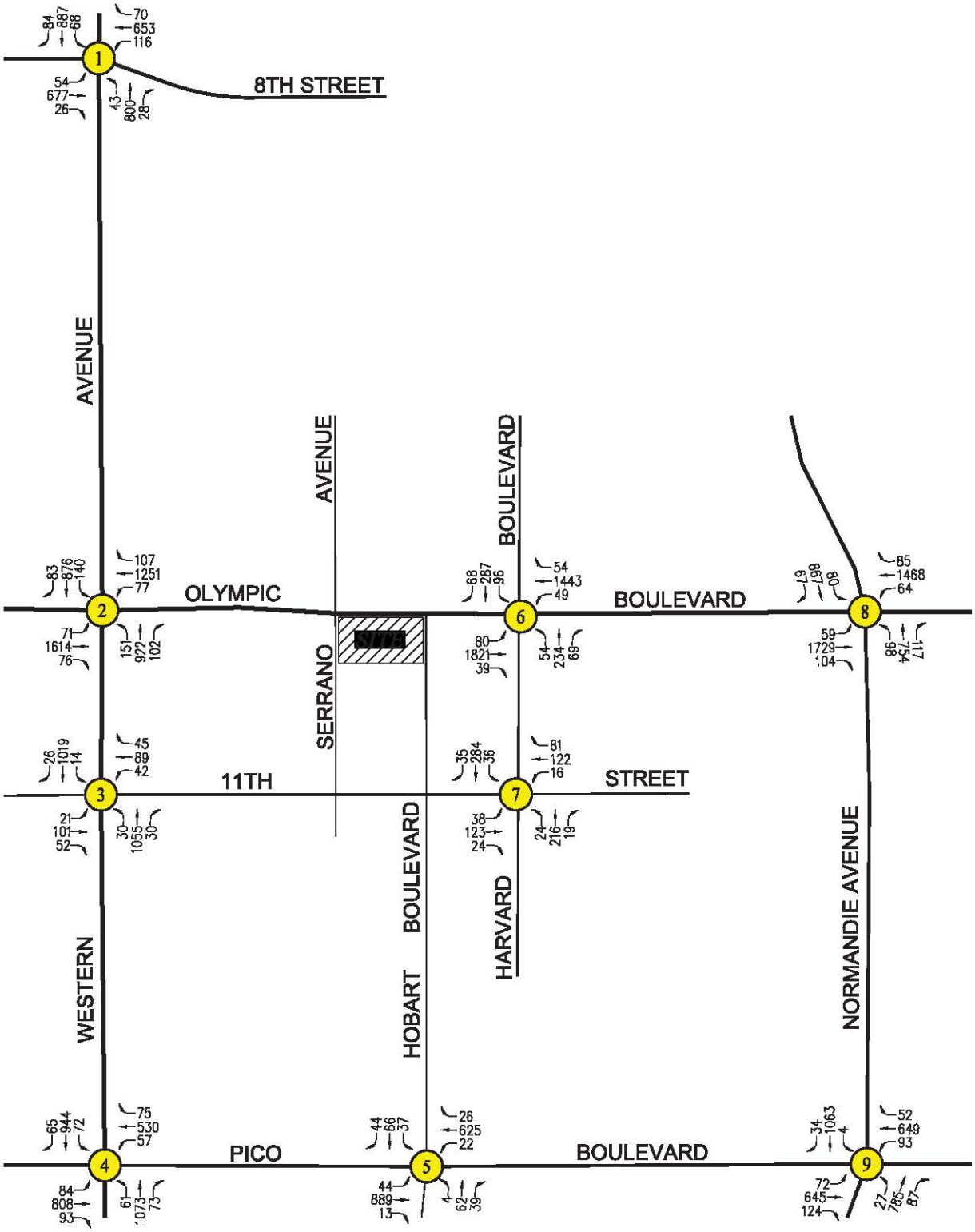
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FIGURE 5-1
EXISTING TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR

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3170 W. OLYMPIC BOULEVARD PROJECT

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PROJECT SITE

XX STUDY INTERSECTION

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FIGURE 5-2
EXISTING TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR

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3170 W. OLYMPIC BOULEVARD PROJECT

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6.0 CUMULATIVE DEVELOPMENT PROJECTS

The forecast of future pre-project conditions was prepared in accordance to procedures outlined in Section 15130 of the CEQA Guidelines. Specifically, the CEQA Guidelines provide two options for developing the future traffic volume forecast:

> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or
>
> (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency."

Accordingly, the traffic analysis provides a highly conservative estimate of future pre-project traffic volumes as it incorporates both the "A" and "B" options outlined in CEQA Guidelines for purposes of developing the forecast.

6.1 Related Projects

A forecast of on-street traffic conditions prior to occupancy of the proposed project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area. With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impact of all ongoing development. The related projects research was based on information on file at the City of Los Angeles Departments of Transportation and Planning. The list of related projects in the project site area is presented in ***Table 6–1***. The location of the related projects is shown in ***Figure 6–1***.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation* manual[4]. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 6-1*. The distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in ***Figures 6–2*** and ***6–3***, respectively.

[4] Institute of Transportation Engineers *Trip Generation* manual, 9th Edition, Washington, D.C., 2012.

Table 6-1
RELATED PROJECTS LIST AND TRIP GENERATION [1]

MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			LAND-USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
1	2004-CEN-0958 3323 W. Olympic Boulevard	Proposed	Apartments Office	40 DU 27,720 GSF		1,267	57	30	87	44	82	126
2	2005-CEN-2248 3670 W. Wilshire Boulevard	Proposed	Condominiums Other	378 DU 8,000 GLSF		2,480	55	142	197	144	76	220
3	3033 W. Wilshire Boulevard	Proposed	Condominiums Retail	189 DU 5,540 GLSF		816	12	49	61	45	29	74
4	3060 W. Olympic Boulevard	Proposed	Retail	109,006 GLSF		4,134	60	26	86	169	191	360
5	805 S. Catalina Street	Proposed	Condominiums Retail	300 DU 5,000 GLSF		1,935	24	119	143	110	57	167
6	820 S. Hoover Street	Proposed	Condominiums Retail	32 DU 4,500 GLSF		414	7	15	22	18	14	32
7	2924 W. 8th Street	Proposed	Apartments Assisted Living	37 DU 48 DU		416	6	17	23	18	10	28
8	621 S. Catalina Street	Proposed	Apartments Hotel Quality Restaurant	7 DU 75 Rooms 1,547 GSF		643	21	18	39	27	23	50
9	Western Galleria Market 100 N. Western Avenue	Proposed	Apartments Retail	98 DU 30,000 GLSF		940	17	40	57	54	38	92
10	Southwestern Law School Expansion 3050 W. Wilshire Boulevard	Proposed	Apartments School Other	133 DU 43,400 GSF 450 Seats		(1,337)	(35)	(16)	(51)	(45)	(52)	(97)
11	Wilshire Temple Master Plan 3663 W. Wilshire Boulevard	Proposed	Administration Office Nursery School Elementary School	55,380 GSF 216 Seats 420 Seats		825	94	44	138	20	3	23
12	South LA Redevelopment 4B 1982 W. Adams Boulevard	Proposed	Retail Office	10,000 GLSF 22,000 GSF		457	33	6	39	15	37	52
13	West Adams Office 1999 W. Adams Boulevard	Proposed	Office	75,000 GSF		826	102	14	116	19	93	112
14	Camino Nuevo Charter School 3400 W. 3rd Street	Under Construction	Charter Elementary (K-8)	696 Students		764	146	120	266	43	45	88
15	3470 W. Wilshire Boulevard	Proposed	Health Club	20,178 GSF		231	(13)	6	(7)	22	(1)	21

Table 6-1
RELATED PROJECTS LIST AND TRIP GENERATION [1] (Continued)

MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			LAND-USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
16	Bernardo Apartments 688 S. Bernardo Street	Proposed	Apartments	136 DU		678	10	42	52	41	22	63
17	3869 W. Wilshire Boulevard	Proposed	Apartments	84 DU		538	8	31	39	36	19	55
18	680 S. Bernardo Street	Proposed	Apartments	177 DU		1,000	15	61	76	61	32	93
19	685 S. New Hampshire Avenue	Proposed	Apartments	177 DU		1,000	15	61	76	61	32	93
20	1020 Fedora Street Hotel 1020 S. Fedora Street	Proposed	Retail	86 Rooms		616	28	14	42	23	21	44
21	3640 W. Wilshire Boulevard	Proposed	Apartments	209 DU		1,182	18	72	90	73	40	113
22	968 S. Bernardo Street	Under Construction	Church	85,308 GSF		535	23	8	31	3	9	12
23	135 N. Western Avenue	Proposed	Restaurant	11,904 GSF		457	2	2	4	25	13	38
24	940 S. Western Avenue	Under Construction	Apartments Retail	79 DU 8,000 GLSF		380	6	31	37	26	11	37
25	864 S. Vermont Avenue	Proposed	Apartments Retail	411 DU 43,800 GLSF		3,202	24	129	153	164	101	265
26	535 S. Kingsley Drive	Proposed	Apartments	85 DU		543	8	31	39	36	19	55
27	2850 W. 7th Street	Proposed	Condominiums Short Tem Hotel Retail	160 DU 40 Rooms 3,600 GLSF		1,057	20	72	92	72	42	114
28	800 S. Harvard Boulevard	Proposed	Apartments Retail	131 DU 7,000 GLSF		827	14	32	46	44	33	77
29	2929 W. Leeward Avenue	Proposed	Condominiums	80 DU		476	7	33	40	44	21	65
30	6th & Virgil 2968 W. 6th Street	Proposed	Apartments High-Turnover Restaurant Health Club	399 DU 12,000 GSF 8,000 GSF	[3]	2,943	73	154	227	168	93	261
31	4110 W. 3rd Street	Proposed	Hotel Retail	174 Rooms 2,780 GSF		1,185	45	35	80	46	40	86
32	1011 S. Serrano Avenue	Proposed	Apartments	91 DU		545	8	33	41	32	18	50
33	3076 W. Olympic Boulevard	Proposed	Apartments Retail	226 DU 16,907 GLSF		1,567	25	78	103	90	56	146

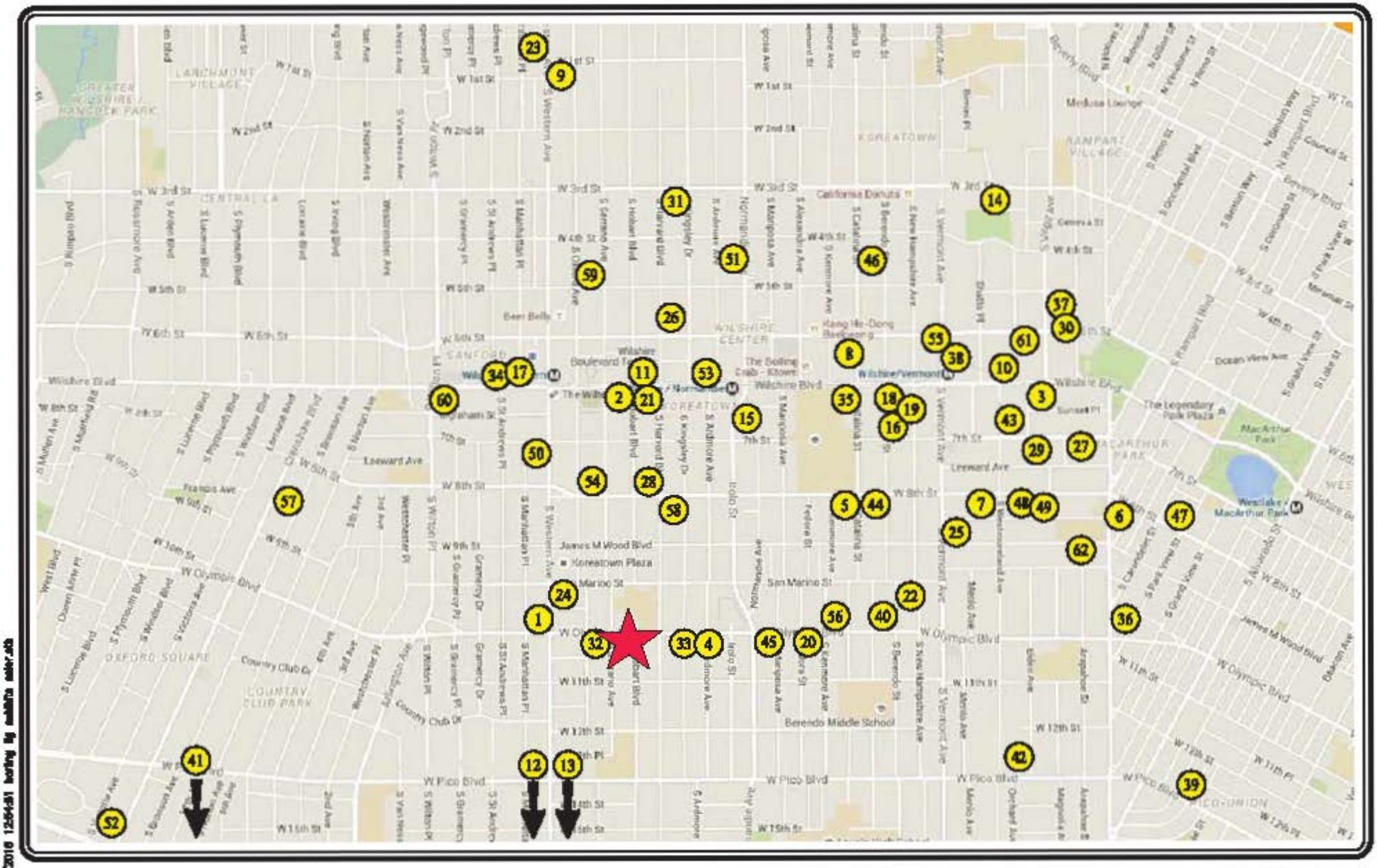
Table 6-1
RELATED PROJECTS LIST AND TRIP GENERATION [1] (Continued)

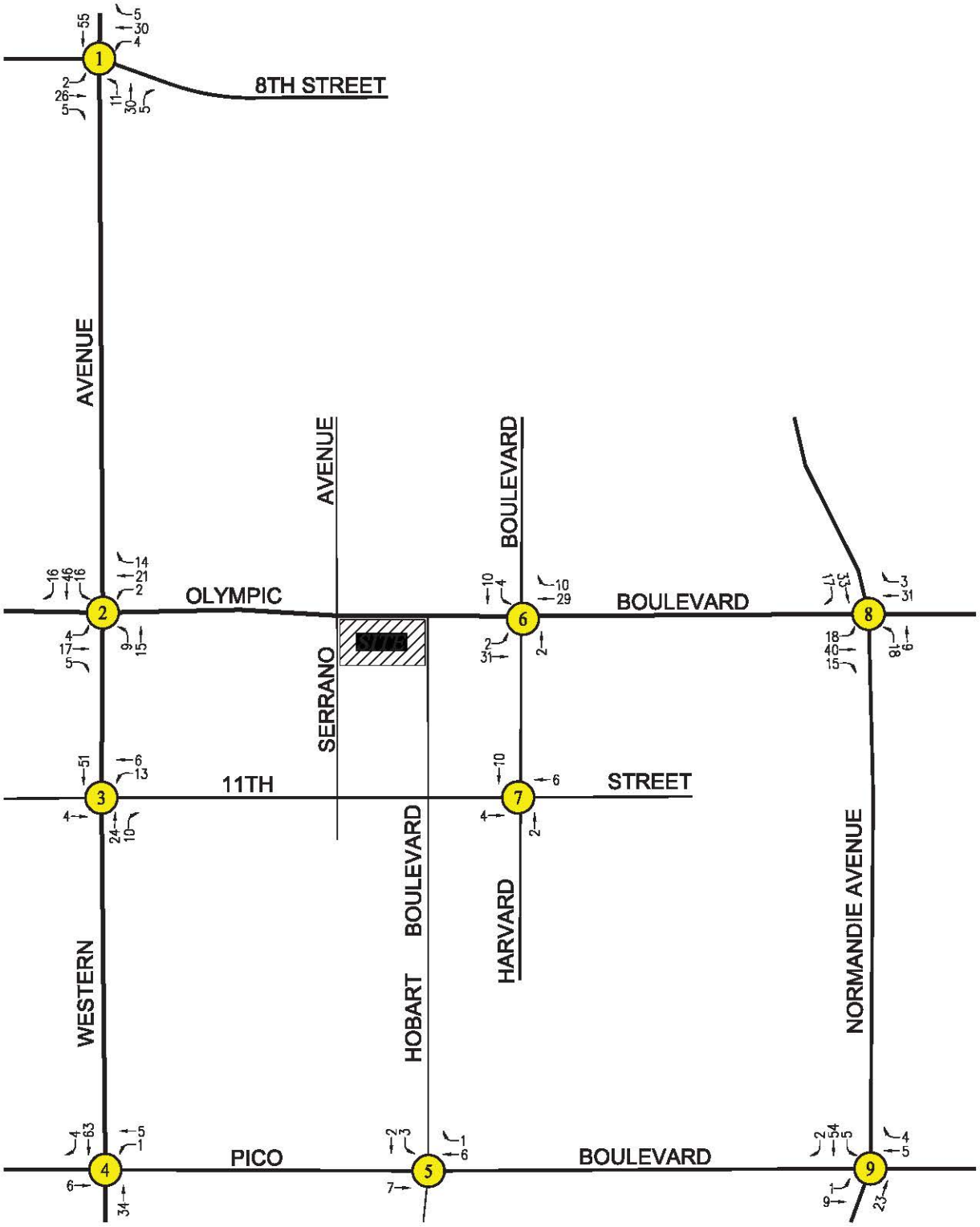
MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			LAND-USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
34	3875 W. Wilshire Boulevard	Proposed	Apartments	220 DU		1,238	19	77	96	77	42	119
35	3350 W. Wilshire Boulevard	Proposed	Apartments	121 DU		728	11	43	54	47	25	72
36	1011 S. Park View Street	Proposed	Apartments	108 DU		594	9	38	47	38	19	57
37	2965 W. 6th Street	Proposed	Hotel	99 Rooms		688	26	18	44	25	25	50
38	627 S. Vermont Avenue	Proposed	Apartments Restaurant	179 DU 12,000 GSF		1,304	34	72	106	75	40	115
39	1929 W. Pico Boulevard	Proposed	Charter High School	480 Students		821	140	66	206	20	42	62
40	2789 W. Olympic Boulevard	Proposed	Office Retail	2,781 GSF 20,607 GLSF		612	16	8	24	25	29	54
41	4001 W. Venice Boulevard	Proposed	Elementary School	432 Students		557	107	87	194	32	33	65
42	1255 E. Elden Avenue	Proposed	Apartments	93 DU		376	0	32	32	28	10	38
43	2972 W. 7th Street	Proposed	Apartments Retail	180 DU 15,000 GLSF		486	7	59	66	43	8	51
44	3100 W. 8th Street	Proposed	Apartments	100 DU	[4]	665	10	41	51	10	41	51
45	1017-1031 S. Mariposa Ave Apartments 1017 S. Mariposa Ave	Proposed	Apartments	79 DU		373	5	23	28	23	12	35
46	427 S. Bernardo Street	Proposed	Apartments	85 DU		288	5	17	22	17	10	27
47	2405 W. 8th Street	Proposed	Apartments Retail	144 DU 4,406 GLSF		333	(20)	48	28	42	(15)	27
48	4001 W. Venice Boulevard	Proposed	Charter Elementary School	432 Students		557	54	43	97	16	16	32
49	2859 W. Francis Avenue	Proposed	Apartments	81 DU		492	7	28	35	31	5	36
50	700 S. Manhattan Place	Proposed	Apartments Restaurant Retail	162 DU 6,500 GSF 3,500 GLSF		1,260	19	57	76	71	46	117
51	411 S. Normandie Avenue	Proposed	Apartments	224 DU		1,407	22	86	108	87	47	134
52	1614 S. Crenshaw Boulevard	Proposed	Donut/Coffee with Drive-Thru	1,700 GSF		1,392	87	84	171	37	36	73
53	3545 W. Wilshire Boulevard	Proposed	Apartments Retail	433 DU 49,849 GLSF		917	(42)	83	41	84	10	94

Table 6-1
RELATED PROJECTS LIST AND TRIP GENERATION [1] (Continued)

MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			LAND-USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
54	3525 W. 8th Street	Proposed	Apartments Supermarket Retail	367 DU 22,906 GLSF 16,513 GLSF		1,214	8	121	129	83	25	108
55	605 S. Vermont Avenue	Proposed	Apartments Museum	103 DU 30,937 GSF		755	17	39	56	42	37	79
56	2870 W. Olympic Boulevard	Proposed	Hotel Retail	78 Rooms 16,384 GLSF		834	22	14	36	30	28	58
57	850 S. Crenshaw Boulevard	Proposed	Apartments	44 DU		293	4	18	22	18	10	28
58	815 S. Kingsley Drive	Proposed	Apartments	90 DU	[4]	599	9	37	46	9	37	46
59	4074 W. 5th St. Mixed-Use 4074 W. 5th Street	Proposed	Apartments Retail	119 DU 13,000 GLSF		944	14	44	58	52	34	86
60	3986 W. Wilshire Boulevard	Proposed	Apartments High-Turnover Restaurant Coffee Shop Retail	228 DU 5,000 GSF 5,000 GSF 12,000 GLSF		1,354	100	23	123	124	77	201
61	616 S. Westmoreland Avenue	Proposed	Apartments Restaurant Retail	77 DU 2,360 GSF 745 GLSF		446	1	30	31	31	5	36
62	2649 W. San Marino Avenue	Proposed	Apartments	45 DU		246	4	15	19	15	8	23
TOTAL						55,315	1,630	2,900	4,530	2,980	2,009	4,989

[1] Source: ITE "Trip Generation", 9th Edition, 2012.
[2] Trips are one-way traffic movements, entering or leaving.
[3] Source: 6th & Virgil Traffic Study, LLG Engineers, May 2014.
[4] ITE Land Use Code 220 (Apartment) trip generation average rates.


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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
RELATED PROJECT
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FIGURE 6-1
LOCATION OF RELATED PROJECTS
3170 W. OLYMPIC BOULEVARD PROJECT



PROJECT SITE

XX STUDY INTERSECTION

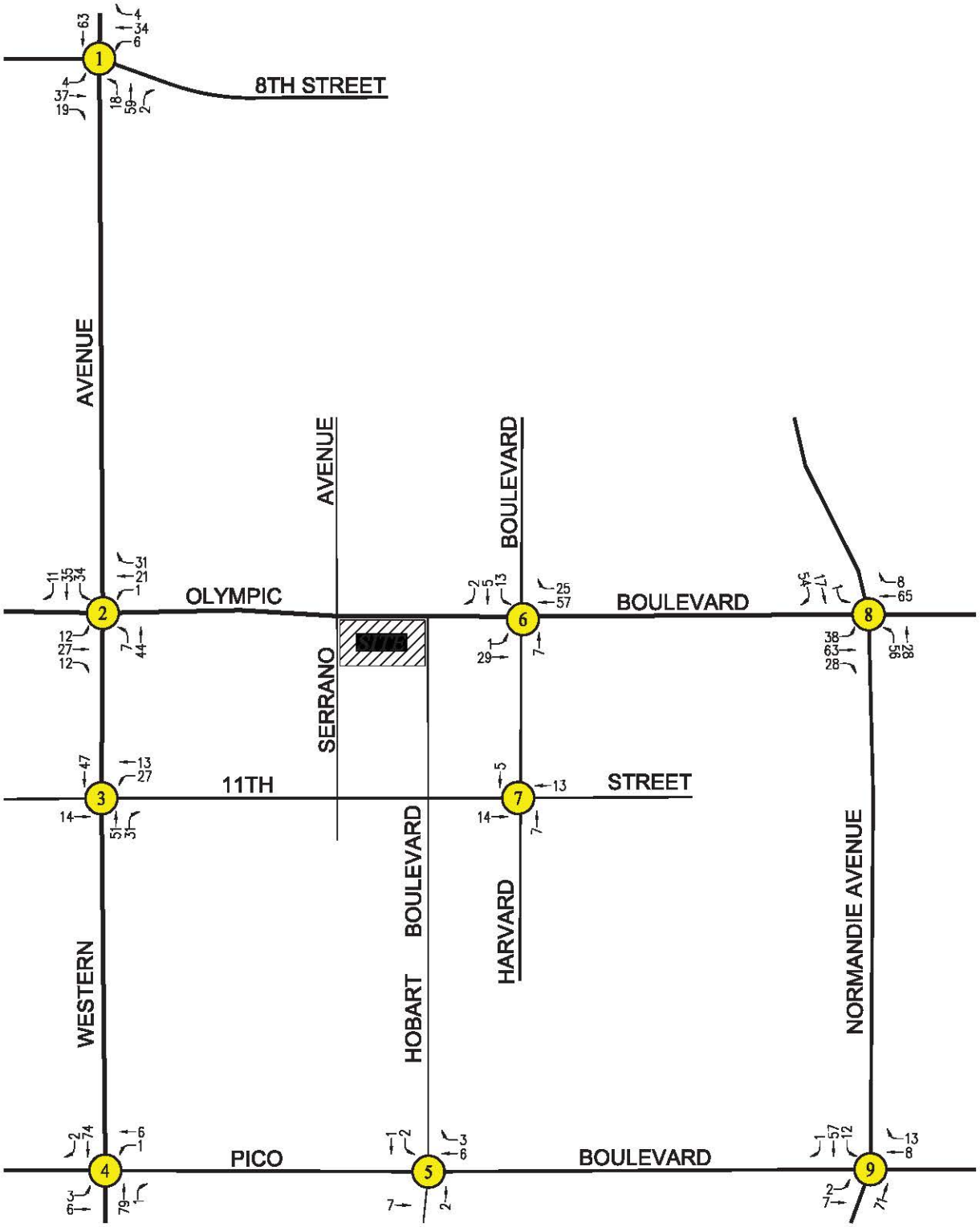
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FIGURE 6-2
RELATED PROJECTS TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
3170 W. OLYMPIC BOULEVARD PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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PROJECT SITE

XX STUDY INTERSECTION

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FIGURE 6-3
RELATED PROJECTS TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR
3170 W. OLYMPIC BOULEVARD PROJECT

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6.2 Ambient Traffic Growth Factor

In order to account for unknown related projects not included in this analysis, the existing traffic volumes were increased at an annual rate of 1.0 percent (1.0%) per year to the year 2018 (i.e., the anticipated year of project build-out). The ambient growth factor was based on general traffic growth factors provided in the *2010 Congestion Management Program for Los Angeles County* (the "CMP manual") and determined in consultation with LADOT staff. It is noted that based on review of the general traffic growth factors provided in the CMP manual for the West/Central L.A. area, it is anticipated that the existing traffic volumes are expected to increase at an annual rate of less than 0.2% per year between the years 2010 and 2020. Thus, application of an annual growth factor of 1.0% allows for a conservative, worst case forecast of future traffic volumes in the area. Further, it is noted that the CMP manual's traffic growth rate is intended to anticipate future traffic generated by development projects in the project vicinity. Thus, the inclusion in this traffic analysis of both a forecast of traffic generated by known related projects plus the use of an ambient growth traffic factor based on CMP traffic model data results in a conservative estimate of future traffic volumes at the study intersections.

7.0 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the 3170 W. Olympic Boulevard project, a multi-step process has been utilized. The first step is trip generation, which estimates the total arriving and departing traffic volumes on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound project traffic volumes. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the proposed project is isolated by comparing operational (i.e., Levels of Service) conditions at the selected key intersections using existing and expected future traffic volumes without and with forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated and the significance of the project's impacts identified.

7.1 Project Traffic Generation

Traffic volumes expected to be generated by the proposed 3170 W. Olympic Boulevard project during the weekday AM and PM peak hours, as well as on a daily basis, were estimated using rates published in the ITE *Trip Generation* manual. The proposed project consists of the development of 252 residential apartment units and 33,280 square feet of retail/restaurant space. The ground floor will consist entirely of retail/restaurant space and the second floor will consist of both residential and retail/restaurant space, all remaining floors will consist of residential apartments units.

Traffic volumes expected to be generated by the proposed project were based upon rates per number of dwelling units, as well as per thousand square feet of commercial use. The following trip generation rate was used to forecast the traffic volumes expected to be generated by the project land use components:

- Apartments: ITE Land Use Code 220 (Apartment) trip generation average rates were used to forecast the traffic volumes expected to be generated by the residential component of the proposed project.

- Retail/Restaurant: ITE Land Use Code 820 (Shopping Center) trip generation average rates were used to forecast the traffic volumes expected to be generated by the commercial component of the proposed project.

In addition to the trip generation forecasts for the project land use components (which are essentially an estimate of the number of vehicles that could be expected to enter and exit the site access points), an internal capture adjustment has been applied for the proposed project to account for the synergistic effects of the planned mixed land use. Internal capture trips are those trips made internal to the site between land uses in a mixed or multi-use development. When combined within a mixed or multi-use development, land uses tend to interact, and thus attract a portion of each other's trip generation. An internal capture adjustment of 15% has been utilized to account for the interaction between the residential and commercial land uses.

A forecast was also made of transit trips. The transit reduction is based on the site's proximity to the various buses and a rail line as well as the land use characteristics of the project. The transit adjustment of 15% has been applied to the proposed project as well as the existing land use.

An adjustment was also made to the trip generation forecast based on the project site's existing land uses. The existing 15,135-square-foot retail/restaurant building and 3 single-family homes would be removed as part of the project. ITE Land Use Code 820 (Shopping Center) and ITE Land Use Code 210 (Single-Family Detached Housing) trip generation average rates were used to forecast the trip reduction expected to be generated by the existing uses of the project site.

Lastly, a forecast was made of likely pass-by trips. Pass-by trips are made as intermediate stops on the way from an origin to a primary destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. In this instance, the adjacent roadway to the project site includes Olympic Boulevard. Based on the *LADOT Policy on Pass-By Trips*, 50% pass-by reduction adjustments were applied to the retail/restaurant land use components of the proposed project as well as the existing land uses.

The trip generation forecast for the proposed project was submitted for review and approval by LADOT staff. As presented in ***Table 7-1***, the proposed project is expected to generate 113 vehicle trips (24 inbound trips and 89 outbound trips) during the AM peak hour. During the PM peak hour, the proposed project is expected to generate 151 vehicle trips (94 inbound trips and 57 outbound trips). Over a 24-hour period, the proposed project is forecast to generate 1,639 daily trips ends (approximately 820 inbound trips and 819 outbound trips) during a typical weekday.

7.2 Project Traffic Distribution and Assignment

Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

Table 7-1
PROJECT TRIP GENERATION [1]

29-Aug-16

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2] IN	AM PEAK HOUR VOLUMES [2] OUT	AM PEAK HOUR VOLUMES [2] TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM PEAK HOUR VOLUMES [2] OUT	PM PEAK HOUR VOLUMES [2] TOTAL
Proposed Project								
Apartments [3]	252 DU	1,676	26	103	129	101	55	156
Retail/Restaurant [4]	33,280 GLSF	1,421	20	12	32	59	64	123
Subtotal		3,097	46	115	161	160	119	279
Proposed Internal Capture								
Retail/Restaurant [6] (15%)		(213)	(3)	(2)	(5)	(9)	(10)	(19)
Proposed Transit Trips [5]								
Apartments (15%)		(251)	(4)	(15)	(19)	(15)	(8)	(23)
Retail/Restaurant (15%)		(181)	(3)	(2)	(5)	(8)	(8)	(16)
Subtotal		(432)	(7)	(17)	(24)	(23)	(16)	(39)
Existing Land Use								
Retail/Restaurant [4]	(15,135) GLSF	(646)	(9)	(6)	(15)	(27)	(29)	(56)
Single-Family Homes [7]	(3) DU	(29)	(1)	(1)	(2)	(2)	(1)	(3)
Subtotal		(675)	(10)	(7)	(17)	(29)	(30)	(59)
Existing Transit Trips [5]								
Retail/Restaurant (15%)		97	1	1	2	4	4	8
Single-Family Homes (15%)		4	0	0	0	0	0	0
Subtotal		101	1	1	2	4	4	8
Net Project Driveway Subtotal		**1,878**	**27**	**90**	**117**	**103**	**67**	**170**
Proposed Pass-By Trips [8]								
Retail/Restaurant (50%)		(514)	(7)	(4)	(11)	(21)	(23)	(44)
Existing Pass-By Trips [8]								
Retail/Restaurant (50%)		275	4	3	7	12	13	25
NET PROJECT TRIPS		**1,639**	**24**	**89**	**113**	**94**	**57**	**151**

[1] Source: ITE "Trip Generation", 9th Edition, 2012.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 220 (Apartment) trip generation average rates.
- Daily Trip Rate: 6.65 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.51 trips/dwelling unit; 20% inbound/80% outbound
- PM Peak Hour Trip Rate: 0.62 trips/dwelling unit; 65% inbound/35% outbound

[4] ITE Land Use Code 820 (Shopping Center) trip generation equation rates.
- Daily Trip Rate: 42.70 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.96 trips/1,000 SF of floor area; 62% inbound/38% outbound
- PM Peak Hour Trip Rate: 3.71 trips/1,000 SF of floor area; 48% inbound/52% outbound

[5] The transit reduction is based on the site's location within 1/4 miles of a Metro rapid bus stop.
[6] The internal capture reduction for the commercial uses is based on the synergy between the residential and commercial uses provided within the Project site.
[7] ITE Land Use Code 210 (Single-Family Detached Housing) trip generation average rates.
- Daily Trip Rate: 9.52 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.75 trips/dwelling unit; 25% inbound/75% outbound
- PM Peak Hour Trip Rate: 1.00 trips/dwelling unit; 63% inbound/37% outbound

[8] Pass-by trips are made as intermediate stops of the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. The trip reduction for pass-by trips has been applied to the commercial component of the project based on a review of the recommended practice in the ITE "Trip Generation Handbook", June 2004, the project characteristics, and the characteristics of the surrounding project area, and the "LADOT Traffic Study Policies and Procedures", August 2014 for shopping centers less than 50,000 SF.

- The site's proximity to major traffic corridors (i.e., Olympic Boulevard, Pico Boulevard, Western Avenue, etc.);

- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;

- Existing intersection traffic volumes;

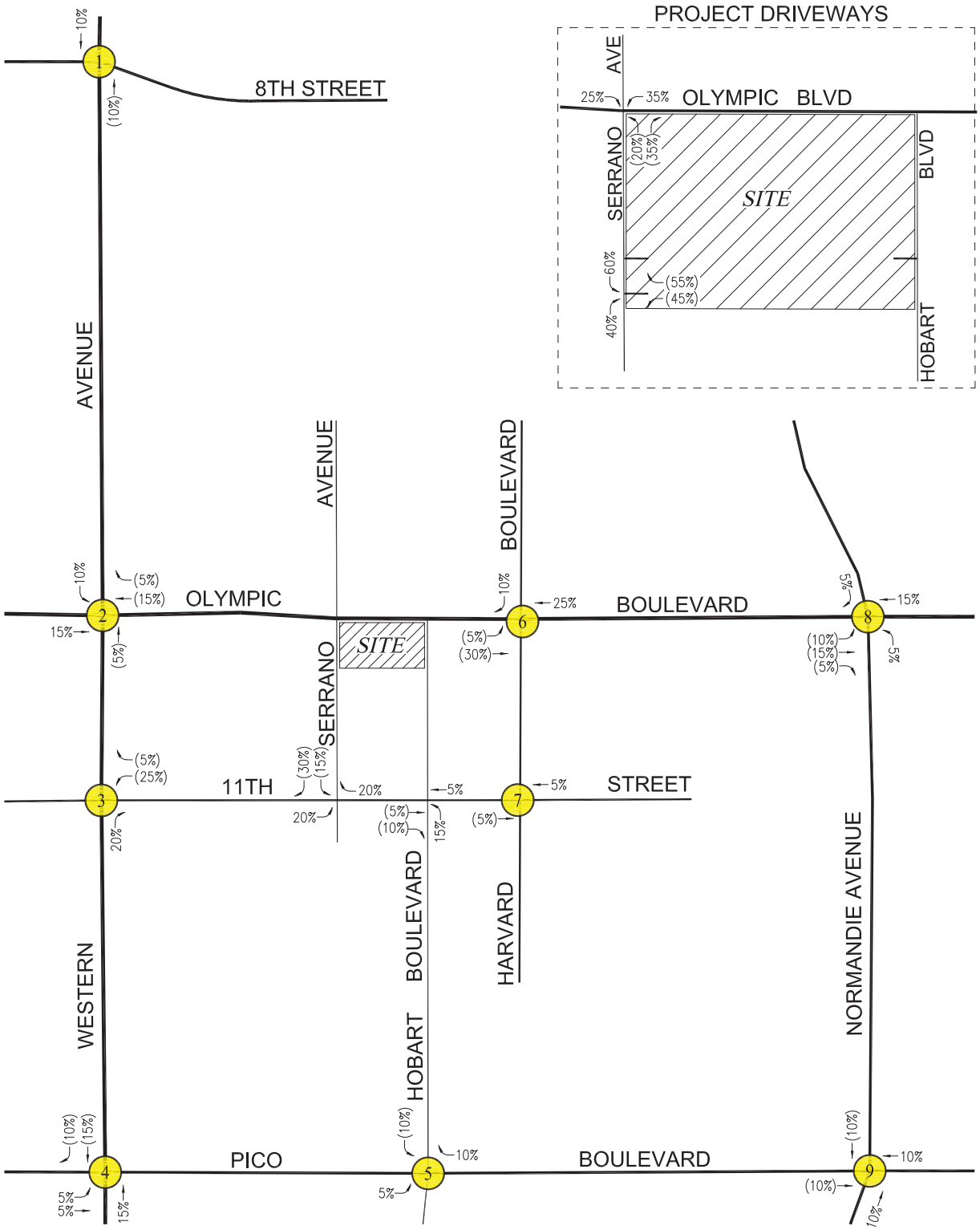
- Ingress/egress availability at the project site assuming the site access and circulation scheme described in Section 3.0;

- The location of existing and proposed parking areas;

- Nearby population and employment centers as well as adjacent residential neighborhoods;

- Input from LADOT staff.

The general, directional traffic distribution patterns for the residential use of proposed project are presented in ***Figure 7-1*** and the directional traffic distribution patterns for the commercial use of the proposed project are presented in ***Figure 7-2***. The forecast net new weekday AM and PM peak hour project traffic volumes at the study intersections associated with the proposed project are presented in ***Figures 7-3*** and ***7-4***, respectively. The traffic volume assignments distribution characteristics shown in *Figure 7-1* and *7-2* and the project traffic generation forecast presented in *Table 7-1*.



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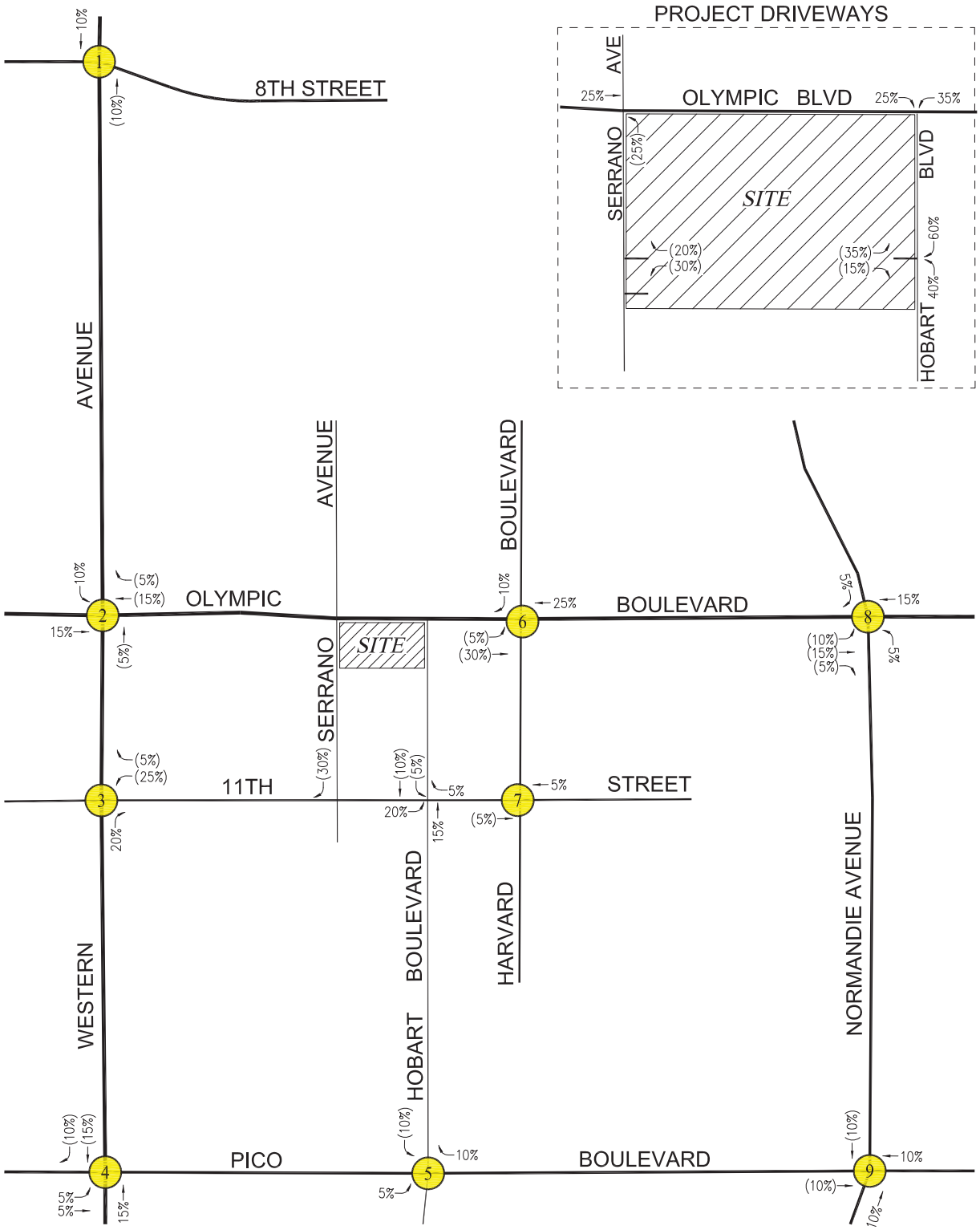
XX STUDY INTERSECTION

PROJECT SITE

XX = INBOUND PERCENTAGES
(XX) = OUTBOUND PERCENTAGES

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 7-1
PROJECT TRIP DISTRIBUTION
RESIDENTIAL LAND USE
3170 W. OLYMPIC BOULEVARD PROJECT



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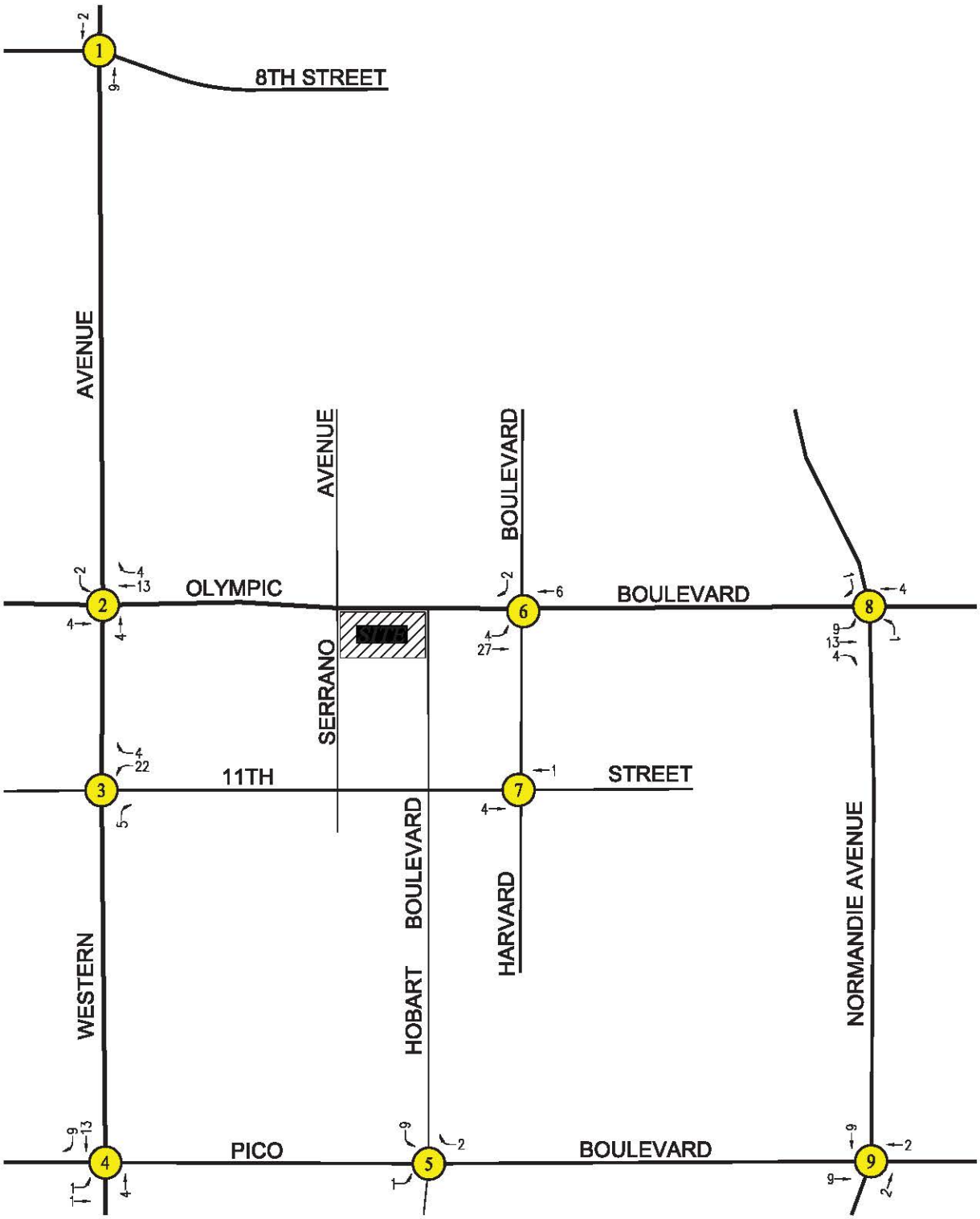
PROJECT SITE

XX = INBOUND PERCENTAGES
(XX) = OUTBOUND PERCENTAGES

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FIGURE 7-2
PROJECT TRIP DISTRIBUTION
COMMERCIAL LAND USE
3170 W. OLYMPIC BOULEVARD PROJECT

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PROJECT SITE

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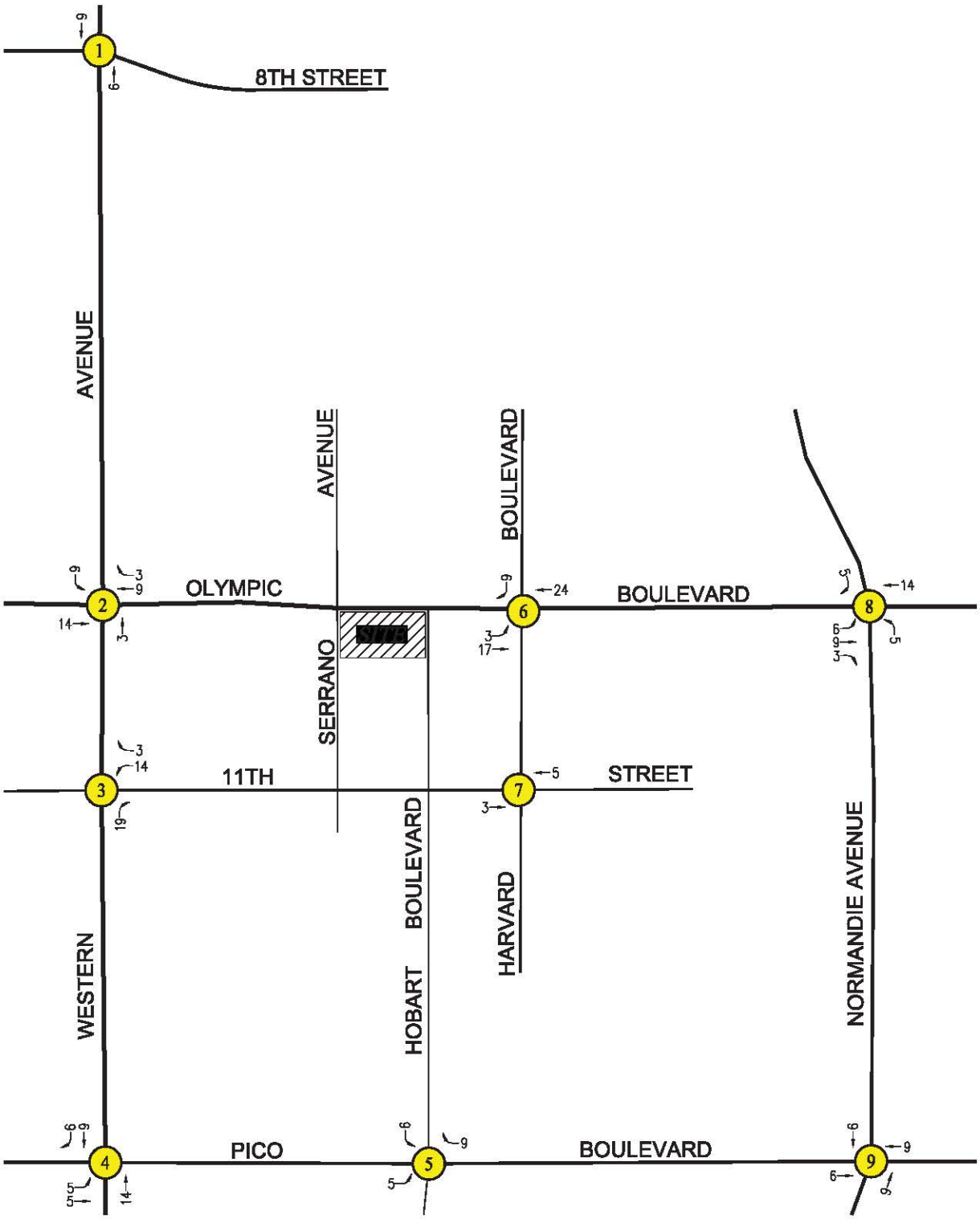
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FIGURE 7-3
PROJECT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR

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3170 W. OLYMPIC BOULEVARD PROJECT

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PROJECT SITE

XX STUDY INTERSECTION

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FIGURE 7-4
PROJECT TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR

LINSCOTT, LAW & GREENSPAN, engineers

3170 W. OLYMPIC BOULEVARD PROJECT

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8.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

The study intersections were evaluated using the Critical Movement Analysis (CMA) method of analysis that determines Volume-to-Capacity (*v/c*) ratios on a critical lane basis. The overall intersection *v/c* ratio is subsequently assigned a Level of Service (LOS) value to describe intersection operations. Level of Service varies from LOS A (free flow) to LOS F (jammed condition). A description of the CMA method and corresponding Level of Service is provided in ***Appendix B***.

8.1 Impact Criteria and Thresholds

The relative impact of the added project traffic volumes to be generated by the proposed project during the AM and PM peak hours was evaluated based on analysis of future operating conditions at the study intersections, without and with the proposed project. The previously discussed capacity analysis procedures were utilized to evaluate the future *v/c* relationships and service level characteristics at each study intersection.

The significance of the potential impacts of project generated traffic was identified using the traffic impact criteria set forth in LADOT's *Traffic Study Policies and Procedures,* August, 2014. According to the City's published traffic study guidelines, the impact is considered significant if the project-related increase in the *v/c* ratio equals or exceeds the thresholds presented in ***Table 8–1***.

Table 8-1
CITY OF LOS ANGELES
INTERSECTION IMPACT THRESHOLD CRITERIA

Final *v/c*	**Level of Service**	**Project Related Increase in *v/c***
> 0.701 - 0.800	C	equal to or greater than 0.040
> 0.801 - 0.900	D	equal to or greater than 0.020
> 0.901	E or F	equal to or greater than 0.010

The City's Sliding Scale Method requires mitigation of project traffic impacts whenever traffic generated by the proposed development causes an increase of the analyzed intersection *v/c* ratio by an amount equal to or greater than the values shown above.

8.2 LADOT ATSAC/ATCS

The City of Los Angeles Automated Traffic Surveillance and Control (ATSAC) and Adaptive Traffic Control System (ATCS) provides computer control of traffic signals allowing automatic adjustment of signal timing plans to reflect changing traffic conditions, identification of unusual traffic conditions caused by accidents, the ability to centrally implement special purpose short term traffic timing changes in response to incidents, and the ability to quickly identify signal equipment malfunctions. ATCS provides real time control of traffic signals and includes additional loop detectors, closed-circuit television, an upgrade in the communications links and a

new generation of traffic control software. LADOT estimates that the ATSAC system reduces the critical *v/c* ratios by seven percent (0.07). The ATCS system upgrade further reduces the critical *v/c* ratios by three percent (0.03) for a total of 10 percent (0.10). ATSAC system upgrades for eight of the nine study intersections have been implemented as part of the LADOT Smart Corridor ATSAC/ATCS system. ATSAC system upgrades for the remaining one intersection of the nine study intersections has been implemented as part of the LADOT Mid-Wilshire ATSAC/ATCS system. Accordingly, the Level of Service calculations reflect a 0.10 adjustment for all analysis scenarios evaluated.

8.3 Traffic Impact Analysis Scenarios

Pursuant to LADOT's traffic study, Level of Service calculations have been prepared for the following scenarios for the study intersections:

(a) Existing (2016) conditions.

(b) Condition (a) with completion and occupancy of the project.

(c) Condition (b) with implementation of project mitigation measures where necessary.

(d) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2018 and with completion and occupancy of the related projects (i.e., future cumulative baseline).

(e) Condition (d) with completion and occupancy of the project.

(f) Condition (e) with implementation of project mitigation measures where necessary.

The traffic volumes for each new condition were added to the volumes in the prior condition to determine the change in capacity utilization at the study intersections.

9.0 TRAFFIC ANALYSIS

The traffic impact analysis prepared for the study intersections using the CMA methodology and application of the City of Los Angeles significant traffic impact criteria is summarized in ***Table 9–1***. The CMA data worksheets for the analyzed intersections are contained in *Appendix B.*

9.1 Existing Conditions

9.1.1 *Existing Conditions*

As indicated in column [1] of *Table 9–1*, all of the nine study intersections are presently operating at LOS D or better during the weekday AM and PM peak hours under existing conditions. The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 5–1* and *5–2*, respectively.

9.1.2 *Existing With Project Conditions*

As shown in column [2] of *Table 9–1,* application of the City's threshold criteria to the "Existing With Project" scenario indicates that the proposed project is not expected to create significant impacts at any of the nine study intersections. Incremental, but not significant, impacts are noted at the study intersections. Because there are no significant impacts, no traffic mitigation measures are required or recommended for the study intersections under the "Existing With Project" conditions. The existing with project traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 9–1*** and ***9–2***, respectively.

9.2 Future Conditions

9.2.1 *Future Cumulative Baseline Conditions*

The future cumulative baseline conditions were forecast based on the addition of traffic generated by the completion and occupancy of related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth). The *v/c* ratios at all of the study intersections are incrementally increased with the addition of ambient traffic and traffic generated by the related projects listed in *Table 6–1*. As presented in column [3] of *Table 9–1*, all nine study intersections are expected to continue operating at LOS D or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related project traffic under the future cumulative baseline conditions.

The future cumulative baseline (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 9–3*** and ***9–4***, respectively.

9.2.2 *Future Cumulative With Project Conditions*

As shown in column [4] of *Table 9–1,* application of the City's threshold criteria to the "Future With Project" scenario indicates that the proposed project is not expected to create significant impacts at the nine study intersections. Incremental, but not significant, impacts are noted at the study intersections during the weekday AM and PM peak hours with the addition of growth in

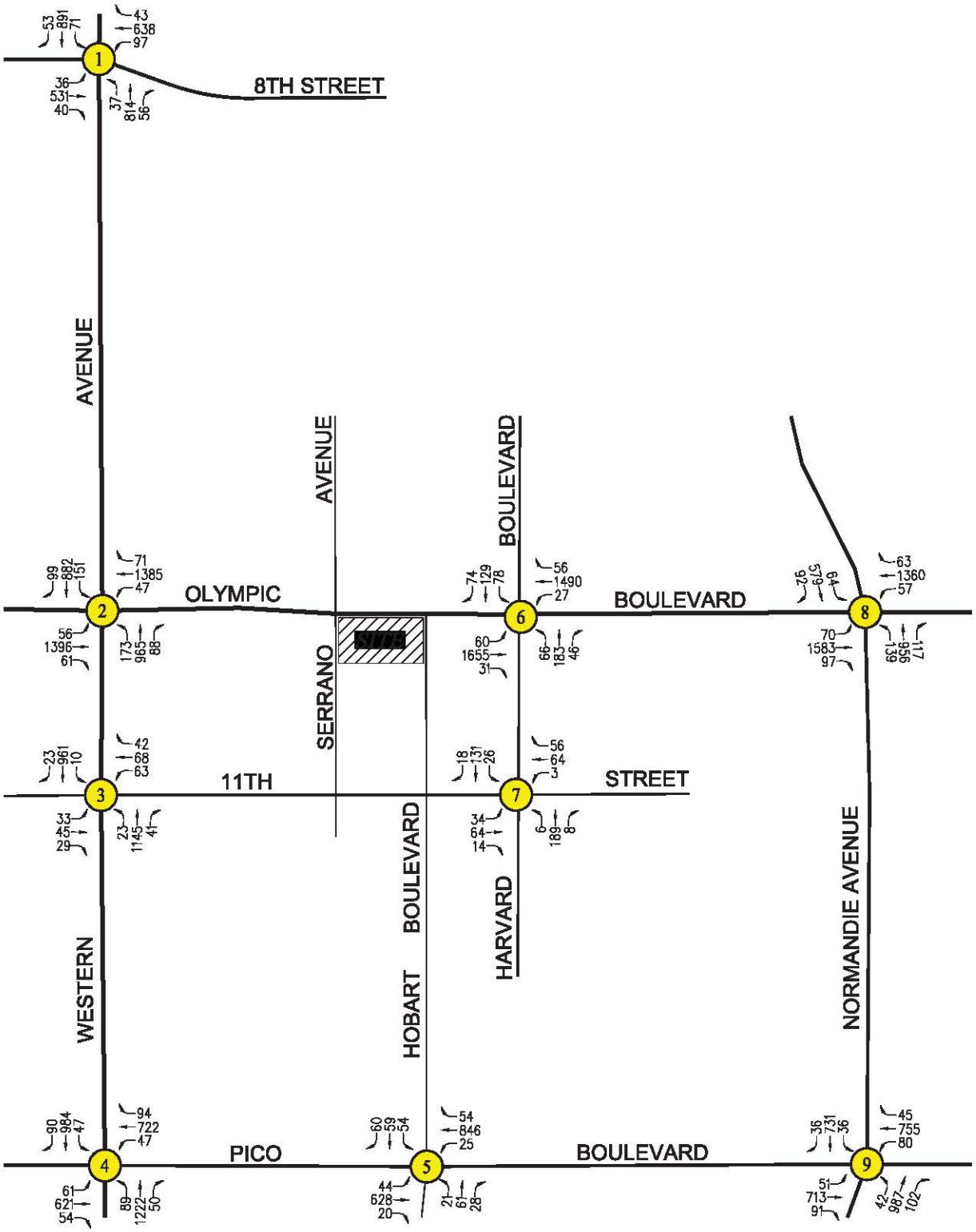
Table 9-1
CITY OF LOS ANGELES LEVELS OF SERVICE SUMMARY
AND VOLUME TO CAPACITY RATIOS
AM AND PM PEAK HOURS

24-Aug-16

NO.	INTERSECTION	PEAK HOUR	[1] EXISTING V/C	LOS	[2] EXISTING W/ PROJECT V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT [a]	[3] FUTURE PRE-PROJECT V/C	LOS	[4] FUTURE WITH PROJECT V/C	LOS	CHANGE V/C [(4)-(3)]	SIGNIF. IMPACT [a]
1	Western Avenue / 8th Street	AM	0.494	A	0.495	A	0.001	NO	0.545	A	0.545	A	0.000	NO
		PM	0.565	A	0.567	A	0.002	NO	0.633	B	0.637	B	0.004	NO
2	Western Avenue / Olympic Boulevard	AM	0.748	C	0.755	C	0.007	NO	0.793	C	0.800	C	0.007	NO
		PM	0.803	D	0.814	D	0.011	NO	0.873	D	0.883	D	0.010	NO
3	Western Avenue / 11th Street	AM	0.439	A	0.457	A	0.018	NO	0.485	A	0.503	A	0.018	NO
		PM	0.465	A	0.475	A	0.010	NO	0.521	A	0.531	A	0.010	NO
4	Western Avenue / Pico Boulevard	AM	0.666	B	0.668	B	0.002	NO	0.695	B	0.697	B	0.002	NO
		PM	0.669	B	0.675	B	0.006	NO	0.713	C	0.719	C	0.006	NO
5	Hobart Boulevard / Pico Boulevard	AM	0.367	A	0.374	A	0.007	NO	0.383	A	0.389	A	0.006	NO
		PM	0.371	A	0.381	A	0.010	NO	0.384	A	0.395	A	0.011	NO
6	Harvard Boulevard / Olympic Boulevard	AM	0.535	A	0.541	A	0.006	NO	0.560	A	0.566	A	0.006	NO
		PM	0.683	B	0.693	B	0.010	NO	0.718	C	0.728	C	0.010	NO
7	Harvard Boulevard / 11th Street	AM	0.157	A	0.157	A	0.000	NO	0.167	A	0.168	A	0.001	NO
		PM	0.324	A	0.327	A	0.003	NO	0.345	A	0.348	A	0.003	NO
8	Normandie Avenue / Olympic Boulevard	AM	0.669	B	0.673	B	0.004	NO	0.699	B	0.703	C	0.004	NO
		PM	0.705	C	0.711	C	0.006	NO	0.784	C	0.790	C	0.006	NO
9	Normandie Avenue / Pico Boulevard	AM	0.661	B	0.665	B	0.004	NO	0.691	B	0.695	B	0.004	NO
		PM	0.608	B	0.612	B	0.004	NO	0.660	B	0.664	B	0.004	NO

[a] According to LADOT's "Traffic Study Policies and Procedures", August 2014, a transportation impact on an intersection shall be deemed significant in accordance with the following table:

Final v/c	LOS	Project Related Increase in v/c
> 0.701 - 0.800	C	equal to or greater than 0.040
> 0.801 - 0.900	D	equal to or greater than 0.020
> 0.901	E, F	equal to or greater than 0.010



PROJECT SITE

XX STUDY INTERSECTION

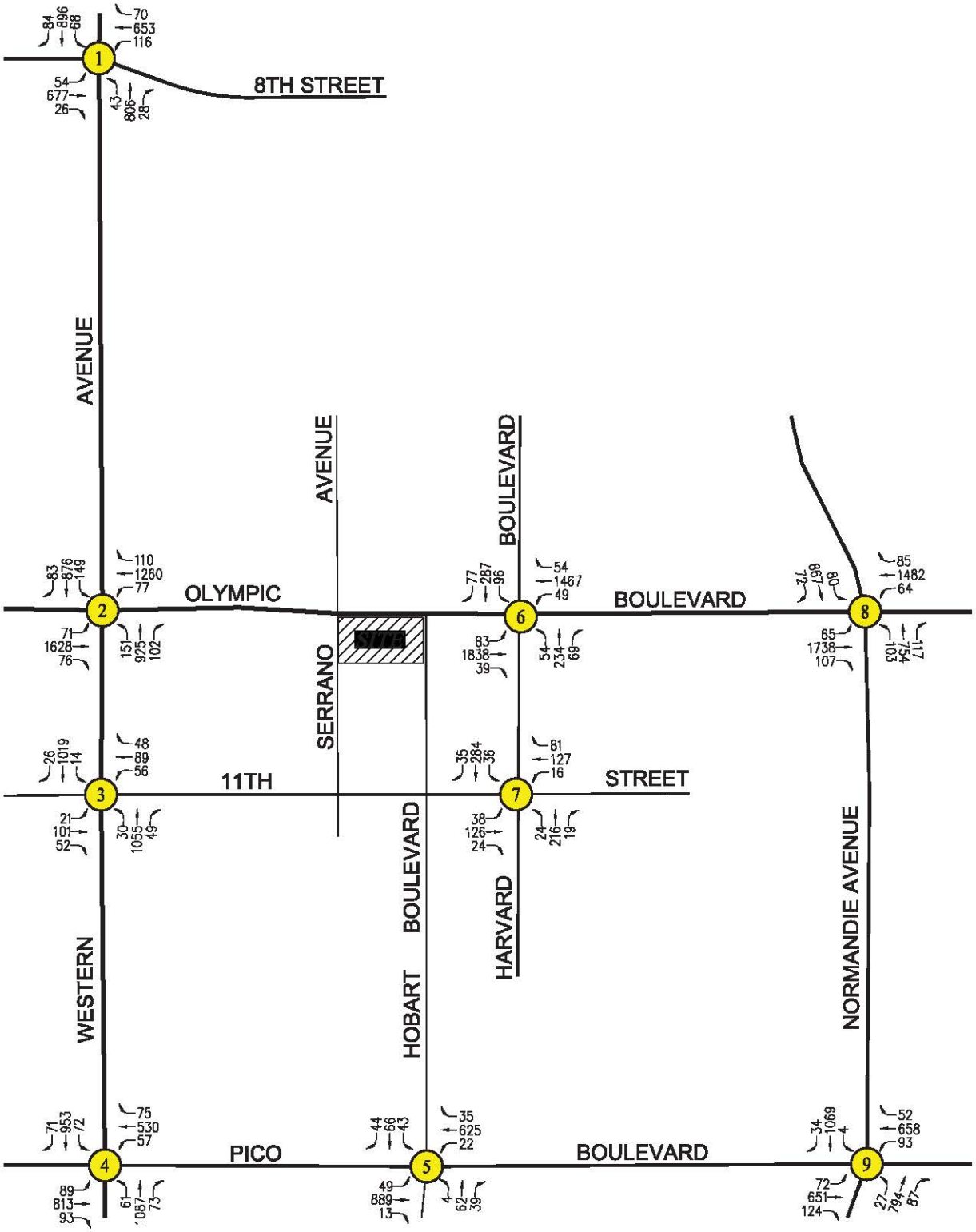
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NOT TO SCALE

FIGURE 9-1
EXISTING WITH PROJECT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
3170 W. OLYMPIC BOULEVARD PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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PROJECT SITE

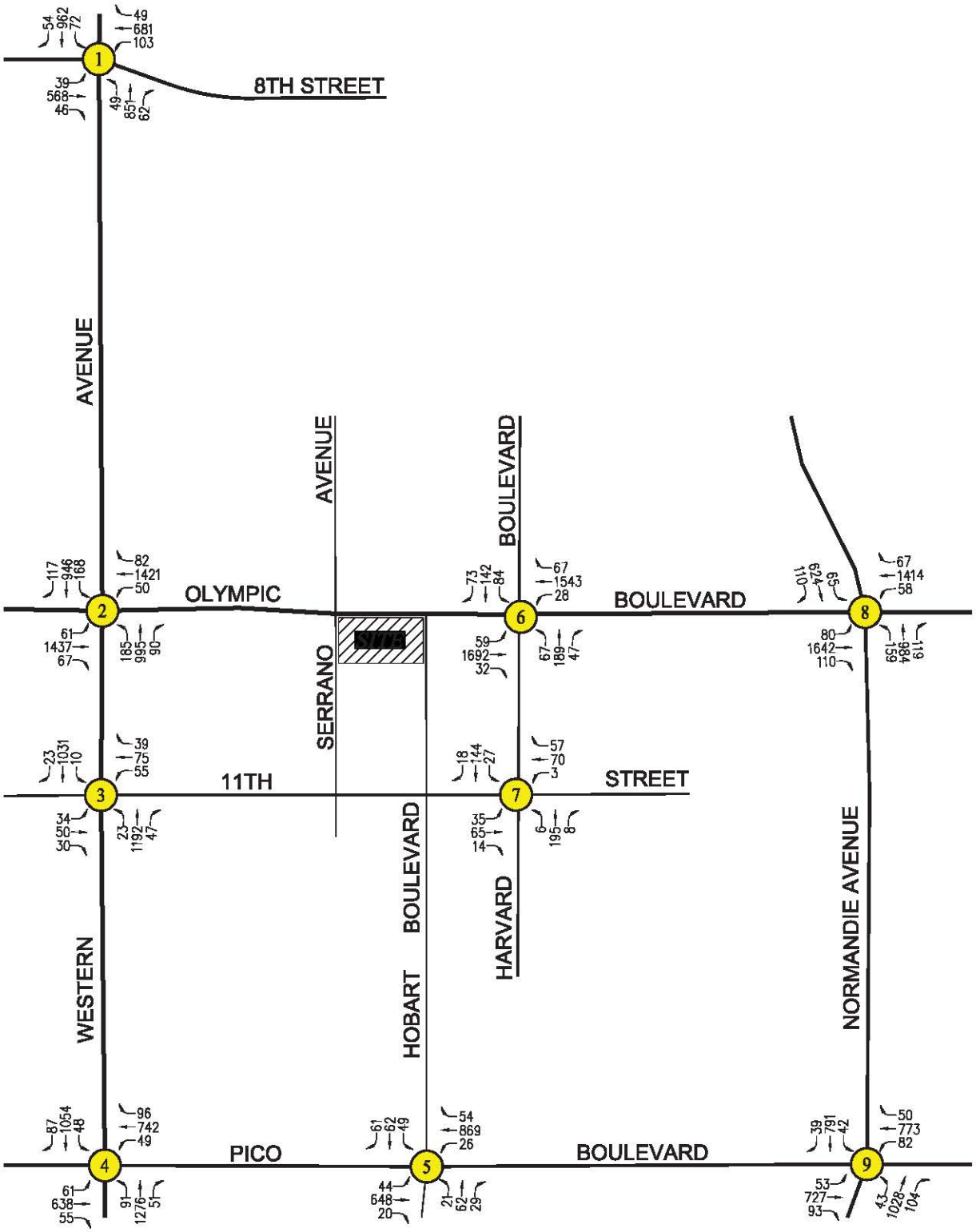
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FIGURE 9-2
EXISTING WITH PROJECT TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR
3170 W. OLYMPIC BOULEVARD PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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PROJECT SITE

XX STUDY INTERSECTION

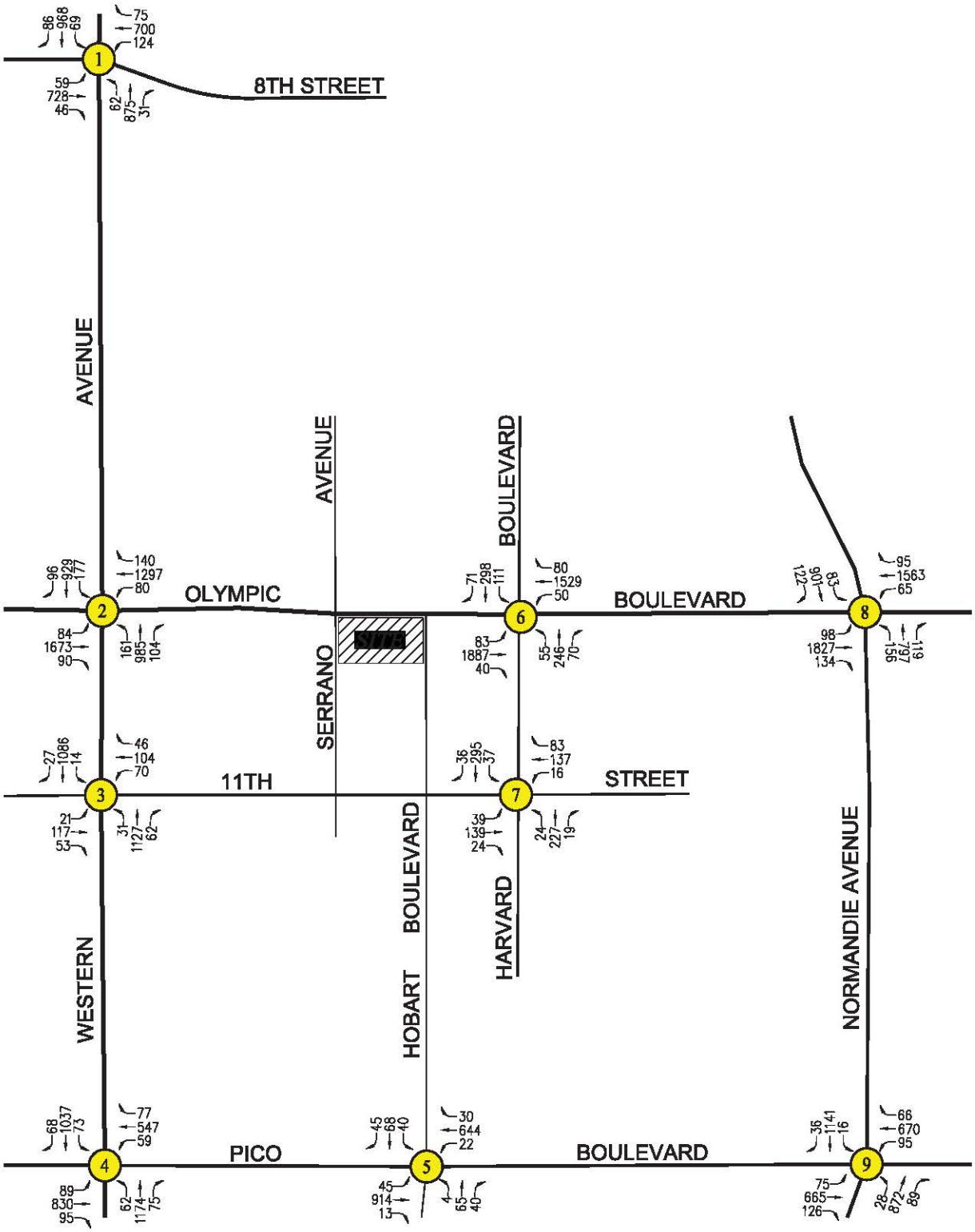
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FIGURE 9-3
FUTURE CUMULATIVE WITH BASELINE TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
3170 W. OLYMPIC BOULEVARD PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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PROJECT SITE

XX STUDY INTERSECTION

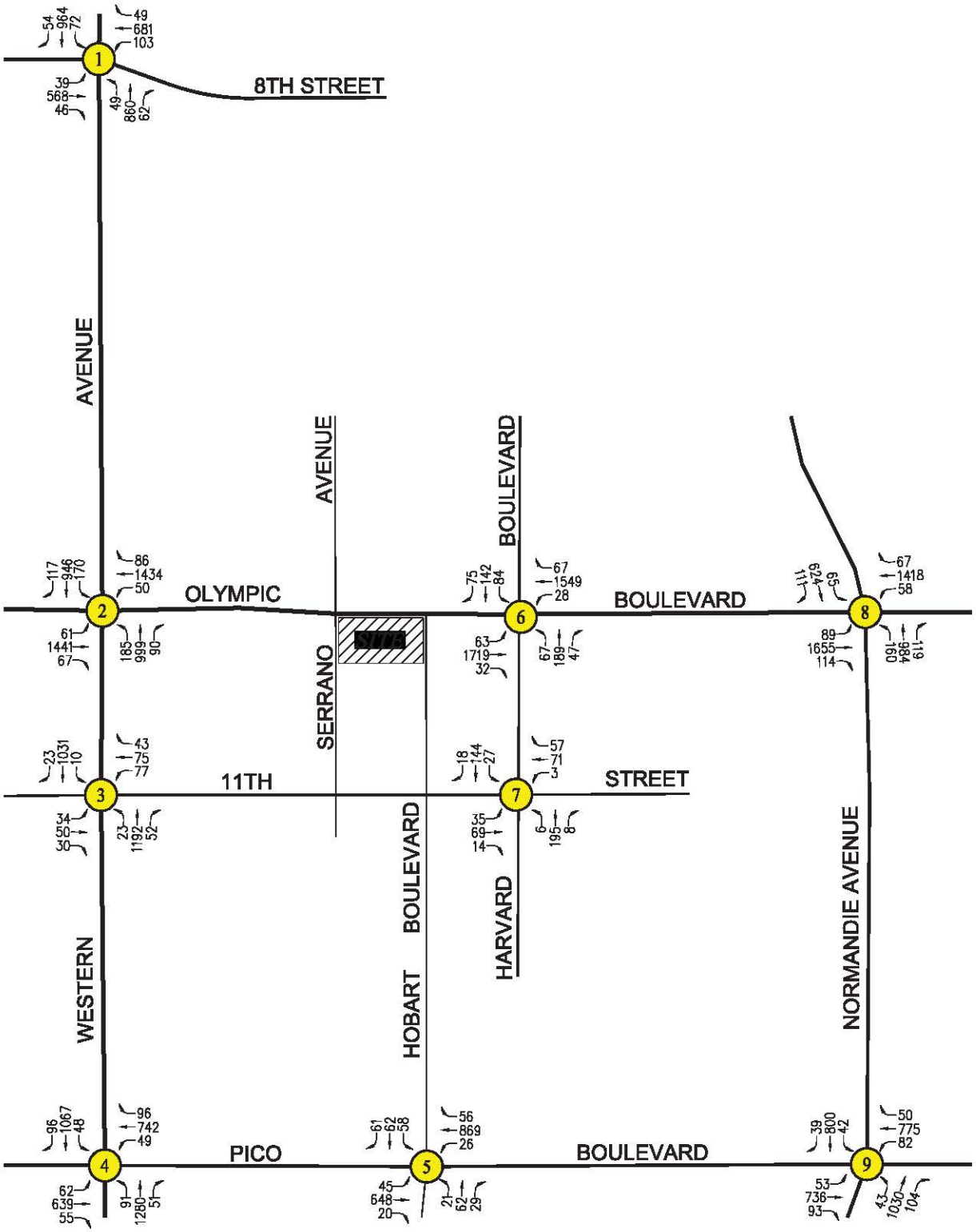
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FIGURE 9-4
FUTURE CUMULATIVE WITH BASELINE TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR
3170 W. OLYMPIC BOULEVARD PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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ambient traffic, related project traffic, and project traffic, as presented in *Table 9–1*. Therefore, no mitigation measures are required or recommended with respect to these study intersections under the "Future Cumulative With Project" conditions. The future cumulative with project (existing, ambient growth, related projects and project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 9–5*** and ***9–6***, respectively.



PROJECT SITE

XX STUDY INTERSECTION

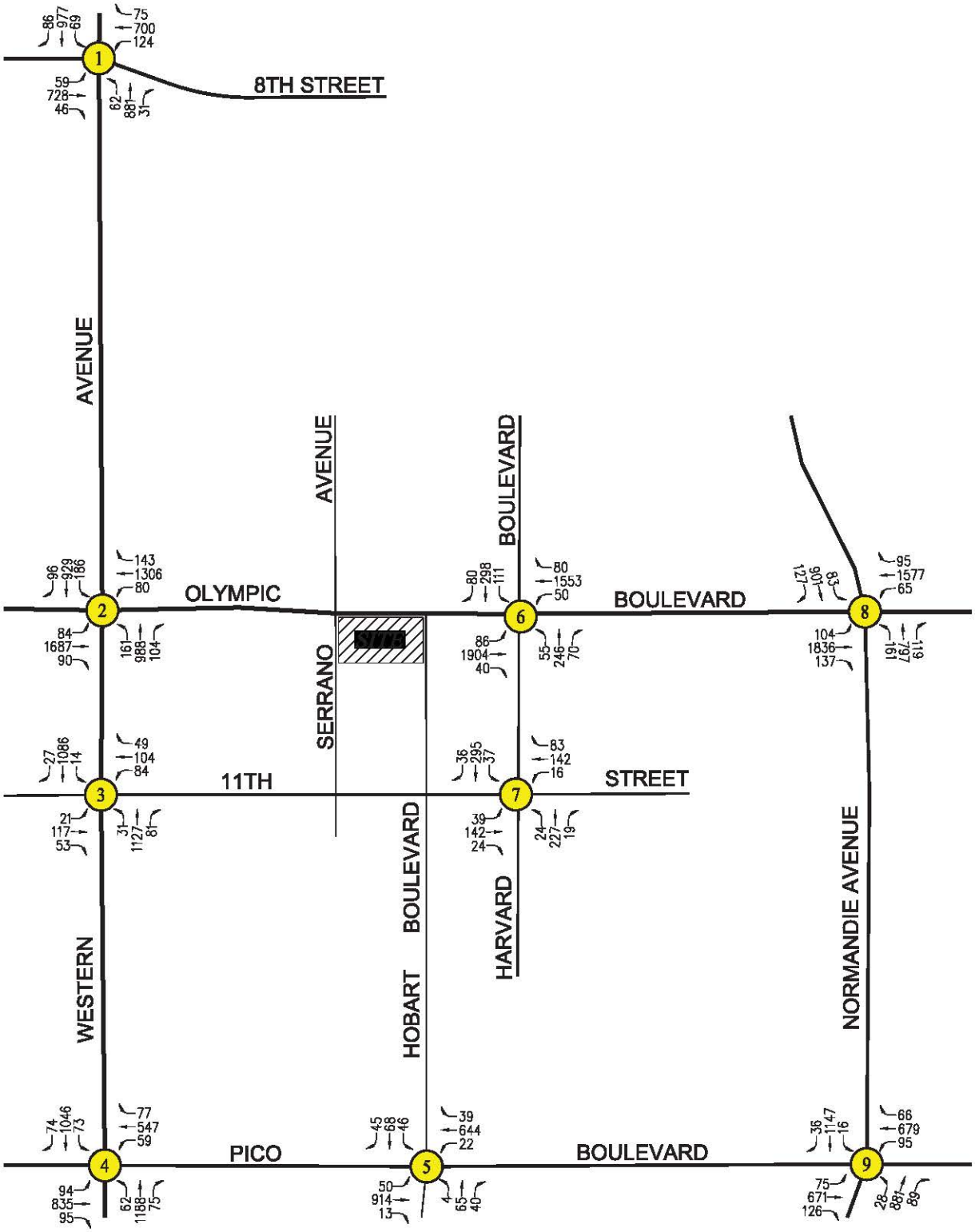
N

NOT TO SCALE

FIGURE 9-5
FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
3170 W. OLYMPIC BOULEVARD PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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PROJECT SITE

XX STUDY INTERSECTION

N

NOT TO SCALE

FIGURE 9-6
FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR
3170 W. OLYMPIC BOULEVARD PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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10.0 TRAFFIC SIGNAL WARRANT ANALYSIS

In addition to the operational analysis of nearby signalized intersections, a separate traffic signal warrant analysis was conducted at the intersection of Serrano Avenue and Olympic Boulevard. The intersection is located at the northwest corner of the project site. The analysis was prepared to determine if a traffic signal is warranted at the intersection, which is currently controlled by stop signs facing Serrano Avenue.

The traffic signal warrant analysis was prepared based on criteria set forth in Chapter 4C of the *Manual on Uniform Traffic Control Devices (MUTCD)*[5]. Warrant No. 1 (Eight Hour Vehicular Volume), Warrant No. 2 (Four Hour Vehicular Volume), and Warrant No. 3 (Peak Hour Volume) traffic signal warrants were prepared. The traffic signal warrant calculations were based on existing traffic volumes and future forecast cumulative with project traffic volumes for the Olympic Boulevard approaches and Serrano Avenue approaches. Copies of the traffic signal warrant data worksheets are contained in ***Appendix C***.

10.1 Existing Conditions

The following provides a summary of existing conditions, as well as factors assumed and data collected in preparing the traffic signal warrant analysis:

- The Serrano Avenue/Olympic Boulevard intersection is currently controlled by a stop sign facing the north/south oriented street (Serrano Avenue) approaches.

- Olympic Boulevard was assumed to be the major street while Serrano Avenue was assumed to be the minor street.

- The posted speed limit for Olympic Street is 35 miles per hour.

- 24-hour machine traffic counts were conducted at all approaches of the Serrano Avenue/Olympic Boulevard intersection in addition to manual peak hour traffic counts at the intersections. Copies of all the traffic counts for the intersection and approaches are contained in *Appendix A*.

- The existing lane configurations at the subject Serrano Avenue/Olympic Boulevard intersection are as follows:

    - Northbound approach: one combined left-turn/through/right-turn lane
    - Southbound approach: one combined left-turn/through/right-turn lane
    - Eastbound approach: one left-turn lane, two through lanes, one shared through-right lane
    - Westbound approach: one left-turn lane, two through lanes, one shared through-right lane

[5] *Manual on Uniform Traffic Control Devices (MUTCD),* 2012 California Supplement, January 12, 2012.

10.2 Traffic Signal Warrant Analysis

The following paragraphs provide a detailed discussion of the traffic signal warrant prepared for the Serrano Avenue/Olympic Boulevard intersection.

Warrant 1: Eight Hour Vehicular Volume Warrants

The Eight Hour Vehicular Volume Warrants are intended for application at locations where a large volume of traffic along a major street occurs during any eight one-hour periods of a day.

Condition A of this Warrant is intended for application where this large volume of intersecting traffic is the primary reason to consider installation of a traffic control signal. The lower threshold for a major street with two or more lanes is 600 vehicles per hour (total for both approaches) while a minor street with one approach lane is 150 vehicles per hour (one direction only). As shown in the worksheet, the major street volumes for the highest eight one-hour periods throughout the day for both approaches are above the lower threshold. While, the minor street volumes for the highest eight one-hour periods throughout the day for one direction are below the lower threshold. Consequently, Condition A of the Eight Hour Vehicular Volume Warrant is not satisfied.

Condition B of this Warrant is intended for application at locations where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. The lower threshold for a major street with two or more lanes is 900 vehicles per hour (total for both approaches) while a minor street with one approach lane is 75 vehicles per hour (one direction only). As shown in the worksheet, the major street volumes for the highest eight one-hour periods throughout the day for both approaches are above the lower threshold. The minor street volumes for the highest eight one-hour periods throughout the day for one direction vary above and below the lower threshold. As a result, Condition B of the Eight Hour Vehicular Volume Warrant is not satisfied.

Warrant 2: Four Hour Vehicular Volume Warrant

The Four Hour Vehicular Volume Warrant is intended for application at locations where a large volume of traffic along a major street occurs during any four one-hour periods of a day. Warrant No. 2 is not satisfied when the plotted point, representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher volume minor street approach (one direction only) for one hour of an average day, falls above the curve for only one point in Figure 4C-1 for the applicable number of approach lanes. The lower threshold for a major street approach with two or more lanes is 400 vehicles per hour while the lower threshold for a minor street with one approach lane is 80 vehicles per hour.

As indicated in Figure 4C-1 provided in *Appendix C*, the plotted point for the Four Hour Vehicular Volume is only above the applicable curve for future conditions for the Serrano

Avenue/Olympic Boulevard intersection twice. Therefore, Warrant No. 2 is not satisfied for the intersection under future conditions.

Warrant 3: Peak Hour Volume Warrant

The Peak Hour Volume Warrant is applied for land uses that attract or discharge large numbers of vehicles over a short period of time. Warrant No. 3 is satisfied when the plotted point, representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher volume minor street approach (one direction only) for one hour of an average day, falls above the curve in Figure 4C-3 for the applicable number of approach lanes. The lower threshold for a major street approach with two or more lanes is 500 vehicles per hour while the lower threshold for a minor street approach with one lane is 100 vehicles per hour.

As indicated in Figure 4C-3 provided in *Appendix C*, the plotted point for the peak hour is below the applicable curve for future conditions for the Serrano Avenue/Olympic Boulevard intersection. Therefore, Warrant No. 3 is not satisfied for the intersection under future conditions.

10.3 Traffic Signal Warrants Conclusions

The traffic signal warrants analysis indicates that the future conditions traffic volumes at the Serrano Avenue/Olympic Boulevard intersection do not satisfy the minimum thresholds as outlined in the MUTCD. In general, the minor street approach volumes are below the minimum thresholds. As noted in the MUTCD document, the satisfaction of traffic signal warrants does not necessarily justify the installation of a traffic signal. Delay, congestion, approach conditions, driver behavior, intersection location/vicinity, and/or other evidence of the need for right-of-way assignment beyond that which could be provided by stop-sign control may also be demonstrated.

11.0 CONGESTION MANAGEMENT PROGRAM TRAFFIC IMPACT ASSESSMENT

The Congestion Management Program (CMP) is a state-mandated program that was enacted by the California State Legislature with the passage of Proposition 111 in 1990. The program is intended to address the impact of local growth on the regional transportation system.

As required by the 2010 Congestion Management Program for Los Angeles County, a Traffic Impact Assessment (TIA) has been prepared to determine the potential impacts on designated monitoring locations on the CMP highway system. The analysis has been prepared in accordance with procedures outlined in the *2010 Congestion Management Program for Los Angeles County*, County of Los Angeles Metropolitan Transportation Authority, 2010.

According to Section D.9.1 (Appendix D, page D-6) of the 2010 CMP manual, the criteria for determining a significant transportation impact is listed below:

> "A significant transportation impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C $\geq$ 0.02), causing or worsening LOS F (V/C > 1.00)."

The CMP impact criteria apply for analysis of both intersection and freeway monitoring locations.

11.1 Intersections

The following CMP intersection monitoring locations in the project vicinity have been identified:

CMP Station	Intersection
No. 84	Western Avenue / 9th Street
No. 85	Wilshire Boulevard / Alvarado Boulevard
No. 89	Wilshire Boulevard / Western Avenue

The CMP TIA guidelines require that intersection monitoring locations must be examined if the proposed project will add 50 or more trips during either the AM or PM weekday peak hours. The proposed project will add 17 trips during the AM weekday peak hour and will add 23 trips during the weekday PM peak hour (i.e., of adjacent street traffic) at the three CMP monitoring intersections in the project vicinity, which is less than the threshold criteria of 50 or more trips as stated in the CMP manual as the threshold criteria for a traffic impact assessment. Therefore, no further review of potential impacts to intersection monitoring locations that are part of the CMP highway system is required.

11.2 Freeways

The following CMP freeway monitoring locations have been identified in the project vicinity:

- CMP Station Location

  No. 1013 I-10 Freeway at Budlong Avenue

The CMP TIA guidelines require that freeway monitoring locations must be examined if the proposed project will add 150 or more trips (in either direction) during either the AM or PM weekday peak periods. The proposed project will add 11 trips during the weekday AM peak hour and 15 trips during the weekday PM peak hour to CMP freeway monitoring locations which is less than the 150 or more trips for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, no further review of potential impacts to freeway monitoring locations that are part of the CMP highway system is required.

11.3 Transit Impact Review

As required by the *2010 Congestion Management Program for Los Angeles County*, a review has been made of the potential impacts of the project on transit services. As discussed in Subsection 4.5 herein, existing transit service is provided in the vicinity of the proposed 3170 W. Olympic Boulevard project.

The project trip generation, as shown in *Table 7–1*, was adjusted by values set forth in the CMP (i.e., person trips equal 1.4 times vehicle trips, and transit trips equal 3.5 percent of the total person trips) to estimate transit trip generation. Pursuant to the CMP guidelines, the proposed project is forecast to generate demand for 6 transit trips during the AM peak hour and 7 transit trips during the PM peak hour. Over a 24-hour period, the proposed project is forecast to generate demand for 80 daily transit trips. Therefore, the calculations are as follows:

- AM Peak Hour = 113 × 1.4 × 0.035 = 6 Transit Trips
- PM Peak Hour = 151 × 1.4 × 0.035 = 7 Transit Trips
- Daily Trips = 1,639 × 1.4 × 0.035 = 80 Transit Trips

As shown in *Table 4–1,* 34 bus transit lines and routes are provided adjacent to or in close proximity the project site. As outlined in *Table 4–1*, under the "No. of Buses/Trains During Peak Hour" column, these 9 transit lines provide services for an average of (i.e., average of the directional number of buses during the peak hours) generally 138 buses during the AM peak hour and roughly 118 buses during the PM peak hour. Therefore, based on the above calculated AM and PM peak hour trips, this would correspond to no more than one additional transit rider per bus. It is anticipated that the existing transit services in the project area will adequately accommodate the increase of project-generated transit trips. Thus, given the low number of project-generated transit trips per bus, no project impacts on existing or future transit services in the project area are expected to occur as a result of the proposed project.

12.0 CONCLUSIONS

This traffic impact analysis has been prepared to evaluate the potential impacts to the local street system due to the 3170 W. Olympic Boulevard project. Nine intersections were identified and analyzed in order to determine changes in operations following construction and occupancy of the proposed project. Application of the impact threshold criteria from the City of Los Angeles indicates that none of the nine study intersections would be significantly impacted by the forecast project traffic. Incremental but not significant impacts are noted at the study intersections evaluated in this analysis. As no significant impacts are expected due to the proposed project, no traffic mitigation measures are required or recommended for the study intersections.

Additionally, a traffic signal warrant analysis was completed for the intersection of Serrano Avenue and Olympic Boulevard. The intersection is currently controlled by stops signs which face the Serrano Avenue approaches. Based on the future traffic volumes, the traffic signal warrants are not satisfied for the intersection.

APPENDIX A

MANUAL AND 24-HOUR MACHINE TRAFFIC COUNT DATA

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Western Ave

East/West 8th St

Day: Wednesday Date: May 25, 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	177	149	22	31
BIKES	52	48	27	17
BUSES	115	127	0	29

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	245	9.30	286	8.00	178	8.45	250	7.15
PM PK 15 MIN	235	16.15	281	15.45	216	17.30	235	17.45
AM PK HOUR	917	7.15	1013	7.45	635	8.00	914	7.00
PM PK HOUR	925	15.00	1086	15.45	757	17.00	839	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	34	846	36	916
8-9	37	790	55	882
9-10	36	830	35	901
15-16	45	839	41	925
16-17	47	805	42	894
17-18	43	800	28	871
TOTAL	242	4910	237	5389

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	50	750	28	828
8-9	66	861	53	980
9-10	70	832	36	938
15-16	90	882	90	1062
16-17	73	927	65	1065
17-18	68	887	84	1039
TOTAL	417	5139	356	5912

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
1744	40	1	37	7
1862	48	0	23	4
1839	29	0	25	1
1987	43	2	46	4
1959	58	1	61	0
1910	65	2	51	2
11301	283	6	243	18

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	49	368	34	451
8-9	36	564	35	635
9-10	64	426	26	516
15-16	56	445	40	541
16-17	37	493	40	570
17-18	54	677	26	757
TOTAL	296	2973	201	3470

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	74	794	46	914
8-9	103	613	45	761
9-10	101	497	67	665
15-16	120	402	78	600
16-17	106	435	54	595
17-18	116	653	70	839
TOTAL	620	3394	360	4374

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1365	41	3	55	3
1396	55	2	55	2
1181	48	1	54	1
1141	84	1	80	0
1165	93	1	86	1
1596	114	2	90	2
7844	435	10	420	9

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Western Ave and 8th St , Los Angeles

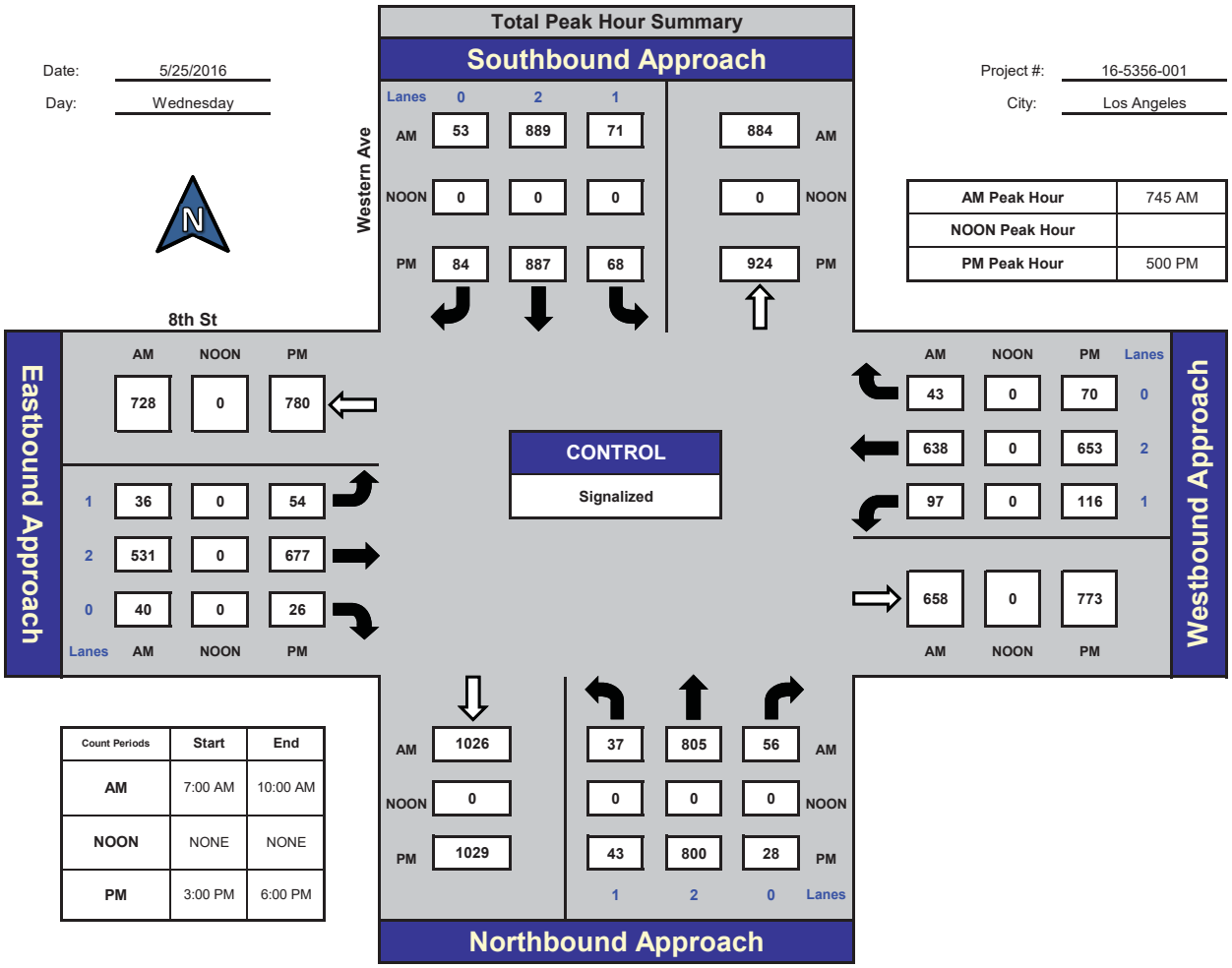
Date: 5/25/2016

Day: Wednesday

Project #: 16-5356-001

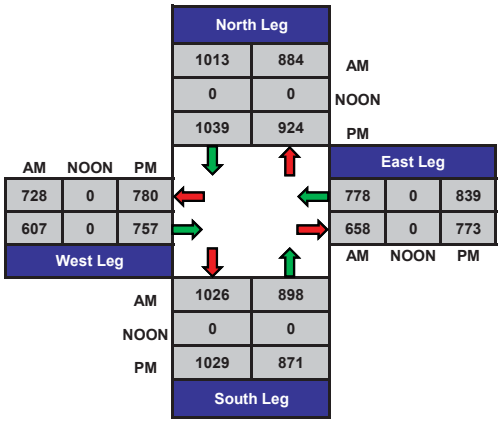
City: Los Angeles

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	500 PM

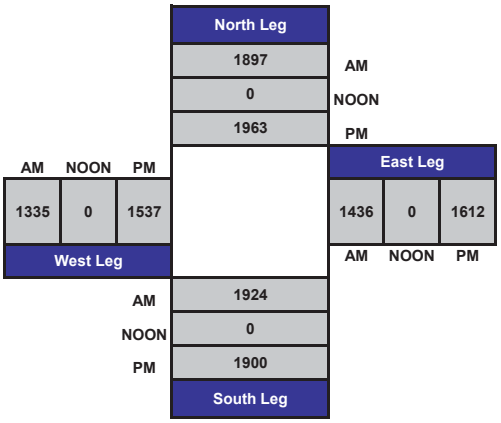


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-001

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

AM

NS/EW Streets:	Western Ave			Western Ave			8th St			8th 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	2	0	1	2	0	
7:00 AM	15	218	9	7	168	6	9	62	1	14	183	13	705
7:15 AM	3	217	9	10	176	7	14	76	9	18	219	13	771
7:30 AM	6	215	4	17	185	7	14	104	12	17	204	8	793
7:45 AM	10	196	14	16	221	8	12	126	12	25	188	12	840
8:00 AM	10	221	12	19	242	25	3	138	8	28	158	12	876
8:15 AM	5	184	14	21	221	13	10	126	9	28	136	10	777
8:30 AM	12	204	16	15	205	7	11	141	11	16	156	9	803
8:45 AM	10	181	13	11	193	8	12	159	7	31	163	14	802
9:00 AM	8	192	11	19	208	6	12	126	6	23	121	18	750
9:15 AM	8	199	8	10	195	13	18	103	8	18	137	12	729
9:30 AM	10	229	6	20	212	11	19	90	7	22	121	15	762
9:45 AM	10	210	10	21	217	6	15	107	5	38	118	22	779
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	107	2466	126	186	2443	117	149	1358	95	278	1904	158	9387
APPROACH %'s :	3.96%	91.37%	4.67%	6.77%	88.97%	4.26%	9.30%	84.77%	5.93%	11.88%	81.37%	6.75%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	37	805	56	71	889	53	36	531	40	97	638	43	3296
PEAK HR FACTOR :		0.924			0.885			0.931			0.864		0.941

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-001

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

PM

NS/EW Streets:	Western Ave			Western Ave			8th St			8th 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	2	0	1	2	0	
3:00 PM	10	218	5	21	221	17	8	114	13	33	98	21	779
3:15 PM	13	204	14	23	229	26	17	111	10	33	109	19	808
3:30 PM	12	207	12	23	198	23	14	118	6	32	101	14	760
3:45 PM	10	210	10	23	234	24	17	102	11	22	94	24	781
4:00 PM	6	198	6	18	226	17	7	114	11	29	104	17	753
4:15 PM	16	207	12	15	233	17	5	119	15	27	94	13	773
4:30 PM	12	194	12	24	241	14	14	126	4	25	109	9	784
4:45 PM	13	206	12	16	227	17	11	134	10	25	128	15	814
5:00 PM	10	205	3	16	231	23	16	140	2	31	144	15	836
5:15 PM	10	206	8	18	220	15	9	165	8	30	161	14	864
5:30 PM	13	201	6	20	210	20	13	195	8	27	170	12	895
5:45 PM	10	188	11	14	226	26	16	177	8	28	178	29	911
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	135	2444	111	231	2696	239	147	1615	106	342	1490	202	9758
APPROACH %'s :	5.02%	90.86%	4.13%	7.30%	85.15%	7.55%	7.87%	86.46%	5.67%	16.81%	73.25%	9.93%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	43	800	28	68	887	84	54	677	26	116	653	70	3506
PEAK HR FACTOR :		0.972			0.962			0.876			0.893		0.962

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Westen Ave

East/West Olympic Blvd

Day: Wednesday Date: May 25, 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	186	167	99	171
BIKES	46	67	34	38
BUSES	86	81	58	60

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	336	9.30	308	8.00	395	8.45	479	7.15
PM PK 15 MIN	323	17.45	307	17.15	449	16.30	377	16.30
AM PK HOUR	1233	8.00	1130	7.45	1544	8.00	1622	7.15
PM PK HOUR	1195	16.15	1131	16.30	1761	17.00	1435	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	182	936	73	1191
8-9	170	965	98	1233
9-10	167	861	94	1122
15-16	156	853	86	1095
16-17	176	891	114	1181
17-18	151	922	102	1175
TOTAL	1002	5428	567	6997

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	114	761	74	949
8-9	145	828	98	1071
9-10	141	741	94	976
15-16	158	841	103	1102
16-17	153	850	90	1093
17-18	140	876	83	1099
TOTAL	851	4897	542	6290

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
2140	61	0	86	22
2304	46	3	52	28
2098	99	2	67	6
2197	127	2	82	8
2274	157	0	76	5
2274	136	0	71	3
13287	626	7	434	72

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	44	973	43	1060
8-9	55	1418	71	1544
9-10	57	1071	70	1198
15-16	81	1353	98	1532
16-17	71	1450	75	1596
17-18	71	1614	76	1761
TOTAL	379	7879	433	8691

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	46	1505	70	1621
8-9	47	1345	75	1467
9-10	73	1049	92	1214
15-16	87	998	138	1223
16-17	104	1120	144	1368
17-18	77	1251	107	1435
TOTAL	434	7268	626	8328

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
2681	58	29	82	0
3011	37	19	78	3
2412	74	7	122	0
2755	95	13	192	6
2964	106	4	137	0
3196	118	2	150	2
17019	488	74	761	11

ITM Peak Hour Summary

Prepared by:

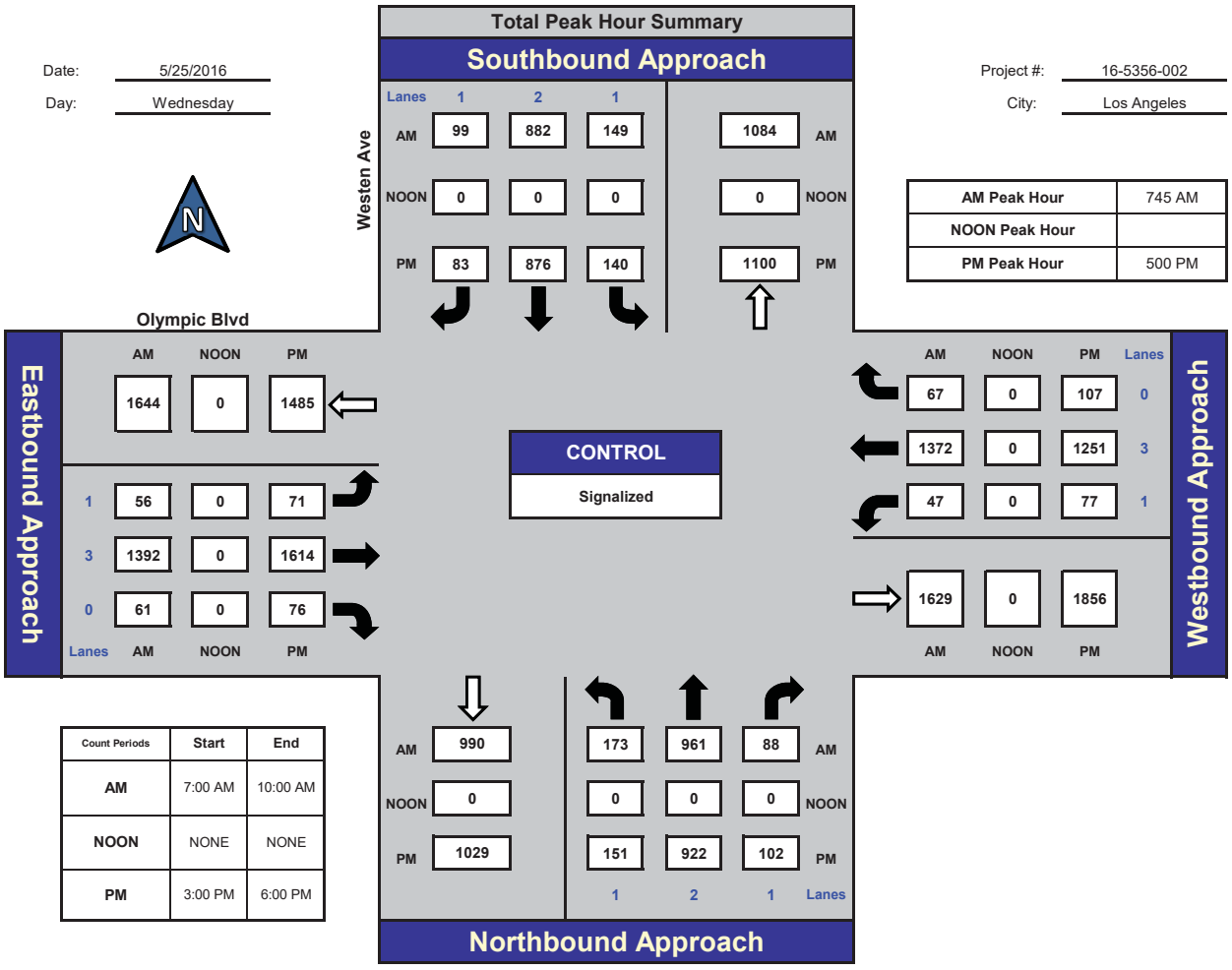
National Data & Surveying Services

Westen Ave and Olympic Blvd , Los Angeles

Date: 5/25/2016
Day: Wednesday

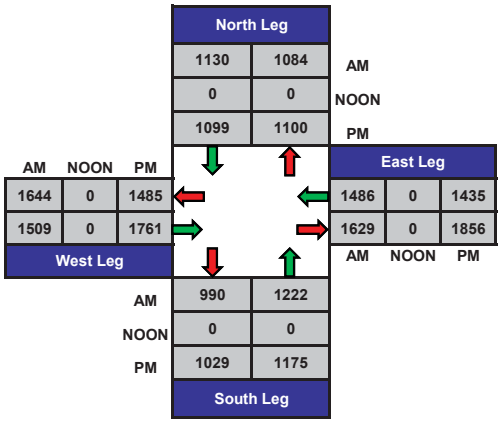
Project #: 16-5356-002
City: Los Angeles

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	500 PM

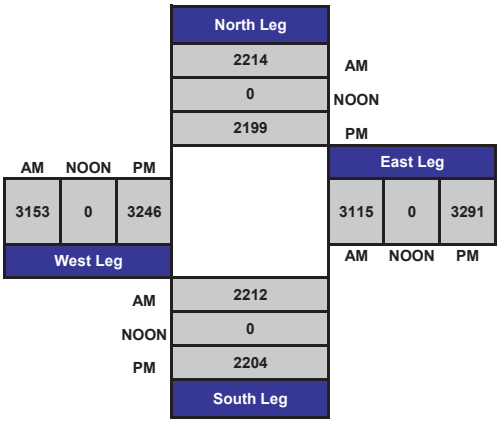


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-002

Day: Wednesday

City: Los Angeles

TOTALS

Date: 5/25/2016

AM

NS/EW Streets:	Westen Ave			Westen Ave			Olympic Blvd			Olympic Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	3	0	1	3	0	
7:00 AM	48	242	17	21	180	21	13	154	9	9	373	18	1105
7:15 AM	44	232	12	22	155	13	12	217	10	17	441	21	1196
7:30 AM	43	246	22	30	212	17	7	265	13	10	352	15	1232
7:45 AM	47	216	22	41	214	23	12	337	11	10	339	16	1288
8:00 AM	36	258	16	38	235	35	11	352	13	15	363	23	1395
8:15 AM	50	225	26	35	208	24	21	350	17	14	370	9	1349
8:30 AM	40	262	24	35	225	17	12	353	20	8	300	19	1315
8:45 AM	44	220	32	37	160	22	11	363	21	10	312	24	1256
9:00 AM	32	197	17	37	202	22	15	270	18	15	267	16	1108
9:15 AM	53	188	30	29	157	25	15	273	18	17	315	28	1148
9:30 AM	42	268	26	34	201	26	14	266	19	16	234	11	1157
9:45 AM	40	208	21	41	181	21	13	262	15	25	233	37	1097
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	519	2762	265	400	2330	266	156	3462	184	166	3899	237	14646
APPROACH %'s :	14.64%	77.89%	7.47%	13.35%	77.77%	8.88%	4.10%	91.06%	4.84%	3.86%	90.63%	5.51%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	173	961	88	149	882	99	56	1392	61	47	1372	67	5347
PEAK HR FACTOR :		0.937			0.917			0.972			0.926		0.958

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-002

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

PM

NS/EW Streets:	Westen Ave			Westen Ave			Olympic Blvd			Olympic Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	3	0	1	3	0	
3:00 PM	31	203	20	40	190	20	28	333	26	17	270	37	1215
3:15 PM	48	220	16	36	238	28	19	280	16	25	235	42	1203
3:30 PM	44	191	27	37	189	19	18	389	34	24	264	33	1269
3:45 PM	33	239	23	45	224	36	16	351	22	21	229	26	1265
4:00 PM	47	195	28	34	185	23	17	364	16	29	283	43	1264
4:15 PM	38	244	26	41	239	23	10	321	16	22	264	39	1283
4:30 PM	49	228	31	37	198	20	22	406	21	25	313	39	1389
4:45 PM	42	224	29	41	228	24	22	359	22	28	260	23	1302
5:00 PM	38	220	26	33	223	20	25	405	16	13	315	29	1363
5:15 PM	35	219	34	39	244	24	13	401	15	21	300	29	1374
5:30 PM	44	216	20	32	178	20	13	409	23	21	322	24	1322
5:45 PM	34	267	22	36	231	19	20	399	22	22	314	25	1411
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	483	2666	302	451	2567	276	223	4417	249	268	3369	389	15660
APPROACH %'s :	14.00%	77.25%	8.75%	13.69%	77.93%	8.38%	4.56%	90.35%	5.09%	6.66%	83.68%	9.66%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	151	922	102	140	876	83	71	1614	76	77	1251	107	5470
PEAK HR FACTOR :		0.909			0.895			0.987			0.978		0.969

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Westen Ave

East/West 11th St

Day: Wednesday Date: May 25, 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	198	163	9	13
BIKES	47	50	15	9
BUSES	86	81	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	317	9.30	266	8.00	40	8.00	50	9.45
PM PK 15 MIN	294	17.45	273	17.00	61	17.30	54	17.00
AM PK HOUR	1204	7.45	994	7.45	123	7.15	172	7.15
PM PK HOUR	1115	16.15	1059	16.15	207	16.45	195	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	24	1102	18	1144
8-9	21	1138	40	1199
9-10	16	1068	29	1113
15-16	41	975	19	1035
16-17	25	1046	19	1090
17-18	43	1024	35	1102
TOTAL	170	6353	160	6683

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	5	844	12	861
8-9	9	917	21	947
9-10	12	841	21	874
15-16	11	981	30	1022
16-17	14	991	29	1034
17-18	22	955	30	1007
TOTAL	73	5529	143	5745

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
2005	24	12	12	8
2146	20	1	14	1
1987	14	0	12	0
2057	17	2	15	1
2124	21	4	30	9
2109	25	2	19	4
12428	121	21	102	23

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	37	24	39	100
8-9	23	42	25	90
9-10	14	22	25	61
15-16	13	51	42	106
16-17	22	71	50	143
17-18	17	138	47	202
TOTAL	126	348	228	702

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	43	84	34	161
8-9	39	56	38	133
9-10	44	62	41	147
15-16	65	80	43	188
16-17	45	81	40	166
17-18	49	92	54	195
TOTAL	285	455	250	990

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
261	35	17	35	7
223	21	0	29	3
208	14	0	41	0
294	37	3	50	2
309	47	2	44	7
397	49	8	50	4
1692	203	30	249	23

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Westen Ave and 11th St , Los Angeles

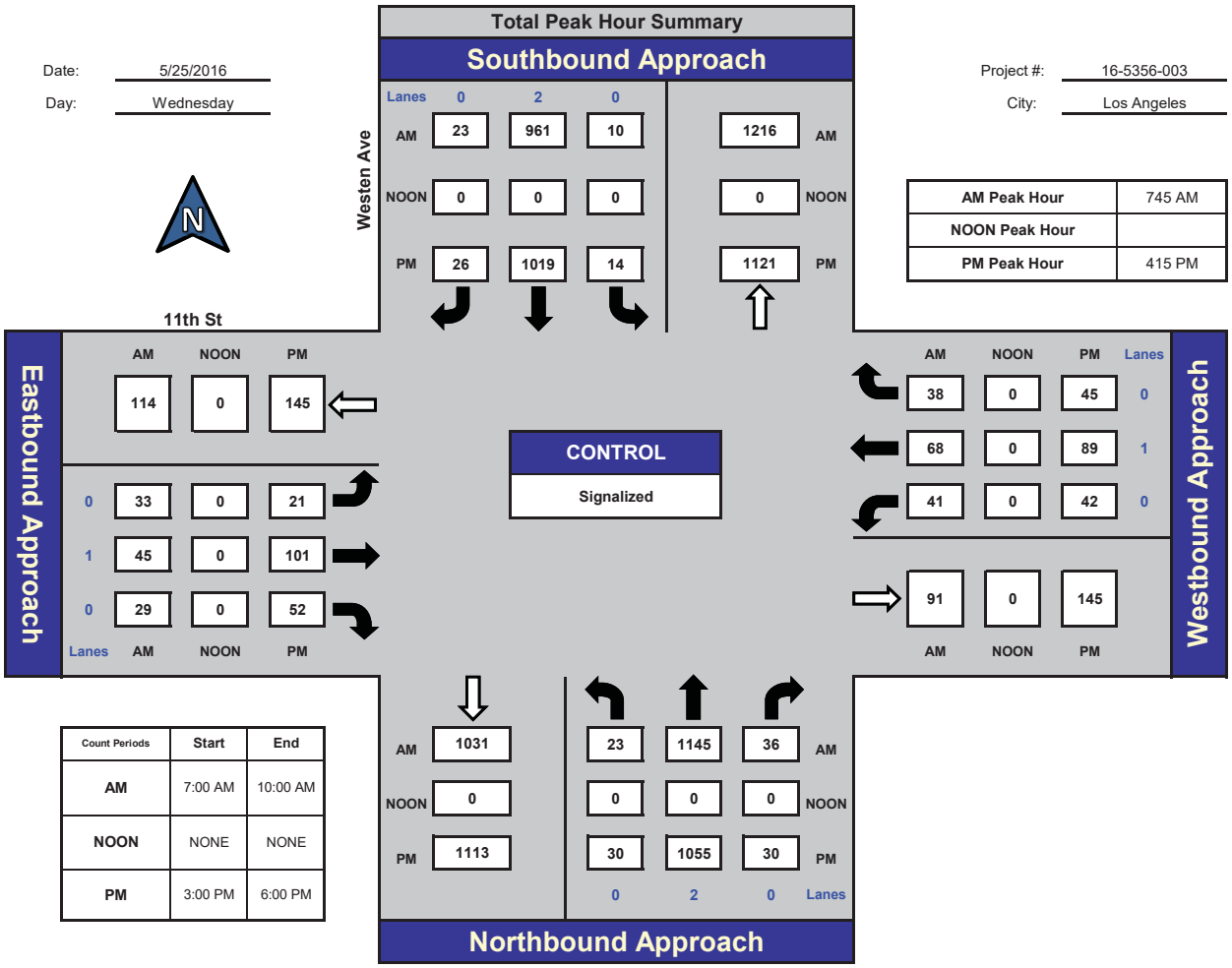
Date: 5/25/2016

Day: Wednesday

Project #: 16-5356-003

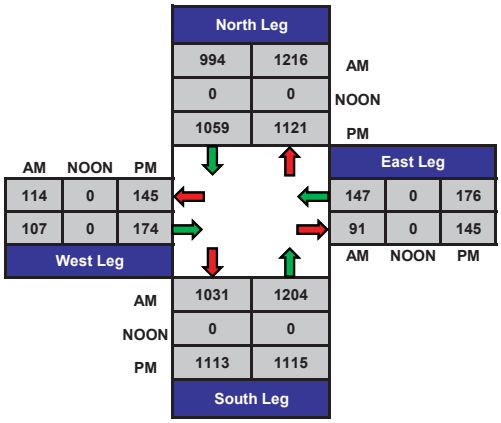
City: Los Angeles

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

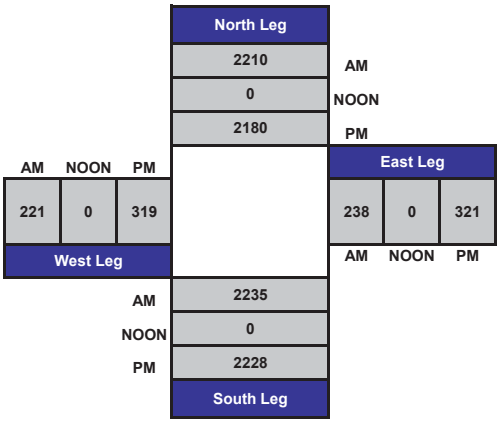


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-003

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

AM

NS/EW Streets:	Westen Ave			Westen Ave			11th St			11th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	0	1	0	0	1	0	
7:00 AM	5	264	2	1	200	3	7	3	7	11	17	7	527
7:15 AM	6	268	4	0	181	3	9	6	15	8	23	12	535
7:30 AM	6	282	8	1	232	3	8	9	9	12	23	10	603
7:45 AM	7	288	4	3	231	3	13	6	8	12	21	5	601
8:00 AM	10	286	13	1	260	5	11	21	8	15	21	10	661
8:15 AM	3	288	8	2	229	7	6	8	5	7	12	11	586
8:30 AM	3	283	11	4	241	8	3	10	8	7	14	12	604
8:45 AM	5	281	8	2	187	1	3	3	4	10	9	5	518
9:00 AM	1	230	4	2	229	2	1	5	6	10	13	8	511
9:15 AM	2	274	6	3	181	5	4	4	6	12	16	9	522
9:30 AM	6	300	11	4	216	8	4	8	4	6	12	11	590
9:45 AM	7	264	8	3	215	6	5	5	9	16	21	13	572
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	61	3308	87	26	2602	54	74	88	89	126	202	113	6830
APPROACH %'s :	1.77%	95.72%	2.52%	0.97%	97.02%	2.01%	29.48%	35.06%	35.46%	28.57%	45.80%	25.62%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	23	1145	36	10	961	23	33	45	29	41	68	38	2452
PEAK HR FACTOR :		0.974			0.934			0.669			0.799		0.927

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-003

Day: Wednesday

City: Los Angeles

TOTALS

Date: 5/25/2016

PM

NS/EW Streets:	Westen Ave			Westen Ave			11th St			11th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	0	1	0	0	1	0	
3:00 PM	9	222	5	7	223	5	6	16	8	15	27	10	553
3:15 PM	12	244	4	0	257	9	1	7	10	14	17	10	585
3:30 PM	8	244	5	1	257	8	2	12	11	19	22	11	600
3:45 PM	12	265	5	3	244	8	4	16	13	17	14	12	613
4:00 PM	6	255	1	4	233	11	4	12	9	13	22	9	579
4:15 PM	8	260	5	5	251	8	8	19	10	14	21	11	620
4:30 PM	7	274	10	1	252	4	3	19	16	11	17	8	622
4:45 PM	4	257	3	4	255	6	7	21	15	7	21	12	612
5:00 PM	11	264	12	4	261	8	3	42	11	10	30	14	670
5:15 PM	10	221	3	9	228	4	3	35	9	13	18	9	562
5:30 PM	13	265	9	4	216	5	9	39	13	12	22	16	623
5:45 PM	9	274	11	5	250	13	2	22	14	14	22	15	651
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	109	3045	73	47	2927	89	52	260	139	159	253	137	7290
APPROACH %'s :	3.38%	94.36%	2.26%	1.53%	95.56%	2.91%	11.53%	57.65%	30.82%	28.96%	46.08%	24.95%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	30	1055	30	14	1019	26	21	101	52	42	89	45	2524
PEAK HR FACTOR :		0.958			0.970			0.777			0.815		0.942

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Westen Ave

East/West Pico Blvd

Day: Wednesday Date: May 25, 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	203	177	87	73
BIKES	47	41	36	44
BUSES	86	81	47	46

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	357	7.45	293	8.00	189	7.45	255	7.15
PM PK 15 MIN	337	17.30	292	15.30	276	17.45	182	15.15
AM PK HOUR	1357	7.30	1113	7.45	734	7.30	944	7.15
PM PK HOUR	1207	17.00	1136	16.30	985	17.00	673	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	96	1195	34	1325
8-9	97	1161	59	1317
9-10	94	1055	42	1191
15-16	87	924	68	1079
16-17	82	982	60	1124
17-18	61	1073	73	1207
TOTAL	517	6390	336	7243

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	43	877	60	980
8-9	36	928	75	1039
9-10	52	827	67	946
15-16	62	938	94	1094
16-17	85	958	73	1116
17-18	72	944	65	1081
TOTAL	350	5472	434	6256

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
2305	59	33	75	69
2356	63	22	66	30
2137	61	1	45	4
2173	116	3	80	14
2240	94	3	87	22
2288	111	11	99	12
13499	504	73	452	151

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	69	510	44	623
8-9	48	606	64	718
9-10	74	420	60	554
15-16	102	681	106	889
16-17	91	759	79	929
17-18	84	808	93	985
TOTAL	468	3784	446	4698

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	38	822	75	935
8-9	52	649	72	773
9-10	53	507	41	601
15-16	73	520	78	671
16-17	58	479	53	590
17-18	57	530	75	662
TOTAL	331	3507	394	4232

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1558	64	48	107	83
1491	52	17	78	22
1155	52	7	85	1
1560	104	15	108	6
1519	87	15	95	11
1647	110	14	104	11
8930	469	116	577	134

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Westen Ave and Pico Blvd , Los Angeles

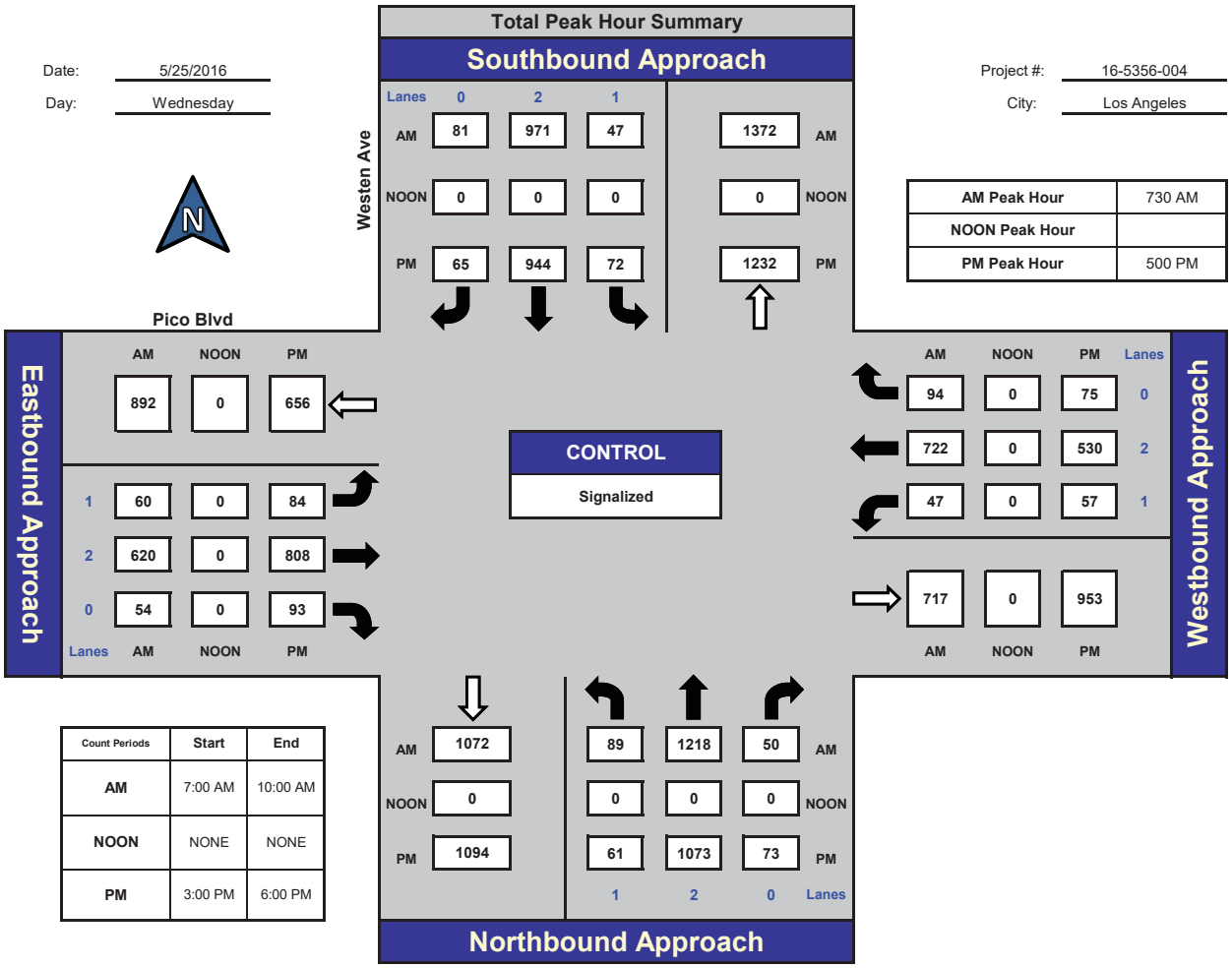
Date: 5/25/2016

Day: Wednesday

Project #: 16-5356-004

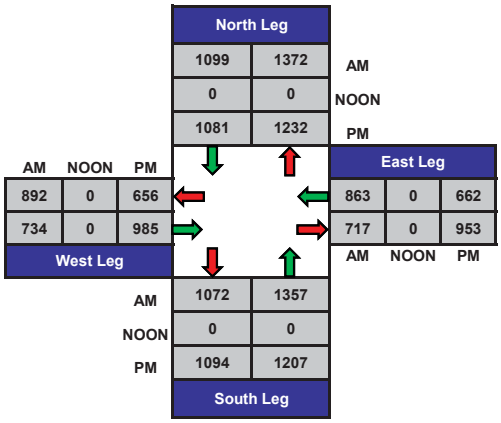
City: Los Angeles

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	500 PM

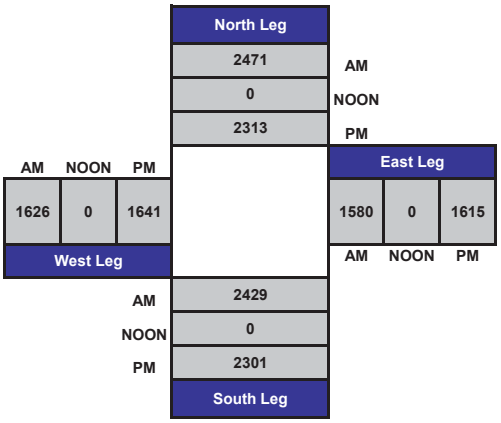


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-004

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

AM

NS/EW Streets:	Westen Ave			Westen Ave			Pico Blvd			Pico Blvd			
	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	2	0	1	2	0	
7:00 AM	24	285	11	8	202	16	16	80	11	7	221	9	890
7:15 AM	28	281	8	8	190	15	15	115	11	12	222	21	926
7:30 AM	22	300	9	10	235	15	23	152	11	8	212	16	1013
7:45 AM	22	329	6	17	250	14	15	163	11	11	167	29	1034
8:00 AM	16	297	19	9	261	23	11	152	17	20	191	35	1051
8:15 AM	29	292	16	11	225	29	11	153	15	8	152	14	955
8:30 AM	22	292	12	10	248	16	13	152	18	13	184	10	990
8:45 AM	30	280	12	6	194	7	13	149	14	11	122	13	851
9:00 AM	22	243	9	13	209	16	20	118	11	12	128	5	806
9:15 AM	30	265	10	13	209	12	18	124	12	12	132	6	843
9:30 AM	26	306	15	15	199	18	18	93	14	15	125	16	860
9:45 AM	16	241	8	11	210	21	18	85	23	14	122	14	783
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	287	3411	135	131	2632	202	191	1536	168	143	1978	188	11002
APPROACH %'s :	7.49%	88.99%	3.52%	4.42%	88.77%	6.81%	10.08%	81.06%	8.87%	6.19%	85.66%	8.14%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	89	1218	50	47	971	81	60	620	54	47	722	94	4053
PEAK HR FACTOR :		0.950			0.938			0.971			0.877		0.964

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-004

Day: Wednesday

City: Los Angeles

TOTALS

Date: 5/25/2016

PM

NS/EW Streets:	Westen Ave			Westen Ave			Pico Blvd			Pico Blvd			
	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	2	0	1	2	0	
3:00 PM	23	213	17	16	224	21	17	163	15	16	116	21	862
3:15 PM	21	222	20	16	250	15	29	167	29	23	140	19	951
3:30 PM	20	225	19	18	248	26	26	163	33	12	131	24	945
3:45 PM	23	264	12	12	216	32	30	188	29	22	133	14	975
4:00 PM	26	235	14	24	245	19	21	165	22	13	121	12	917
4:15 PM	18	244	15	24	228	19	30	191	19	18	111	16	933
4:30 PM	17	275	21	16	252	20	21	197	20	16	115	7	977
4:45 PM	21	228	10	21	233	15	19	206	18	11	132	18	932
5:00 PM	14	255	12	24	253	15	22	178	28	11	135	23	970
5:15 PM	16	238	16	14	247	26	26	214	19	14	137	17	984
5:30 PM	17	295	25	22	226	10	16	184	22	10	148	17	992
5:45 PM	14	285	20	12	218	14	20	232	24	22	110	18	989
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	230	2979	201	219	2840	232	277	2248	278	188	1529	206	11427
APPROACH %'s :	6.74%	87.36%	5.89%	6.65%	86.30%	7.05%	9.88%	80.20%	9.92%	9.78%	79.51%	10.71%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	61	1073	73	72	944	65	84	808	93	57	530	75	3935
PEAK HR FACTOR :		0.895			0.926			0.892			0.946		0.992

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Hobart Blvd

East/West Pico Blvd

Day: Wednesday Date: May 25, 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	5	10	80	74
BIKES	9	5	43	51
BUSES	0	0	47	46

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	44	7.45	63	8.00	193	7.45	269	7.15
PM PK 15 MIN	33	17.45	59	17.45	277	17.45	187	15.15
AM PK HOUR	128	7.30	185	7.30	737	7.45	955	7.00
PM PK HOUR	105	17.00	147	17.00	946	17.00	719	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	16	54	27	97
8-9	20	40	35	95
9-10	9	10	17	36
15-16	12	20	29	61
16-17	9	27	34	70
17-18	4	62	39	105
TOTAL	70	213	181	464

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	32	38	46	116
8-9	41	43	56	140
9-10	18	17	35	70
15-16	34	31	49	114
16-17	37	41	34	112
17-18	37	66	44	147
TOTAL	199	236	264	699

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
213	32	22	42	46
235	33	3	26	9
106	27	4	18	7
175	31	18	19	25
182	23	6	41	28
252	50	10	45	15
1163	196	63	191	130

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	40	550	15	605
8-9	32	654	16	702
9-10	25	491	14	530
15-16	45	746	16	807
16-17	46	855	16	917
17-18	44	889	13	946
TOTAL	232	4185	90	4507

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	20	888	47	955
8-9	18	685	27	730
9-10	29	569	10	608
15-16	16	632	40	688
16-17	23	577	27	627
17-18	22	625	26	673
TOTAL	128	3976	177	4281

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1560	71	45	23	15
1432	31	4	17	4
1138	8	2	4	3
1495	20	17	4	11
1544	28	17	9	11
1619	36	10	22	2
8788	194	95	79	46

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Hobart Blvd and Pico Blvd , Los Angeles

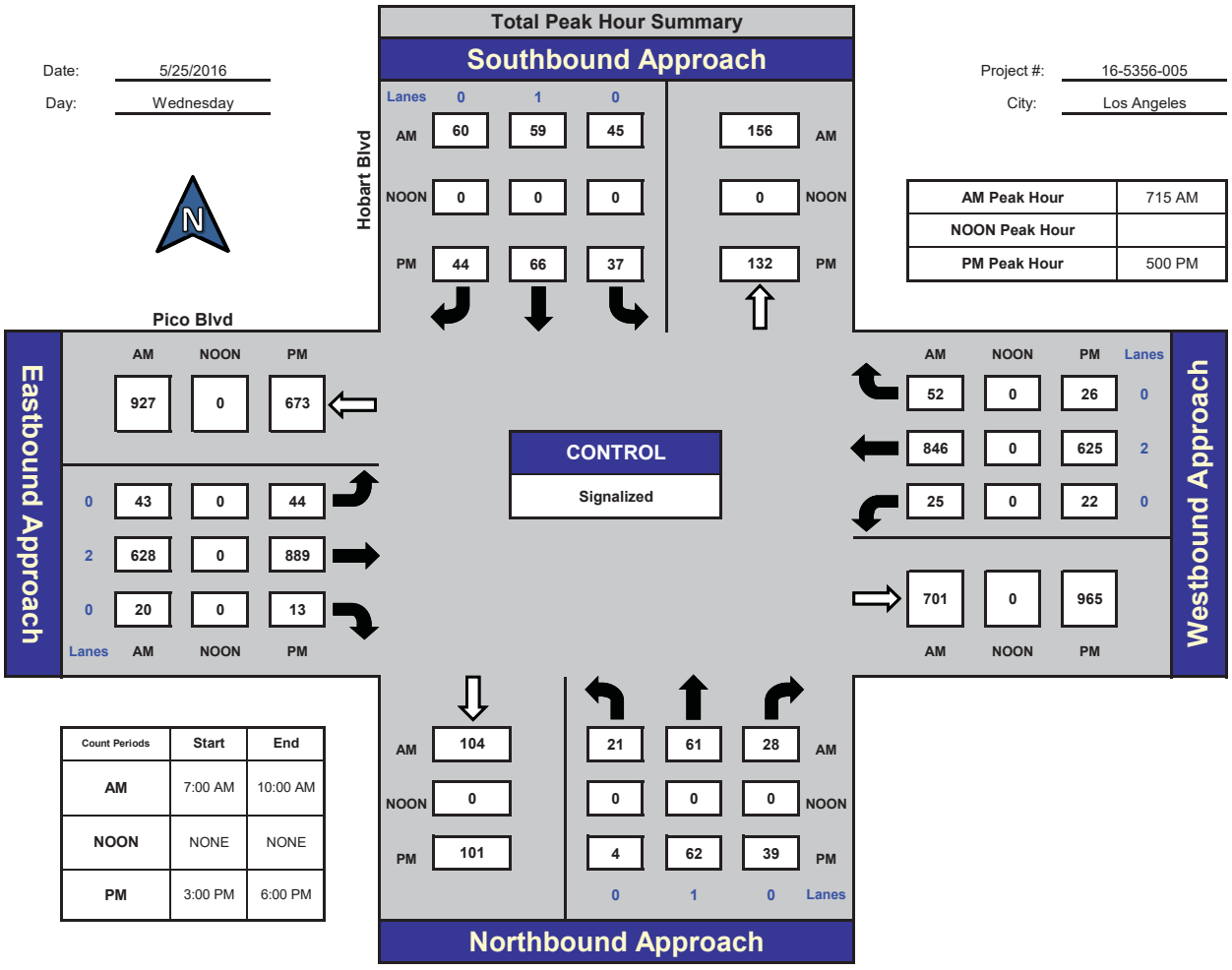
Date: 5/25/2016

Day: Wednesday

Project #: 16-5356-005

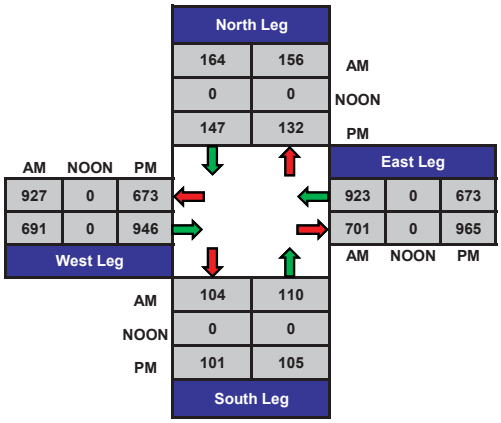
City: Los Angeles

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	500 PM

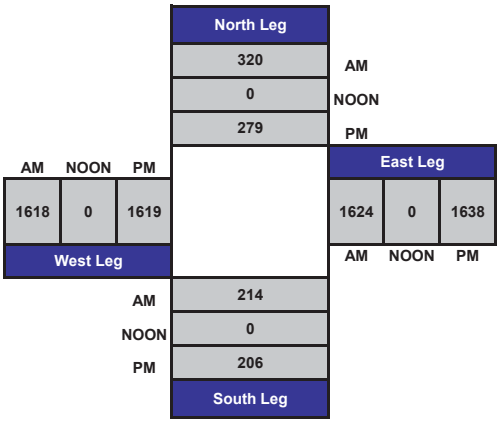


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-005 **Day:** Wednesday

City: Los Angeles **Date:** 5/25/2016

TOTALS

AM

NS/EW Streets:	Hobart Blvd			Hobart Blvd			Pico Blvd			Pico Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	2	0	0	2	0	
7:00 AM	2	6	7	5	2	8	5	93	3	4	227	11	373
7:15 AM	2	7	0	5	0	11	6	122	2	6	255	8	424
7:30 AM	6	13	10	10	16	14	15	160	6	7	189	17	463
7:45 AM	6	28	10	12	20	13	14	175	4	3	217	11	513
8:00 AM	7	13	8	18	23	22	8	171	8	9	185	16	488
8:15 AM	4	7	16	14	8	15	8	157	4	1	170	7	411
8:30 AM	4	11	6	4	6	11	7	180	1	4	180	3	417
8:45 AM	5	9	5	5	6	8	9	146	3	4	150	1	351
9:00 AM	3	1	3	1	6	8	5	147	3	6	133	0	316
9:15 AM	2	4	5	4	6	10	2	129	4	8	155	8	337
9:30 AM	1	1	4	5	2	5	11	120	5	6	137	2	299
9:45 AM	3	4	5	8	3	12	7	95	2	9	144	0	292
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	45	104	79	91	98	137	97	1695	45	67	2142	84	4684
APPROACH %'s :	19.74%	45.61%	34.65%	27.91%	30.06%	42.02%	5.28%	92.27%	2.45%	2.92%	93.41%	3.66%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	21	61	28	45	59	60	43	628	20	25	846	52	1888
PEAK HR FACTOR :		0.625			0.651			0.895			0.858		0.920

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-005

Day: Wednesday

City: Los Angeles

TOTALS

Date: 5/25/2016

PM

NS/EW Streets:	Hobart Blvd			Hobart Blvd			Pico Blvd			Pico Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	2	0	0	2	0	
3:00 PM	1	5	11	8	8	8	9	173	5	4	141	9	382
3:15 PM	5	7	8	6	6	16	14	199	2	7	167	13	450
3:30 PM	1	2	4	14	7	12	9	185	4	2	166	9	415
3:45 PM	5	6	6	6	10	13	13	189	5	3	158	9	423
4:00 PM	3	7	10	5	2	6	9	188	2	2	142	7	383
4:15 PM	2	6	11	11	7	14	15	219	1	6	142	5	439
4:30 PM	4	3	6	11	9	6	14	219	6	9	128	8	423
4:45 PM	0	11	7	10	23	8	8	229	7	6	165	7	481
5:00 PM	2	16	4	9	15	9	9	196	3	7	158	11	439
5:15 PM	0	9	13	5	15	9	11	226	5	6	164	8	471
5:30 PM	1	14	13	5	11	10	11	206	2	8	176	3	460
5:45 PM	1	23	9	18	25	16	13	261	3	1	127	4	501
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	25	109	102	108	138	127	135	2490	45	61	1834	93	5267
APPROACH %'s :	10.59%	46.19%	43.22%	28.95%	37.00%	34.05%	5.06%	93.26%	1.69%	3.07%	92.25%	4.68%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	4	62	39	37	66	44	44	889	13	22	625	26	1871
PEAK HR FACTOR :		0.795			0.623			0.854			0.900		0.934

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Harvard Blvd

East/West Olympic Blvd

Day: Wednesday Date: May 25, 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	8	31	115	170
BIKES	12	12	43	59
BUSES	0	0	58	60

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	81	8.30	103	7.45	436	8.00	477	7.00
PM PK 15 MIN	100	17.45	122	17.45	509	17.45	404	17.30
AM PK HOUR	295	8.00	311	7.45	1715	8.00	1693	7.00
PM PK HOUR	357	17.00	451	17.00	1940	17.00	1546	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	66	116	64	246
8-9	66	183	46	295
9-10	56	158	28	242
15-16	35	135	33	203
16-17	55	187	64	306
17-18	54	234	69	357
TOTAL	332	1013	304	1649

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	77	80	83	240
8-9	78	129	72	279
9-10	63	107	69	239
15-16	79	184	78	341
16-17	85	228	60	373
17-18	96	287	68	451
TOTAL	478	1015	430	1923

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
486	53	19	91	17
574	25	2	46	3
481	29	4	29	1
544	56	7	32	1
679	52	4	46	0
808	56	5	28	0
3572	271	41	272	22

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	34	1083	30	1147
8-9	56	1628	31	1715
9-10	70	1215	23	1308
15-16	71	1504	34	1609
16-17	63	1670	42	1775
17-18	80	1821	39	1940
TOTAL	374	8921	199	9494

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	36	1603	54	1693
8-9	27	1484	56	1567
9-10	37	1225	53	1315
15-16	49	1284	62	1395
16-17	39	1394	61	1494
17-18	49	1443	54	1546
TOTAL	237	8433	340	9010

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
2840	50	32	31	2
3282	23	1	21	1
2623	20	1	18	3
3004	34	7	39	4
3269	36	3	28	4
3486	24	2	23	8
18504	187	46	160	22

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Harvard Blvd and Olympic Blvd , Los Angeles

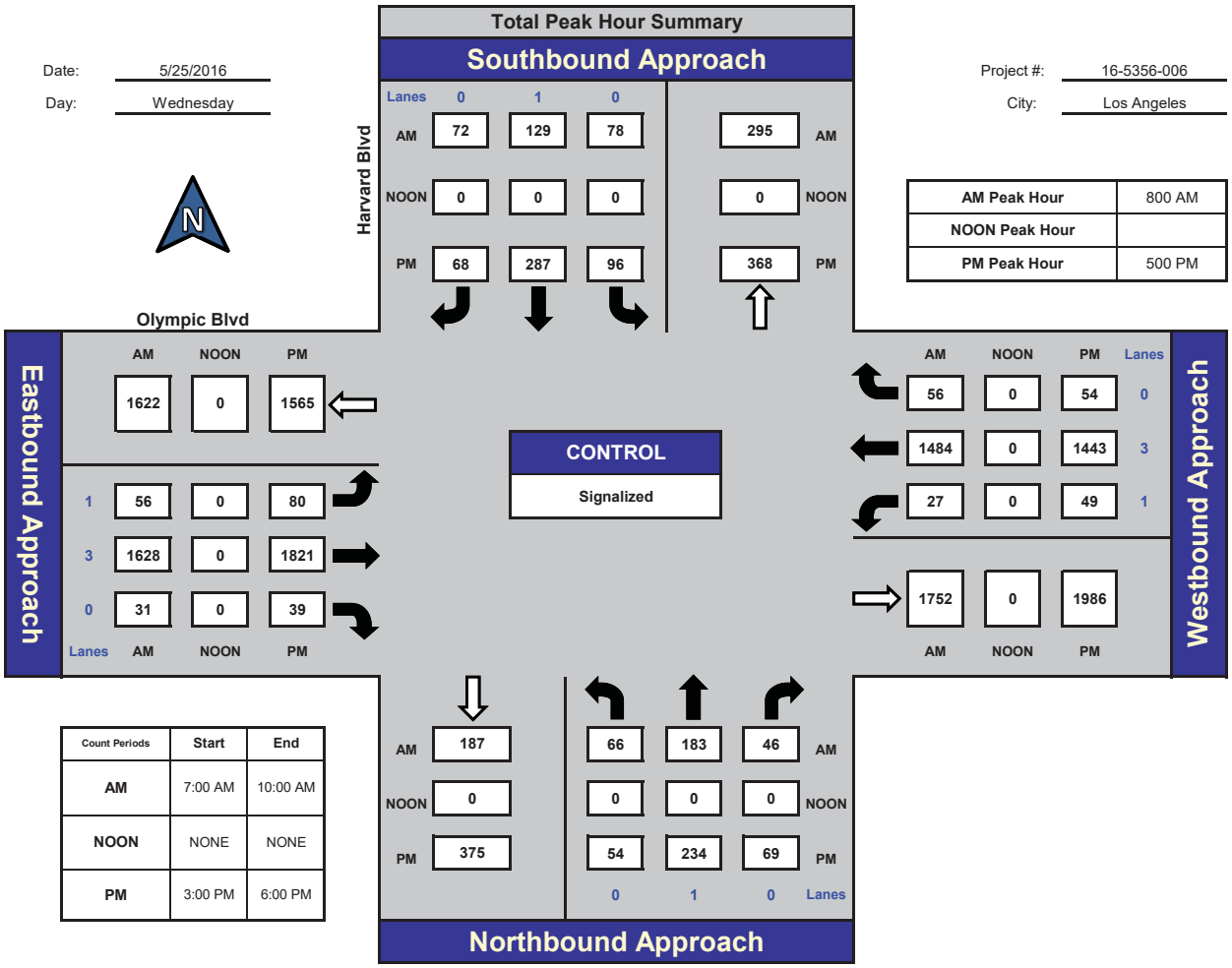
Date: 5/25/2016

Day: Wednesday

Project #: 16-5356-006

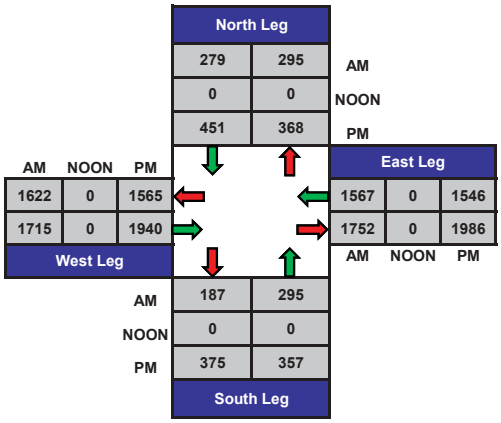
City: Los Angeles

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

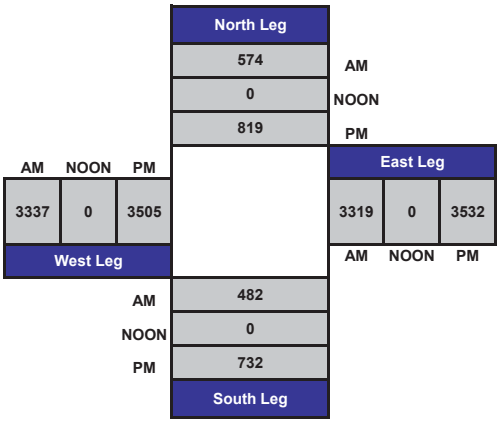


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-006

Day: Wednesday

City: Los Angeles

TOTALS

Date: 5/25/2016

AM

NS/EW Streets:	Harvard Blvd			Harvard Blvd			Olympic Blvd			Olympic Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	3	0	1	3	0	
7:00 AM	8	26	9	12	13	10	10	190	8	5	465	7	763
7:15 AM	16	36	14	15	13	13	8	234	5	10	429	15	808
7:30 AM	21	26	15	20	21	20	6	337	5	12	386	15	884
7:45 AM	21	28	26	30	33	40	10	322	12	9	323	17	871
8:00 AM	20	35	13	26	31	21	9	418	9	10	428	15	1035
8:15 AM	9	49	9	14	23	20	21	383	5	7	370	12	922
8:30 AM	16	49	16	15	41	17	12	414	8	2	375	13	978
8:45 AM	21	50	8	23	34	14	14	413	9	8	311	16	921
9:00 AM	14	40	7	13	27	9	11	325	5	14	331	11	807
9:15 AM	12	36	10	14	35	23	20	303	4	10	346	9	822
9:30 AM	13	32	5	18	20	10	15	322	5	7	288	16	751
9:45 AM	17	50	6	18	25	27	24	265	9	6	260	17	724
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	188	457	138	218	316	224	160	3926	84	100	4312	163	10286
APPROACH %'s :	24.01%	58.37%	17.62%	28.76%	41.69%	29.55%	3.84%	94.15%	2.01%	2.19%	94.25%	3.56%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	66	183	46	78	129	72	56	1628	31	27	1484	56	3856
PEAK HR FACTOR :		0.910			0.894			0.983			0.865		0.931

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-006 **Day:** Wednesday

City: Los Angeles **Date:** 5/25/2016

TOTALS

PM

NS/EW Streets:	Harvard Blvd			Harvard Blvd			Olympic Blvd			Olympic Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	3	0	1	3	0	
3:00 PM	8	34	7	21	37	15	15	374	12	19	329	19	890
3:15 PM	12	34	8	21	47	24	19	302	8	10	325	13	823
3:30 PM	8	26	6	20	46	20	24	427	7	10	329	10	933
3:45 PM	7	41	12	17	54	19	13	401	7	10	301	20	902
4:00 PM	13	49	14	20	59	13	11	403	14	6	357	12	971
4:15 PM	20	53	16	23	48	16	18	407	9	11	335	17	973
4:30 PM	10	47	20	21	49	22	18	443	7	13	361	13	1024
4:45 PM	12	38	14	21	72	9	16	417	12	9	341	19	980
5:00 PM	8	62	20	20	78	8	23	454	10	7	373	12	1075
5:15 PM	14	56	12	23	70	24	21	439	6	21	339	10	1035
5:30 PM	18	49	18	27	62	17	12	460	6	11	374	19	1073
5:45 PM	14	67	19	26	77	19	24	468	17	10	357	13	1111
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	144	556	166	260	699	206	214	4995	115	137	4121	177	11790
APPROACH %'s :	16.63%	64.20%	19.17%	22.32%	60.00%	17.68%	4.02%	93.82%	2.16%	3.09%	92.92%	3.99%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	54	234	69	96	287	68	80	1821	39	49	1443	54	4294
PEAK HR FACTOR :		0.893			0.924			0.953			0.957		0.966

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Harvard Blvd

East/West 11th St

Day: Wednesday Date: May 25, 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	4	14	7	7
BIKES	11	5	4	6
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	56	8.30	54	8.00	43	8.00	48	7.45
PM PK 15 MIN	70	17.45	94	17.45	51	17.00	61	17.45
AM PK HOUR	207	8.00	175	7.45	120	7.30	148	7.00
PM PK HOUR	259	17.00	355	17.00	185	17.00	219	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	10	148	7	165
8-9	3	197	7	207
9-10	10	144	11	165
15-16	12	119	2	133
16-17	16	191	17	224
17-18	24	216	19	259
TOTAL	75	1015	63	1153

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	15	98	17	130
8-9	26	122	21	169
9-10	10	112	15	137
15-16	18	172	48	238
16-17	31	230	31	292
17-18	36	284	35	355
TOTAL	136	1018	167	1321

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
295	5	0	7	4
376	7	0	9	1
302	6	0	9	0
371	8	3	11	5
516	7	0	10	0
614	10	2	14	2
2474	43	5	60	12

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	23	47	17	87
8-9	35	56	13	104
9-10	20	41	10	71
15-16	18	71	16	105
16-17	20	88	23	131
17-18	38	123	24	185
TOTAL	154	426	103	683

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	5	83	60	148
8-9	2	44	61	107
9-10	6	75	64	145
15-16	3	96	51	150
16-17	11	77	54	142
17-18	16	122	81	219
TOTAL	43	497	371	911

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
235	1	0	17	10
211	3	0	16	1
216	8	0	17	2
255	4	1	16	3
273	1	1	14	1
404	4	0	18	3
1594	21	2	98	20

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Harvard Blvd and 11th St , Los Angeles

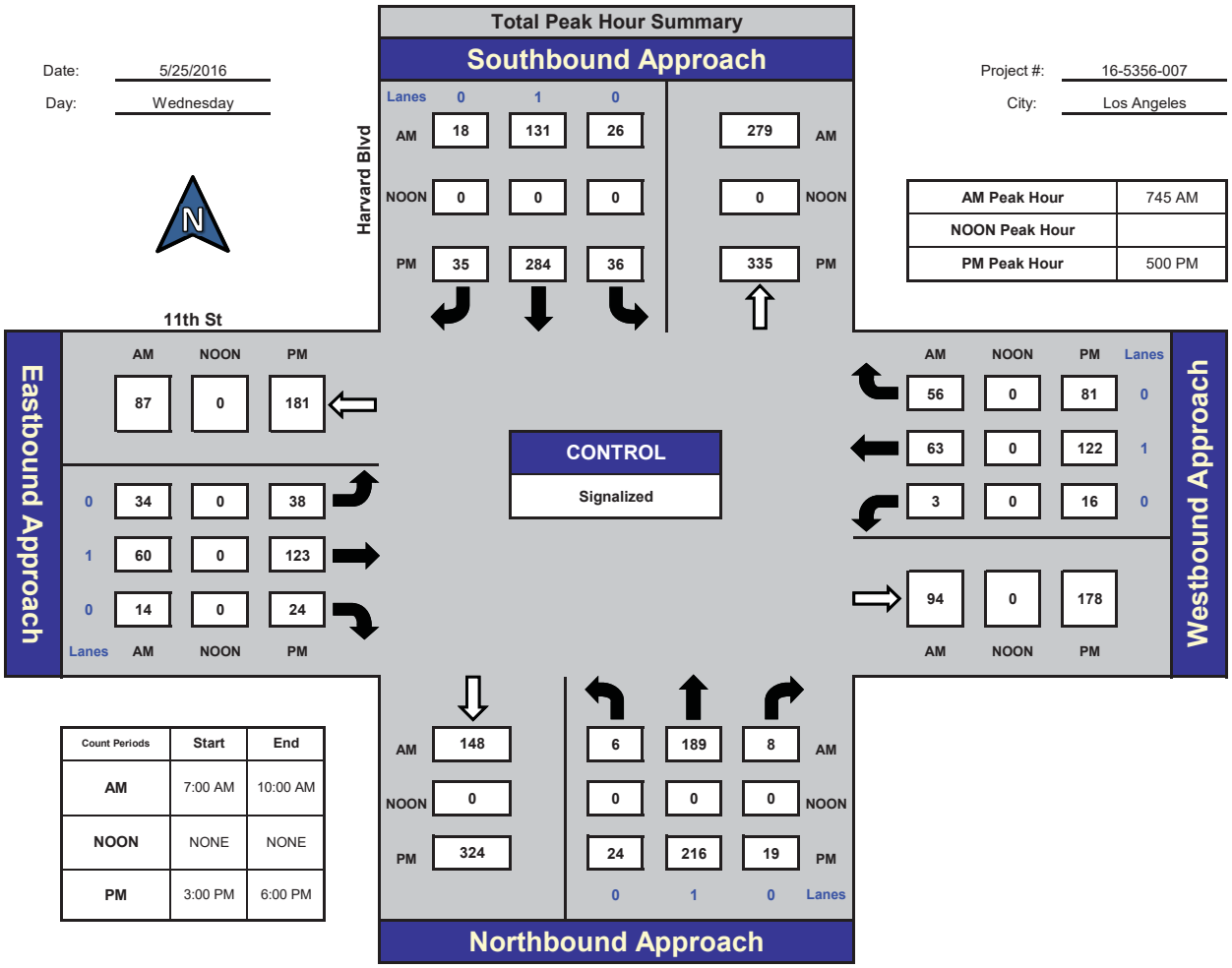
Date: 5/25/2016

Day: Wednesday

Project #: 16-5356-007

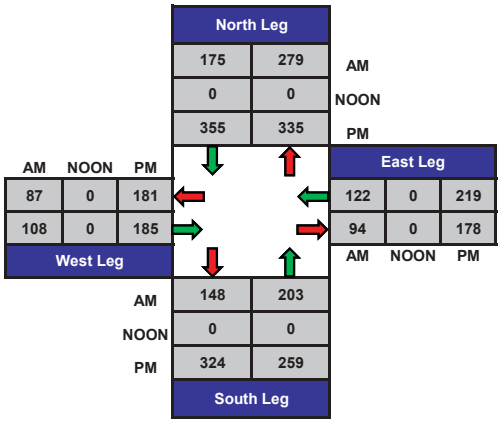
City: Los Angeles

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	500 PM

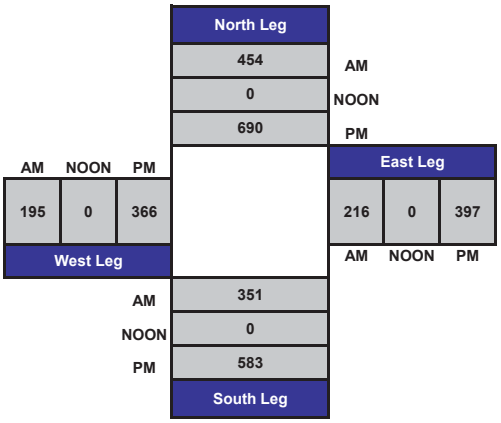


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-007

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

AM

NS/EW Streets:	Harvard Blvd			Harvard Blvd			11th St			11th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
7:00 AM	1	31	1	1	22	5	2	6	4	1	22	10	106
7:15 AM	4	37	2	2	18	4	4	8	5	2	15	18	119
7:30 AM	1	39	1	4	26	4	9	22	4	1	16	15	142
7:45 AM	4	41	3	8	32	4	8	11	4	1	30	17	163
8:00 AM	1	47	4	10	38	6	9	28	6	1	16	12	178
8:15 AM	0	46	1	2	21	4	5	14	0	0	5	14	112
8:30 AM	1	55	0	6	40	4	12	7	4	1	12	13	155
8:45 AM	1	49	2	8	23	7	9	7	3	0	11	22	142
9:00 AM	2	34	2	2	30	6	7	8	1	0	13	17	122
9:15 AM	3	40	2	4	35	3	3	11	2	1	18	8	130
9:30 AM	1	25	3	2	23	3	4	12	3	3	20	21	120
9:45 AM	4	45	4	2	24	3	6	10	4	2	24	18	146
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	23	489	25	51	332	53	78	144	40	13	202	185	1635
APPROACH %'s :	4.28%	91.06%	4.66%	11.70%	76.15%	12.16%	29.77%	54.96%	15.27%	3.25%	50.50%	46.25%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	6	189	8	26	131	18	34	60	14	3	63	56	608
PEAK HR FACTOR :		0.906			0.810			0.628			0.635		0.854

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-007

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

PM

NS/EW Streets:	Harvard Blvd			Harvard Blvd			11th St			11th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
3:00 PM	2	32	0	1	43	13	4	20	5	1	29	15	165
3:15 PM	2	24	0	6	41	10	3	14	3	0	25	11	139
3:30 PM	4	26	1	5	42	14	4	15	0	2	22	10	145
3:45 PM	4	37	1	6	46	11	7	22	8	0	20	15	177
4:00 PM	2	49	5	12	61	8	5	15	5	0	8	21	191
4:15 PM	8	55	3	10	37	7	4	22	9	4	27	10	196
4:30 PM	2	48	6	2	62	6	6	18	4	4	22	13	193
4:45 PM	4	39	3	7	70	10	5	33	5	3	20	10	209
5:00 PM	5	56	5	8	73	12	13	32	6	5	32	17	264
5:15 PM	5	55	3	9	68	8	7	34	6	3	21	20	239
5:30 PM	8	44	8	9	67	7	9	27	6	6	30	24	245
5:45 PM	6	61	3	10	76	8	9	30	6	2	39	20	270
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	52	526	38	85	686	114	76	282	63	30	295	186	2433
APPROACH %'s :	8.44%	85.39%	6.17%	9.60%	77.51%	12.88%	18.05%	66.98%	14.96%	5.87%	57.73%	36.40%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	24	216	19	36	284	35	38	123	24	16	122	81	1018
PEAK HR FACTOR :		0.925			0.944			0.907			0.898		0.943

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Normandie Ave

East/West Olympic Blvd

Day: Wednesday Date: May 25, 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	72	70	112	165
BIKES	48	45	49	57
BUSES	35	34	59	59

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	310	8.45	214	7.45	467	8.45	400	7.00
PM PK 15 MIN	263	17.00	280	17.00	520	17.45	457	17.45
AM PK HOUR	1211	8.00	787	7.30	1724	8.00	1476	8.00
PM PK HOUR	969	17.00	1024	16.30	1892	17.00	1617	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	152	788	62	1002
8-9	138	956	117	1211
9-10	126	818	127	1071
15-16	112	611	135	858
16-17	83	664	126	873
17-18	98	754	117	969
TOTAL	709	4591	684	5984

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	74	580	74	728
8-9	64	579	91	734
9-10	72	529	73	674
15-16	84	727	96	907
16-17	69	806	92	967
17-18	80	867	67	1014
TOTAL	443	4088	493	5024

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
1730	55	3	81	15
1945	56	0	72	0
1745	52	0	37	0
1765	106	9	82	0
1840	71	18	66	7
1983	83	5	63	1
11008	423	35	401	23

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	48	1077	59	1184
8-9	61	1570	93	1724
9-10	56	1135	73	1264
15-16	52	1397	97	1546
16-17	60	1583	140	1783
17-18	59	1729	104	1892
TOTAL	336	8491	566	9393

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	26	1389	43	1458
8-9	57	1356	63	1476
9-10	51	1233	62	1346
15-16	55	1215	58	1328
16-17	49	1377	63	1489
17-18	64	1468	85	1617
TOTAL	302	8038	374	8714

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
2642	57	18	80	18
3200	59	1	55	2
2610	47	0	52	1
2874	77	0	70	7
3272	56	4	60	19
3509	56	1	67	8
18107	352	24	384	55

ITM Peak Hour Summary

Prepared by:

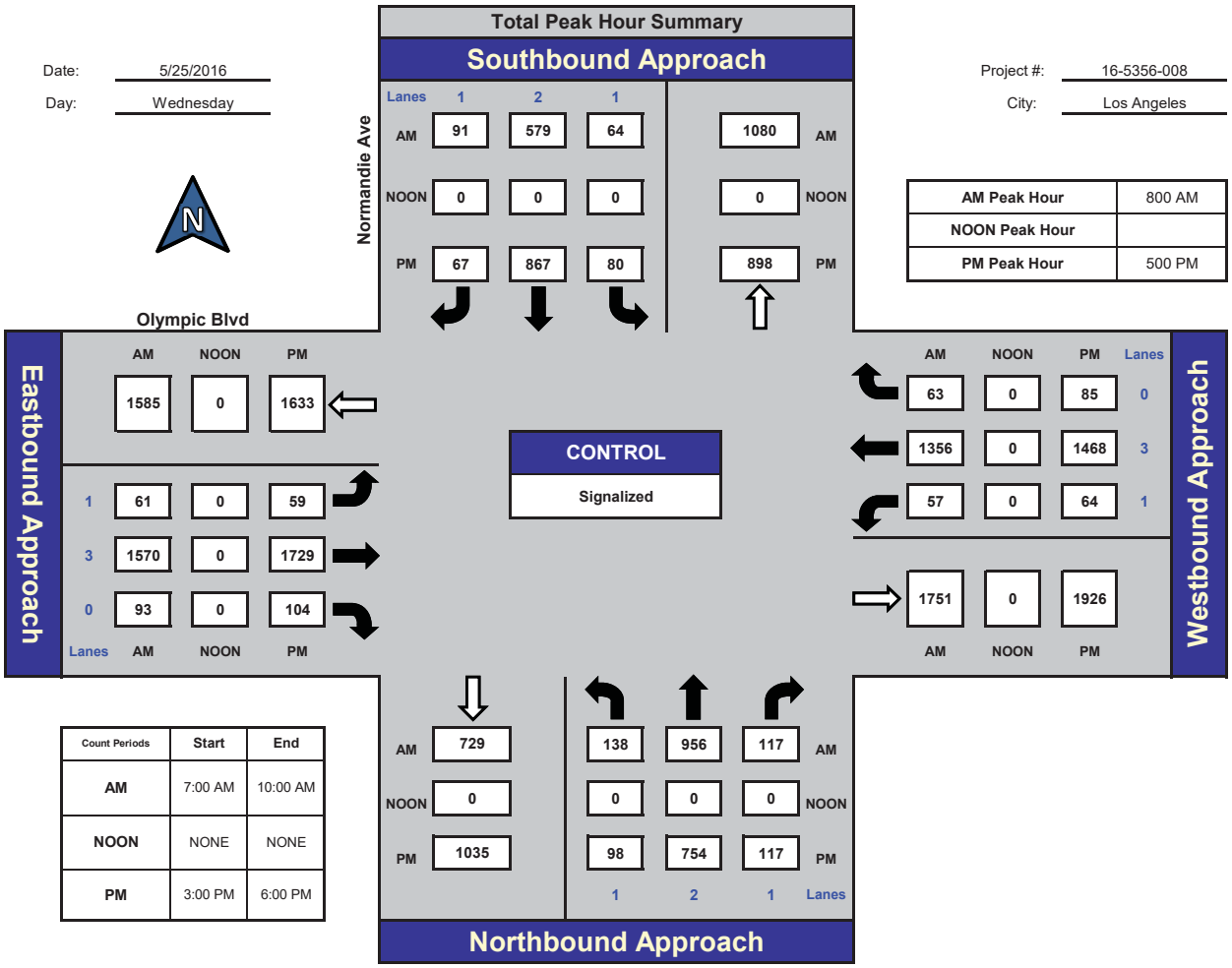
National Data & Surveying Services

Normandie Ave and Olympic Blvd , Los Angeles

Date: 5/25/2016
Day: Wednesday

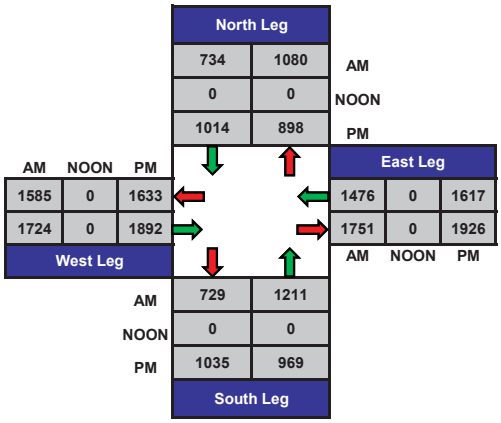
Project #: 16-5356-008
City: Los Angeles

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

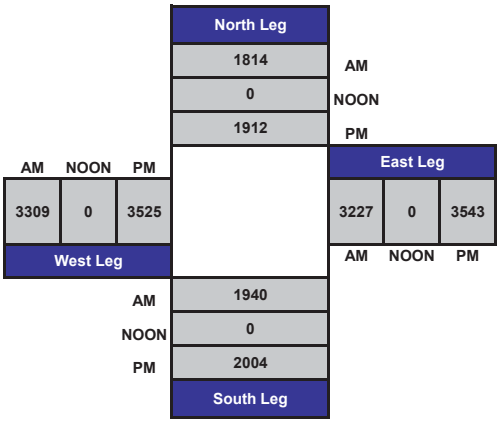


Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-008

Day: Wednesday

City: Los Angeles

TOTALS

Date: 5/25/2016

AM

NS/EW Streets:	Normandie Ave			Normandie Ave			Olympic Blvd			Olympic Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	3	0	1	3	0	
7:00 AM	35	187	11	12	124	17	12	199	8	3	392	5	1005
7:15 AM	44	224	18	11	139	27	8	232	14	4	359	8	1088
7:30 AM	34	183	18	24	149	11	13	326	22	7	354	16	1157
7:45 AM	39	194	15	27	168	19	15	320	15	12	284	14	1122
8:00 AM	34	236	34	16	151	32	19	392	27	11	347	12	1311
8:15 AM	37	240	21	15	154	21	12	379	24	12	351	15	1281
8:30 AM	38	234	27	17	144	18	13	367	24	21	346	16	1265
8:45 AM	29	246	35	16	130	20	17	432	18	13	312	20	1288
9:00 AM	29	203	27	16	140	23	16	301	20	10	332	11	1128
9:15 AM	38	188	41	18	129	7	13	297	19	6	367	20	1143
9:30 AM	33	201	20	19	138	19	13	288	15	20	272	18	1056
9:45 AM	26	226	39	19	122	24	14	249	19	15	262	13	1028
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	416	2562	306	210	1688	238	165	3782	225	134	3978	168	13872
APPROACH %'s :	12.67%	78.01%	9.32%	9.83%	79.03%	11.14%	3.95%	90.65%	5.39%	3.13%	92.94%	3.93%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	138	956	117	64	579	91	61	1570	93	57	1356	63	5145
PEAK HR FACTOR :		0.977			0.922			0.923			0.963		0.981

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-008

Day: Wednesday

City: Los Angeles

TOTALS

Date: 5/25/2016

PM

NS/EW Streets:	Normandie Ave			Normandie Ave			Olympic Blvd			Olympic Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	1	1	3	0	1	3	0	
3:00 PM	35	158	34	21	176	22	18	315	20	18	293	13	1123
3:15 PM	33	138	38	13	167	23	12	315	25	15	338	14	1131
3:30 PM	16	163	30	28	187	28	13	360	16	11	251	17	1120
3:45 PM	28	152	33	22	197	23	9	407	36	11	333	14	1265
4:00 PM	17	188	27	26	203	29	12	351	30	12	310	16	1221
4:15 PM	23	157	21	13	187	18	13	420	34	11	364	19	1280
4:30 PM	28	189	43	16	226	26	17	386	38	10	323	17	1319
4:45 PM	15	130	35	14	190	19	18	426	38	16	380	11	1292
5:00 PM	28	204	31	25	242	13	12	372	34	16	330	28	1335
5:15 PM	22	171	26	17	220	16	8	479	26	16	374	18	1393
5:30 PM	28	200	34	25	214	20	23	395	23	18	340	20	1340
5:45 PM	20	179	26	13	191	18	16	483	21	14	424	19	1424
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	293	2029	378	233	2400	255	171	4709	341	168	4060	206	15243
APPROACH %'s :	10.85%	75.15%	14.00%	8.07%	83.10%	8.83%	3.28%	90.19%	6.53%	3.79%	91.57%	4.65%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	98	754	117	80	867	67	59	1729	104	64	1468	85	5492
PEAK HR FACTOR :		0.921			0.905			0.910			0.885		0.964

CONTROL : Signalized

City Of Los Angeles

Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Normandie Ave

East/West Pico Blvd

Day: Wednesday Date: May 25, 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	91	79	80	83
BIKES	21	23	63	61
BUSES	34	33	47	45

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	328	8.45	215	8.00	266	7.45	257	7.45
PM PK 15 MIN	246	15.45	283	17.00	235	16.45	206	16.45
AM PK HOUR	1208	8.00	794	7.30	846	7.30	938	7.00
PM PK HOUR	963	15.30	1112	16.30	843	16.30	794	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	67	861	135	1063
8-9	47	1100	61	1208
9-10	66	1008	87	1161
15-16	63	726	120	909
16-17	35	763	90	888
17-18	28	822	96	946
TOTAL	306	5280	589	6175

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	32	625	33	690
8-9	34	709	32	775
9-10	30	589	29	648
15-16	20	844	41	905
16-17	4	992	31	1027
17-18	6	1018	36	1060
TOTAL	126	4777	202	5105

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
1753	80	7	72	0
1983	80	1	97	2
1809	51	1	45	3
1814	133	24	142	0
1915	86	1	138	1
2006	71	3	145	0
11280	501	37	639	6

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	35	584	82	701
8-9	45	629	72	746
9-10	28	451	75	554
15-16	52	625	89	766
16-17	58	655	125	838
17-18	65	642	112	819
TOTAL	283	3586	555	4424

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	94	805	39	938
8-9	53	646	50	749
9-10	52	530	43	625
15-16	90	589	45	724
16-17	103	566	46	715
17-18	90	606	51	747
TOTAL	482	3742	274	4498

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1639	49	2	65	0
1495	50	1	67	0
1179	37	4	40	0
1490	53	6	77	4
1553	67	2	79	0
1566	102	1	74	0
8922	358	16	402	4

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Normandie Ave and Pico Blvd , Los Angeles

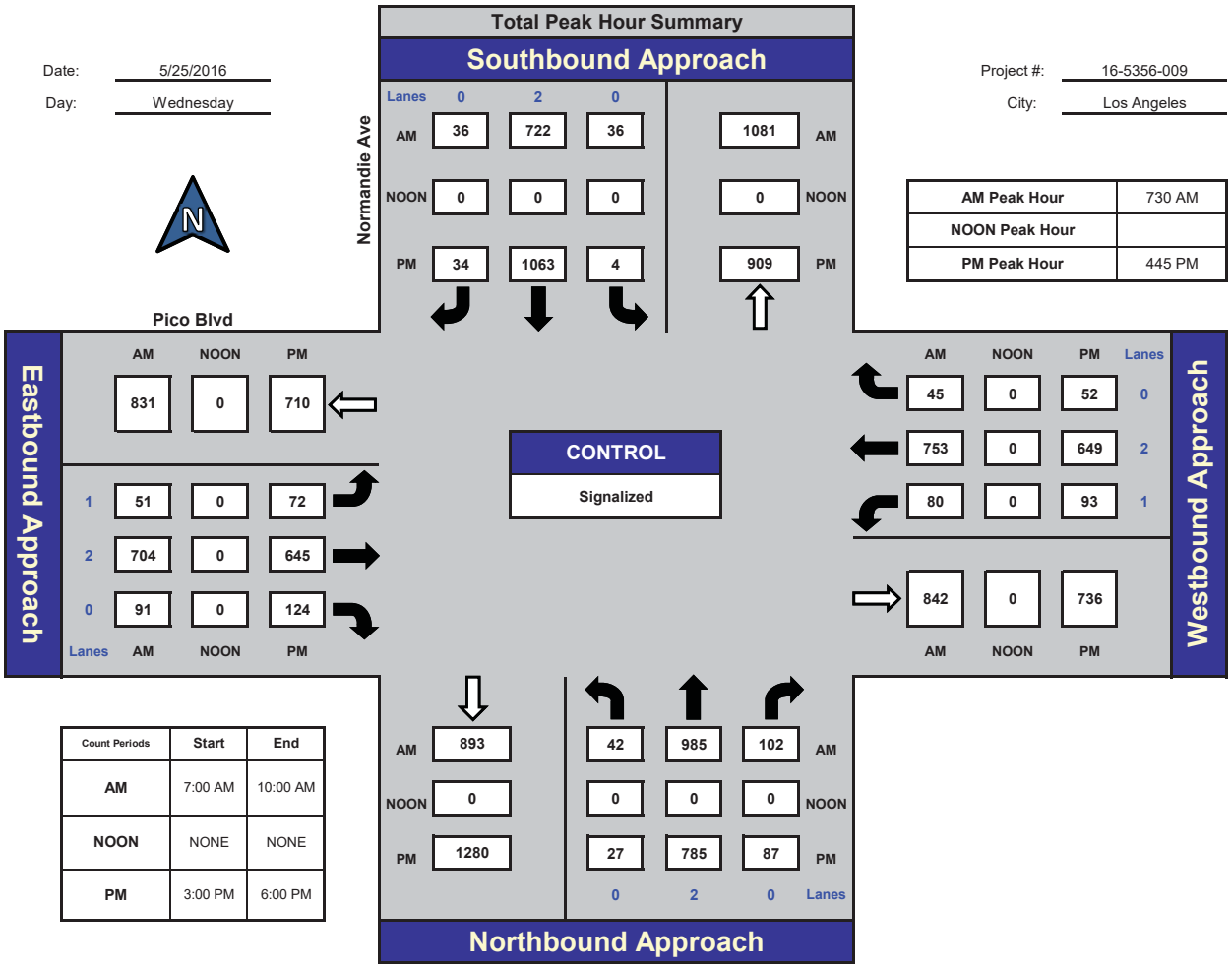
Date: 5/25/2016

Day: Wednesday

Project #: 16-5356-009

City: Los Angeles

AM Peak Hour	730 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

North Leg	
794	1081
0	0
1101	909

AM NOON PM

West Leg		
831	0	710
846	0	841

East Leg		
878	0	794
842	0	736

AM NOON PM

South Leg	
893	1129
0	0
1280	899

AM NOON PM

Total Volume Per Leg

North Leg
1875
0
2010

AM NOON PM

West Leg		
1677	0	1551

East Leg		
1720	0	1530

AM NOON PM

South Leg
2022
0
2179

AM NOON PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-009

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

AM

NS/EW Streets:	Normandie Ave			Normandie Ave			Pico Blvd			Pico Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	1	2	0	1	2	0	
7:00 AM	22	195	32	3	147	5	3	83	21	27	202	5	745
7:15 AM	17	226	30	10	146	8	10	134	13	21	209	12	836
7:30 AM	18	237	46	11	176	11	7	143	21	27	170	8	875
7:45 AM	10	203	27	8	156	9	15	224	27	19	224	14	936
8:00 AM	9	263	19	13	193	9	17	179	18	18	191	11	940
8:15 AM	5	282	10	4	197	7	12	158	25	16	168	12	896
8:30 AM	17	261	14	11	154	11	7	142	17	8	159	13	814
8:45 AM	16	294	18	6	165	5	9	150	12	11	128	14	828
9:00 AM	13	251	18	9	148	4	8	122	17	9	118	10	727
9:15 AM	26	233	16	7	154	9	6	132	23	12	146	10	774
9:30 AM	17	234	25	5	136	8	9	105	12	18	141	13	723
9:45 AM	10	290	28	9	151	8	5	92	23	13	125	10	764
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	180	2969	283	96	1923	94	108	1664	229	199	1981	132	9858
APPROACH %'s :	5.24%	86.51%	8.25%	4.54%	91.01%	4.45%	5.40%	83.16%	11.44%	8.61%	85.68%	5.71%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	42	985	102	36	722	36	51	704	91	80	753	45	3647
PEAK HR FACTOR :		0.938			0.923			0.795			0.854		0.970

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-5356-009

Day: Wednesday

TOTALS

City: Los Angeles

Date: 5/25/2016

PM

NS/EW Streets:	Normandie Ave			Normandie Ave			Pico Blvd			Pico Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	1	2	0	1	2	0	
3:00 PM	16	171	26	12	162	11	14	140	18	18	130	8	726
3:15 PM	17	168	26	3	219	12	16	178	25	24	152	11	851
3:30 PM	19	185	35	5	210	11	11	163	18	24	156	12	849
3:45 PM	11	202	33	0	253	7	11	144	28	24	151	14	878
4:00 PM	10	205	20	0	224	7	10	143	29	22	149	8	827
4:15 PM	15	205	23	1	241	4	12	168	28	29	127	13	866
4:30 PM	5	196	30	3	257	12	17	165	31	26	123	12	877
4:45 PM	5	157	17	0	270	8	19	179	37	26	167	13	898
5:00 PM	7	205	26	3	270	10	15	138	30	23	147	17	891
5:15 PM	4	212	22	0	272	7	19	167	26	24	163	16	932
5:30 PM	11	211	22	1	251	9	19	161	31	20	172	6	914
5:45 PM	6	194	26	2	225	10	12	176	25	23	124	12	835
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	126	2311	306	30	2854	108	175	1922	326	283	1761	142	10344
APPROACH %'s :	4.59%	84.25%	11.16%	1.00%	95.39%	3.61%	7.22%	79.32%	13.45%	12.95%	80.56%	6.50%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	27	785	87	4	1063	34	72	645	124	93	649	52	3635
PEAK HR FACTOR :		0.921			0.973			0.895			0.964		0.975

CONTROL : Signalized

Prepared by NDS/ATD

VOLUME

Serrano Ave & Olympic Blvd

Day: Wednesday
Date: 5/25/2016

City: Los Angeles
Project #: CA16_5363_001

DAILY TOTALS	NB	SB	EB	WB	Total
	573	779	22,141	21,065	44,558

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		1		68		36		108		12:00	14		9		251		275		549	
00:15	0		4		88		37		129		12:15	12		9		289		277		587	
00:30	1		4		56		40		101		12:30	11		11		273		298		593	
00:45	0	4	0	9	49	261	27	140	76	414	12:45	6	43	10	39	302	1115	292	1142	610	2339
01:00	0		0		39		45		84		13:00	11		7		295		297		610	
01:15	1		2		31		28		62		13:15	4		7		294		275		580	
01:30	2		1		37		28		68		13:30	7		10		283		269		569	
01:45	2	5	3	6	34	141	23	124	62	276	13:45	10	32	13	37	283	1155	287	1128	593	2352
02:00	4		0		28		37		69		14:00	8		9		273		275		565	
02:15	2		0		36		16		54		14:15	11		13		332		313		669	
02:30	0		2		47		13		62		14:30	7		5		315		304		631	
02:45	0	6	0	2	37	148	8	74	45	230	14:45	5	31	16	43	373	1293	314	1206	708	2573
03:00	1		0		19		14		34		15:00	11		12		362		319		704	
03:15	0		1		21		14		36		15:15	4		7		339		343		693	
03:30	4		0		29		15		48		15:30	7		11		392		300		710	
03:45	0	5	1	2	26	95	16	59	43	161	15:45	8	30	18	48	421	1514	339	1301	786	2893
04:00	1		0		16		17		34		16:00	5		13		373		308		699	
04:15	0		1		23		18		42		16:15	9		14		412		348		783	
04:30	0		1		34		36		71		16:30	10		14		411		341		776	
04:45	2	3	1	3	29	102	47	118	79	226	16:45	5	29	19	60	454	1650	334	1331	812	3070
05:00	0		3		27		44		74		17:00	5		15		401		307		728	
05:15	4		2		49		63		118		17:15	6		17		465		363		851	
05:30	3		1		62		80		146		17:30	10		24		393		319		746	
05:45	10	17	4	10	63	201	117	304	194	532	17:45	16	37	19	75	480	1739	369	1358	884	3209
06:00	3		5		74		182		264		18:00	8		12		453		355		828	
06:15	5		7		100		313		425		18:15	9		18		467		378		872	
06:30	4		7		126		387		524		18:30	9		13		426		296		744	
06:45	5	17	6	25	164	464	406	1288	581	1794	18:45	9	35	16	59	454	1800	320	1349	799	3243
07:00	5		4		194		447		650		19:00	7		10		357		295		669	
07:15	11		8		240		440		699		19:15	9		7		417		257		690	
07:30	13		8		308		399		728		19:30	3		10		321		228		562	
07:45	9	38	6	26	348	1090	371	1657	734	2811	19:45	7	26	4	31	325	1420	232	1012	568	2489
08:00	11		8		390		397		806		20:00	7		8		316		189		520	
08:15	6		8		393		378		785		20:15	5		7		310		220		542	
08:30	6		12		421		350		789		20:30	9		7		246		170		432	
08:45	9	32	12	40	408	1612	356	1481	785	3165	20:45	2	23	8	30	271	1143	165	744	446	1940
09:00	6		9		309		311		635		21:00	3		7		215		159		384	
09:15	6		11		304		367		688		21:15	5		8		220		184		417	
09:30	7		13		316		298		634		21:30	4		8		197		167		376	
09:45	6	25	18	51	319	1248	331	1307	674	2631	21:45	3	15	5	28	171	803	143	653	322	1499
10:00	6		16		286		286		594		22:00	2		9		199		154		364	
10:15	9		14		271		302		596		22:15	5		6		152		140		303	
10:30	13		16		237		267		533		22:30	2		9		144		128		283	
10:45	11	39	8	54	251	1045	298	1153	568	2291	22:45	4	13	6	30	127	622	128	550	265	1215
11:00	17		10		224		270		521		23:00	3		3		133		97		236	
11:15	15		15		299		308		637		23:15	4		5		110		139		258	
11:30	13		13		274		290		590		23:30	3		2		87		112		204	
11:45	10	55	19	57	275	1072	292	1160	596	2344	23:45	3	13	4	14	78	408	78	426	163	861
TOTALS		246		285		7479		8865		16875	TOTALS		327		494		14662		12200		27683
SPLIT %		1.5%		1.7%		44.3%		52.5%		37.9%	SPLIT %		1.2%		1.8%		53.0%		44.1%		62.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	573	779	22,141	21,065	44,558

AM Peak Hour	10:30	09:45	08:00	06:45	08:00	PM Peak Hour	12:00	16:45	17:45	17:30	17:30
AM Pk Volume	56	64	1612	1692	3165	PM Pk Volume	43	75	1826	1421	3330
Pk Hr Factor	0.824	0.889	0.957	0.946	0.982	Pk Hr Factor	0.768	0.781	0.951	0.940	0.942
7 - 9 Volume	70	66	2702	3138	5976	4 - 6 Volume	66	135	3389	2689	6279
7 - 9 Peak Hour	07:15	08:00	08:00	07:00	08:00	4 - 6 Peak Hour	17:00	16:45	17:00	17:00	17:00
7 - 9 Pk Volume	44	40	1612	1657	3165	4 - 6 Pk Volume	37	75	1739	1358	3209
Pk Hr Factor	0.846	0.833	0.957	0.927	0.982	Pk Hr Factor	0.578	0.781	0.906	0.920	0.908

APPENDIX B

CMA AND LEVELS OF SERVICE EXPLANATION
CMA DATA WORKSHEETS – AM AND PM PEAK HOURS

CRITICAL MOVEMENT ANALYSIS (CMA) DESCRIPTION

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Level of Service concept denotes any one of a number of differing combinations of operating conditions which may take place as a roadway is accommodating various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the 1965 *Highway Capacity Manual*. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

Critical Movement Analysis (CMA) is a procedure which provides a capacity and level of service geometry and traffic signal operation and results in a level of service determination for the intersection as a whole operating unit.

The per lane volume for each movement in the intersection is determined and the per lane intersection capacity based on the Transportation Research Board (TRB) Report 212 (*Interim Materials on Highway Capacity*). The resulting CMA represents the ratio of the intersection's cumulative volume over its respective capacity (V/C ratio). Critical Movement Analysis takes into account lane widths, bus and truck operations, pedestrian activity and parking activity, as well as number of lanes and geometrics.

The Level of Service (abbreviated from the *Highway Capacity Manual*) are listed here with their corresponding CMA and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e. when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

Critical Movement Analysis Characteristics

Level of Service	Load Factor	Equivalent CMA
A (free flow)	0.0	0.00 - 0.60
B (rural design)	0.0 - 0.1	0.61 - 0.70
C (urban design)	0.1 - 0.3	0.71 - 0.80
D (maximum urban design)	0.3 - 0.7	0.81 - 0.90
E (capacity)	0.7 - 1.0	0.91 - 1.00
F (force flow)	Not Applicable	Not Applicable

SERVICE LEVEL A
There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

SERVICE LEVEL B
This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

SERVICE LEVEL C
At this level stable operation continues. Loading is still intermittent but more frequent than at Level B. Occasionally drivers may have to wait through more one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

SERVICE LEVEL D
This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

SERVICE LEVEL E
This represents near capacity and capacity operation. At capacity (CMA = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

SERVICE LEVEL F
Jammed conditions. Traffic backed up from a downstream location on one of the street restricts or prevents movement of traffic through the intersection under consideration.

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Western Avenue	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA01	East-West Street:	8th Street	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

		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			2			2			2				2				2	
	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?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	37	1	**37**	0	37	**37**	11	49	1	**49**	0	49	1	**49**	0	49	1	**49**
	Left-Through		0							0				0				0	
	Through	805	1	431	9	814	435	30	851	1	457	9	860	1	461	0	860	1	461
	Through-Right		1							1				1				1	
	Right	56	0	56	0	56	56	5	62	0	62	0	62	0	62	0	62	0	62
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	71	1	71	0	71	71	0	72	1	72	0	72	1	72	0	72	1	72
	Left-Through		0							0				0				0	
	Through	889	1	**471**	2	891	**472**	55	962	1	**508**	2	964	1	**509**	0	964	1	**509**
	Through-Right		1							1				1				1	
	Right	53	0	53	0	53	53	0	54	0	54	0	54	0	54	0	54	0	54
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	36	1	36	0	36	36	2	39	1	39	0	39	1	39	0	39	1	39
	Left-Through		0							0				0				0	
	Through	531	1	**286**	0	531	**286**	26	568	1	**307**	0	568	1	**307**	0	568	1	**307**
	Through-Right		1							1				1				1	
	Right	40	0	40	0	40	40	5	46	0	46	0	46	0	46	0	46	0	46
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	97	1	**97**	0	97	**97**	4	103	1	**103**	0	103	1	**103**	0	103	1	**103**
	Left-Through		0							0				0				0	
	Through	638	1	341	0	638	341	30	681	1	365	0	681	1	365	0	681	1	365
	Through-Right		1							1				1				1	
	Right	43	0	43	0	43	43	5	49	0	49	0	49	0	49	0	49	0	49
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		508	*North-South:*		509	*North-South:*		557		*North-South:*		558		*North-South:*		558	
		East-West:		383	*East-West:*		383	*East-West:*		410		*East-West:*		410		*East-West:*		410	
		SUM:		891	*SUM:*		892	*SUM:*		967		*SUM:*		968		*SUM:*		968	
	VOLUME/CAPACITY *(V/C)* RATIO:			0.594			0.595			0.645				0.645				0.645	
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.494			0.495			0.545				0.545				0.545	
	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: 0.000 — Δ*v/c* after mitigation: 0.000

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Western Avenue	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA01	East-West Street:	8th Street	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

		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			2			2			2				2					2
	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?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	43	1	**43**	0	43	**43**	18	62	1	**62**	0	62	1	**62**	0	62	1	**62**
	Left-Through		0							0				0				0	
	Through	800	1	414	6	806	417	59	875	1	453	6	881	1	456	0	881	1	456
	Through-Right		1							1				1				1	
	Right	28	0	28	0	28	28	2	31	0	31	0	31	0	31	0	31	0	31
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	68	1	68	0	68	68	0	69	1	69	0	69	1	69	0	69	1	69
	Left-Through		0							0				0				0	
	Through	887	1	**486**	9	896	**490**	63	968	1	**527**	9	977	1	**532**	0	977	1	**532**
	Through-Right		1							1				1				1	
	Right	84	0	84	0	84	84	0	86	0	86	0	86	0	86	0	86	0	86
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	54	1	54	0	54	54	4	59	1	59	0	59	1	59	0	59	1	59
	Left-Through		0							0				0				0	
	Through	677	1	**352**	0	677	**352**	37	728	1	**387**	0	728	1	**387**	0	728	1	**387**
	Through-Right		1							1				1				1	
	Right	26	0	26	0	26	26	19	46	0	46	0	46	0	46	0	46	0	46
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	116	1	**116**	0	116	**116**	6	124	1	**124**	0	124	1	**124**	0	124	1	**124**
	Left-Through		0							0				0				0	
	Through	653	1	362	0	653	362	34	700	1	388	0	700	1	388	0	700	1	388
	Through-Right		1							1				1				1	
	Right	70	0	70	0	70	70	4	75	0	75	0	75	0	75	0	75	0	75
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		529	*North-South:*		533	*North-South:*			589	*North-South:*			594	*North-South:*			594
		East-West:		468	*East-West:*		468	*East-West:*			511	*East-West:*			511	*East-West:*			511
		SUM:		997	*SUM:*		1001	*SUM:*			1100	*SUM:*			1105	*SUM:*			1105
	VOLUME/CAPACITY (*V/C*) RATIO:			0.665			0.667				0.733				0.737				0.737
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.565**			**0.567**				**0.633**				**0.637**				**0.637**
	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: 0.004 | Δ*v/c* after mitigation: 0.004

Significant impacted? NO | Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Western Avenue	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA02	East-West Street:	Olympic Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
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-- 3	SB-- 3		NB-- 3	SB-- 3		NB-- 3	SB-- 3			NB-- 3	SB-- 3			NB-- 3	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	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	173	1	173	0	173	173	9	185	1	185	0	185	1	185	0	185	1	185
	Left-Through		0							0				0				0	
	Through	961	2	**481**	4	965	**483**	15	995	2	**498**	4	999	2	**500**	0	999	2	**500**
	Through-Right		0							0				0				0	
	Right	88	1	41	0	88	41	0	90	1	40	0	90	1	40	0	90	1	40
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	149	1	**149**	2	151	**151**	16	168	1	**168**	2	170	1	**170**	0	170	1	**170**
	Left-Through		0							0				0				0	
	Through	882	2	441	0	882	441	46	946	2	473	0	946	2	473	0	946	2	473
	Through-Right		0							0				0				0	
	Right	99	1	43	0	99	43	16	117	1	56	0	117	1	56	0	117	1	56
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	56	1	**56**	0	56	**56**	4	61	1	**61**	0	61	1	**61**	0	61	1	**61**
	Left-Through		0							0				0				0	
	Through	1392	2	484	4	1396	486	17	1437	2	501	4	1441	2	503	0	1441	2	503
	Through-Right		1							1				1				1	
	Right	61	0	61	0	61	61	5	67	0	67	0	67	0	67	0	67	0	67
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	47	1	47	0	47	47	2	50	1	50	0	50	1	50	0	50	1	50
	Left-Through		0							0				0				0	
	Through	1372	2	**480**	13	1385	**485**	21	1421	2	**501**	13	1434	2	**507**	0	1434	2	**507**
	Through-Right		1							1				1				1	
	Right	67	0	67	4	71	71	14	82	0	82	4	86	0	86	0	86	0	86
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*	630		*North-South:*	634		*North-South:*	666			*North-South:*	670			*North-South:*	670		
		East-West:	536		*East-West:*	541		*East-West:*	562			*East-West:*	568			*East-West:*	568		
		SUM:	1166		*SUM:*	1175		*SUM:*	1228			*SUM:*	1238			*SUM:*	1238		
VOLUME/CAPACITY (*V/C*) RATIO:			0.848			0.855			0.893				0.900						0.900
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.748			0.755			0.793				0.800						0.800
LEVEL OF SERVICE (LOS):			C			C			C				D						D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.007	Δ*v/c* after mitigation:	0.007
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Western Avenue	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA02	East-West Street:	Olympic Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
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-- 3	SB--	3	NB-- 3	SB--	3	NB-- 3	SB--	3		NB-- 3	SB--	3		NB-- 3	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	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	151	1	151	0	151	151	7	161	1	161	0	161	1	161	0	161	1	161
	Left-Through		0							0				0				0	
	Through	922	2	**461**	3	925	**463**	44	985	2	**493**	3	988	2	**494**	0	988	2	**494**
	Through-Right		0							0				0				0	
	Right	102	1	25	0	102	25	0	104	1	24	0	104	1	24	0	104	1	24
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	140	1	**140**	9	149	**149**	34	177	1	**177**	9	186	1	**186**	0	186	1	**186**
	Left-Through		0							0				0				0	
	Through	876	2	438	0	876	438	35	929	2	465	0	929	2	465	0	929	2	465
	Through-Right		0							0				0				0	
	Right	83	1	12	0	83	12	11	96	1	12	0	96	1	12	0	96	1	12
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	71	1	71	0	71	71	12	84	1	84	0	84	1	84	0	84	1	84
	Left-Through		0							0				0				0	
	Through	1614	2	**563**	14	1628	**568**	27	1673	2	**588**	14	1687	2	**592**	0	1687	2	**592**
	Through-Right		1							1				1				1	
	Right	76	0	76	0	76	76	12	90	0	90	0	90	0	90	0	90	0	90
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	77	1	**77**	0	77	**77**	1	80	1	**80**	0	80	1	**80**	0	80	1	**80**
	Left-Through		0							0				0				0	
	Through	1251	2	453	9	1260	457	21	1297	2	479	9	1306	2	483	0	1306	2	483
	Through-Right		1							1				1				1	
	Right	107	0	107	3	110	110	31	140	0	140	3	143	0	143	0	143	0	143
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*	601		*North-South:*	612		*North-South:*	670			*North-South:*	680			*North-South:*	680		
		East-West:	640		*East-West:*	645		*East-West:*	668			*East-West:*	672			*East-West:*	672		
		SUM:	1241		*SUM:*	1257		*SUM:*	1338			*SUM:*	1352			*SUM:*	1352		
VOLUME/CAPACITY (*V/C*) RATIO:			0.903			0.914			0.973				0.983				0.983		
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.803			0.814			0.873				0.883				0.883		
LEVEL OF SERVICE (LOS):			D			D			D				D				D		

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.010	Δ*v/c* after mitigation:	0.010
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Western Avenue	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA03	East-West Street:	11th Street	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

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	23	0	23	0	23	23	0	23	0	23	0	23	0	23	0	23	0	23
	Left-Through		1							1				1				1	
	Through	1145	1	**619**	0	1145	**619**	24	1192	1	**665**	0	1192	1	**665**	0	1192	1	**665**
	Through-Right		0							0				0				0	
	Right	36	1	36	5	41	41	10	47	1	47	5	52	1	52	0	52	1	52
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	10	0	**10**	0	10	**10**	0	10	0	**10**	0	10	0	**10**	0	10	0	**10**
	Left-Through		1							1				1				1	
	Through	961	1	511	0	961	511	51	1031	1	546	0	1031	1	546	0	1031	1	546
	Through-Right		0							0				0				0	
	Right	23	1	23	0	23	23	0	23	1	23	0	23	1	23	0	23	1	23
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	33	0	**33**	0	33	**33**	0	34	0	**34**	0	34	0	**34**	0	34	0	**34**
	Left-Through		0							0				0				0	
	Through	45	0	107	0	45	107	4	50	0	114	0	50	0	114	0	50	0	114
	Through-Right		0							0				0				0	
	Right	29	0	0	0	29	0	0	30	0	0	0	30	0	0	0	30	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	41	0	41	22	63	63	13	55	0	55	22	77	0	77	0	77	0	77
	Left-Through		0							0				0				0	
	Through	68	0	**147**	0	68	**173**	6	75	0	**169**	0	75	0	**195**	0	75	0	**195**
	Through-Right		0							0				0				0	
	Right	38	0	0	4	42	0	0	39	0	0	4	43	0	0	0	43	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		629	*North-South:*		629	*North-South:*			675	*North-South:*			675	*North-South:*			675
		East-West:		180	*East-West:*		206	*East-West:*			203	*East-West:*			229	*East-West:*			229
		SUM:		809	*SUM:*		835	*SUM:*			878	*SUM:*			904	*SUM:*			904
VOLUME/CAPACITY (*V/C*) RATIO:				0.539			0.557				0.585				0.603				0.603
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.439**			**0.457**				**0.485**				**0.503**				**0.503**
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: 0.018 — Δ*v/c* after mitigation: 0.018

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Western Avenue	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA03	East-West Street:	11th Street	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

		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			2			2			2				2					2
	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?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	30	0	30	0	30	30	0	31	0	31	0	31	0	31	0	31	0	31
	Left-Through		1							1				1				1	
	Through	1055	1	618	0	1055	618	51	1127	1	657	0	1127	1	657	0	1127	1	657
	Through-Right		0							0				0				0	
	Right	30	1	30	19	49	49	31	62	1	62	19	81	1	81	0	81	1	81
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	14	0	14	0	14	14	0	14	0	14	0	14	0	14	0	14	0	14
	Left-Through		1							1				1				1	
	Through	1019	1	552	0	1019	552	47	1086	1	585	0	1086	1	585	0	1086	1	585
	Through-Right		0							0				0				0	
	Right	26	1	26	0	26	26	0	27	1	27	0	27	1	27	0	27	1	27
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	21	0	21	0	21	21	0	21	0	21	0	21	0	21	0	21	0	21
	Left-Through		0							0				0				0	
	Through	101	0	174	0	101	174	14	117	0	191	0	117	0	191	0	117	0	191
	Through-Right		0							0				0				0	
	Right	52	0	0	0	52	0	0	53	0	0	0	53	0	0	0	53	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	42	0	42	14	56	56	27	70	0	70	14	84	0	84	0	84	0	84
	Left-Through		0							0				0				0	
	Through	89	0	176	0	89	193	13	104	0	220	0	104	0	237	0	104	0	237
	Through-Right		0							0				0				0	
	Right	45	0	0	3	48	0	0	46	0	0	3	49	0	0	0	49	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		632	North-South:		632	North-South:			671	North-South:			671	North-South:			671
		East-West:		216	East-West:		230	East-West:			261	East-West:			275	East-West:			275
		SUM:		848	SUM:		862	SUM:			932	SUM:			946	SUM:			946
	VOLUME/CAPACITY (V/C) RATIO:			0.565			0.575				0.621				0.631				0.631
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.465			0.475				0.521				0.531				0.531
	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:	0.010	Δ*v/c* after mitigation:	0.010
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Western Avenue	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA04	East-West Street:	Pico Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

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	89	1	89	0	89	89	0	91	1	91	0	91	1	91	0	91	1	91
Left-Through		0							0				0				0	
Through	1218	1	**634**	4	1222	**636**	34	1276	1	**664**	4	1280	1	**666**	0	1280	1	**666**
Through-Right		1							1				1				1	
Right	50	0	50	0	50	50	0	51	0	51	0	51	0	51	0	51	0	51
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	47	1	**47**	0	47	**47**	0	48	1	**48**	0	48	1	**48**	0	48	1	**48**
Left-Through		0							0				0				0	
Through	971	1	526	13	984	537	63	1054	1	571	13	1067	1	582	0	1067	1	582
Through-Right		1							1				1				1	
Right	81	0	81	9	90	90	4	87	0	87	9	96	0	96	0	96	0	96
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	60	1	**60**	1	61	**61**	0	61	1	**61**	1	62	1	**62**	0	62	1	**62**
Left-Through		0							0				0				0	
Through	620	1	337	1	621	338	6	638	1	347	1	639	1	347	0	639	1	347
Through-Right		1							1				1				1	
Right	54	0	54	0	54	54	0	55	0	55	0	55	0	55	0	55	0	55
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	47	1	47	0	47	47	1	49	1	49	0	49	1	49	0	49	1	49
Left-Through		0							0				0				0	
Through	722	1	**408**	0	722	**408**	5	742	1	**419**	0	742	1	**419**	0	742	1	**419**
Through-Right		1							1				1				1	
Right	94	0	94	0	94	94	0	96	0	96	0	96	0	96	0	96	0	96
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		681	*North-South:*		683	*North-South:*			712	*North-South:*			714	*North-South:*			714
	East-West:		468	*East-West:*		469	*East-West:*			480	*East-West:*			481	*East-West:*			481
	SUM:		1149	*SUM:*		1152	*SUM:*			1192	*SUM:*			1195	*SUM:*			1195
VOLUME/CAPACITY (*V/C*) RATIO:			0.766			0.768				0.795				0.797				0.797
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.666**			**0.668**				**0.695**				**0.697**				**0.697**
LEVEL OF SERVICE (LOS):			**B**			**B**				**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:	Western Avenue	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA04	East-West Street:	Pico Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
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	0	NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0		NB-- 0	SB-- 0	0		NB-- 0	SB-- 0	0	
	EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0		EB-- 0	WB-- 0	0		EB-- 0	WB-- 0	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	61	1	61	0	61	61	0	62	1	62	0	62	1	62	0	62	1	62
	Left-Through		0							0				0				0	
	Through	1073	1	**573**	14	1087	**580**	79	1174	1	**625**	14	1188	1	**632**	0	1188	1	**632**
	Through-Right		1							1				1				1	
	Right	73	0	73	0	73	73	1	75	0	75	0	75	0	75	0	75	0	75
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	72	1	**72**	0	72	**72**	0	73	1	**73**	0	73	1	**73**	0	73	1	**73**
	Left-Through		0							0				0				0	
	Through	944	1	505	9	953	512	74	1037	1	553	9	1046	1	560	0	1046	1	560
	Through-Right		1							1				1				1	
	Right	65	0	65	6	71	71	2	68	0	68	6	74	0	74	0	74	0	74
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	84	1	84	5	89	89	3	89	1	89	5	94	1	94	0	94	1	94
	Left-Through		0							0				0				0	
	Through	808	1	**451**	5	813	**453**	6	830	1	**463**	5	835	1	**465**	0	835	1	**465**
	Through-Right		1							1				1				1	
	Right	93	0	93	0	93	93	0	95	0	95	0	95	0	95	0	95	0	95
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	57	1	**57**	0	57	**57**	1	59	1	**59**	0	59	1	**59**	0	59	1	**59**
	Left-Through		0							0				0				0	
	Through	530	1	303	0	530	303	6	547	1	312	0	547	1	312	0	547	1	312
	Through-Right		1							1				1				1	
	Right	75	0	75	0	75	75	0	77	0	77	0	77	0	77	0	77	0	77
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		645	*North-South:*		652	*North-South:*			698	*North-South:*			705	*North-South:*			705
		East-West:		508	*East-West:*		510	*East-West:*			522	*East-West:*			524	*East-West:*			524
		SUM:		1153	*SUM:*		1162	*SUM:*			1220	*SUM:*			1229	*SUM:*			1229
VOLUME/CAPACITY (*V/C*) RATIO:				0.769			0.775				0.813				0.819				0.819
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.669			0.675				0.713				0.719				0.719
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:	0.006	Δ*v/c* after mitigation:	0.006
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Hobart Boulevard	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA05	East-West Street:	Pico Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
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	
	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	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	21	0	**21**	0	21	**21**	0	21	0	**21**	0	21	0	**21**	0	21	0	**21**
	Left-Through		0							0				0				0	
	Through	61	0	110	0	61	110	0	62	0	112	0	62	0	112	0	62	0	112
	Through-Right		0							0				0				0	
	Right	28	0	0	0	28	0	0	29	0	0	0	29	0	0	0	29	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	45	0	45	9	54	54	3	49	0	49	9	58	0	58	0	58	0	58
	Left-Through		0							0				0				0	
	Through	59	0	**164**	0	59	**173**	2	62	0	**172**	0	62	0	**181**	0	62	0	**181**
	Through-Right		0							0				0				0	
	Right	60	0	0	0	60	0	0	61	0	0	0	61	0	0	0	61	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	43	0	**43**	1	44	**44**	0	44	0	**44**	1	45	0	**45**	0	45	0	**45**
	Left-Through		1							1				1				1	
	Through	628	1	400	0	628	402	7	648	1	412	0	648	1	414	0	648	1	414
	Through-Right		0							0				0				0	
	Right	20	1	20	0	20	20	0	20	1	20	0	20	1	20	0	20	1	20
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	25	0	25	0	25	25	0	26	0	26	0	26	0	26	0	26	0	26
	Left-Through		1							1				1				1	
	Through	846	1	**473**	0	846	**473**	6	869	1	**487**	0	869	1	**487**	0	869	1	**487**
	Through-Right		0							0				0				0	
	Right	52	1	52	2	54	54	1	54	1	54	2	56	1	56	0	56	1	56
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		185	*North-South:*		194	*North-South:*			193	*North-South:*			202	*North-South:*			202
		East-West:		516	*East-West:*		517	*East-West:*			531	*East-West:*			532	*East-West:*			532
		SUM:		701	*SUM:*		711	*SUM:*			724	*SUM:*			734	*SUM:*			734
VOLUME/CAPACITY *(V/C)* RATIO:				0.467			0.474				0.483				0.489				0.489
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.367**			**0.374**				**0.383**				**0.389**				**0.389**
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:	0.006	Δ*v/c* after mitigation:	0.006
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Hobart Boulevard	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA05	East-West Street:	Pico Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

		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			2			2			2				2					2
	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?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	4	0	**4**	0	4	**4**	0	4	0	**4**	0	4	0	**4**	0	4	0	**4**
	Left-Through		0							0				0				0	
	Through	62	0	105	0	62	105	2	65	0	109	0	65	0	109	0	65	0	109
	Through-Right		0							0				0				0	
	Right	39	0	0	0	39	0	0	40	0	0	0	40	0	0	0	40	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	37	0	37	6	43	43	2	40	0	40	6	46	0	46	0	46	0	46
	Left-Through		0							0				0				0	
	Through	66	0	**147**	0	66	**153**	1	68	0	**153**	0	68	0	**159**	0	68	0	**159**
	Through-Right		0							0				0				0	
	Right	44	0	0	0	44	0	0	45	0	0	0	45	0	0	0	45	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	44	0	44	5	49	49	0	45	0	45	5	50	0	50	0	50	0	50
	Left-Through		1							1				1				1	
	Through	889	1	**533**	0	889	**543**	7	914	1	**547**	0	914	1	**557**	0	914	1	**557**
	Through-Right		0							0				0				0	
	Right	13	1	13	0	13	13	0	13	1	13	0	13	1	13	0	13	1	13
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	22	0	**22**	0	22	**22**	0	22	0	**22**	0	22	0	**22**	0	22	0	**22**
	Left-Through		1							1				1				1	
	Through	625	1	357	0	625	357	6	644	1	366	0	644	1	366	0	644	1	366
	Through-Right		0							0				0				0	
	Right	26	1	26	9	35	35	3	30	1	30	9	39	1	39	0	39	1	39
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		151	*North-South:*		157	*North-South:*		157		*North-South:*		163		*North-South:*		163	
		East-West:		555	*East-West:*		565	*East-West:*		569		*East-West:*		579		*East-West:*		579	
		SUM:		706	*SUM:*		722	*SUM:*		726		*SUM:*		742		*SUM:*		742	
	VOLUME/CAPACITY (*V/C*) RATIO:			0.471			0.481			0.484				0.495					0.495
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.371**			**0.381**			**0.384**				**0.395**					**0.395**
	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:	0.011	Δ*v/c* after mitigation:	0.011
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Harvard Boulevard	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA06	East-West Street:	Olympic Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

	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
NORTHBOUND																		
Left	66	0	66	0	66	66	0	67	0	67	0	67	0	67	0	67	0	67
Left-Through		0							0				0				0	
Through	183	0	**295**	0	183	**295**	2	189	0	**303**	0	189	0	**303**	0	189	0	**303**
Through-Right		0							0				0				0	
Right	46	0	0	0	46	0	0	47	0	0	0	47	0	0	0	47	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	78	0	**78**	0	78	**78**	4	84	0	**84**	0	84	0	**84**	0	84	0	**84**
Left-Through		0							0				0				0	
Through	129	0	279	0	129	281	10	142	0	299	0	142	0	301	0	142	0	301
Through-Right		0							0				0				0	
Right	72	0	0	2	74	0	0	73	0	0	2	75	0	0	0	75	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	56	1	56	4	60	60	2	59	1	59	4	63	1	63	0	63	1	63
Left-Through		0							0				0				0	
Through	1628	2	**553**	27	1655	**562**	31	1692	2	**575**	27	1719	2	**584**	0	1719	2	**584**
Through-Right		1							1				1				1	
Right	31	0	31	0	31	31	0	32	0	32	0	32	0	32	0	32	0	32
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	27	1	**27**	0	27	**27**	0	28	1	**28**	0	28	1	**28**	0	28	1	**28**
Left-Through		0							0				0				0	
Through	1484	2	513	6	1490	515	29	1543	2	537	6	1549	2	539	0	1549	2	539
Through-Right		1							1				1				1	
Right	56	0	56	0	56	56	10	67	0	67	0	67	0	67	0	67	0	67
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		373	*North-South:*		373	*North-South:*			387	*North-South:*			387	*North-South:*			387
	East-West:		580	*East-West:*		589	*East-West:*			603	*East-West:*			612	*East-West:*			612
	SUM:		953	*SUM:*		962	*SUM:*			990	*SUM:*			999	*SUM:*			999
VOLUME/CAPACITY (*V/C*) RATIO:			0.635			0.641				0.660				0.666				0.666
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.535			0.541				0.560				0.566				0.566
LEVEL OF SERVICE (LOS):			A			A				A				A				A

Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0
ATSAC-1 or ATSAC+ATCS-2?	2	2	2
Override Capacity	0	0	0

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.006	Δ*v/c* after mitigation:	0.006
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Harvard Boulevard	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA06	East-West Street:	Olympic Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

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	54	0	**54**	0	54	**54**	0	55	0	**55**	0	55	0	**55**	0	55	0	**55**
	Left-Through		0							0				0				0	
	Through	234	0	357	0	234	357	7	246	0	371	0	246	0	371	0	246	0	371
	Through-Right		0							0				0				0	
	Right	69	0	0	0	69	0	0	70	0	0	0	70	0	0	0	70	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	96	0	96	0	96	96	13	111	0	111	0	111	0	111	0	111	0	111
	Left-Through		0							0				0				0	
	Through	287	0	**451**	0	287	**460**	5	298	0	**480**	0	298	0	**489**	0	298	0	**489**
	Through-Right		0							0				0				0	
	Right	68	0	0	9	77	0	2	71	0	0	9	80	0	0	0	80	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	80	1	80	3	83	83	1	83	1	83	3	86	1	86	0	86	1	86
	Left-Through		0							0				0				0	
	Through	1821	2	**620**	17	1838	**626**	29	1887	2	**642**	17	1904	2	**648**	0	1904	2	**648**
	Through-Right		1							1				1				1	
	Right	39	0	39	0	39	39	0	40	0	40	0	40	0	40	0	40	0	40
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	49	1	**49**	0	49	**49**	0	50	1	**50**	0	50	1	**50**	0	50	1	**50**
	Left-Through		0							0				0				0	
	Through	1443	2	499	24	1467	507	57	1529	2	536	24	1553	2	544	0	1553	2	544
	Through-Right		1							1				1				1	
	Right	54	0	54	0	54	54	25	80	0	80	0	80	0	80	0	80	0	80
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		505	*North-South:*		514	*North-South:*			535	*North-South:*			544	*North-South:*			544
		East-West:		669	*East-West:*		675	*East-West:*			692	*East-West:*			698	*East-West:*			698
		SUM:		1174	*SUM:*		1189	*SUM:*			1227	*SUM:*			1242	*SUM:*			1242
VOLUME/CAPACITY (*V/C*) RATIO:				0.783			0.793				0.818				0.828				0.828
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.683**			**0.693**				**0.718**				**0.728**				**0.728**
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:	0.010	Δ*v/c* after mitigation:	0.010
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Harvard Boulevard	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA07	East-West Street:	11th Street	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

		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			2			2			2				2					2
	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?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	6	0	6	0	6	6	0	6	0	6	0	6	0	6	0	6	0	6
	Left-Through		0							0				0				0	
	Through	189	0	203	0	189	203	2	195	0	209	0	195	0	209	0	195	0	209
	Through-Right		0							0				0				0	
	Right	8	0	0	0	8	0	0	8	0	0	0	8	0	0	0	8	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	26	0	26	0	26	26	0	27	0	27	0	27	0	27	0	27	0	27
	Left-Through		0							0				0				0	
	Through	131	0	175	0	131	175	10	144	0	189	0	144	0	189	0	144	0	189
	Through-Right		0							0				0				0	
	Right	18	0	0	0	18	0	0	18	0	0	0	18	0	0	0	18	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	34	0	34	0	34	34	0	35	0	35	0	35	0	35	0	35	0	35
	Left-Through		0							0				0				0	
	Through	60	0	108	4	64	112	4	65	0	114	4	69	0	118	0	69	0	118
	Through-Right		0							0				0				0	
	Right	14	0	0	0	14	0	0	14	0	0	0	14	0	0	0	14	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	3	0	3	0	3	3	0	3	0	3	0	3	0	3	0	3	0	3
	Left-Through		0							0				0				0	
	Through	63	0	122	1	64	123	6	70	0	130	1	71	0	131	0	71	0	131
	Through-Right		0							0				0				0	
	Right	56	0	0	0	56	0	0	57	0	0	0	57	0	0	0	57	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		229	North-South:		229	North-South:		236		North-South:		236		North-South:			236
		East-West:		156	East-West:		157	East-West:		165		East-West:		166		East-West:			166
		SUM:		385	SUM:		386	SUM:		401		SUM:		402		SUM:			402
	VOLUME/CAPACITY (V/C) RATIO:			0.257			0.257			0.267				0.268					0.268
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.157			0.157			0.167				0.168					0.168
	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:	Harvard Boulevard	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA07	East-West Street:	11th Street	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

		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		2	2		2	2			2	2			2	2			2	2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0	0			0	0			0	0			0	0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- EB-- 0 WB--	0	0	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0	0	NB-- 0 SB-- EB-- 0 WB--		0	0	NB-- 0 SB-- EB-- 0 WB--		0	0
	ATSAC-1 or ATSAC+ATCS-2?		2	2		2	2			2	2			2	2			2	2
	Override Capacity		0	0		0	0			0	0			0	0			0	0
NORTHBOUND	Left	24	0	**24**	0	24	**24**	0	24	0	**24**	0	24	0	**24**	0	24	0	**24**
	Left-Through		0							0				0				0	
	Through	216	0	259	0	216	259	7	227	0	270	0	227	0	270	0	227	0	270
	Through-Right		0							0				0				0	
	Right	19	0	0	0	19	0	0	19	0	0	0	19	0	0	0	19	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	36	0	36	0	36	36	0	37	0	37	0	37	0	37	0	37	0	37
	Left-Through		0							0				0				0	
	Through	284	0	**355**	0	284	**355**	5	295	0	**368**	0	295	0	**368**	0	295	0	**368**
	Through-Right		0							0				0				0	
	Right	35	0	0	0	35	0	0	36	0	0	0	36	0	0	0	36	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	38	0	**38**	0	38	**38**	0	39	0	**39**	0	39	0	**39**	0	39	0	**39**
	Left-Through		0							0				0				0	
	Through	123	0	185	3	126	188	14	139	0	202	3	142	0	205	0	142	0	205
	Through-Right		0							0				0				0	
	Right	24	0	0	0	24	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	
WESTBOUND	Left	16	0	16	0	16	16	0	16	0	16	0	16	0	16	0	16	0	16
	Left-Through		0							0				0				0	
	Through	122	0	**219**	5	127	**224**	13	137	0	**236**	5	142	0	**241**	0	142	0	**241**
	Through-Right		0							0				0				0	
	Right	81	0	0	0	81	0	0	83	0	0	0	83	0	0	0	83	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*	379		*North-South:*		379	*North-South:*			392	*North-South:*			392	*North-South:*			392
		East-West:	257		*East-West:*		262	*East-West:*			275	*East-West:*			280	*East-West:*			280
		SUM:	636		*SUM:*		641	*SUM:*			667	*SUM:*			672	*SUM:*			672
	VOLUME/CAPACITY (*V/C*) RATIO:		0.424				0.427				0.445				0.448				0.448
	V/C LESS ATSAC/ATCS ADJUSTMENT:		**0.324**				**0.327**				**0.345**				**0.348**				**0.348**
	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:	Normandie Avenue	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA08	East-West Street:	Olympic Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
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	0	NB-- 0	SB-- 0	0	NB-- 0	SB-- 0	0		NB-- 0	SB-- 0	0		NB-- 0	SB-- 0	0	
	EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0	EB-- 0	WB-- 0	0		EB-- 0	WB-- 0	0		EB-- 0	WB-- 0	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	138	1	138	1	139	139	18	159	1	159	1	160	1	160	0	160	1	160
	Left-Through		0							0				0				0	
	Through	956	2	**478**	0	956	**478**	9	984	2	**492**	0	984	2	**492**	0	984	2	**492**
	Through-Right		0							0				0				0	
	Right	117	1	89	0	117	89	0	119	1	90	0	119	1	90	0	119	1	90
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	64	1	**64**	0	64	**64**	0	65	1	**65**	0	65	1	**65**	0	65	1	**65**
	Left-Through		0							0				0				0	
	Through	579	2	290	0	579	290	33	624	2	312	0	624	2	312	0	624	2	312
	Through-Right		0							0				0				0	
	Right	91	1	61	1	92	57	17	110	1	70	1	111	1	67	0	111	1	67
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	61	1	61	9	70	70	18	80	1	80	9	89	1	89	0	89	1	89
	Left-Through		0							0				0				0	
	Through	1570	2	**554**	13	1583	**560**	40	1642	2	**584**	13	1655	2	**590**	0	1655	2	**590**
	Through-Right		1							1				1				1	
	Right	93	0	93	4	97	97	15	110	0	110	4	114	0	114	0	114	0	114
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	57	1	**57**	0	57	**57**	0	58	1	**58**	0	58	1	**58**	0	58	1	**58**
	Left-Through		0							0				0				0	
	Through	1356	2	473	4	1360	474	31	1414	2	494	4	1418	2	495	0	1418	2	495
	Through-Right		1							1				1				1	
	Right	63	0	63	0	63	63	3	67	0	67	0	67	0	67	0	67	0	67
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		542	*North-South:*		542	*North-South:*			557	*North-South:*			557	*North-South:*			557
		East-West:		611	*East-West:*		617	*East-West:*			642	*East-West:*			648	*East-West:*			648
		SUM:		1153	*SUM:*		1159	*SUM:*			1199	*SUM:*			1205	*SUM:*			1205
VOLUME/CAPACITY (*V/C*) RATIO:				0.769			0.773				0.799				0.803				0.803
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.669**			**0.673**				**0.699**				**0.703**				**0.703**
LEVEL OF SERVICE (LOS):				B			B				B				C				C

REMARKS:

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 Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Normandie Avenue	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA08	East-West Street:	Olympic Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

		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			2			2			2				2				2	
	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-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0		NB-- 0 SB-- EB-- 0 WB--		0		NB-- 0 SB-- EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	98	1	**98**	5	103	**103**	56	156	1	**156**	5	161	1	**161**	0	161	1	**161**
	Left-Through		0							0				0				0	
	Through	754	2	377	0	754	377	28	797	2	399	0	797	2	399	0	797	2	399
	Through-Right		0							0				0				0	
	Right	117	1	85	0	117	85	0	119	1	87	0	119	1	87	0	119	1	87
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	80	1	80	0	80	80	1	83	1	83	0	83	1	83	0	83	1	83
	Left-Through		0							0				0				0	
	Through	867	2	**434**	0	867	**434**	17	901	2	**451**	0	901	2	**451**	0	901	2	**451**
	Through-Right		0							0				0				0	
	Right	67	1	38	5	72	40	54	122	1	73	5	127	1	75	0	127	1	75
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	59	1	59	6	65	65	38	98	1	98	6	104	1	104	0	104	1	104
	Left-Through		0							0				0				0	
	Through	1729	2	**611**	9	1738	**615**	63	1827	2	**654**	9	1836	2	**658**	0	1836	2	**658**
	Through-Right		1							1				1				1	
	Right	104	0	104	3	107	107	28	134	0	134	3	137	0	137	0	137	0	137
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	64	1	**64**	0	64	**64**	0	65	1	**65**	0	65	1	**65**	0	65	1	**65**
	Left-Through		0							0				0				0	
	Through	1468	2	518	14	1482	522	65	1563	2	553	14	1577	2	557	0	1577	2	557
	Through-Right		1							1				1				1	
	Right	85	0	85	0	85	85	8	95	0	95	0	95	0	95	0	95	0	95
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		532	*North-South:*		537	*North-South:*			607	*North-South:*			612	*North-South:*			612
		East-West:		675	*East-West:*		679	*East-West:*			719	*East-West:*			723	*East-West:*			723
		SUM:		1207	*SUM:*		1216	*SUM:*			1326	*SUM:*			1335	*SUM:*			1335
	VOLUME/CAPACITY (*V/C*) RATIO:			0.805			0.811				0.884				0.890				0.890
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.705**			**0.711**				**0.784**				**0.790**				**0.790**
	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:	0.006	Δ*v/c* after mitigation:	0.006
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Normandie Avenue	Year of Count:	2016	Ambient Growth: (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA09	East-West Street:	Pico Boulevard	Projection Year:	2018	Peak Hour:	AM	Reviewed by:	KB	Project:	5-16-0262-1

		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			2			2			2				2					2
	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?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	42	0	42	0	42	42	0	43	0	43	0	43	0	43	0	43	0	43
	Left-Through		1							1				1				1	
	Through	985	0	**628**	2	987	**629**	23	1028	0	**652**	2	1030	0	**653**	0	1030	0	**653**
	Through-Right		1							1				1				1	
	Right	102	0	628	0	102	629	0	104	0	652	0	104	0	653	0	104	0	653
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	36	0	**36**	0	36	**36**	5	42	0	**42**	0	42	0	**42**	0	42	0	**42**
	Left-Through		1							1				1				1	
	Through	722	0	487	9	731	492	54	791	0	541	9	800	0	546	0	800	0	546
	Through-Right		1							1				1				1	
	Right	36	0	487	0	36	492	2	39	0	541	0	39	0	546	0	39	0	546
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	51	1	51	0	51	51	1	53	1	53	0	53	1	53	0	53	1	53
	Left-Through		0							0				0				0	
	Through	704	1	**398**	9	713	**402**	9	727	1	**410**	9	736	1	**415**	0	736	1	**415**
	Through-Right		1							1				1				1	
	Right	91	0	91	0	91	91	0	93	0	93	0	93	0	93	0	93	0	93
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	80	1	**80**	0	80	**80**	0	82	1	**82**	0	82	1	**82**	0	82	1	**82**
	Left-Through		0							0				0				0	
	Through	753	2	377	2	755	378	5	773	2	387	2	775	2	388	0	775	2	388
	Through-Right		0							0				0				0	
	Right	45	1	45	0	45	45	4	50	1	50	0	50	1	50	0	50	1	50
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		664	*North-South:*		665	*North-South:*		694		*North-South:*		695		*North-South:*			695
		East-West:		478	*East-West:*		482	*East-West:*		492		*East-West:*		497		*East-West:*			497
		SUM:		1142	*SUM:*		1147	*SUM:*		1186		*SUM:*		1192		*SUM:*			1192
	VOLUME/CAPACITY *(V/C)* RATIO:			0.761			0.765			0.791				0.795					0.795
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.661**			**0.665**			**0.691**				**0.695**					**0.695**
	LEVEL OF SERVICE (LOS):			**B**			**B**			**B**				**B**					**B**

REMARKS:

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 Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Normandie Avenue	Year of Count:	2016	Ambient Growth (%):	1.0	Conducted by:	NDS	Date:	8/24/2016
CMA09	East-West Street:	Pico Boulevard	Projection Year:	2018	Peak Hour:	PM	Reviewed by:	KB	Project:	5-16-0262-1

		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			2			2			2				2				2	
	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-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0		NB-- 0 SB-- EB-- 0 WB--		0		NB-- 0 SB-- EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	27	0	**27**	0	27	**27**	0	28	0	**28**	0	28	0	**28**	0	28	0	**28**
	Left-Through		1							1				1				1	
	Through	785	0	517	9	794	522	71	872	0	565	9	881	0	569	0	881	0	569
	Through-Right		1							1				1				1	
	Right	87	0	517	0	87	522	0	89	0	565	0	89	0	569	0	89	0	569
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	4	0	4	0	4	4	12	16	0	16	0	16	0	16	0	16	0	16
	Left-Through		1							1				1				1	
	Through	1063	0	**557**	6	1069	**560**	57	1141	0	**621**	6	1147	0	**624**	0	1147	0	**624**
	Through-Right		1							1				1				1	
	Right	34	0	557	0	34	560	1	36	0	621	0	36	0	624	0	36	0	624
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	72	1	72	0	72	72	2	75	1	75	0	75	1	75	0	75	1	75
	Left-Through		0							0				0				0	
	Through	645	1	**385**	6	651	**388**	7	665	1	**396**	6	671	1	**399**	0	671	1	**399**
	Through-Right		1							1				1				1	
	Right	124	0	124	0	124	124	0	126	0	126	0	126	0	126	0	126	0	126
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	93	1	**93**	0	93	**93**	0	95	1	**95**	0	95	1	**95**	0	95	1	**95**
	Left-Through		0							0				0				0	
	Through	649	2	325	9	658	329	8	670	2	335	9	679	2	340	0	679	2	340
	Through-Right		0							0				0				0	
	Right	52	1	52	0	52	52	13	66	1	66	0	66	1	66	0	66	1	66
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		584	*North-South:*		587	*North-South:*			649	*North-South:*			652	*North-South:*			652
		East-West:		478	*East-West:*		481	*East-West:*			491	*East-West:*			494	*East-West:*			494
		SUM:		1062	*SUM:*		1068	*SUM:*			1140	*SUM:*			1146	*SUM:*			1146
	VOLUME/CAPACITY (*V/C*) RATIO:			0.708			0.712				0.760				0.764				0.764
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.608**			**0.612**				**0.660**				**0.664**				**0.664**
	LEVEL OF SERVICE (LOS):			**B**			**B**				**B**				**B**				**B**

REMARKS:

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

APPENDIX C

LADOT TRAFFIC SIGNAL WARRANT WORKSHEETS

Traffic Signal Warrants Worksheet

DATE 06/15/16
CALC KAB
CHK

Major St: Olympic Bouelvard — Critical Approach Speed 35 mph
or
Minor St: Serrano Avenue — Speed Limit 35 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☐
or
In built up area of isolated community of < 10,000 population..... ☐ } RURAL (R)
☑ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume — SATISFIED YES ☐ NO ☒

a. Condition A or Condition B or combination of A and B must be satisfied.
b. 6 hour manual count may be used in lieu of 8 hour count.
c. In applying each condition, the major street and minor street volumes shall be for the same hours. On the minor street, the higher volume does not need to be the same approach during end of the hours.
d. A reduction for right turning vehicles that turn within 45 seconds may be applied.
e. Figure 4C-103(CA) should be used for new intersections or where it is not reasonable to use current traffic volumes.
f. See Section 4C.102(CA) for bicycle signal guidelines.

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Condition A - Minimum Vehicle Volume

100% SATISFIED YES ☐ NO ☒
80% SATISFIED YES ☐ NO ☒

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												
	U	R	U	R									
APPROACH LANES	1		2 or More		5PM	8AM	6PM	4PM	3PM	7AM	9AM	2PM	Hour
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	3244	3159	3149	3128	2962	2813	2621	2499	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	80	102	59	72	73	108	95	43	

Condition B - Interruption of Continuous Traffic

100% SATISFIED YES ☐ NO ☒
80% SATISFIED YES ☐ NO ☒

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)												
	U	R	U	R									
APPROACH LANES	1		2 or More		5PM	8AM	6PM	4PM	3PM	7AM	9AM	2PM	Hour
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	3244	3159	3149	3128	2962	2813	2621	2499	
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	80	102	59	72	73	108	95	43	

Traffic Signal Warrants Worksheet

WARRANT 1 - Eight Hour Vehicular Volume (continued) — **SATISFIED** YES ☐ NO ☒

Combination of Conditions A & B — **SATISFIED** YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☒
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☒

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Projected Volumes — N/A ☒ **SATISFIED** YES ☐ NO ☐

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

Based on Estimated Average Daily Traffic - See Note

URBAN..... RURAL.....

CONDITION A - Minimum Vehicular Volume

Satisfied _____ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1	1
2 or More	1
2 or More	2 or More
1	2 or More

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied _____ Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1	1
2 or More	1
2 or More	2 or More
1	2 or More

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied _____ Not Satisfied _____

No one condition satisfied, but following conditions fulfilled 80% or more..... _____ (A) _____ (B)

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

DRAFT

Traffic Signal Warrants Worksheet

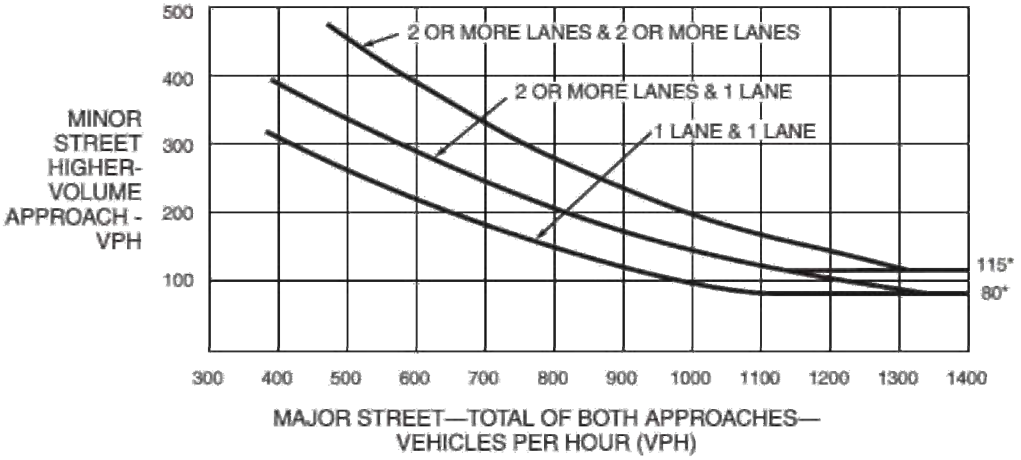
WARRANT 2 - Four Hour Vehicular Volume — **SATISFIED** YES ☐ NO ☒

a. Record hourly vehicle volumes for any four hours of an average day.
b. A reduction for right turning vehicles that turn within 45 seconds may be applied.

APPROACH LANES	One	2 or More	A 5PM	B 8AM	C 6PM	D 4PM Hour
Both Approaches - Major Street		✓	3244	3159	3149	3128
Higher Approach - Minor Street	✓		80	102	59	72

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐ No ☒
OR All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐ No ☐

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume

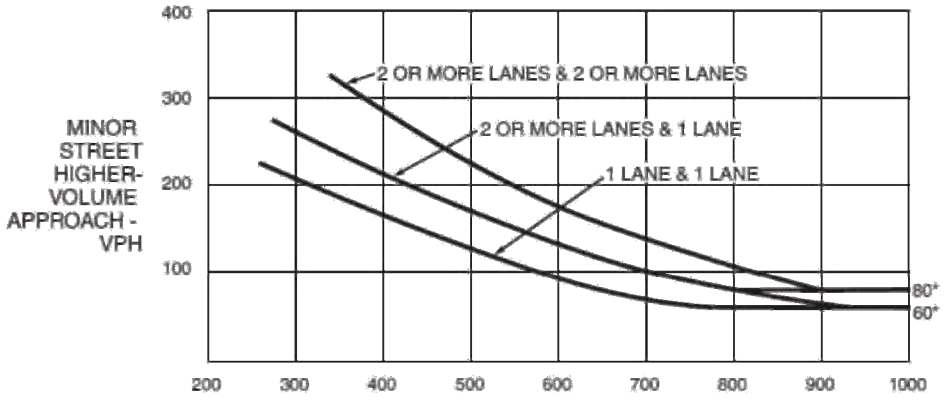


B A D C

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

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Traffic Signal Warrants Worksheet

WARRANT 3 - Peak Hour SATISFIED YES ☐ NO ☒

a. Part A or Part B must be satisfied.
b. A reduction for right turning vehicle that turn within 45 seconds may be applied.
c. Estimated Average Daily Traffic may be used for new intersections, significantly reconstructed intersections, or where near-term land development will result in increased volumes.
d. See Section 4C.102(CA) for bicycle signal guidelines.

PART A SATISFIED YES ☐ NO ☐

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐ No ☐
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐ No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐ No ☐

PART B SATISFIED YES ☐ NO ☒

A

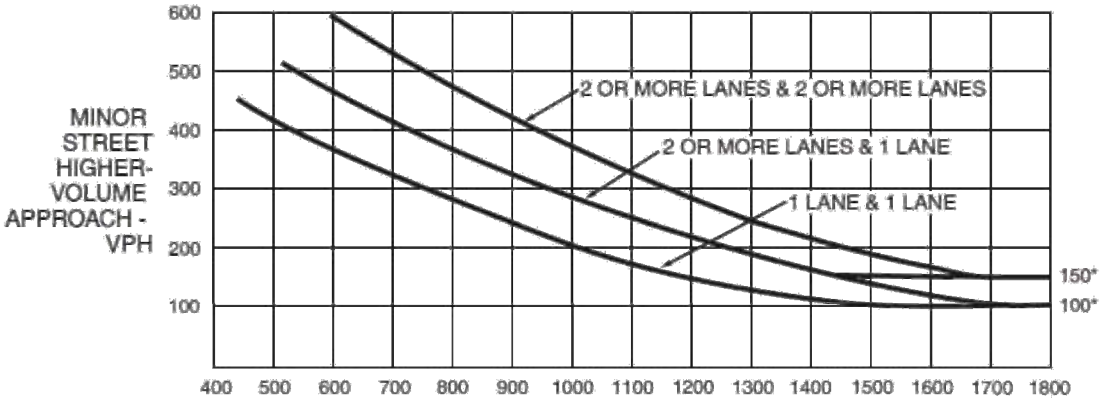
APPROACH LANES	One	2 or More	5PM Hour
Both Approaches - Major Street		✓	3244
Higher Approach - Minor Street	✓		80

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☒
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

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Figure 4C-3. Warrant 3, Peak Hour



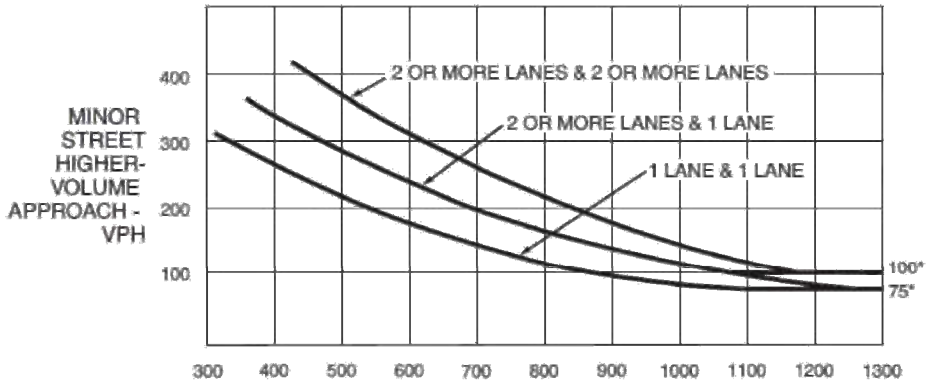
A

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Traffic Signal Warrants Worksheet

WARRANT 3 - Peak Hour (continued)

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 4 - Pedestrian Volume

SATISFIED YES ☐ NO ☐

a. Part 1 and 2 must be satisfied.

b. The pedestrian volume criterion may be reduced as much as 50% if the 15th percentile speed of the pedestrians is less than 3.5 feet/second.

c. Estimated pedestrian volume may be used where nearby, near-term land use development has been approved for construction.

Part 1 (Parts A or B must be satisfied)

Hours - - ->

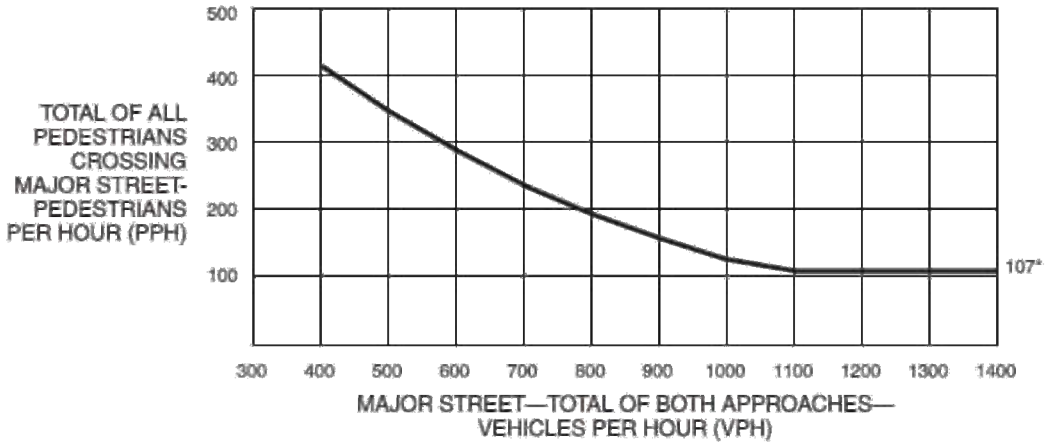
A.	Vehicles per hour for any 4 hours				
	Pedestrians per hour for any 4 hours				

Figure 4C-5
or Figure 4C-6

SATISFIED YES ☐ NO ☐

SPEED ≤ 35 MPH

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume



*Note: 107 pph applies as the lower threshold volume.

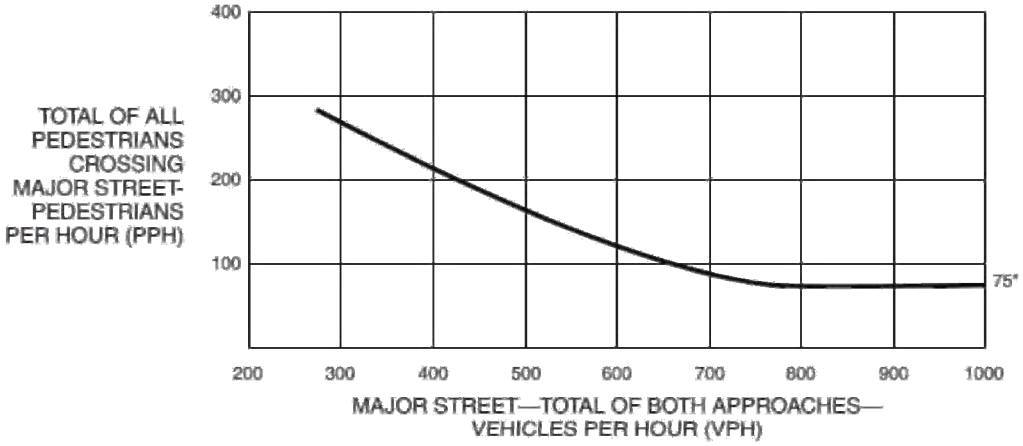
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Traffic Signal Warrants Worksheet

WARRANT 4 - Pedestrian Volume (continued)

SPEED > 35 MPH

Figure 4C-6. Warrant 4, Pedestrian Four-Hour Volume (70% Factor)



*Note: 75 pph applies as the lower threshold volume.

B.

Hours - - ->				
Vehicles per hour for any 4 hours				
Pedestrians per hour for any 4 hours				

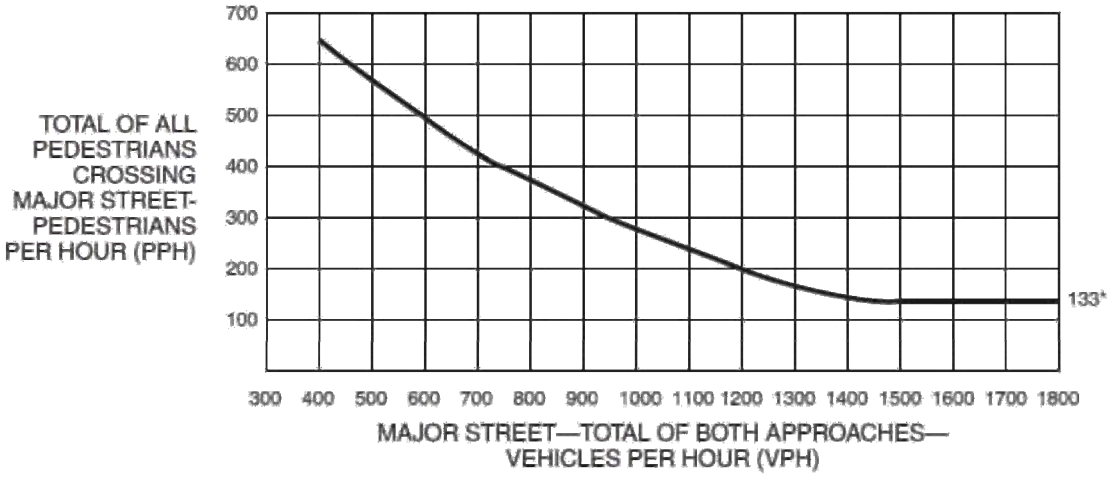
Figure 4C-7 or Figure 4C-8

SATISFIED YES ☐ NO ☐

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SPEED ≤ 35 MPH

Figure 4C-7. Warrant 4, Pedestrian Peak Hour



*Note: 133 pph applies as the lower threshold volume.

Traffic Signal Warrants Worksheet

WARRANT 4 - Pedestrian Volume (continued)

SPEED > 35 MPH

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



*Note: 93 pph applies as the lower threshold volume.

Part 2 **SATISFIED YES ☐ NO ☐**

AND, The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐ No ☐
OR, The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes ☐ No ☐

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WARRANT 5 - School Crossing

SATISFIED YES ☐ NO ☐

a. Part A or Part B must be satisfied.

b. For purposes of this warrant, school children include elementary through high school students.

c. Estimated student pedestrian volumes may be used where a new school or expanded school has been approved for construction.

Part A **SATISFIED YES ☐ NO ☐**

Gap/Minutes and # of Children

		Hour
Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Gaps < Minutes YES ☐ NO ☐

AND Children > 20/hr YES ☐ NO ☐

AND, Consideration has been given to less restrictive remedial measures.	Yes ☐ No ☐

Part B **SATISFIED YES ☐ NO ☐**

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐ No ☐
OR, The proposed signal will not restrict the progressive movement of traffic.	Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

LADOT

Traffic Signal Warrants Worksheet

WARRANT 6 - Coordinated Signal System

SATISFIED YES ☐ NO ☐

(All Parts Must Be Satisfied)

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes ☐ No ☐
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning. OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		Yes ☐ No ☐

WARRANT 7 - Crash Experience Warrant

SATISFIED YES ☐ NO ☐

a. All Parts must be satisfied.

b. LADOT may consider a reduction of crashes to 3 correctible injury crashes in the most recent 12-month period, or 4 correctible injury accidents in the most recent 36-month period.

c. LADOT may consider a reduction of pedestrian crashes to 3 injury crashes in the most recent 12-month period, or 4 injury accidents in the most recent 36-month period.

d. LADOT may consider a reduction of bike crashes to 3 injury crashes in the most recent 12-month period, or 4 injury accidents in the most recent 36-month period.

e. See Section 4C.102(CA) for bicycle signal guidelines if two or more correctible bicycle/vehicle collisions have occurred..

DRAFT

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes ☐ No ☐
REQUIREMENTS	**DATES**	**YES / NO**
Number of crashes reported within a period susceptible to correction by a traffic signal		Yes ☐ No ☐
5 or more collisions with injuries or PDO within 12 months		
OR, 3 or more collisions with injuries within 12 months		
OR, 4 or more collisions with injuries within 36 months		

REQUIREMENTS	CONDITIONS	✓	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume		Yes ☐ No ☐
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic		
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 152 for any hour OR, Ped Vol ≥ 80 for any 4 hours		

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Traffic Signal Warrants Worksheet

WARRANT 8 - Roadway Network

SATISFIED YES ☐ NO ☐

(All Parts Must Be Satisfied)

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes ☐ No ☐
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		

CHARACTERISTICS OF MAJOR ROUTES	MAJOR ROUTE A	MAJOR ROUTE B	
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan			
Any Major Route Characteristics Met, Both Streets			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

WARRANT 9 - Intersection Near a Grade Crossing

N/A ☐ SATISFIED YES ☐ NO ☐

a. Both Parts A and B must be satisfied.

b. This warrant is intended where none of the other warrants are met, but the intersection proximity to a grade crossing is the principal reason for consideration of a traffic signal.

PART A A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft	Yes ☐ No ☐
PART B **There is one minor street approach lane at the track crossing -** During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9. Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH	Yes ☐ No ☐
OR, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10. Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calcualte AF) = _____ VPH	

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

1- Number of Rail Traffic per Day_____ Adjustment factor from table 4C-2____

2- Percentage of High-Occupancy Buses on Minor Street Approach_____ Adjustment factor from table 4C-3____

3- Percentage of Tractor-Trailer Trucks on Minor Street Approach_____ Adjustment factor from table 4C-4____

NOTE: If no data is availale or known, then use AF = 1 (no adjustment)

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WARRANT 9 - Intersection Near a Grade Crossing (continued)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

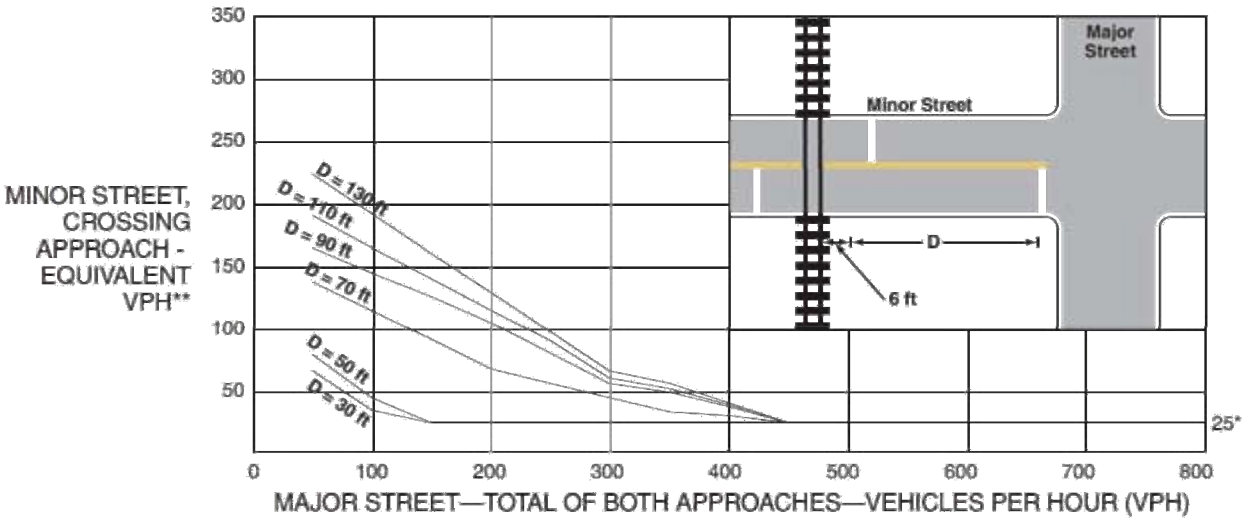
* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

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Figure 4C-9. Warrant 9, Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)



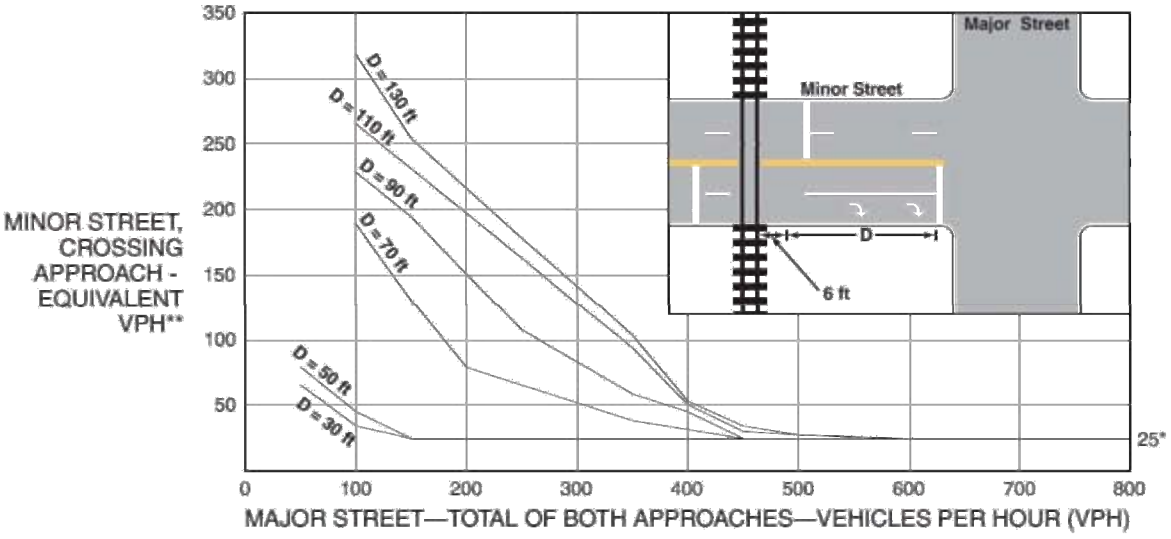
* 25 vph applies as the lower threshold volume

** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

Traffic Signal Warrants Worksheet

WARRANT 9 - Intersection Near a Grade Crossing (continued)

Figure 4C-10. Warrant 9, Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)



* 25 vph applies as the lower threshold volume

** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

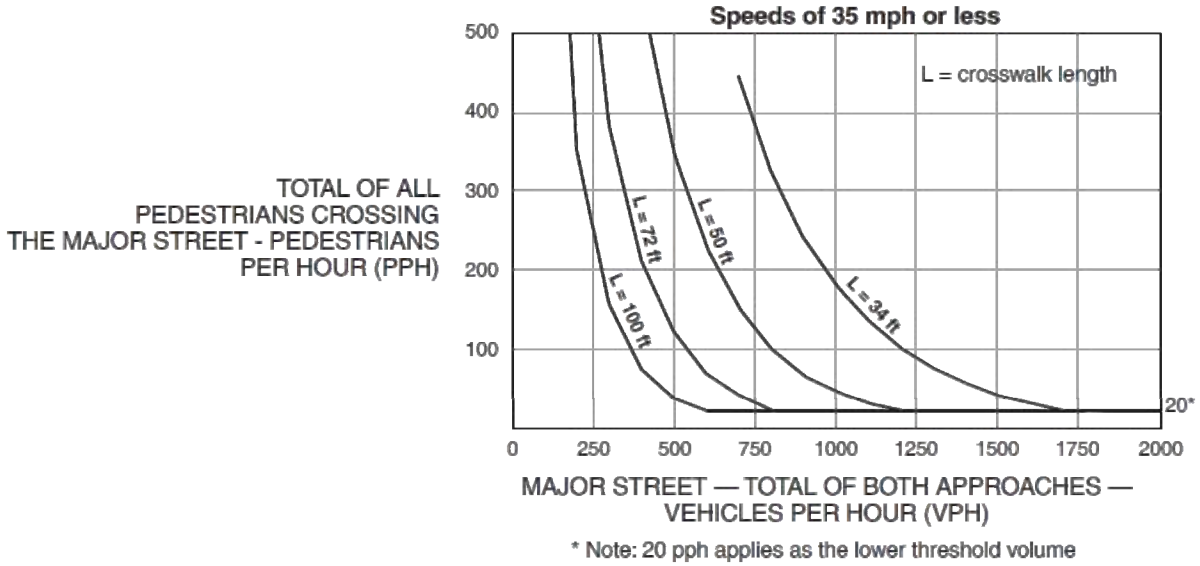
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Traffic Signal Warrants Worksheet

WARRANT 10 - Midblock Crosswalk **SATISFIED YES ☐ NO ☐**

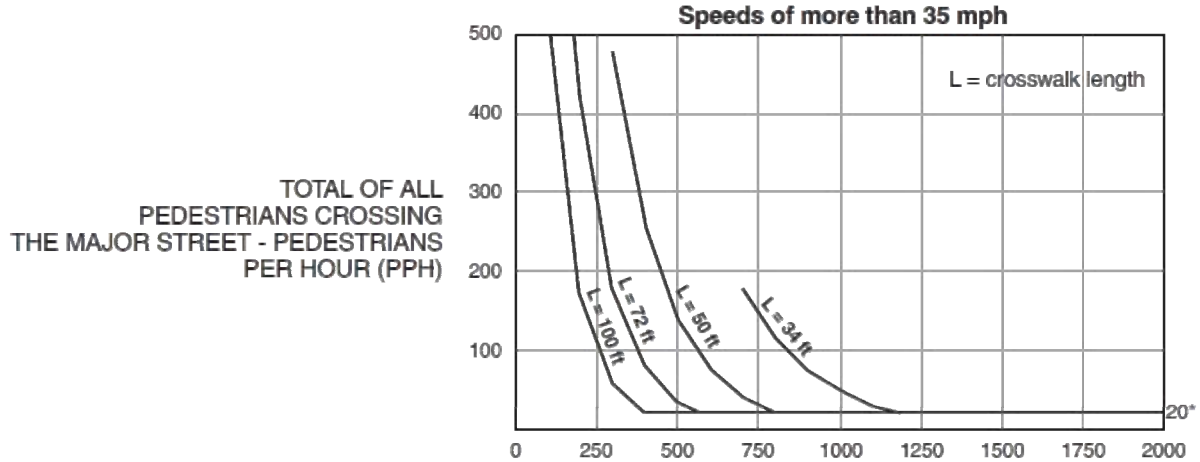
1. See Section 4F.01 of CAMUTCD.
2. A conventional or a pedestrian hybrid beacon may be justified under these guidelines.
3. If a traffic control signal is not justified under the signal warrants of Chapter 4C and if gaps in traffic are not adequate to permit pedestrians to cross, or if the speed for vehicles approaching on the major street is too high to permit pedestrians to cross, or if pedestrian delay is excessive, the need for a pedestrian hybrid beacon should be considered on the basis of an engineering study that considers major-street volumes, speeds, widths, and gaps in conjunction with pedestrian volumes, walking speeds, and delay.
4. For crosswalks that have lengths other than the four that are specifically shown in Figures 4F-1 and 4F-2, the values should be interpolated between the curves.

Figure 4F-1. Guidelines for the Installation of Pedestrian Hybrid Beacons on Low-Speed Roadways



* Note: 20 pph applies as the lower threshold volume

Figure 4F-2. Guidelines for the Installation of Pedestrian Hybrid Beacons on High-Speed Roadways



* Note: 20 pph applies as the lower threshold volume

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Traffic Signal Warrants Worksheet

WARRANT 11 - Activated Pedestrian Warning Device	SATISFIED YES ☐ NO ☐

If a location meets the guidelines for the installation of an Activated Pedestrian Warning Device as described in MPP section 354 and is within 600 feet both upstream and downstream of a traffic signal, then a traffic signal shall be installed rather than an Activated Pedestrian Warning Device

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BOARD OF
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DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

FRANK BUSH
GENERAL MANAGER

OSAMA YOUNAN, P.E.
EXECUTIVE OFFICER

SOILS REPORT APPROVAL LETTER

September 27, 2016

LOG # 94942
SOILS/GEOLOGY FILE - 2

Archeon Group
3530 Wilshire Blvd.,
Los Angeles, CA 90010

TRACT:	Pellissier Tract (MR 15-70)
BLOCK:	E
LOT(S):	9-12, 15-18, Portion of 13 & 14
LOCATION:	3170 W. Olympic Blvd.

CURRENT REFERENCE REPORT/LETTER(S)	REPORT No.	DATE(S) OF DOCUMENT	PREPARED BY
Soils Report	S-1652	06/30/2016	Don Soils Engineering Co.

The Grading Division of the Department of Building and Safety has reviewed the referenced report that provide recommendations for proposed development which will consist of a new 7-/8-story mixed use building over two-/three-level of subterranean parking at the subject site. Temporary excavations to a maximum depth of 32 feet below the existing ground surface including perimeter footing excavations are anticipated for the proposed subterranean parking. The consultant recommends to support the proposed structure on conventional foundations bearing on native undisturbed soils.

The referenced report is acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis ( ) refer to applicable sections of the 2014 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

1. Secure the written consent from all owners upon whose property the proposed grading is to extend. (7006.6) [OR Secure the notarized written consent from all owners upon whose property proposed grading/construction access is to extend, in the event off-site grading and/or access for construction purposes is required. The consent shall be included as part of the final plans. (7006.6)]

2. Provide a notarized letter from all adjoining property owners allowing tie-back anchors on their property. (7006.6)

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3. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans that clearly indicates the geologist and soils engineer have reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in their reports. (7006.1)

4. All recommendations of the report that are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.

5. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit. (7006.1)

6. A grading permit shall be obtained for all structural fill and retaining wall backfill. (106.1.2)

7. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density (D1556). Placement of gravel in lieu of compacted fill is allowed only if complying with Section 91.7011.3 of the Code. (7011.3)

8. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction. (7013.12)

9. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety. (3301.1)

10. The soils engineer shall review and approve the shoring plans prior to issuance of the permit. (3307.3.2)

11. Prior to the issuance of the permits, the soils engineer and/or the structural designer shall evaluate the surcharge loads used in the report calculations for the design of the retaining walls and shoring. If the surcharge loads used in the calculations do not conform to the actual surcharge loads, the soil engineer shall submit a supplementary report with revised recommendations to the Department for approval.

12. Unsurcharged temporary excavations over 7 feet exposing soil shall be trimmed back at a gradient not exceeding 1:1, as recommended.

13. Shoring shall be designed for the lateral earth pressures specified in the section titled "Shoring" starting on page 11 of the report; all surcharge loads shall be included into the design. [Total lateral load on shoring piles shall be determined by multiplying the recommended EFP by the pile spacing.]

14. Shoring shall be designed for a maximum lateral deflection of ½ inch where a structure is within a 1:1 plane projected up from the base of the excavation, and for a maximum lateral deflection of 1 inch provided there are no structures within a 1:1 plane projected up from the base of the excavation, as recommended.

15. A shoring monitoring program shall be implemented to the satisfaction of the soils engineer.

16. Footings supported on approved compacted fill or expansive soil shall be reinforced with a minimum of four (4) ½-inch diameter (#4) deformed reinforcing bars. Two (2) bars shall be placed near the bottom and two (2) bars placed near the top.

17. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2014-116 "Foundation Design for Expansive Soils" (1803.5.3).[Note: Soils with an Expansion Index greater than 20 are considered to be expansive, in accordance with Section 1803.5.3 of the 2014 LABC.]

18. The seismic design shall be based on a Site Class D as recommended. All other seismic design parameters shall be reviewed by LADBS building plan check.

19. Retaining walls shall be designed for the lateral earth pressures specified in the section titled "Retaining Walls" starting on page 8 of the report. Basement walls and other walls in which horizontal movement is restricted at the top shall be designed for at-rest maximum pressure as specified on page 8 of the report. All surcharge loads shall be incorporated into the design.

20. Cantilevered walls up to 10 feet in height and with a level backfill shall be designed for a minimum equivalent fluid pressure of 30 PCF, as specified on page 8 of the report. All surcharge loads shall be incorporated into the design.

21. Retaining walls higher than 6 feet shall be designed for lateral earth pressure due to earthquake motions as specified on page 9 of the report (1803.5.12).

    Note: Lateral earth pressure due to earthquake motions shall be in addition to static lateral earth pressures and other surcharge pressures.

22. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted to the street in an acceptable manner and in a non-erosive device. (7013.11)

23. With the exception of retaining walls designed for hydrostatic pressure, all retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Prior to issuance of any permit, the retaining wall subdrain system recommended in the soil report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record. (1805.4)

24. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector. (108.9)

25. Basement walls and floors shall be waterproofed/damp-proofed with an L.A. City approved "Below-grade" waterproofing/damp-proofing material with a research report number. (104.2.6)

26. Prefabricated drainage composites (Miradrain) (Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.

27. Where the ground water table is lowered and maintained at an elevation not less than 6 inches below the bottom of the lowest floor, or where hydrostatic pressures will not occur, the floor and basement walls shall be damp-proofed. Where a hydrostatic pressure condition exists, and the design does not include a ground-water control system, basement walls and floors shall be waterproofed. (1803.5.4, 1805.1.3, 1805.2, 1805.3)

28. All roof and pad drainage shall be conducted to the street in an acceptable manner [; water shall not be dispersed on to descending slopes without specific approval from the Grading Division and the consulting geologist and soils engineer]. (7013.10)

29. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS. (7013.10)

30. Any recommendations prepared by the geologist and/or the soils engineer for correction of geological hazards found during grading shall be submitted to the Grading Division of the Department for approval prior to utilization in the field. (7008.2, 7008.3)

31. The geologist and soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading. (7008 & 1705.6)

32. Prior to the pouring of concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. He/She shall post a notice on the job site for the LADBS Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2)

33. Prior to excavation, an initial inspection shall be called with LADBS Inspector at which time sequence of construction, shoring, pile installation, protection fences and dust and traffic control will be scheduled. (108.9.1)

34. Installation of shoring, slot cutting excavations and/or pile installation shall be performed under the inspection and approval of the soils engineer and deputy grading inspector. (1705.6)

35. The installation and testing of tie-back anchors shall comply with the recommendations included in the report or the standard sheets titled "Requirement for Tie-back Earth Anchors", whatever is more restrictive. (Research Report #23835)

36. Allowable foundation pressure and frictional and lateral soil bearing values shall be limited to a maximum one-third increase when considering earthquake or other temporary forces. (1808)

37. Frictional and lateral resistance of soils may be combined, provided the lateral bearing resistance does not exceed two-thirds of the allowable lateral bearing.

38. When water over 3 inches in depth is present in drilled pile holes, a concrete mix with a strength of 1000 p.s.i. over the design p.s.i. shall be tremied from the bottom up; an admixture that reduces the problem of segregation of paste/aggregates and dilution of paste shall be included. (1808.8.3)

39. Continuous/isolated footings allowable bearing pressure shall be 5,000 psf, for footings with a minimum of 12 inches in width and embedded a minimum of 24 inches in depth below the lowest adjacent grade, and 24 inches into the recommended bearing material, as recommended. Increases for depth/width shall not exceed a maximum of 7,000 psf.

FRED WONG
Structural Engineering Associate IV

FW/fw
Log No. 94942
213-482-0480

cc: Donghyun Yim, Applicant
Don Soils Engineering Co., Project Consultant
LA District Office

FORM GEN. 160A (Rev. 1/82)

CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

3170 W. Olympic Blvd
DOT Case No. CEN 16-44375

Date: October 19, 2016

To: Karen Hoo, City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRAFFIC IMPACT STUDY FOR THE PROPOSED MIXED USE DEVELOPMENT PROJECT LOCATED AT 3170 WEST OLYMPIC BOUEVARD**

The Department of Transportation (DOT) has reviewed the traffic analysis dated August 30, 2016 prepared by Linscott Law & Greenspan, Engineers for the proposed mixed use development project located at 3170 West Olympic Boulevard. In order to evaluate the effects of the project's traffic on the available transportation infrastructure, the significance of the project's traffic impacts is measured in terms of change to the volume-to-capacity (V/C) ratio between the "future no project" and the "future with project" scenarios. This change in the V/C ratio is compared to DOT's established threshold standards to assess the project-related traffic impacts. The traffic study included the detailed analysis of nine intersections. Based on DOT's traffic impact criteria[1], none of the study intersections included in the traffic analysis are expected to be significantly impacted by project-related traffic, as noted in **Attachment 1**. The results of the traffic analysis accounted for other known development projects in evaluating potential cumulative impacts and adequately evaluated the project's traffic impacts on the surrounding community.

DISCUSSION AND FINDINGS

A. Project Description

The project will replace approximately 15,135 square feet of retail/restaurant space and three single family homes with a mixed-use development consisting of 252 apartment units and approximately 33,280 square feet of retail/restaurant space. The proposed site will provide subterranean parking, at grade parking and upper level parking. Vehicular access to the site will be provided by two driveways located along Hobart Boulevard and Serrano Avenue. The project is expected to be completed by 2018.

B. Trip Generation

The project is estimated to generate a net increase of 1,639 daily trips, a net increase of 113 trips in the a.m. peak hour, and a net decrease of 151 trips in the p.m. peak hour. The trip generation estimates are based on formulas published by the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition, 2012. A copy of the trip generation table can be found in **Attachment 2**.

[1] Per the DOT Traffic Study Policies and Procedures, a significant impact is identified as an increase in the Critical Movement Analysis (CMA) value, due to project related traffic, of 0.01 or more when the final ("with project") Level of Service (LOS) is LOS E or F; an increase of 0.020 or more when the final LOS is LOS D; or an increase of 0.040 or more when the final LOS is LOS C.

C. Traffic Signal Warrant Analysis

In the preparation of traffic studies, DOT guidelines indicate that unsignalized intersections should be evaluated solely to determine the need for the installation of a traffic signal or other traffic control device. When choosing which unsignalized intersections to evaluate in the study, intersections that are adjacent to the project or that are integral to the project's site access and circulation plan, or that facilitate pedestrian access should be identified. This traffic study included a traffic signal warrant analysis for the intersections of **Olympic Boulevard and Serrano Avenue**. The study found that the intersections did not meet the warrants necessary for the approval of a new traffic signal at either location.

D. Freeway Analysis

The traffic study included a freeway impact analysis that was prepared in accordance with the State-mandated Congestion Management Program (CMP) administered by the Los Angeles County Metropolitan Transportation Authority (MTA). According to this analysis, the project would not result in significant traffic impacts on any of the evaluated freeway mainline segments. To comply with the Freeway Impact Analysis Agreement executed between Caltrans and DOT in October 2013, the study also included a screening analysis to determine if additional evaluation of freeway mainline and ramp segments was necessary beyond the CMP requirements. The project did not meet or exceed any of the four thresholds defined in the latest agreement, updated in December 2015. Exceeding one of the four screening criteria would require the applicant to work directly with Caltrans to prepare more detailed freeway analyses. No additional freeway analysis was required.

PROJECT REQUIREMENTS

A. Construction Impacts

DOT recommends that a construction work site traffic control plan be submitted to DOT for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. DOT also recommends that all construction related traffic be restricted to off-peak hours.

B. Highway Dedication And Street Widening Requirements

On January 20, 2016, the City Council adopted the Mobility Plan 2035 which is the new Mobility Element of the General Plan. A key feature of the updated plan is to revise street standards in an effort to provide a more enhanced balance between traffic flow and other important street functions including transit routes and stops, pedestrian environments, bicycle routes, building design and site access, etc. Per the new Mobility Element, **Olympic Boulevard** has been designated as Boulevard II (Major Highway Class II) which would require a 40-foot half-width roadway within a 55-foot half-width right-of-way, **Hobart Boulevard and Serrano Avenue** have been designated as Local Streets which would require an 18-foot half-width roadway and a 30-foot half-width right-of-way. The applicant should check with BOE's Land Development Group to determine if there are any other applicable highway dedication, street widening and/or sidewalk requirements for this project.

C. Parking Requirements

The traffic study did not indicate the number of parking spaces that would be provided.

Vehicular access to site parking would be provided via two proposed driveways located along Serrano Avenue and Hobart Avenue. The applicant should check with the Department of Building and Safety on the number of code-required parking spaces needed for the project.

D. Driveway Access and Circulation

The proposed site plans illustrated in **Attachment 3** is acceptable to DOT; however, review of the study does not constitute approval of internal circulation schemes and driveway dimensions. Those require separate review and approval and should be coordinated with DOT's Citywide Planning Coordination Section 201 N. Figueroa Street, 5th Floor, Room 550, at (213) 482-7024. In order to minimize potential building design changes, the applicant should contact DOT for driveway width and internal circulation requirements so that such traffic flow considerations are designed and incorporated early into the building and parking layout plans. All new driveways should be Case 2 driveways and any security gates should be a minimum 20 feet from the property line.

E. Development Review Fees

An ordinance adding Section 19.15 to the Los Angeles Municipal Code relative to application fees paid to DOT for permit issuance activities was adopted by the Los Angeles City Council in 2009. This ordinance identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Eduardo Hermoso of my staff at (213) 972-8473.

Attachments

J:\Letters\2016CEN16-44375_3170 W. Olympic Blvd ts ltr.docx

c: Jordan Beroukhim, Council District No. 10
Jeannie Shen, Hollywood-Wilshire District Office, DOT
Taimour Tanavoli, Case Management Office, DOT
Carl Mills, Central District, BOE
Tin T. Nguyen, Linscott Law & Greenspan, Engineers

Table 9-1
CITY OF LOS ANGELES LEVELS OF SERVICE SUMMARY
AND VOLUME TO CAPACITY RATIOS
AM AND PM PEAK HOURS

24-Aug-16

NO.	INTERSECTION	PEAK HOUR	[1] EXISTING V/C	LOS	[2] EXISTING W/ PROJECT V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT [a]	[3] FUTURE PRE-PROJECT V/C	LOS	[4] FUTURE WITH PROJECT V/C	LOS	CHANGE V/C [(4)-(3)]	SIGNIF. IMPACT [a]
1	Western Avenue / 8th Street	AM	0.494	A	0.495	A	0.001	NO	0.545	A	0.545	A	0.000	NO
		PM	0.565	A	0.567	A	0.002	NO	0.633	B	0.637	B	0.004	NO
2	Western Avenue / Olympic Boulevard	AM	0.748	C	0.755	C	0.007	NO	0.793	C	0.800	C	0.007	NO
		PM	0.803	D	0.814	D	0.011	NO	0.873	D	0.883	D	0.010	NO
3	Western Avenue / 11th Street	AM	0.439	A	0.457	A	0.018	NO	0.485	A	0.503	A	0.018	NO
		PM	0.465	A	0.475	A	0.010	NO	0.521	A	0.531	A	0.010	NO
4	Western Avenue / Pico Boulevard	AM	0.666	B	0.668	B	0.002	NO	0.695	B	0.697	B	0.002	NO
		PM	0.669	B	0.675	B	0.006	NO	0.713	C	0.719	C	0.006	NO
5	Hobart Boulevard / Pico Boulevard	AM	0.367	A	0.374	A	0.007	NO	0.383	A	0.389	A	0.006	NO
		PM	0.371	A	0.381	A	0.010	NO	0.384	A	0.395	A	0.011	NO
6	Harvard Boulevard / Olympic Boulevard	AM	0.535	A	0.541	A	0.006	NO	0.560	A	0.566	A	0.006	NO
		PM	0.683	B	0.693	B	0.010	NO	0.718	C	0.728	C	0.010	NO
7	Harvard Boulevard / 11th Street	AM	0.157	A	0.157	A	0.000	NO	0.167	A	0.168	A	0.001	NO
		PM	0.324	A	0.327	A	0.003	NO	0.345	A	0.348	A	0.003	NO
8	Normandie Avenue / Olympic Boulevard	AM	0.669	B	0.673	B	0.004	NO	0.699	B	0.703	C	0.004	NO
		PM	0.705	C	0.711	C	0.006	NO	0.784	C	0.790	C	0.006	NO
9	Normandie Avenue / Pico Boulevard	AM	0.661	B	0.665	B	0.004	NO	0.691	B	0.695	B	0.004	NO
		PM	0.608	B	0.612	B	0.004	NO	0.660	B	0.664	B	0.004	NO

[a] According to LADOT's "Traffic Study Policies and Procedures", August 2014, a transportation impact on an intersection shall be deemed significant in accordance with the following table:

Final v/c	LOS	Project Related Increase in v/c
> 0.701 - 0.800	C	equal to or greater than 0.040
> 0.801 - 0.900	D	equal to or greater than 0.020
> 0.901	E, F	equal to or greater than 0.010

Table 7-1
PROJECT TRIP GENERATION [1]

29-Aug-16

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2] IN	AM PEAK HOUR VOLUMES [2] OUT	AM PEAK HOUR VOLUMES [2] TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM PEAK HOUR VOLUMES [2] OUT	PM PEAK HOUR VOLUMES [2] TOTAL
Proposed Project								
Apartments [3]	252 DU	1,676	26	103	129	101	55	156
Retail/Restaurant [4]	33,280 GLSF	1,421	20	12	32	59	64	123
Subtotal		3,097	46	115	161	160	119	279
Proposed Internal Capture								
Retail/Restaurant [6] (15%)		(213)	(3)	(2)	(5)	(9)	(10)	(19)
Proposed Transit Trips [5]								
Apartments (15%)		(251)	(4)	(15)	(19)	(15)	(8)	(23)
Retail/Restaurant (15%)		(181)	(3)	(2)	(5)	(8)	(8)	(16)
Subtotal		(432)	(7)	(17)	(24)	(23)	(16)	(39)
Existing Land Use								
Retail/Restaurant [4]	(15,135) GLSF	(646)	(9)	(6)	(15)	(27)	(29)	(56)
Single-Family Homes [7]	(3) DU	(29)	(1)	(1)	(2)	(2)	(1)	(3)
Subtotal		(675)	(10)	(7)	(17)	(29)	(30)	(59)
Existing Transit Trips [5]								
Retail/Restaurant (15%)		97	1	1	2	4	4	8
Single-Family Homes (15%)		4	0	0	0	0	0	0
Subtotal		101	1	1	2	4	4	8
Net Project Driveway Subtotal		**1,878**	**27**	**90**	**117**	**103**	**67**	**170**
Proposed Pass-By Trips [8]								
Retail/Restaurant (50%)		(514)	(7)	(4)	(11)	(21)	(23)	(44)
Existing Pass-By Trips [8]								
Retail/Restaurant (50%)		275	4	3	7	12	13	25
NET PROJECT TRIPS		**1,639**	**24**	**89**	**113**	**94**	**57**	**151**

[1] Source: ITE "Trip Generation", 9th Edition, 2012.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 220 (Apartment) trip generation average rates.
- Daily Trip Rate: 6.65 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.51 trips/dwelling unit; 20% inbound/80% outbound
- PM Peak Hour Trip Rate: 0.62 trips/dwelling unit; 65% inbound/35% outbound

[4] ITE Land Use Code 820 (Shopping Center) trip generation equation rates.
- Daily Trip Rate: 42.70 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.96 trips/1,000 SF of floor area; 62% inbound/38% outbound
- PM Peak Hour Trip Rate: 3.71 trips/1,000 SF of floor area; 48% inbound/52% outbound

[5] The transit reduction is based on the site's location within 1/4 miles of a Metro rapid bus stop.
[6] The internal capture reduction for the commercial uses is based on the synergy between the residential and commercial uses provided within the Project site.
[7] ITE Land Use Code 210 (Single-Family Detached Housing) trip generation average rates.
- Daily Trip Rate: 9.52 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.75 trips/dwelling unit; 25% inbound/75% outbound
- PM Peak Hour Trip Rate: 1.00 trips/dwelling unit; 63% inbound/37% outbound

[8] Pass-by trips are made as intermediate stops of the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. The trip reduction for pass-by trips has been applied to the commercial component of the project based on a review of the recommended practice in the ITE "Trip Generation Handbook", June 2004, the project characteristics, and the characteristics of the surrounding project area, and the "LADOT Traffic Study Policies and Procedures", August 2014 for shopping centers less than 50,000 SF.



Attachment 3

N

NOT TO SCALE

MAP SOURCE: ARCHEON

FIGURE 2-1
SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

3170 W. OLYMPIC BOULEVARD PROJECT

c:\0262\dwg\f2-1.dwg 08/24/2016 10:30:44 barling llg exhibits color.ctb

PALEOWEST archaeology

626.408.8006 | paleowest.com | 517 South Ivy Avenue | Monrovia, CA 91016

August 3, 2018

Mr. Ned Baldwin
Senior Project Manager
Meridian Consultants, LLC
910 Hampshire Road, Suite V
Westlake Village, CA 91361
Transmitted via email to nbaldwin@meridianconsultantsllc.com

RE: Cultural Resource Records Review for the 3170 West Olympic Boulevard Project in Los Angeles, Los Angeles County, California

Dear Mr. Baldwin:

At the request of Meridian Consultants, LLC, PaleoWest Archaeology conducted a cultural resource records review for the 3170 West Olympic Bouleward Project in Los Angeles, Los Angeles County, California. This cultural resource study was limited to a cultural resource literature review and records search of the California Historic Resource Information System (CHRIS) and a review of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC). This memorandum summarizes the results of the cultural resource records review for the Project.

The literature review and records search was conducted by Roberta Thomas, Senior Archaeologist, on July 31, 2018 at the South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The records search included the Project area as well as a quarter-mile radius. The purpose of the records search was to identify any known cultural resources within the immediate vicinity of the Project area. The records search also included a review of the Office of Historic Preservation Archaeological Determination of Eligibility and the Office of Historic Preservation Directory of Historic Properties Data File.

The records search indicated that no less than four previous studies have been conducted within a quarter-mile of the Project area since 2007 (Table 1). None of the four studies include the Project area. In addition, no prehistoric or historic-period archaeological resources were identified as a result of the records search. However, four previously recorded historic-period built environment resources were identified within a quarter-mile radius of the Project. The building located within the Project area was constructed in 1955 and, based on the results of the records search, has not been previously recorded. Should the proposed Project include any physical modifications to this building, the building may need to be assessed for historical significance. The four previously recorded historic-period built environment resources are identified in Table 2 and discussed in further detail below.

Table 1
Previous Cultural Resource Studies within a Quarter-Mile of the Project Area

Report No.	Year	Author(s)	Title
LA-05352	2000	Duke, Curt	Cultural Resource Assessment for AT&T Fixed Wireless Services Facility Number, R314.2, County of Los Angeles, California
LA-08266	2007	Wood, Catherine M.	Archaeological Survey Report for the Ardmore Heights Apartments Project Located at 959-961 and 963-973 S. Ardmore Avenue, Los Angeles, California
LA-10387	2009	Bonner, Wayne H. and Kathleen Crawford	Direct APE Historic Architectural Assessment for T-Mobile USA Candidate SV00279A(Mod), 3075 1/2 Harrington Ave, Los Angeles, Los Angeles County, California
LA-12050	2012	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA03613F (SC613 Kingsley), 901 South Kingsley Drive, Los Angeles, Los Angeles County, California

Table 2
Cultural Resources within a Quarter-Mile of the Project Area

Primary No.	Age	Type	Description	Eligibility Determination
19-167288	Historic	Building	Pio Pico Branch Library	N/A
19-188207	Historic	Building	Wilshire Center Apt Historic District	2D2
19-188500	Historic	Building	3075 Harrington Street; multiple-family residence	6Y
19-190270	Historic	Building	Kingsley House	Not recommended eligible for NRHP

The Pio Pico Branch Library (P-19-167288, historic-period building) was a 1923 library building located at 3255 Connecticut Street. P-19-167288 is no longer extant and, therefore, is no longer considered a historic resource (Los Angeles Conservancy 1978). The Wilshire Center Apartment Historic District (P-19-188207, historic-period building) is located two blocks south of Wilshire Boulevard and east of Western Avenue It is comprised of several historic-period apartment buildings. The Wilshire Center Apartment District has been recommended eligible for the National Register of Historic Places (NRHP) under Criteria A and C. (Historic Resources Group 2006). 3075 Harrington Street (P-19-188500, historic-period building) is comprised of an 18-unit Beaux Arts-style multiple-family residence constructed in 1928. P-19-188500 was not recommended eligible for the NRHP, however no recommendation for California Register of Historical Resources (CRHR) eligibility was made (Michael Brandman Associates 2009). The Kingsley House (P-19-190270, historic-period building) is located at 901 South Kingsley Avenue and is comprised of a five-story Spanish Eclectic-style multiple-family residence that was constructed in 1930. The Kingsley House was not recommended eligible for the NRHP, however no recommendation for CRHR eligibility was made (Michael Brandman Associates 2012).

PaleoWest contacted the NAHC for a review of the SLF on July 19, 2018. The objective of the SLF search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within

the immediate vicinity of the Project area. The NAHC responded on July 25, 2018, stating that the SLF was completed with negative results. However, the NAHC did state that the absence of specific site information in the SLF does not indicate the absence of Native American cultural resources. As such, the NAHC recommended that 16 Native American individuals and/or tribal groups be contacted to elicit information regarding cultural resource issues related to the proposed Project (see Exhibit A for a copy of the response letter received from the NAHC).

It has been a pleasure working with you on this Project. If you have any questions, please do not hesitate to contact me at jcastells@paleowest.com.

Sincerely,



Justin Castells, MA
Archaeologist
PaleoWest Archaeology

References

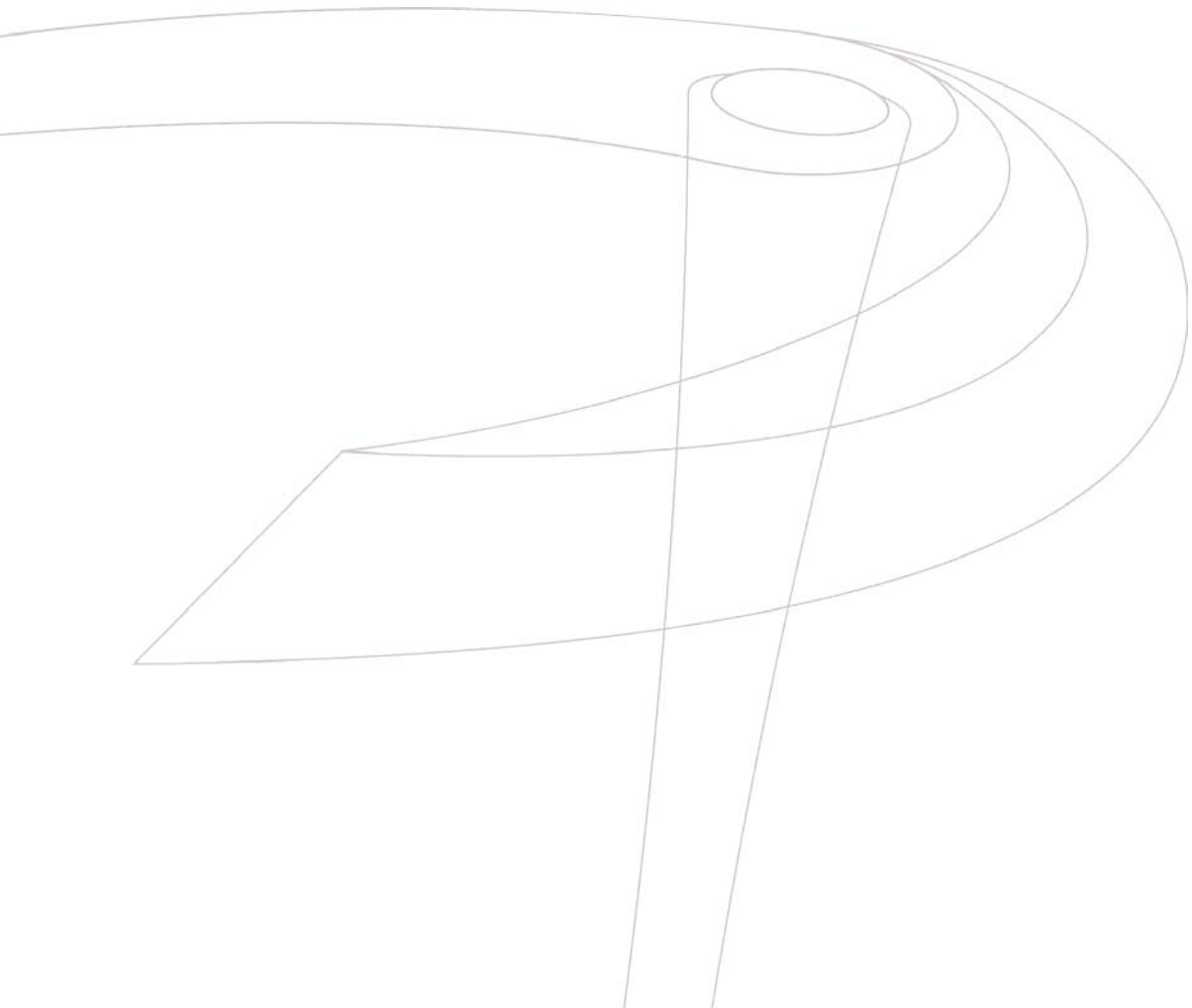
Historic Resources Group
2006 Department of Parks and Recreation 523 Series Forms for P-19-188207. Housed at the South Central Coastal Information Center, California State University, Fullerton.

Los Angeles Conservancy
1978 Department of Parks and Recreation 523 Series Forms for P-19-167288. Housed at the South Central Coastal Information Center, California State University, Fullerton.

Michael Brandman Associates
2009 Department of Parks and Recreation 523 Series Forms for P-19-188500. Housed at the South Central Coastal Information Center, California State University, Fullerton.

Michael Brandman Associates
2012 Department of Parks and Recreation 523 Series Forms for P-19-190270. Housed at the South Central Coastal Information Center, California State University, Fullerton.

EXHIBIT A



STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

July 25, 2018

Justin Castells

PaleoWest Archaeology

Sent by Email: jcastells@paleowest.com

Re: 18-259 3170 W Olympic Ave, Los Angeles County

Dear Mr. Castells,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not preclude the presence of cultural resources in any project area. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native Americans tribes who may have knowledge of cultural resources in the project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at 916-573-1033 or frank.lienert@nahc.ca.gov.

Sincerely,

Frank Lienert
Associate Governmental Program Analyst

Native American Heritage Commission
Native American Contacts
July 25, 2018

Santa Ynez Band of Chumash Indians
Kenneth Kahn. Chairperson
P.O. Box 517 — Chumash
Santa Ynez , CA 93460
kkahn@santaynezchumash.org
(805) 688-7997

(805) 686-9578 Fax

Fernandeno Tataviam Band of Mission Indians
Rudy Ortega Jr.. Tribal President
1019 Second Street. Suite 1 — Fernandeno
San Fernando , CA 91340 — Tataviam
rortega@tataviam-nsn.us
(818) 837-0794

(818) 837-0796 Fax

Barbareno/Ventureno Band of Mission Indians
Julie Lynn Tumamait-Stenslie. Chair
365 North Poli Ave — Chumash
Ojai , CA 93023
itumamait@hotmail.com
(805) 646-6214

Barbareno/Ventureno Band of Mission Indians
Patrick Tumamait
992 El Camino Corto — Chumash
Ojai , CA 93023
(805) 216-1253 Cell

Kitanemuk & Yowlumne Teion Indians
Delia Dominguez. Chairperson
115 Radio Street — Yowlumne
Bakersfield , CA 93305 — Kitanemuk
deedominguez@juno.com
(626) 339-6785

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales. Chairperson
P.O. Box 693 — Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 483-3564 Cell

(626) 286-1262 Fax

Gabrielino /Tongva Nation
Sandonne Goad. Chairperson
106 1/2 Judge John Aiso St., #231 — Gabrielino Tongva
Los Angeles , CA 90012
sgoad@gabrielino-tongva.com
(951) 807-0479

San Manuel Band of Mission Indians
Lee Clauss. Director-CRM Dept.
26569 Community Center Drive — Serrano
Highland , CA 92346
lclauss@sanmanuel-nsn.gov
(909) 864-8933

(909) 864-3370 Fax

Kern Valley Indian Community
Robert Robinson. Chairperson
P.O. Box 1010 — Tubatulabal
Lake Isabella , CA 93283 — Kawaiisu
brobinson@iwvisp.com
(760) 378-2915 Cell

Gabrielino-Tongva Tribe
Linda Candelaria. Chairperson
No Current Address on File — Gabrielino

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes with regard to cultural resources assessments for the proposed 18-259 3170 W Olympic Ave, Los Angeles County

Native American Heritage Commission
Native American Contacts
July 25, 2018

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Luiseno
San Jacinto , CA 92581 Cahuilla
jontiveros@soboba-nsn.gov
(951) 663-5279
(951) 654-5544, ext 4137
(951) 654-4198 Fax

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
admin@gabrielenoindians.org
(626) 926-4131

Barbareno/Ventureno Band of Mission Indians
Eleanor Arrellanes
P.O. Box 5687 Chumash
Ventura , CA 93005
(805) 701-3246

Barbareno/Ventureno Band of Mission Indians
Raudel Joe Banuelos, Jr.
331 Mira Flores Court Chumash
Camarillo , CA 93012
(805) 427-0015

Gabrielino-Tongva Tribe
Charles Alvarez, Councilmember
23454 Vanowen St. Gabrielino
West Hills , CA 91307
roadkingcharles@aol.com
(310) 403-6048

San Manuel Band of Mission Indians
Lynn Valbuena
26569 Community Center Dr. Serrano
Highland , CA 92346
(909) 864-8933

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes with regard to cultural resources assessments for the proposed 18-259 3170 W Olympic Ave, Los Angeles County

DEPARTMENT OF
CITY PLANNING

CITY PLANNING COMMISSION

SAMANTHA MILLMAN
PRESIDENT

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VICE-PRESIDENT

DAVID H. J. AMBROZ
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DEPUTY DIRECTOR
(213) 978-1274

http://planning.lacity.org

DATE: October 5, 2018

TO: Case File No. ENV-2016-3663-MND

FROM: Monique Acosta
City Planning Associate
Department of City Planning

SUBJECT: **CITY'S ANALYSIS OF PROJECT'S POTENTIAL IMPACTS TO TRIBAL CULTURAL RESOURCES AT 3170 WEST OLYMPIC BOULEVARD ("PROJECT SITE")**

This memo is to document and summarize the City's good faith and reasonable efforts to carefully investigate and analyze potential direct, and reasonably foreseeable indirect impacts to tribal cultural resources that may be caused by the above identified development project. For a complete project description and timeline of Assembly Bill 52 ("AB 52") compliance, please see Exhibits "A" and "B" respectively.

To comply with its obligations under the California Environmental Quality Act (CEQA), and specifically the requirements of Public Resources Code Sections 21074, 21080.3.1 and 21080.3.2, the City engaged in telephone and email consultations with the Gabrieleño Band of Mission Indians-Kizh Nation ("Gabrieleño"), requested record searches of the California Historical Resources Information System ("CHRIS") and the Sacred Lands File ("SLF"), Exhibits "C" and "D", respectively, and carefully reviewed all information/documentation submitted by the Gabrieleño.

1. Consultation with the Gabrieleño

Pursuant to the requirements of AB 52, the City provided written notice of the proposed project to Native American tribes that may be culturally affiliated with the Project Site, informing them of their right to request tribal consultation. The Gabrieleño was the only tribe who requested consultation. The consultation process included exchanges of information via email, and two telephone consultations with Andrew Salas and Matt Teutimez ("Gabrieleño Representatives").

During the first telephone consultation on June 14, 2018, the Gabrieleño Representatives requested information about the excavation of the site, provided a brief oral history of the area, and advised they would provide historical maps. The telephone consultation was brief and lasted a few minutes. Gabrieleño Representative Andrew Salas requested to reschedule the appointment due to a personal emergency.

Following this call, Planning Staff received an email with three (3) aerial maps depicting the Project vicinity and Kizh Nation Proposed Mitigation Measures.

Planning Staff attempted a subsequent telephone consultation on June 15, 2018. However, Planning Staff and Gabrieleño Representatives were unable to connect due to a miscommunication regarding the conference call phone number.

During the second telephone consultation on June 28, 2018, Planning Staff requested information about the maps sent on June 14th. Gabrieleño Representatives discussed waterways, trade routes and hamlets in the Project vicinity. Gabrieleño Representatives stated that hamlets have never been mapped. Gabrieleño Representatives explained traditional burials usually occurred where people had expired, which typically occurred along a trade route. Gabrieleño Representatives further stated that since burials usually occurred along trade routes, it is highly likely for a tribal cultural resource to exist along trade routes. When asked about the satellite imagery submitted on June 14th, the Gabrieleño Representatives stated the following:

- Olympic Boulevard is a trading route.
- The red and black lines on the map are in proximity and were done by a friend of Gabrieleño Representative Matt Teutimez.
- The red lines indicate the Portola Trail. Portola followed Native American routes.
- The black lines indicate ancient roads, old traditional trade routes used by tribes.
- The map does not represent in its entirety tribal history.
- The map is not all encompassing of showing tribal resources.

When Planning Staff asked about the scale and a corresponding legend for the satellite imagery, the Gabrieleño Representatives said they would provide the legend from the 1938 map created by George W. Kirkman. When Planning Staff asked if the Gabrieleño knew of any tribal cultural resources within the Project vicinity, the Gabrieleño began to discuss tribal resources located near the Camino Real adjacent to Olvera Street, San Fernando and Tustin.

Planning Staff and Gabrieleño Representatives corresponded for a month in an effort to schedule a subsequent phone consultation. However, a subsequent phone consultation was not able to be scheduled. Given the difficulty of securing a phone consultation, Planning Staff sent an email on August 16, 2018, requesting detailed written responses to the following questions:

1. Can the tribe provide any other documents to corroborate the original of the maps provided to the lead agency on June 14, 2018? If so, please send them to me.

2. NAHC determined that there are no known resources within the area of potential project effect per their letter dated July 25, 2018. Are there any known, subsurface tribal cultural resources or artifacts within 0.5 mile of the project sites? I am referring to tribal cultural resources that are currently listed or eligible to be listed in the national, state or local register of historical resources. Please send me a list showing the address and details of the resources or artifacts.

3. Mr. Salas and Mr. Teutimez both provided oral history of the Gabrieleño Band of Mission Indians Kizh Nation during our phone consultation on June 28, 2018. Who has the authority in the Tribe to provide oral history? Was that authority given to both Mr. Salas and Mr. Teutimez by the tribe? Are Mr. Salas and Mr. Teutimez the only people authorized in the tribe to provide oral history?

On August 28, 2018, Gabrieleño Representatives provided the following responses:

1. Below are explanations to the maps given to you at the time of consultation. In addition, we are including The Legend to the 1938 LA County Map for your reference. The 1938 LA County map is public and can be accessed at https://www.lapl.org/collections-resources/visual-collections/kirkman-harriman-pictorial-and-historical-map-los-

angeles. The 1901 and 1903 Maps are USGS 7.5 minute Topographical maps produced by US Geological Survey and can be accessed at http://historicalmaps.arcgis.com/usgs/. The West LA area was historically known as Rancho La Brea and before that there were ancient villages of our Nation on that land. Here is a link to historical information about the Rancho La Brea area and the artifacts discovered in this area. We have also included a map of the California Rancho's to provide you with the land territory of Rancho La Brea. The information can be accessed at http://nativeamericannetroots.net/diary/2605.

- Historical Maps 1901 & 1903 (Google Earth overlay). These USGS maps show the ancient watercourse that historically flowed within and/or adjacent to your project area. Watercourses were used by our Tribe for life sustenance as well as seasonal hamlets, trade depots, transportation of goods (trade route), and burials and cremations of our ancestors along the waterways.

- Historical Map 1938 (Google Earth overlay). This map shows the trade routes that historically traveled through this area and would have been located within and/or adjacent to your project area. Trade routes were heavily used by our Tribe and within and around them contained seasonal hamlets, trade depots, were used for transportation of goods and often contain isolated burials and cremations of our ancestors along the routes.

2. Although the NAHC Sacred Lands File search letters may indicate a negative search result, the letters also explicitly state that such a result ***DOES NOT PRECLUDE the existence of sites in the search area***. Furthermore, said letters recommend that the requestor contact all tribes on the contact/consultation list because these databases and surface surveys do not fully quantify the presence/absence of TCR's (Please see attached emails from Frank Leinert, NAHC and Dr. Gary Stickel, Ph.D Archaeologist). In addition, it is understood under AB52 that tribal oral history is independent and not weighted upon the amount of scientific documentation available and the absence of such information does not lesson the value or the significance of the oral history provided. Furthermore, this location is on private property, and at no time has our tribe been allowed to freely access and search for and record our Tribal Cultural Resources on private land. Thus, it may not be possible to "point" to a TCR onsite, however, topographic indicators such as stream courses, trade routes, village areas, etc are utilized to assess the probability of encountering Tribal Cultural Resources. Due to the proximity of this project location to three major Tribal Cultural Features (trade routes, waterway, and village area), there is a high potential to impact buried Tribal Cultural Resources including artifacts and human remains.

3. Authority to provide Oral History for the Gabrieleño Band of Mission Indians-Kizh Nation is given to the entire Tribe. It is through our elders and Ancestors that our History has been taught and shared. However, for Consultation purposes, the Tribe elected Andrew Salas, (son to the Chief of Gabrieleño Band of Mission Indians-Kizh Nation) who also serves as Chairman and to Matthew Teutimez who serves as the Tribal Biologist; Both have extensive knowledge of the land, along with the Gabrieleño Band of Mission Indians-Kizh Nations Oral History and traditions. As I am sure you are aware, according to AB52 and the Native American Heritage Commission, Oral History given by the Tribe supports the substantial evidence criteria (please refer to **AB52 Public Resources code 21080.3.1(A)** ... "*The Legislature finds and declares that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources".* In addition, please see the email attached for your reference from NAHC General Counsel, Terri Robinson regarding the significance of Oral testimony on a separate project in Los Angeles.

Additionally, Gabrieleño Representatives sent the following documents:

1. Title Insurance and Trust Company: The Old Spanish and Mexican Ranchos of Los Angeles County.

2. Terri Robinson Email, 09/20/2017: An email from Terri Robinson, General Counsel for NAHC, to Department of City Planning Staff (Jason Chan and Stacy Farfan) regarding AB 52 technical advisory and oral history.

3. Gary Stickel Letter, 08/22/2018: A letter from Gary Stickel, Principal Consulting Archaeologist with Environmental Research Archaeologists: a Scientific Consortium. The letter states Mr. Stickel's professional opinion about a traditional site survey and the need for a proper monitoring program.

4. Los Angeles Public Library: 1938 Map legend of historic sites, old highways, battle fields of Spanish – Mexican – Early American in Old Los Angeles County. Portola's first Exploring Route, El Camino Real, Mission Roads, and Old Roads. Complied by Geo W. Kirkman.

5. Kizh Nation Mitigation Measures: The Gabrieleño submitted proposed Mitigation Measures for mitigation adverse impacts to potential tribal cultural resources on the Project Site.

6. Gabrieleño Email, 08/31/2018: An email from the Gabrieleño with information about oral traditions and archaeology and the use of oral tradition and archaeological research. (Exhibit "F")

The Gabrieleño Representatives requested that the City add the mitigation measures to the Project regarding:

(1) An on-site Native American Monitor/Consultant;
(2) Unanticipated discovery of tribal cultural and archaeological resources;
(3) Treatment for unique archaeological resources;
(4) Unanticipated discovery of human remains and associated funerary objects; and
(5) Resource assessment and continuation of work protocol;
(6) Kizh- Gabrieleño Procedures for burials and funerary remains;
(7) Treatment measures; and
(8) Professional Standards. (Exhibit "E")

The Gabrieleño Representatives provided information for the City to consider to support the tribe's claims. A table summarizing this information, and the City's analysis of the information, is attached as Exhibit "F" and Exhibit "G".

2. The City's Records Searches

Independent of the City's consultations with the Gabrieleño, the City requested record searches of the SLF and the CHRIS databases. Staff also researched whether the Project Site is within or in the vicinity of any listed sites in the California Register of Historic Resources or National Register of Historic Places. Neither the SLF nor CHRIS record searches identify the Project Site as a tribal cultural resource or provide any information that subsurface artifacts potentially exist on site or in the project vicinity that may qualify as tribal cultural resources.

ANALYSIS

The City carefully considered the information provided by the Gabrieleño in support of their claim that this project has the potential to impact tribal cultural resources, and the tribe's request for the City to require its proposed mitigation measures to mitigate those potential impacts. The City has concluded that there is no substantial evidence to support a determination that this project could reasonably foreseeably impact tribal cultural resources.

During its review, Planning Staff evaluated the relevance and credibility of each piece of submitted information alleged to be related to the Project Site, determined the geographic distance between any stated tribal cultural resource and the Project Site, and evaluated the truthfulness, qualifications and integrity of any facts offered by the sources and information provided.

Trade Routes

In order to evaluate whether Olympic Boulevard served as an historic trade route for various tribes, Planning Staff had requested that the Gabrieleño provide documents to show recordation of prior artifact discoveries on or around the Project Site. In response, the Gabrieleño submitted an 1901 and 1903 map from the US Geological Survey and an aerial satellite image illustrating the Project vicinity with an overlay of the 1938 map; and a map undated prepared by Title Insurance and Trust Company illustrating The Old Spanish and Mexican Ranchos of Los Angeles County. However, for any of the provided maps, Planning Staff determined that the scale and lack of details on the maps were insufficient to determine if the Project Site is an important or independent feature of any proposed tribal cultural resource. For some of the submitted documentation, no actual information source about the publisher or author was provided. Many documents also included no explanation to support the claims being presented by the tribe. For all these reasons, Planning Staff determined this information was not credible to support the identification of a tribal cultural resource as defined by Public Resources Code Section 21704.

The Gabrieleño also provided several webpages with general background information about sacred landscapes, tribal cultural landscapes, trails to freeways, and the Spanish Period Rancherias. The subject matter of these documents is not within a ½ mile of the Project Site. Therefore, the submitted documentation is insufficient to support a claim that the Project Site should be treated as a tribal cultural resource.

CONCLUSION

In conclusion, the information provided by the Gabrieleño did not demonstrate that the Project Site is a tribal cultural resource. The City has determined that the Proposed Project will have no potential direct, and reasonably foreseeable indirect, impacts on tribal cultural resources.

However, in the unlikely event that tribal cultural resources are inadvertently discovered during the excavation and grading of the Project Site, the City will include the following Condition of Approval as part of the recommended project approvals:

- **Tribal Cultural Resource Inadvertent Discovery.** In the event that objects or artifacts that may be tribal cultural resources are encountered during the course of any ground disturbance activities (excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, pounding posts, augering, backfilling, blasting, stripping topsoil or a similar activity), all such activities shall temporarily cease on the project site until the potential tribal cultural resources are properly assessed and addressed pursuant to the process set forth below:

- Upon a discovery of a potential tribal cultural resource, the project Permittee shall immediately stop all ground disturbance activities and contact the following: (1) all California Native American tribes that have informed the City they are traditionally and culturally affiliated with the geographic area of the proposed project; (2) and the Department of City Planning at (213) 978-1454.

- If the City determines, pursuant to Public Resources Code Section 21074 (a)(2), that the object or artifact appears to be tribal cultural resource, the City shall provide any effected tribe a reasonable period of time, not less than 14 days, to conduct a site visit and make recommendations to the project Permittee and the City regarding the monitoring of future ground disturbance activities, as well as the treatment and disposition of any discovered tribal cultural resources.

- The project Permittee shall implement the tribe's recommendations if a qualified archaeologist, retained by the City and paid for by the project Permittee, reasonably concludes that the tribe's recommendations are reasonable and feasible.

- The project Permittee shall submit a tribal cultural resource monitoring plan to the City that includes all recommendations from the City and any effected tribes that have been reviewed and determined by the qualified archaeologist to be reasonable and feasible. The project Permittee shall not be allowed to recommence ground disturbance activities until this plan is approved by the City.

- If the project Permittee does not accept a particular recommendation determined to be reasonable and feasible by the qualified archaeologist, the project Permittee may request mediation by a mediator agreed to by the Permittee and the City who has the requisite professional qualifications and experience to mediate such a dispute. The project Permittee shall pay any costs associated with the mediation.

- The project Permittee may recommence ground disturbance activities outside of a specified radius of the discovery site, so long as this radius has been reviewed by the qualified archaeologist and determined to be reasonable and appropriate.

- Copies of any subsequent prehistoric archaeological study, tribal cultural resources study or report, detailing the nature of any significant tribal cultural resources, remedial actions taken, and disposition of any significant tribal cultural resources shall be submitted to the South Central Coastal Information Center (SCCIC) at California State University, Fullerton.

Notwithstanding the above, any information determined to be confidential in nature, by the City Attorney's office, shall be excluded from submission to the SCCIC or the general public under the applicable provisions of the California Public Records Act, California Public Resources Code, and shall comply with the City's AB 52 Confidentiality Protocols.

Furthermore, the following Regulatory Compliance Measures are implemented for all projects citywide:

- **Regulatory Compliance Measure CR-4 (Human Remains):** If human remains are encountered unexpectedly during construction demolition and/or grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code (PRC) Section 5097.98. In the event that

human remains are discovered during excavation activities, the following procedure shall be observed:

- Stop immediately and contact the County Coroner:
  1104 N. Mission Road
  Los Angeles, CA 90033
  323-343-0512 (8 a.m. to 5 p.m. Monday through Friday) or
  323-343-0714 (After Hours, Saturday, Sunday, and Holidays)

If the remains are determined to be of Native American descent, the Coroner has 24 hours to notify the Native American Heritage Commission (NAHC).

The NAHC will immediately notify the person it believes to be the most likely descendent of the deceased Native American.

- The most likely descendent has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.

If the owner does not accept the descendant's recommendations, the owner or the descendent may request mediation by the NAHC.

- **Regulatory Compliance Measure RC-CR-2 (Archaeological):** If archaeological resources are discovered during excavation, grading, or construction activities, work shall cease in the area of the find until a qualified archaeologist has evaluated the find in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. Personnel of the proposed Modified Project shall not collect or move any archaeological materials and associated materials. Construction activity may continue unimpeded on other portions of the Project site. The found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2.

  - Distinctive features, finishes and construction techniques or examples of skilled craftsmanship which characterize an historic property shall be preserved.

  - Deteriorated historic features shall be repaired rather than replaced. Where the severity if deterioration requires replacement of a distinctive historic feature, the new feature shall match the old in design, color, texture, and other visual qualities, and where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

  - Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

  - Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

  - New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

- New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

EXHIBIT A
Project Description

The Proposed Project includes the demolition of an existing commercial retail building, related surface parking, and 5 residential buildings (two single-family residences and three multi-family residences) for the construction of a new 7-story mixed-use structure above two levels of subterranean parking with excavations to a maximum depth of 32 feet. The Project would contain 252 dwelling units, of which 46 dwelling units would be designated as restricted affordable to Very Low Income Households, and 32,100 square feet of retail space. The Project would contain a total of 270,198 square feet of floor area and a 6.05:1 Floor Area Ratio (FAR) across the Project Site, 144,251 square feet of floor area and an FAR of 5.79:1 in the C2-1 Zone and 125,948 square feet of floor area and a FAR of 6.39:1 in the R4-1 Zone. The Project would be 85 feet in height with roof structures up to 91 feet in height. The Project would include 311 parking spaces (231 residential spaces and 80 commercial spaces).

EXHIBIT B
Project Timeline

May 9, 2018	The City mailed AB 52 letter via US Mail.
May 18, 2018	The City received a letter dated May 14, 2018 from the Gabrieleno Band of Mission Indians – Kizh Nation ("Gabrieleno") requesting consultation.
May 18, 2018	Monique Acosta sent email to the Gabrieleno requesting a consultation via conference call. Email to Gabrieleno was returned and sent another email to redirected email address.
May 25, 2018	Monique Acosta sent a second email to the Gabrieleno requesting a consultation via conference call.
May 25, 2018	Brandy Salas responded via email that a date will be coordinated on May 29, 2018.
June 11, 2018	The Gabrieleno requested appointment confirmation for phone consultation on June 14, 2018 at 1:00 pm.
June 12, 2018	Monique Acosta replied via email confirming appointment.
June 14, 2018	First consultation appointment via conference call. In attendance was Christina Toy-Lee, Iris Wan and Monique Acosta. Tribal Representatives in attendance included Matthew Teutimez and Andrew Salas. Andrew Salas, Tribal Chair, requested to reschedule the appointment due to a personal emergency.
June 14, 2018	In advance of our conference call on June 15th, the Gabrieleno provided three maps and Tribal Cultural Resources mitigation measures.
June 15, 2018	Called into the conference number provided by the Gabrieleno, but Tribal Representatives never joined the call. Tribal Representatives emailed Monique Acosta stating they were waiting on City's attendance for the conference call. A miscommunication between parties.
June 15, 2018	Monique Acosta sent email requesting another consultation appointment via phone. Tribal Representatives provided a date City Staff was not available. Monique Acosta sent an email providing dates and times City was available.
June 15, 2018	DCP Staff discussed maps and mitigation measures with City Attorney.
June 19, 2018	Project taken to Environmental Staff Advisory Committee (ESAC).
June 20, 2018	Monique Acosta sent email requesting a consultation appointment via phone.

June 28, 2018	Second consultation appointment via conference call. In attendance was Iris Wan, Monique Acosta and Nuri Cho. Tribal Representatives in attendance included Matthew Teutimez and Andrew Salas.
June 28, 2018	Gabrieleno emailed 1938 map legend, email from Terrie Robinson to DCP Staff (Jason Chan and Stacy Farfan) on an unrelated project regarding AB 52 Technical Advisory specifically to address oral history.
June 29, 2018	Gabrieleno emailed website links regarding Native American Netroots, Aboriginal Pathways and Trade Routes, Native American Trails; and Cultural Resources from an Indigenous Perspective. Information was also provided for short essays by Michael Jacob Rochlin and information about the Rancherias.
June 29, 2018	Monique Acosta emailed Gabrieleno thanked them for the information and advised it would be discussed with the City Attorney.
July 3, 2018	DCP Staff follow up discussion with City Attorney regarding phone consultation and information provided on June 28th and 29th.
July 16, 2018	Nuri Cho emailed Gabrieleno requesting another conference call. Gabrieleno advised they would follow up the next day.
July 18, 2018	Gabrieleno emailed and requested City Staff's availability for July 18th or 19th and advised they had an appointment scheduled for July 18th at 4:00 pm.
July 18, 2018	Nuri Cho emailed that City Staff was not available on July 19th and requested July 24th.
July 19, 2018	Gabrieleno emailed and stated that they are available on August 23rd and asked the lead agency to confirm.
July 19, 2018	Nuri Cho left a message with Admin Staff of Gabrieleno to schedule a consultation. Nuri Cho also emailed and requested conference call for the week of July 23 – 27.
July 24, 2018	Gabrieleno emailed and advised they have scheduled consultations with lead agencys and will do their best to contact City Staff later in the day. Gabrieleno contacted City Staff after business hours via phone and email.
July 31, 2018	Nuri Cho emailed Gabrieleno asking if City Staff can call Gabrieleno on August 1st.
August 2, 2018	Nuri Cho emailed Gabrieleno requesting detailed written responses and supporting documents to specific questions by August 9th.
August 6, 2018	CHRIS and SLF reports provided by Meridian.

August 13, 2018 Gabrieleno emailed and requested a phone consultation.

August 14, 2018 Nuri Cho emailed Gabrieleno asking about their earliest availability.

August 14, 2018 Gabrieleno emailed and stated that they are available on August 15th for a phone consultation.

Gabrieleno emailed again several hours later stating that they are no longer available on August 15th and that the next availability is August 29th.

August 14, 2018 Nuri Cho emailed and reminded Gabrieleno of an email dated August 2nd sent by the lead agency requesting Gabrieleno to provide detailed written responses to questions in the email with supporting documents.

August 14, 2018 Gabrieleno emailed and advised of a death in their family and that Mr. Salas would reply as soon as possible.

August 16, 2018 Monique Acosta emailed Gabrieleno requesting a detailed written response and supporting documents to specific questions by August 24th.

August 16, 2018 Gabrieleo emailed and advised of the death in their family and said a conference call could be scheduled after August 24th.

August 17, 2018 Monique Acosta emailed Gabrieleno and requested a detailed written response and supporting documents to specific questions by August 31st.

August 28, 2018 Gabrieleo emailed a written response to the questions asked in the August 16th email and included six attachments: Ranchos of Los Angeles map; Email from Terri Robinson to DCP Staff regarding AB 52 consultation and NAHC oral history explanation dated September 20, 2017; Email from NAHC to Gabrieleno regarding Sacred Lands File explanation dated August 20, 2018; Letter from Gary Stickel to Gabrieleno dated August 22, 2018; Information for Kirkman map dated April 5, 1938; and Gabrieleno Tribal Cultural Resources Mitigation Measures.

PALEOWEST archaeology

626.602.8005 | paleowest.com | 517 South Ivy Avenue | Monrovia, CA 91016

August 3, 2018

Mr. Ned Baldwin
Senior Project Manager
Meridian Consultants, LLC
910 Hampshire Road, Suite V
Westlake Village, CA 91361
Transmitted via email to nbaldwin@meridianconsultantsllc.com

RE: Cultural Resource Records Review for the 3170 West Olympic Boulevard Project in Los Angeles, Los Angeles County, California

Dear Mr. Baldwin:

At the request of Meridian Consultants, LLC, PaleoWest Archaeology conducted a cultural resource records review for the 3170 West Olympic Bouleward Project in Los Angeles, Los Angeles County, California. This cultural resource study was limited to a cultural resource literature review and records search of the California Historic Resource Information System (CHRIS) and a review of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC). This memorandum summarizes the results of the cultural resource records review for the Project.

The literature review and records search was conducted by Roberta Thomas, Senior Archaeologist, on July 31, 2018 at the South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The records search included the Project area as well as a quarter-mile radius. The purpose of the records search was to identify any known cultural resources within the immediate vicinity of the Project area. The records search also included a review of the Office of Historic Preservation Archaeological Determination of Eligibility and the Office of Historic Preservation Directory of Historic Properties Data File.

The records search indicated that no less than four previous studies have been conducted within a quarter-mile of the Project area since 2007 (Table 1). None of the four studies include the Project area. In addition, no prehistoric or historic-period archaeological resources were identified as a result of the records search. However, four previously recorded historic-period built environment resources were identified within a quarter-mile radius of the Project. The building located within the Project area was constructed in 1955 and, based on the results of the records search, has not been previously recorded. Should the proposed Project include any physical modifications to this building, the building may need to be assessed for historical significance. The four previously recorded historic-period built environment resources are identified in Table 2 and discussed in further detail below.

Table 1
Previous Cultural Resource Studies within a Quarter-Mile of the Project Area

Report No.	Year	Author(s)	Title
LA-05352	2000	Duke, Curt	Cultural Resource Assessment for AT&T Fixed Wireless Services Facility Number, R314.2, County of Los Angeles, California
LA-08266	2007	Wood, Catherine M.	Archaeological Survey Report for the Ardmore Heights Apartments Project Located at 959-961 and 963-973 S. Ardmore Avenue, Los Angeles, California
LA-10387	2009	Bonner, Wayne H. and Kathleen Crawford	Direct APE Historic Architectural Assessment for T-Mobile USA Candidate SV00279A(Mod), 3075 1/2 Harrington Ave, Los Angeles, Los Angeles County, California
LA-12050	2012	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA03613F (SC613 Kingsley), 901 South Kingsley Drive, Los Angeles, Los Angeles County, California

Table 2
Cultural Resources within a Quarter-Mile of the Project Area

Primary No.	Age	Type	Description	Eligibility Determination
19-167288	Historic	Building	Pio Pico Branch Library	N/A
19-188207	Historic	Building	Wilshire Center Apt Historic District	2D2
19-188500	Historic	Building	3075 Harrington Street; multiple-family residence	6Y
19-190270	Historic	Building	Kingsley House	Not recommended eligible for NRHP

The Pio Pico Branch Library (P-19-167288, historic-period building) was a 1923 library building located at 3255 Connecticut Street. P-19-167288 is no longer extant and, therefore, is no longer considered a historic resource (Los Angeles Conservancy 1978). The Wilshire Center Apartment Historic District (P-19-188207, historic-period building) is located two blocks south of Wilshire Boulevard and east of Western Avenue It is comprised of several historic-period apartment buildings. The Wilshire Center Apartment District has been recommended eligible for the National Register of Historic Places (NRHP) under Criteria A and C. (Historic Resources Group 2006). 3075 Harrington Street (P-19-188500, historic-period building) is comprised of an 18-unit Beaux Arts-style multiple-family residence constructed in 1928. P-19-188500 was not recommended eligible for the NRHP, however no recommendation for California Register of Historical Resources (CRHR) eligibility was made (Michael Brandman Associates 2009). The Kingsley House (P-19-190270, historic-period building) is located at 901 South Kingsley Avenue and is comprised of a five-story Spanish Eclectic-style multiple-family residence that was constructed in 1930. The Kingsley House was not recommended eligible for the NRHP, however no recommendation for CRHR eligibility was made (Michael Brandman Associates 2012).

PaleoWest contacted the NAHC for a review of the SLF on July 19, 2018. The objective of the SLF search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within

the immediate vicinity of the Project area. The NAHC responded on July 25, 2018, stating that the SLF was completed with negative results. However, the NAHC did state that the absence of specific site information in the SLF does not indicate the absence of Native American cultural resources. As such, the NAHC recommended that 16 Native American individuals and/or tribal groups be contacted to elicit information regarding cultural resource issues related to the proposed Project (see Exhibit A for a copy of the response letter received from the NAHC).

It has been a pleasure working with you on this Project. If you have any questions, please do not hesitate to contact me at jcastells@paleowest.com.

Sincerely,

Justin Castells

Justin Castells, MA
Archaeologist
PaleoWest Archaeology

References

Historic Resources Group
2006 Department of Parks and Recreation 523 Series Forms for P-19-188207. Housed at the South Central Coastal Information Center, California State University, Fullerton.

Los Angeles Conservancy
1978 Department of Parks and Recreation 523 Series Forms for P-19-167288. Housed at the South Central Coastal Information Center, California State University, Fullerton.

Michael Brandman Associates
2009 Department of Parks and Recreation 523 Series Forms for P-19-188500. Housed at the South Central Coastal Information Center, California State University, Fullerton.

Michael Brandman Associates
2012 Department of Parks and Recreation 523 Series Forms for P-19-190270. Housed at the South Central Coastal Information Center, California State University, Fullerton.

STATE OF CALIFORNIA — Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

July 25, 2018

Justin Castells

PaleoWest Archaeology

Sent by Email: jcastells@paleowest.com

Re: 18-259 3170 W Olympic Ave, Los Angeles County

Dear Mr. Castells,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not preclude the presence of cultural resources in any project area. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native Americans tribes who may have knowledge of cultural resources in the project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at 916-573-1033 or frank.lienert@nahc.ca.gov.

Sincerely,

Frank Lienert
Associate Governmental Program Analyst

Native American Heritage Commission
Native American Contacts
July 25, 2018

Santa Ynez Band of Chumash Indians
Kenneth Kahn. Chairperson
P.O. Box 517 — Chumash
Santa Ynez , CA 93460
kkahn@santaynezchumash.org
(805) 688-7997

(805) 686-9578 Fax

Fernandeno Tataviam Band of Mission Indians
Rudy Ortega Jr., Tribal President
1019 Second Street, Suite 1 — Fernandeno
San Fernando , CA 91340 — Tataviam
rortega@tataviam-nsn.us
(818) 837-0794

(818) 837-0796 Fax

Barbareno/Ventureno Band of Mission Indians
Julie Lynn Tumamait-Stenslie, Chair
365 North Poli Ave — Chumash
Ojai , CA 93023
itumamait@hotmail.com
(805) 646-6214

Barbareno/Ventureno Band of Mission Indians
Patrick Tumamait
992 El Camino Corto — Chumash
Ojai , CA 93023
(805) 216-1253 Cell

Kitanemuk & Yowlumne Teion Indians
Delia Dominguez, Chairperson
115 Radio Street — Yowlumne
Bakersfield , CA 93305 — Kitanemuk
deedominguez@juno.com
(626) 339-6785

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 — Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 483-3564 Cell

(626) 286-1262 Fax

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 — Gabrielino Tongva
Los Angeles , CA 90012
sgoad@gabrielino-tongva.com
(951) 807-0479

San Manuel Band of Mission Indians
Lee Clauss, Director-CRM Dept.
26569 Community Center Drive — Serrano
Highland , CA 92346
lclauss@sanmanuel-nsn.gov
(909) 864-8933

(909) 864-3370 Fax

Kern Valley Indian Community
Robert Robinson, Chairperson
P.O. Box 1010 — Tubatulabal
Lake Isabella , CA 93283 — Kawaiisu
brobinson@lwvisp.com
(760) 378-2915 Cell

Gabrielino-Tongva Tribe
Linda Candelaria, Chairperson
No Current Address on File — Gabrielino

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes with regard to cultural resources assessments for the proposed 18-259 3170 W Olympic Ave, Los Angeles County

Native American Heritage Commission
Native American Contacts
July 25, 2018

Soboba Band of Luiseno Indians
Joseph Ontiveros. Cultural Resource Department
P.O. BOX 487 Luiseno
San Jacinto , CA 92581 Cahuilla
iontiveros@soboba-nsn.gov
(951) 663-5279
(951) 654-5544, ext 4137
(951) 654-4198 Fax

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas. Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
admin@gabrielenoindians.org
(626) 926-4131

Barbareno/Ventureno Band of Mission Indians
Eleanor Arrellanes
P.O. Box 5687 Chumash
Ventura , CA 93005
(805) 701-3246

Barbareno/Ventureno Band of Mission Indians
Raudel Joe Banuelos, Jr.
331 Mira Flores Court Chumash
Camarillo , CA 93012
(805) 427-0015

Gabrielino-Tongva Tribe
Charles Alvarez. Councilmember
23454 Vanowen St. Gabrielino
West Hills , CA 91307
roadkingcharles@aol.com
(310) 403-6048

San Manuel Band of Mission Indians
Lynn Valbuena
26569 Community Center Dr. Serrano
Highland , CA 92346
(909) 864-8933

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes with regard to cultural resources assessments for the proposed 18-259 3170 W Olympic Ave, Los Angeles County

Gabrieleno Band of Mission Indians
-Kizh Nation-

Re: Tribal Cultural Resources Mitigation Measures within Kizh Nation Tribal Territory.

Note: In order to avoid compliance issues with the following laws, all Native American Monitoring shall be conducted by a documented lineal descendant from the ancestral Tribe of the project area.

- *The Native American Graves Protection and Repatriation Act (NAGPRA), Public Law - 101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048.*
- *CEQA Guidelines Section 15064.5, PRC 5097.98 (d)(1).*
- *The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).*

If you are receiving these measures, The Gabrieleño Band of Mission Indians Kizh -Nation are the direct lineal descendants of your project area. The Kizh Nation ONLY responds and consults on projects within their ANCESTRAL tribal territory. Therefore, to remain in compliance with above referenced laws and to enable our Tribe with the ability to protect and preserve our last remaining and irreplaceable Tribal Cultural Resources, it is recommended that the ***project applicant*** *retain a qualified professional tribal monitor/consultant from the Gabrieleño Band of Mission Indians Kizh -Nation. The Kizh Nation possesses Tribal archives including documented historical information as well as multiple members who possess unique knowledge derived from oral tradition passed down through generations of the Tribe in order to provide the expertise needed to identify whether a project is located within a culturally sensitive area given its proximity to village areas, commerce areas, recreation areas, ceremonial areas, and burial locations.*

Native American Heritage Commission (NAHC) Guidelines for Native American Monitors/Consultants (approved 9/13/05): By acting as a liaison between Native American, archaeologist, developers, contactors and public agency, a Native American monitor/consultant can ensure that cultural features are treated appropriately from the Native American point of view. This can help others involved in a project to coordinate mitigation measures. These guidelines are intended to provide prospective monitors/consultants, and people who hire monitors/consultants, with an understanding of the scope and extant of knowledge that should be expected.

Mitigation Guidelines for Tribal Cultural Resources (TCRs): CEQA now defines TCRs as an independent element separate from archaeological resources. Environmental documents shall address a separate Tribal Cultural Resources section that includes a thorough analysis of the impacts to only TCRs and also includes separate and independent mitigation measures created with tribal input under AB-52 consultations. Therefore, all agreements, mitigation, and conditions of approval regarding TCR's shall be handled solely with the Tribal Government and conversely all agreements, mitigation, and conditions of approval regarding Archaeological Resources shall be handled by an Archaeological Resource Company.

Retain a Native American Monitor/Consultant: The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

Unanticipated Discovery of Tribal Cultural and Archaeological Resources: Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and

Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

Unanticipated Discovery of Human Remains and Associated Funerary Objects:
Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

Resource Assessment & Continuation of Work Protocol:
Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

Kizh-Gabrieleno Procedures for burials and funerary remains:
If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be

treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

Treatment Measures:
Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

Professional Standards*:* Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

Gabrieleño Band of Mission Indians
Kizh Nation

Attachment A

Kizh Nation Ancestral Tribal Territory extended along the coast from Malibu Creek in Los Angeles County down to Aliso Creek in Orange County and encompassed the Channel Islands of Catalina (Pimugna), San Nicolas (Haraasnga), and San Clemente (Kiinkenga). Our inland border was the San Gabriel Mountains (Hidakupa) and eastwardly our territory extended to parts of San Bernardino (Waatsngna), Orange, and Riverside counties.

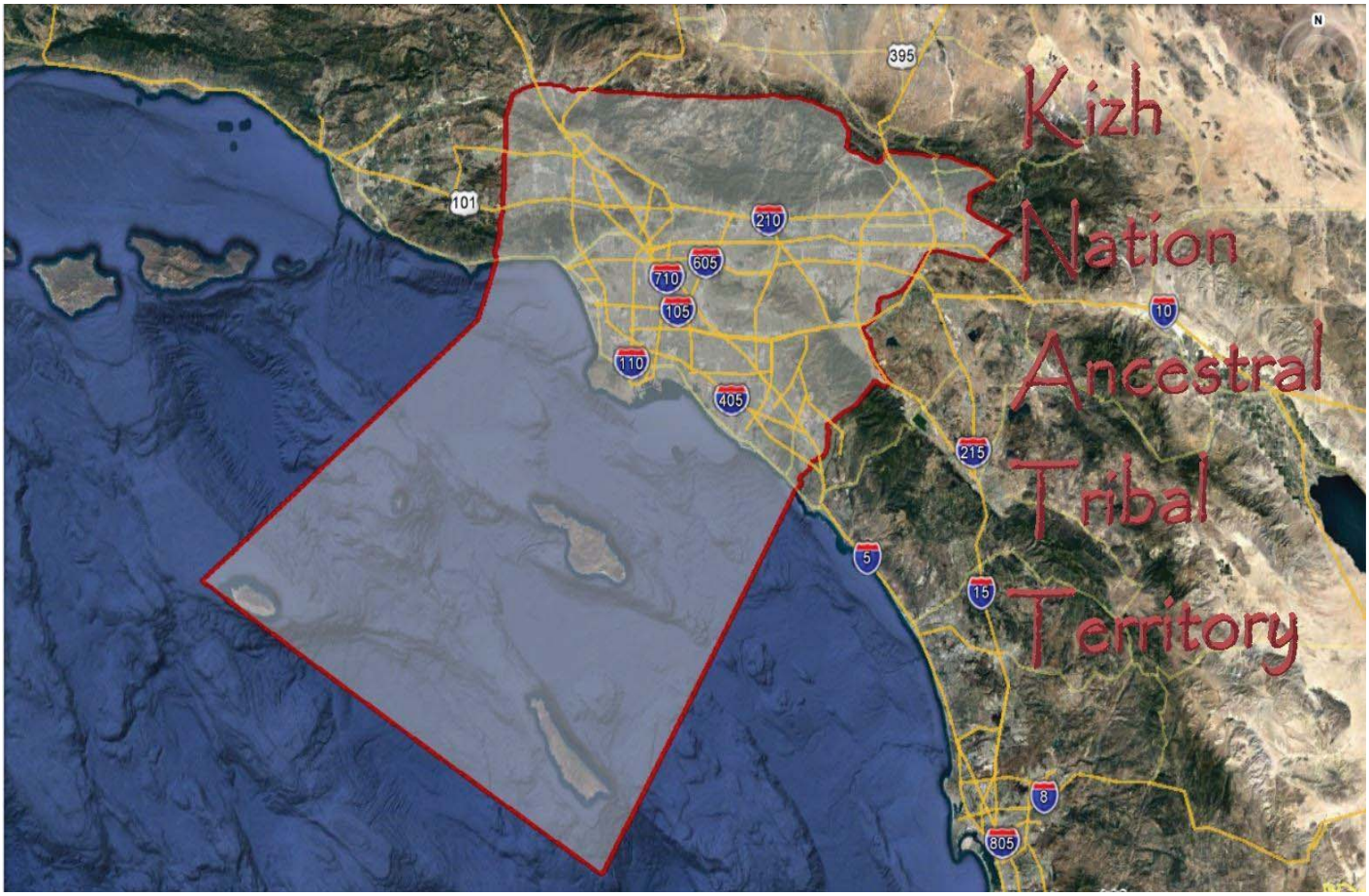


EXHIBIT F
Information Submitted by the Gabrieleño

DATE	INFORMATION	EVALUATION AND CONCERNS
06/14/2018	US Geological Survey: 1901 Map with Google Earth overlay showing ancient watercourses.	The City has determined that the marked locations are not within a half-mile vicinity of the Project Site.
06/14/2018	US Geological Survey: 1903 Map with Google Earth overlay showing ancient watercourses.	The City has determined that the marked locations are not within a half-mile vicinity of the Project Site.
06/14/2018	Satellite Imagery: Aerial screenshot of Project Site with overlay markings of Tribal Cultural Features (image source not provided but stated to be from the 1938 map of Los Angeles County), cited by the Gabrieleño as nearby trading routes and tribal villages.	The City has determined that the marked locations are not within a half-mile vicinity of the Project Site.
06/14/2018	Kizh Nation Mitigation Measures: The Gabrieleno submitted proposed Mitigation Measures for mitigation adverse impacts to potential tribal cultural resources on the Project Site.	This information was reviewed as part of the impact analysis. Please see City's existing Regulatory Compliance Measures.
06/28/2018	Los Angeles Public Library: 1938 Map legend of historic sites, old highways, battle fields of Spanish – Mexican – Early American in Old Los Angeles County. Portola's first Exploring Route, El Camino Real, Mission Roads, and Old Roads. Complied by Geo W. Kirkman.	The City has determined that the marked locations are not within a half-mile vicinity of the Project Site.
06/28/2018	Terri Robinson Email, 09/20/2017: An email from Terri Robinson, General Counsel for NAHC, to Department of City Planning Staff (Jason Chan and Stacy Farfan) regarding AB 52 technical advisory and oral history.	The City has received and filed this information regarding oral history and how it's applied in AB 52.
06/29/2018	Native American Netroots: An informational webpage about sacred landscapes.	The City has determined that the webpage does not address an area within a half-mile vicinity of the Project Site.

EXHIBIT F
Information Submitted by the Gabrieleño

06/29/2018	Cultural Resources from an Indigenous Perspective: An informational webpage about guiding principles of self-determination, a cultural landscape approach for integrated resource management, and tribal cultural landscapes.	The City has determined that the webpage does not address an area within a half-mile vicinity of the Project Site.
06/29/2018	From trails to freeways: Information provided for short essays by Michael Jacob Rochlin.	The City has determined that the information does not address an area within a half-mile vicinity of the Project Site.
06/29/2018	The Rancherias: Information about the Spanish Period.	The City has determined that the information does not address an area within a half-mile vicinity of the Project Site.
08/28/2018	Title Insurance and Trust Company: The Old Spanish and Mexican Ranchos of Los Angeles County.	The City has determined that the information does not address an area within a half-mile vicinity of the Project Site.
08/28/2018	Terri Robinson Email, 09/20/2017: An email from Terri Robinson, General Counsel for NAHC, to Department of City Planning Staff (Jason Chan and Stacy Farfan) regarding AB 52 technical advisory and oral history.	The City has received and filed this information regarding oral history and how it's applied in AB 52.
08/28/2018	Gary Stickel Letter, 08/22/2018: A letter from Gary Stickel, Principal Consulting Archaeologist with Environmental Research Archaeologists: a Scientific Consortium. The letter states Mr. Stickel's professional opinion about a traditional site survey and the need for a proper monitoring program.	The City has received and filed this information regarding Gary Stickel's professional opinion on traditional site surveys and a proper monitoring program.
08/28/2018	Los Angeles Public Library: 1938 Map legend of historic sites, old highways, battle fields of Spanish – Mexican – Early American in Old Los Angeles County. Portola's first Exploring Route, El Camino Real, Mission Roads, and Old Roads. Complied by Geo W. Kirkman.	The City has determined that the marked locations are not within a half-mile vicinity of the Project Site.

EXHIBIT F
Information Submitted by the Gabrieleño

08/28/2018	Kizh Nation Mitigation Measures: The Gabrieleno submitted proposed Mitigation Measures for mitigation adverse impacts to potential tribal cultural resources on the Project Site.	This information was reviewed as part of the impact analysis. Please see City's existing Regulatory Compliance Measures.
08/31/2018	Gabrieleno Email, 08/31/2018: An email from Gabrieleno with information about oral traditions and archaeology and the use of oral tradition and archaeological research.	The City has received and filed this information regarding Native American oral traditions.

DEPARTMENT OF
CITY PLANNING

CITY PLANNING COMMISSION

DAVID H. J. AMBROZ
PRESIDENT

RENEE DAKE WILSON
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COMMISSION OFFICE MANAGER
(213) 978-1300

CITY OF LOS ANGELES
CALIFORNIA

ERIC GARCETTI
MAYOR

EXECUTIVE OFFICES
200 N. SPRING STREET, ROOM 525
LOS ANGELES, CA 90012-4801

VINCENT P. BERTONI, AICP
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(213) 978-1271

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EXECUTIVE OFFICER
(213) 978-1272

LISA M. WEBBER, AICP
DEPUTY DIRECTOR
(213) 978-1274

http://planning.lacity.org

May 9, 2018

CASE No.: ENV-2016-3663-EAF
Project Address: 3170, 3188 W. Olympic Boulevard, 1006, 1010, 1012, 1014, 1020 S. Serrano Avenue, and 1007, 1011, 1015, 1017, 1019, 1021 S. Hobart Boulevard
Community Plan: Wilshire

Dear Tribal Representative:

This letter is to inform you that the Los Angeles Department of City Planning is reviewing the following proposed project:

The demolition of an existing commercial retail building, related surface parking, and 5 residential buildings (two single-family residences and three multi-family residences) for the construction of a new 7-story mixed-use structure above two levels of subterranean parking with excavations to a maximum depth of 32 feet. The Project would contain 252 dwelling units, of which 46 dwelling units would be designated as restricted affordable to Very Low Income Households, and 32,100 square feet of retail space. The Project would contain a total of 270,198 square feet of floor area and a 6.05:1 Floor Area Ratio (FAR) across the Project Site, 144,251 square feet of floor area and an FAR of 5.79:1 in the C2-1 Zone and 125,948 square feet of floor area and a FAR of 6.39:1 in the R4-1 Zone. The Project would be 85 feet in height with roof structures up to 91 feet in height. The Project would include 311 parking spaces (231 residential spaces and 80 commercial spaces).

Per AB 52, you have the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. You have 30 calendar days from receipt of this letter to notify us in writing that you wish to consult on this project. Please provide your contact information and mail your request to:

Los Angeles Department of City Planning
Attn: Monique Acosta
200 N. Spring Street, Room 621
Los Angeles, CA 90012

Sincerely,

Monique Acosta

Monique Acosta, City Planning Associate
Email: monique.acosta@lacity.org
Phone No.: (213) 978-1173

City of Los Angeles
Department of City Planning

Affidavit of Mailing

Case Number: ENV-2016-3663-EAF

This Affidavit concerns the NAHC Tribal Consultation Letter.

I, Maria Reyes, certify that I am an employee of the City of Los Angeles, and on May 10, 2018, mailed, postage prepaid, to the applicable 5California Native American Tribes parties, as indicated below, on the case indicated above, a true copy of which is attached:

NAHC Tribal Consultation Letter

Check Recipients Below/ Certified Mail# (CM):

- ☒ Fernandeño Tataviam Band of Mission Indians/ CM# 7017 1450 0000 8443 6303
- ☒ Gabrieleño Band of Mission Indians–Kizh Nation / CM# 7017 1450 0000 8443 6396
- ☒ Gabrielino Tongva Indians of California Tribal Council/CM# 7017 1450 0000 8443 6389
- ☒ Gabrielino/Tongva Nation (Sam Dunlap) /CM# 7017 1450 0000 8443 6372
- ☒ Gabrielino/Tongva Nation (Sandonne Goad) /CM# 7017 1450 0000 8443 6365
- ☒ Gabrielino/Tongva San Gabriel Band of Mission Indians /CM# 7017 1450 0000 8443 6358
- ☒ Gabrielino-Tongva Tribe (Charles Alverez) /CM# 7017 1450 0000 8443 6341
- ☒ San Fernando Band of Mission Indians /CM# 7017 1450 0000 8443 6334
- ☒ Soboba Band of Luiseño Indians /CM# 7017 1450 0000 8443 6327
- ☒ Torres Martinez Desert Cahuilla Indians /CM# 7017 1450 0000 8443 6310

Maria Reyes

Staff Signature

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

City of Los Angeles
Department of City Planning
200 N. Spring St. Room 621
Los Angeles, CA 90012

May 14, 2018

Re: AB52 Consultation request for Olympic Blvd, Serrano Ave , and S. Hobert Blvd

Dear Monique Acosta,

Please find this letter as a written request for consultation regarding the above-mentioned project pursuant to Public Resources Code § 21080.3.1, subd. (d). Your project lies within our ancestral tribal territory, meaning belonging to or inherited from, which is a higher degree of kinship than traditional or cultural affiliation. Your project is located within a sensitive area and may cause a substantial adverse change in the significance of our tribal cultural resources. Most often, a records search for our tribal cultural resources will result in a "no records found" for the project area. The Native American Heritage Commission (NAHC), ethnographers, historians, and professional archaeologists can only provide limited information that has been previously documented about California Native Tribes. This is the reason the NAHC will always refer the lead agency to the respective Native American Tribe of the area because the NAHC is only aware of general information and are not the experts on each California Tribe. Our Elder Committee & tribal historians are the experts for our Tribe and are able to provide a more complete history (both written and oral) regarding the location of historic villages, trade routes, cemeteries and sacred/religious sites in the project area. Therefore, to avoid adverse effects to our tribal cultural resources, we would like to consult with you and your staff to provide you with a more complete understanding of the prehistoric use(s) of the project area and the potential risks for causing a substantial adverse change to the significance of our tribal cultural resources.

Consultation appointments are available on Wednesdays and Thursdays at our offices at 910 N. Citrus Ave. Covina, CA 91722 or over the phone. Please call toll free 1-844-390-0787 or email gabrielenoindians@yahoo.com to schedule an appointment.

** Prior to the first consultation with our Tribe, we ask all those individuals participating in the consultation to view a video produced and provided by CalEPA and the NAHC for sensitivity and understanding of AB52. You can view their videos at: http://calepa.ca.gov/Tribal/Training/ or http://nahc.ca.gov/2015/12/ab-52-tribal-training/

With Respect,

Andrew Salas, Chairman

Andrew Salas, Chairman | Nadine Salas, Vice-Chairman | Christina Swindall Martinez, secretary
Albert Perez, treasurer I | Martha Gonzalez Lemos, treasurer II | Richard Gradias, Chairman of the Council of Elders
PO Box 393, Covina, CA 91723 | www.gabrielenoindians.org | gabrielenoindians@yahoo.com

Connect Create Collaborate

Monique Acosta <monique.acosta@lacity.org>

Auto Response: CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

1 message

Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com> Fri, May 18, 2018 at 12:17 PM
To: Monique Acosta <monique.acosta@lacity.org>

YOUR MESSAGE WAS NOT RECEIVED! PLEASE RESEND TO THE CORRECT ADDRESS BELOW.

Hello Everyone,

We have had great success and have grown over the past year! As a result, we updated our contact information to help streamline and improve our communication.

For Tribal inquiries, please email the corresponding address.

- Email **admin@gabrielenoindians.org** for:
    - o General Questions and Info.
    - o AB52/SB18
        - ▪ Consultation Requests
        - ▪ Consultation Scheduling
        - ▪ Consultation Follow-ups
    - o Education Public Speaking for:
        - ▪ Museums
        - ▪ Schools
        - ▪ Colleges
        - ▪ Community Groups

Sorry for any inconvenience. Thanks for your time.

Connect Create Collaborate

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

2 messages

Monique Acosta <monique.acosta@lacity.org> Fri, May 18, 2018 at 12:16 PM
To: gabrielenoindians@yahoo.com
Cc: Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>

Dear Mr. Andrew Salas,

I received your request for consultation regarding Case Nos. CPC-2016-3662-CU-DB-SPR, VTT-74311 and ENV-2016-3663-EAF for properties located at 3170, 3188 W. Olympic Boulevard, 1006, 1010, 1012, 1014, 1020 S. Serrano Avenue, and 1007, 1011, 1015, 1017, 1019, 1021 S. Hobart Boulevard.

I would like to schedule an appointment for consultation regarding the above case numbers. I understand you are available for appointments on Wednesdays and Thursdays by phone or in your office. Please provide some dates and times of your availability starting 5/24/2018 for a meeting by phone.

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

Monique Acosta <monique.acosta@lacity.org> Fri, May 18, 2018 at 12:18 PM
To: admin@gabrielenoindians.org
Cc: Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>

Dear Mr. Andrew Salas,

I received your request for consultation regarding Case Nos. CPC-2016-3662-CU-DB-SPR, VTT-74311 and ENV-2016-3663-EAF for properties located at 3170, 3188 W. Olympic Boulevard, 1006, 1010, 1012, 1014, 1020 S. Serrano Avenue, and 1007, 1011, 1015, 1017, 1019, 1021 S. Hobart Boulevard.

I would like to schedule an appointment for consultation regarding the above case numbers. I understand you are available for appointments on Wednesdays and Thursdays by phone or in your office. Please provide some dates and times of your availability starting 5/24/2018 for a meeting by phone.

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org> Fri, May 18, 2018 at 12:16 PM
To: gabrielenoindians@yahoo.com
Cc: Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>

Dear Mr. Andrew Salas,

I received your request for consultation regarding Case Nos. CPC-2016-3662-CU-DB-SPR, VTT-74311 and ENV-2016-3663-EAF for properties located at 3170, 3188 W. Olympic Boulevard, 1006, 1010, 1012, 1014, 1020 S. Serrano Avenue, and 1007, 1011, 1015, 1017, 1019, 1021 S. Hobart Boulevard.

I would like to schedule an appointment for consultation regarding the above case numbers. I understand you are available for appointments on Wednesdays and Thursdays by phone or in your office. Please provide some dates and times of your availability starting 5/24/2018 for a meeting by phone.

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | F: (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

Connect Create Collaborate

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org> Fri, May 25, 2018 at 9:48 AM
To: admin@gabrielenoindians.org
Cc: Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>

Dear Mr. Salas,

This is our second attempt to contact you via email, our Department would like to schedule an appointment for consultation regarding Case Nos. CPC-2016-3662-CU-DB-SPR, VTT-74311 and ENV-2016-3663-EAF for properties located at 3170, 3188 W. Olympic Boulevard, 1006, 1010, 1012, 1014, 1020 S. Serrano Avenue, and 1007, 1011, 1015, 1017, 1019, 1021 S. Hobart Boulevard. Additionally, I have tried contacting you by phone at the number provided (1-844-390-0787) in your letter dated 5/14/2018 and have left a voicemail message.

I understand you are available for appointments on Wednesdays and Thursdays by phone or in your office. Please provide some dates and times of your availability starting 5/30/2018 for a meeting by phone.

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Fri, May 25, 2018 at 12:06 PM
To: Monique Acosta <monique.acosta@lacity.org>

Hello Monique,

I will give you some times and dates when I get back in the office on Tuesday. I am not in the office today.
Thank you

Brandy Salas
[Quoted text hidden]
--
Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Mon, Jun 11, 2018 at 2:37 PM
To: Monique Acosta <monique.acosta@lacity.org>

Hello Monique

I have you down for a phone consultation on June 14 at 1pm. Please get back to us to confirm.
Thank you

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

[Quoted text hidden]



Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org>
To: Administration Gabrieleno Indians <admin@gabrielenoindians.org>

Tue, Jun 12, 2018 at 9:47 PM

Yes, we have a scheduled appointment.
[Quoted text hidden]
--
[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Wed, Jun 13, 2018 at 12:07 PM
To: Monique Acosta <monique.acosta@lacity.org>

Hello Monique

Here is our call in number (605)475-4038 Access code 422267

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

[Quoted text hidden]

Connect Create Collaborate

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org> Thu, Jun 14, 2018 at 7:20 AM
To: Administration Gabrieleno Indians <admin@gabrielenoindians.org>

I have the access code written down as 42267 when I confirmed the consultation via phone; however, the previous email shows 422267. Please confirm if the access code is 422267 or 42267?

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Thu, Jun 14, 2018 at 2:06 PM
To: Monique Acosta <monique.acosta@lacity.org>

It is 422267

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

Olympic - Serrano - Hobart project

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Thu, Jun 14, 2018 at 9:28 PM
To: Monique Acosta <monique.acosta@lacity.org>

Ms. Acosta,

As discussed over the phone, attached are screenshots of historical maps overlaid on a google earth imagery with your project area identified.

These maps show the waterways, trade routes, and prominent villages that occurred on this land which was heavily used for millennia by ancient people. We will explain our concerns further during the consultation, but wanted to provide you these reference maps for your files.

Also, we are including our Tribal Government's recommended mitigation for this project.

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

4 attachments



Olympic Serrano Hobart_1901.JPG
282K

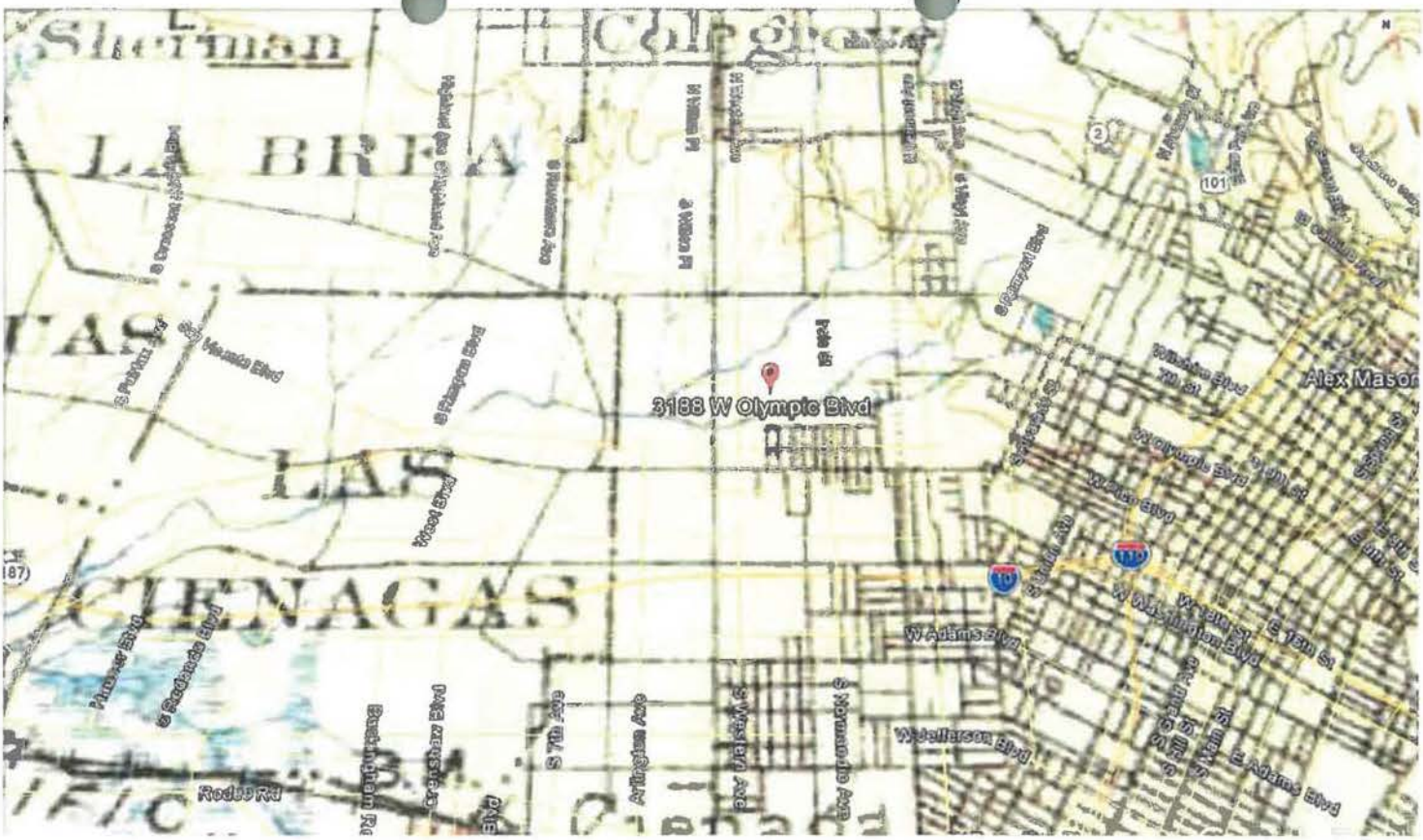


Olympic Serrano Hobart_1903.JPG
306K

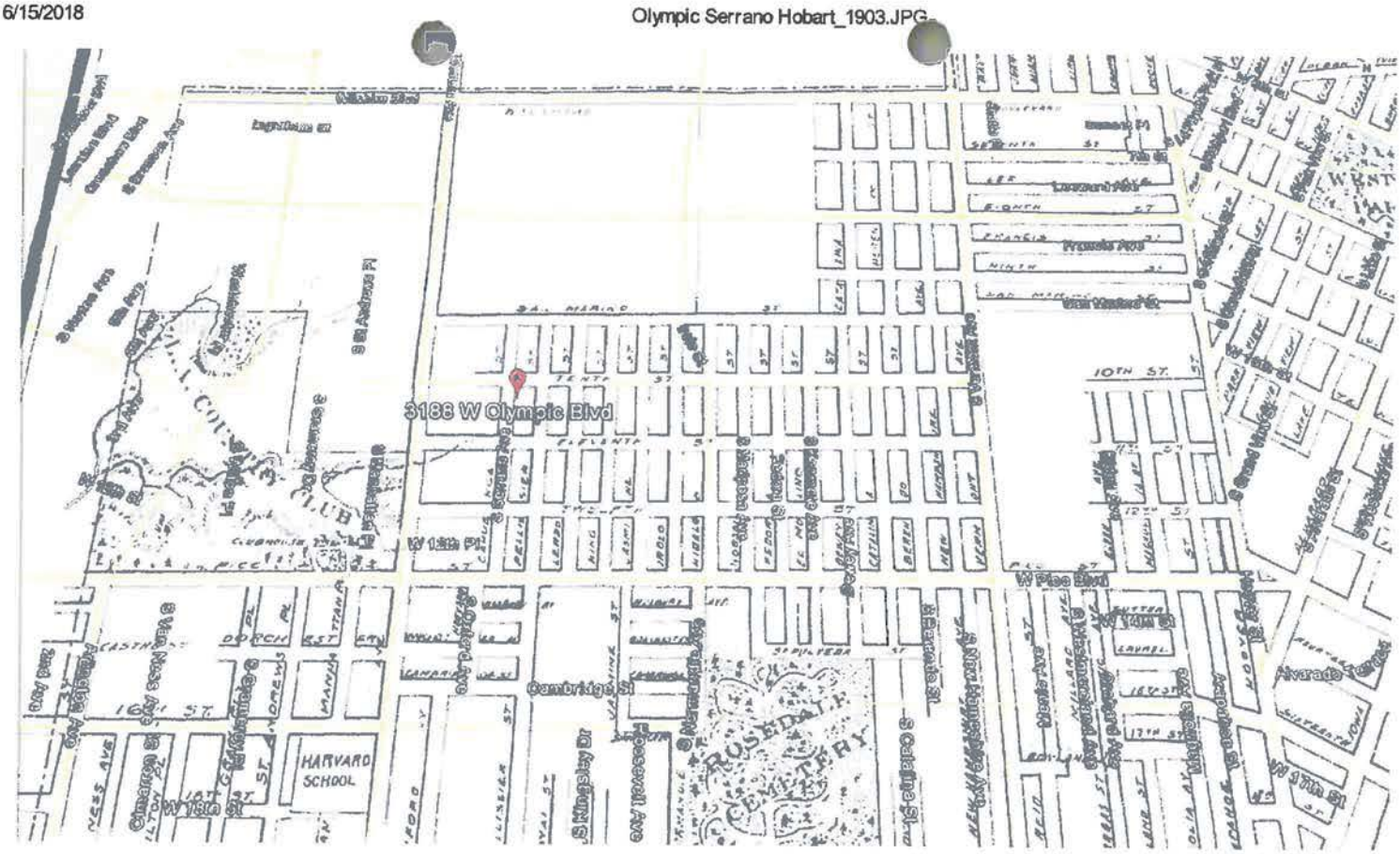


Olympic Serrano Hobart_1938.JPG
380K

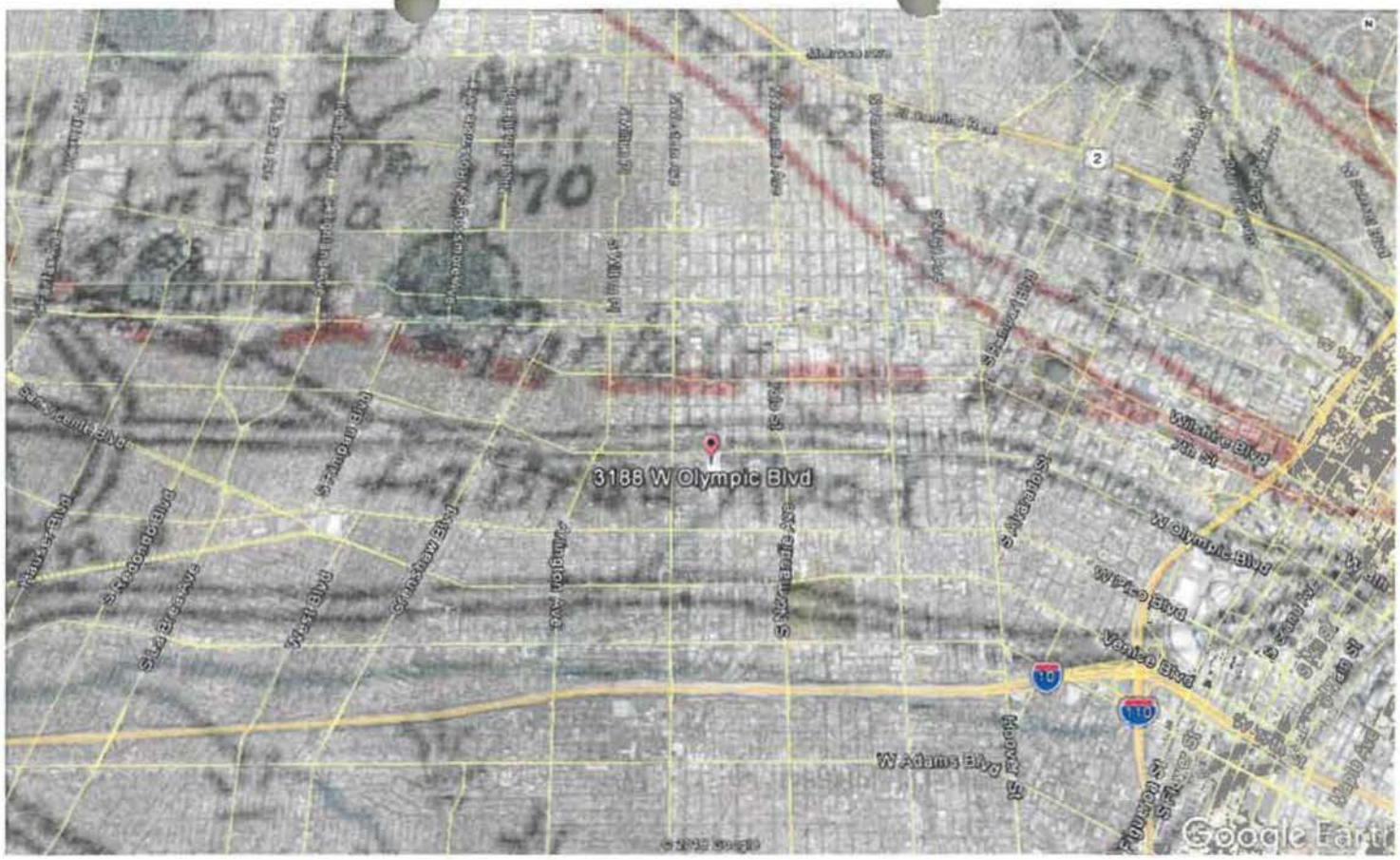
Kizh Nation Mitigation Measures.pdf
333K



RECEIVED
CITY OF LOS ANGELES
JUN 14 2018
CITY PLANNING
PROJECT PLANNING



RECEIVED
CITY OF LOS ANGELES
JUN 14 2018
CITY PLANNING
PROJECT PLANNING



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Gabrieleno Band of Mission Indians
-Kizh Nation-

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Re: Tribal Cultural Resources Mitigation Measures within Kizh Nation Tribal Territory.

Note: In order to avoid compliance issues with the following laws, all Native American Monitoring shall be conducted by a documented lineal descendant from the ancestral Tribe of the project area.

- *The Native American Graves Protection and Repatriation Act (NAGPRA), Public Law- 101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048.*
- *CEQA Guidelines Section 15064.5, PRC 5097.98 (d)(1).*
- *The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).*

If you are receiving these measures, The Gabrieleño Band of Mission Indians Kizh -Nation are the direct lineal descendants of your project area. The Kizh Nation ONLY responds and consults on projects within their ANCESTRAL tribal territory. Therefore, to remain in compliance with above referenced laws and to enable our Tribe with the ability to protect and preserve our last remaining and irreplaceable Tribal Cultural Resources, it is recommended that the ***project applicant*** *retain a qualified professional tribal monitor/consultant from the Gabrieleño Band of Mission Indians Kizh -Nation. The Kizh Nation possesses Tribal archives including documented historical information as well as multiple members who possess unique knowledge derived from oral tradition passed down through generations of the Tribe in order to provide the expertise needed to identify whether a project is located within a culturally sensitive area given its proximity to village areas, commerce areas, recreation areas, ceremonial areas, and burial locations.*

Native American Heritage Commission (NAHC) Guidelines for Native American Monitors/Consultants (approved 9/13/05): By acting as a liaison between Native American, archaeologist, developers, contactors and public agency, a Native American monitor/consultant can ensure that cultural features are treated appropriately from the Native American point of view. This can help others involved in a project to coordinate mitigation measures. These guidelines are intended to provide prospective monitors/consultants, and people who hire monitors/consultants, with an understanding of the scope and extant of knowledge that should be expected.

Mitigation Guidelines for Tribal Cultural Resources (TCRs): CEQA now defines TCRs as an independent element separate from archaeological resources. Environmental documents shall address a separate Tribal Cultural Resources section that includes a thorough analysis of the impacts to only TCRs and also includes separate and independent mitigation measures created with tribal input under AB-52 consultations. Therefore, all agreements, mitigation, and conditions of approval regarding TCR's shall be handled solely with the Tribal Government and conversely all agreements, mitigation, and conditions of approval regarding Archaeological Resources shall be handled by an Archaeological Resource Company.

Retain a Native American Monitor/Consultant: The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

Unanticipated Discovery of Tribal Cultural and Archaeological Resources: Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and

Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

Unanticipated Discovery of Human Remains and Associated Funerary Objects:
Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

Resource Assessment & Continuation of Work Protocol:
Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

Kizh-Gabrieleno Procedures for burials and funerary remains:
If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be

treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

Treatment Measures:
Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

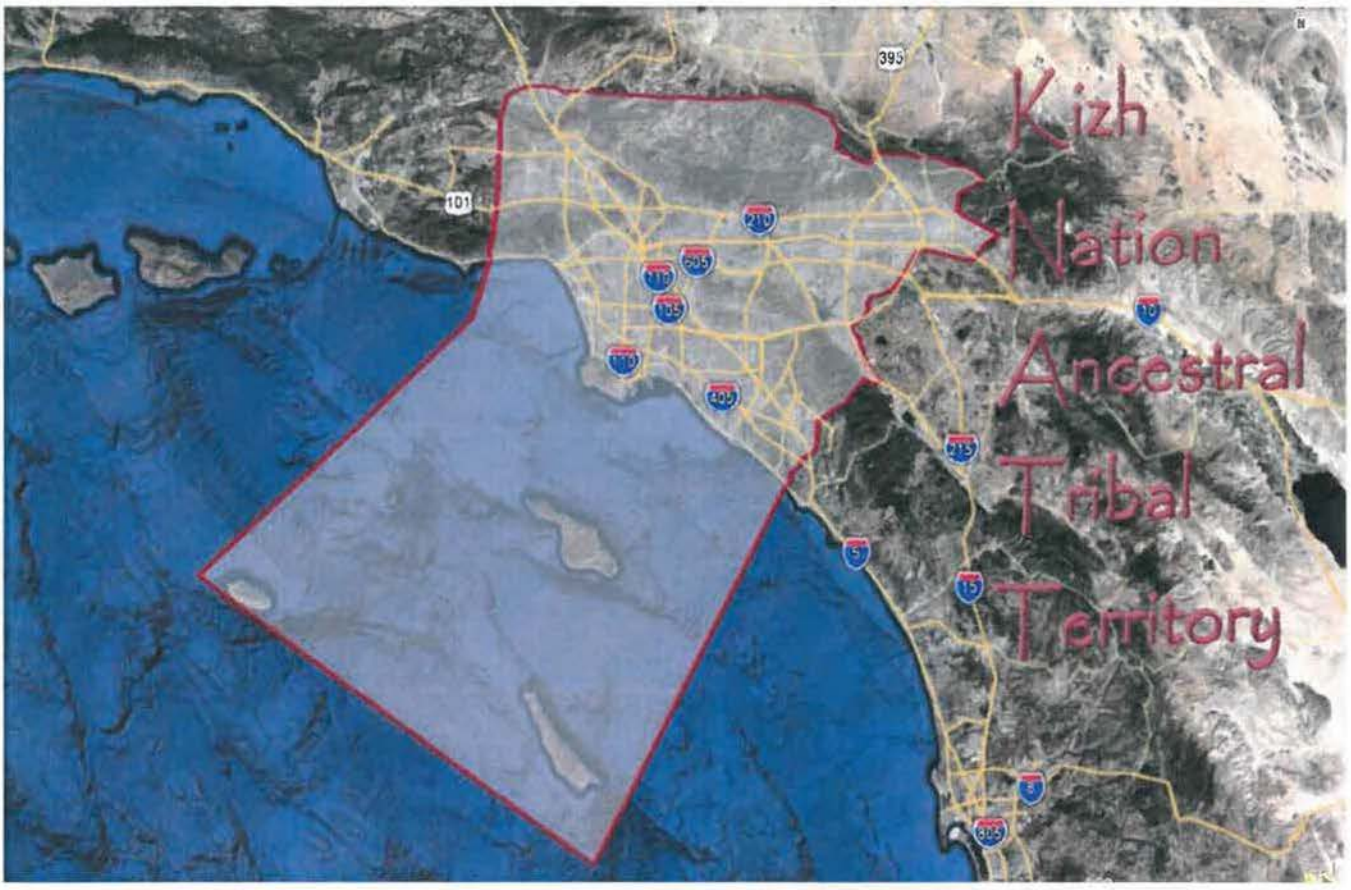
Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

Gabrieleño Band of Mission Indians
Kizh Nation

Attachment A

Kizh Nation Ancestral Tribal Territory extended along the coast from Malibu Creek in Los Angeles County down to Aliso Creek in Orange County and encompassed the Channel Islands of Catalina (Pimugna), San Nicolas (Haraasnga), and San Clemente (Kiinkenga). Our inland border was the San Gabriel Mountains (Hidakupa) and eastwardly our territory extended to parts of San Bernardino (Waatsngna), Orange, and Riverside counties.



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Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Andrew Salas <gabrielenoindians@yahoo.com> Fri, Jun 15, 2018 at 10:12 AM
To: Monique Acosta <monique.acosta@lacity.org>
Cc: Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>, "Matt Teutimez.Kizh Gabrieleno" <Matt.Teutimez@gmail.com>

Hello Monique,
We are awaiting on you to Conference in. Maybe we can reschedule . Thanks

Sent from my iPhone
[Quoted text hidden]

Connect Create Collaborate

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org> Fri, Jun 15, 2018 at 10:35 AM
To: Andrew Salas <gabrielenoindians@yahoo.com>
Cc: Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>, "Matt Teutimez.Kizh Gabrieleno" <Matt.Teutimez@gmail.com>

Our appointment was at 10 am, we were waiting for 10 minutes from 10:00 to 10:10 am. I used the same phone number and access code provided to us for yesterday's meeting.

When is the earliest time we can reschedule?

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

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Connect Create Collaborate

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org> Wed, Jun 20, 2018 at 1:54 PM
To: Andrew Salas <gabrielenoindians@yahoo.com>
Cc: Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>, "Matt Teutimez.Kizh Gabrieleno" <Matt.Teutimez@gmail.com>

Dear Mr. Salas and Mr. Teutimez,
I apologize for the daily emails and voice mails; however, we are eager to reschedule our consultation appointment. Please advise of the earliest date and time that you are available to discuss via phone.

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

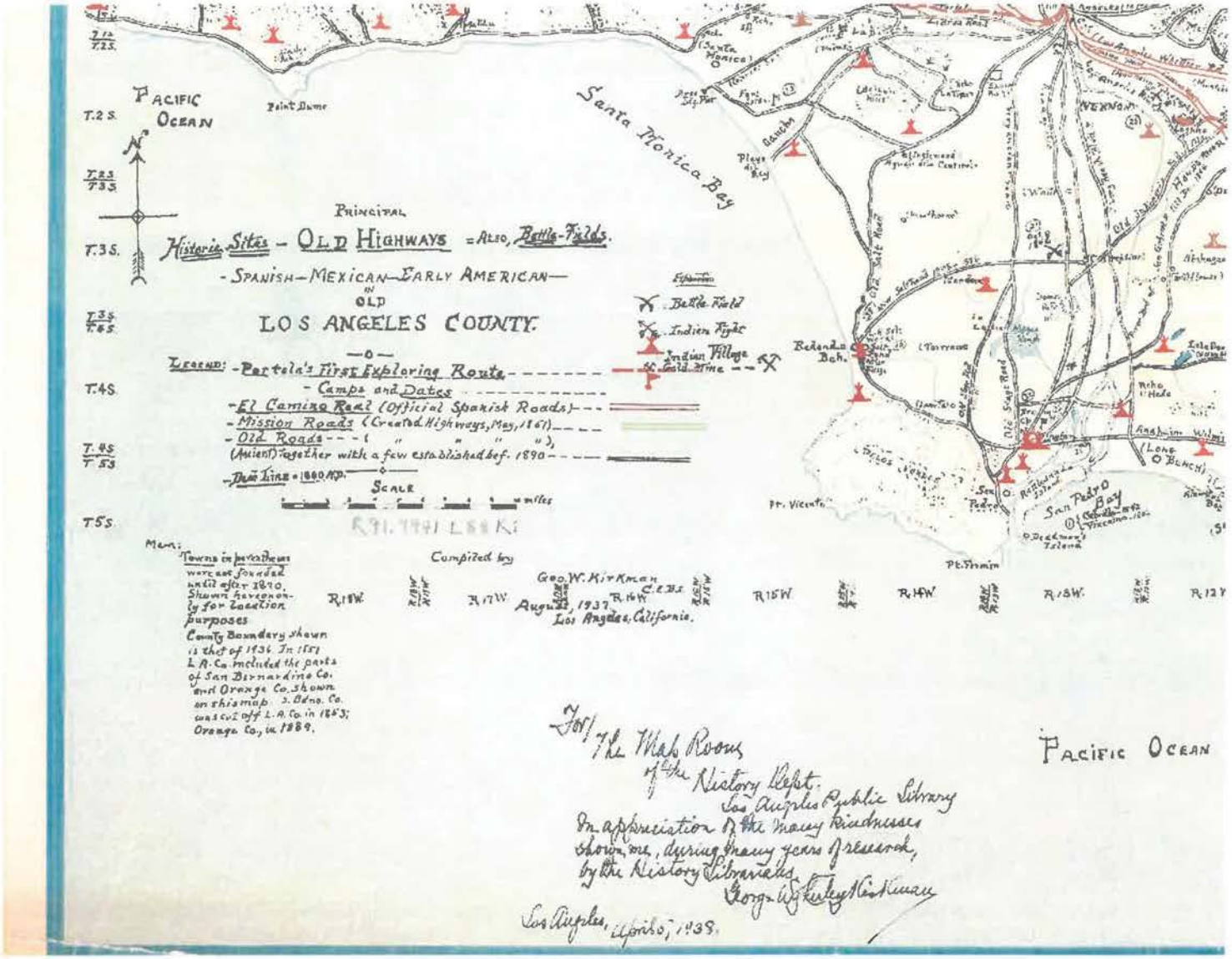
CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Matthew Teutimez <matt.teutimez@gmail.com> Thu, Jun 28, 2018 at 1:26 PM
To: Monique Acosta <monique.acosta@lacity.org>
Cc: Andrew Salas <gabrielenoindians@yahoo.com>, Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>

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175K



For the Work Rooms
of the History Dept.
Los Angeles Public Library
In appreciation of the many kindnesses
shown me, during many years of research,
by the History Librarians.
Geo. W. Kirkman

Los Angeles, April 6, 1938.

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Andrew Salas <gabrielenoindians@yahoo.com> Thu, Jun 28, 2018 at 7:44 PM
To: Matthew Teutimez <matt.teutimez@gmail.com>
Cc: Monique Acosta <monique.acosta@lacity.org>, Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>

This response was for another project regarding AB52 consultation

Terri Robinson

Dear Ms. Farfan and Mr. Chan,

I'm in receipt of an email from Chairman Salas of the Kizh Nation regarding the substantial evidence standing being applied by the City of Los Angeles for the above-listed property and what appears to have been a rejection of oral testimony from the Kizh Nation to substantiate the existence of a tribal cultural resource as defined in Public Resources Code section 21074. I did not see any citation to authority for the legal standard you are using for substantial evidence and would appreciate any citation you have, and I'd appreciate it if you have it. Furthermore, I'd like to bring to your attention the Governor's Office of Planning and Research's AB 52 Technical Advisory, which provides on page four:

Evidence that may support such a finding [of a tribal cultural resource] could include, among other evidence, elder testimony, **oral history**, tribal government archival information, testimony of a qualified archaeologist certified by the relevant tribe, testimony of an expert certified by the Tribal Government, official tribal government declarations or resolutions, formal statements from a certified Tribal Historic Preservation Officer, and historical notes, such as those found in the Harrington Papers and other anthropological records

Governor's Office of Planning and Research, Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA, June, 2017 (emphasis added).

On a personal note, I have observed first-hand the accuracy of the oral history of the Kizh Nation, and I have met their elders. I routinely cite the Kizh Nation as an example in the trainings I give on AB 52 of how a tribe,

through oral history alone, was accurate to within 50 feet of an ancient Native American burial ground. Had the agencies and project proponents for that particular project listened to the expertise and wisdom of the Kizh Nation, the damage to the burials ultimately discovered, and which an archaeologist claimed did not exist, could have been avoided.

Attached please find a copy of the OPR's AB 52 Technical Advisory. I look forward to reviewing your findings as to whether a tribal cultural resource exists and the standards you apply in making that determination. If I can be of any assistance in this matter, please do not hesitate to contact me.

Yours very truly,

Terrie L. Robinson, General Counsel
NAHC

Terrie L. Robinson
General Counsel
Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
(916) 373-3716 (voice)
(916) 373-5471 (fax)
terrie.robinson@nahc.ca.gov

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Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Andrew Salas <gabrielenoindians@yahoo.com> Fri, Jun 29, 2018 at 12:49 AM
To: Matthew Teutimez <matt.teutimez@gmail.com>
Cc: Monique Acosta <monique.acosta@lacity.org>, Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>

AB52

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. (a) The Legislature finds and declares all of the following:

(1) Current state law provides a limited measure of protection for sites, features, places, objects, and ***landscapes*** with cultural value to California Native American tribes.

traditional trading routes are considered Sacred Landscapes to our tribal Nation.

http://nativeamericannetroots.net/diary/1559

Trade routes
https://newsmaven.io/indiancountrytoday/archive/aboriginal-pathways-and-trading-routes-were-california-s-first-highways-Hb_vors4YkObMa2flND_Yg/

https://www.desertusa.com/desert-trails/native-americans-trails.html

https://sanctuaries.noaa.gov/tribal-landscapes/cultural-resources.html

From trails to freeways

Michael Jacob Rochlin's *Ancient L.A.* is a collection of three short essays illustrated with the author's and period photographs of L.A. cityscapes. "Why is our city the way it is?" Rochlin asks; "Why did it grow the way it grew?" His answer is that its current population centers owe their locations to Gabrielino villages. "For proximity to sources of forced labor, Missions and Pueblo were placed adjacent to Indigenous Villages. Ranchos reoccupied the desolated sites. Boomtowns replaced ranchos. Grids filled-in open space and melded with adjacent grids." Now downtown sits near the site of Yangna, San Pedro at Tsavingna, Redondo at Engnovagna. Trails from village to village became roads and, finally, freeways.

A section about Suangna, the largest of the Gabrielino villages, is illustrated by images of its likely location today: an Ugly Duckling used-car lot, traffic beside an oil refinery, neo-Nazi graffiti on a storm drain, an empty field.

The Rancherias

The Spanish period was dominated by vast Ranchos, the result of land grants. Rancho San Pedro, soon known as the Dominguez Ranch (local), began as a gift of 75,000 acres of land in 1784. It is now a museum. The historic Gilmore Adobe was built in 1852. The original building had two rooms with packed dirt floors and a brea roof from the *La Brea Tar Pits*. Today, it is the location of the Farmer's Market (external), which recounts the full story.

Sites on the history of Los Angeles

Sent from my IPhone

On Jun 28, 2018, at 1:26 PM, Matthew Teutimez <matt.teutimez@gmail.com> wrote:

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Native American Netroots

...a forum for the discussion of political, social and economic issues affecting the indigenous peoples of the United States, including their lack of political representation, economic deprivation, health care issues, and the on-going struggle for preservation of identity and cultural history

Sacred Landscape

Posted on **September 9, 2013** by **Ojibwa**

All humans have a cognitive map which provides them with a spatial analysis of their world, both natural and human-made. Traditionally, the cognitive maps of American Indians have been carried in the stories. Indian stories, particularly the spiritual stories and the stories of creation, focus on geography, telling what happened where and describing different places and their associations with each other. When one knows the stories, then one has a map of the traditional tribal territory. Traditionally, this meant that a person could go someplace new and know, because of the stories, not only the route, but also the different geographic features which would be encountered on the trip.

The European cultures which first encountered American Indians were accustomed to delineating sacred places with some type of structure or monument which would then be consecrated as sacred. These structures-churches, cemeteries, altars, etc.-were considered to be self-contained, that is, their sacred nature was contained within the space designated as sacred.

American Indians, on the other hand, tended to be animists who viewed the world around them as a living thing. Sacred places were not created by humans. While the people would sometimes designate a sacred place with a structure of some type-a pile of stones, a circle of stones, a mound or earthwork, or a chamber-often places with great sacred power did not have any human-created indications that they were sacred. People know about these places because of the stories and the songs rather than because of the structures which they had constructed.

One example of the interrelationship of sacred space, cognitive maps, and oral tradition can be seen in the Salt Trail Songs of the Nuwuvi (Southern Paiute) which describe both a physical and spiritual landscape. This includes physical features such as oceans and deserts, and spiritual features including life and death. The songs describe ancient village sites, gathering sites for medicinal plants and salt, historic events, trade routes, and sacred areas. The 142-song cycle assists the deceased in their sacred journey.

For American Indians sacred places do not exist in isolation: they are connected to other sacred places and these connections enhance the spiritual power of an area. The connections between sacred places are explained in the stories and in the songs.

It is not just "places" that are spiritually connected, but also the "people" who are associated with the places: the plants, the animals, the rocks. Again, the stories, songs, and ceremonies explain the nature and meaning of these connections.

Beginning in the nineteenth century, archaeologists began their scientific attempts to recreate and understand American Indian past. With regard to spiritual sites, they brought with them a European bias based in classical archaeology: they looked for sacred sites in structures created by humans and they considered these sites as self-contained, that is, not connected with other human-made or natural features in the area. The archaeologists did not know the native stories and often dismissed them as meaningless with regard to their work as archaeologists.

One of the places where archaeologists have become more aware of the larger sacred landscape is in Chaco Canyon, New Mexico. There are eight major sites here-very large apartment-type complexes known as pueblos, each with several hundred rooms-which can be studied independently. However, the discovery of the ancient road system connecting the Chaco Canyon pueblos with other sites outside of the canyon shows that Chaco must be understood as a larger complex. Furthermore, the discovery that the sites in the region often have an astronomical orientation adds an additional dimension to the picture: Chaco represents a very large ritual landscape.

The astronomical orientation found at Chaco Canyon can also be seen in other sites around North America, including Woodhenge at Cahokia, Illinois, the many medicine wheels found on the northern Plains, and the stone chambers found in New England. As with Chaco Canyon, these sites may be studied alone, but they are best understood as a part of a larger spiritual and ritual landscape. Unfortunately, many of the oral traditions (stories and songs) which could provide a better explanation of these landscapes have been lost. Archaeologists, however, must pay attention to the larger landscape in order to understand the role which these sites played in the ancient world. Archaeologists must get past their Eurocentric bias regarding sacred sites and attempt to look at them through Native American and animistic eyes.

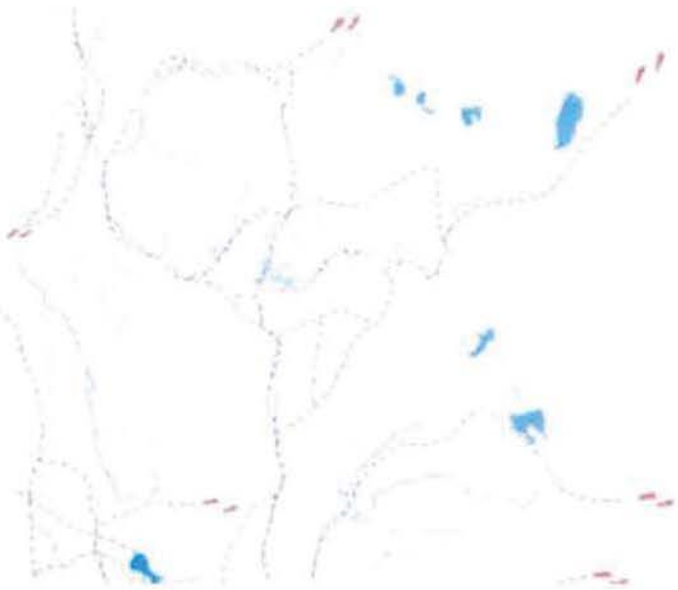


Shown above is the reconstructed Woodhenge at Cahokia.

This entry was posted in Uncategorized by **Ojibwa**. Bookmark the **permalink [http://nativeamericannetroots.net/diary/1559]** .

Aboriginal Pathways and Trading Routes Were California's First Highways

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Native American Trade Routes

California Indians developed trails or routes that they traveled by water or by foot to trade natural and manufactured goods. For example, the northeast Wiyot paddled dugout canoes south down the coast to exchange the canoes for tobacco with the Mattole. Central Valley Maidu and Miwok carried acorns across the Sierra Nevada to trade for pinyon nuts and obsidian with the Northern and Southern Paiute. Salt collected from inland lagoons by the Pasego of the Sonoran Desert made its way north to the Mohave who traded for pumpkin seeds. The exchange of crops, fish, and manufactured goods enriched and improved the lives of people who lived great distances from one another. The same is true today.

IMAGE BELOW: Mortar holes at Indian Grinding Rock (Chaw'se) State Park in the Sierra Nevada foothills. Over centuries the repeated pounding of acorns into flour by Miwok Indians wore these cup shaped holes into the flat rock. The Miwok





Courtesy San Diego State University, Geography Department / Many of today's thoroughfares in California started out as indigenous pathways.

by **Mark R. Day** Dec 19, 2016

Aboriginal Pathways and Trading Routes Were California's First Highways

On July 16, 1769, the Spanish Franciscan friar Junipero Serra planted a cross and founded the Mission San Diego near the Kumeyaay village of Nipawai. Over the next 54 years, friars would establish 20 more missions and military forts and call the road connecting them El Camino Real (the King's Highway).

But for thousands of years before the Spanish conquest, California had been crisscrossed in every direction by hundreds of Native pathways and trading routes, many of which would reach far beyond the state's present borders.



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While the California Missions Foundation seeks to nominate El Camino Real as an international cultural corridor and historic site, a growing number of Native Californians prefer to have their traditional pathways and trade routes recognized in a special way.

Examples of such trade routes abound, according to historians, archeologists and anthropologists. The noted anthropologist Alfred Kroeber chronicled the discovery of a woven burial cloth imported from the Pueblo Indians near Buena Vista Lake in what is today California's Kern County. He called it one of the few authentic instances of long-distance trade of any manufactured article, either into out of California.

The Franciscan explorer Pedro Font, who accompanied the Juan Bautista de Anza expedition from Arizona to California, also witnessed woven cotton blankets imported form the Southwest being worn by the Chumash Indians on the coast and islands of the Santa Barbara channel.

Anthropologists Erin Smith and Mikael Fauvelle have written in the *American Anthropologist* that these interlocked trade connections spanned the continent, and that California shells, asphaltum (oil tar) and obsidian flowed east beyond the Chaco Canyon, New Mexico, to sites in Oklahoma, the Great Plains and Mississippi, while textiles and pottery flowed back to the west.

"Prehispanic inhabitants of North America lived in a world that stretched from Canada to Panama," Fauvelle told ICTMN. "We look at the past, and we tend to think everything was local and small scale. Actually, people were traveling all over the place. And these were highly developed civilizations."

The Trading Routes

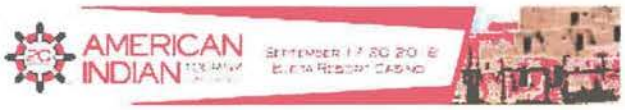
A map of pre-contact California shows multiple trading routes. Goods traded included food (fish, pine nuts, meat), tobacco, beads, shell products, furs, basketry, minerals (obsidian) and textiles, as well as feathers and birds.

In fact Indian clam disc beads flowed northward form the San Francisco Bay Area to Alaska, and pelts, sinew-backed bows and stonework flowed southward to the Bay Area and beyond, according to a study published by James Davis of UC Berkley's anthropology department. The study shows several examples of tribal trade. The Achomawi tribe, located in California's Pit River Valley, traded salmon and tule baskets with the Northern Paiute in exchange for bows, baskets and shell beads.

The Cahuilla, located in what is now Riverside County, received gourd rattles from the Yuma and basketry from the Chemehuevi. The Central Miwok of northern California suppled shell and glass beads to the Eastern Mono, and the Mono furnished them with baskets, red and white paint, and rabbit-skin blankets.

Highways and Railroads

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The UC study also showed that many Indian trails evolved into modern thoroughfares. The Mohave, for example, used a well-worn route from Arizona to California. In fact, Mohave and Yuma scouts assisted De Anza in his expedition to reach San Gabriel mission in California. Later this route became an emigrant trail, a horse express, and finally the Santa Fe Railroad.

When an expedition of Nez Perce Indians traveled, in the 1880s, from eastern Washington south to the Sacramento River Valley, their pathway became known as the Walla Walla Trail.

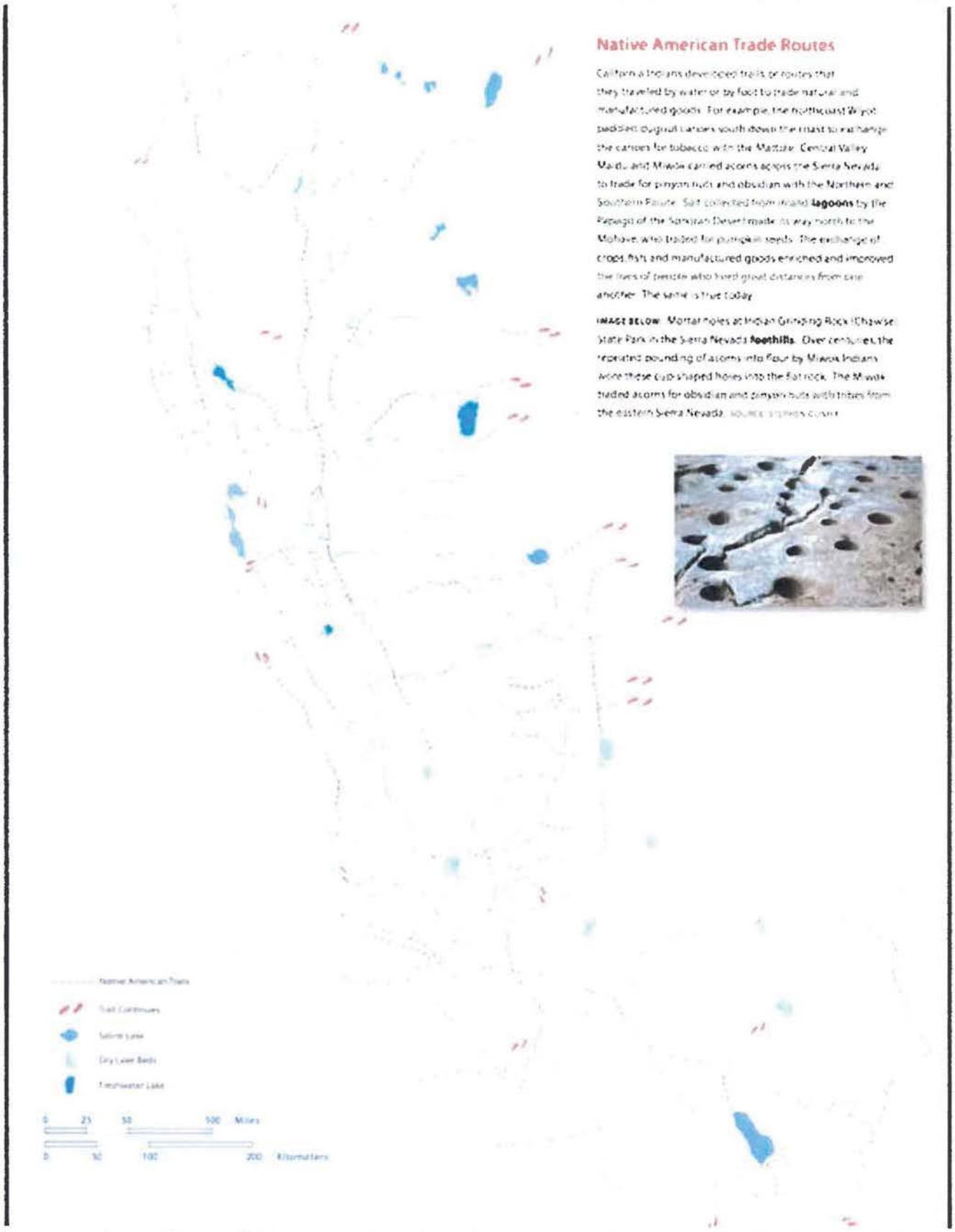
Aboriginal roads also pre-dated at least 15 modern roadways, such as U.S Route 101 from the Oregon border to Ventura; State Highway 1 from Rockport south to Bodega Bay; U.S. Route 99 from the Oregon border to Los Angeles, and U.S. Route 50 from Oakland to Manteca and from Sacramento to the Nevada border.

"If you are talking about the importance of El Camino Real, you need to put it into perspective," said archeologist Kent Lightfoot of UC Berkeley. "Native Californians had trade routes for thousands of years. You can't just talk about what came afterward. You need to look at the long-term history to have a balanced perspective. You need to look at the tribal side of this."

Valentin Lopez, chairman of the Amah Mutsun Tribal Band, is doubtful that the California Missions Foundation will get the cooperation it needs from California's tribal councils for the UNESCO nomination of the El Camino Real cultural corridor.

"Meanwhile," said Lopez, "we need to focus on our own Native pathways and trading routes. We want UNESCO to recognize these, not just the route the Spaniards used to conquer our people."

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Indigenous pathways that turned into major thoroughfares. (Photo: Courtesy San Diego State University, Geography Department)

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Native Americans Trails

History of Their Trails

by **Jay W. Sharp** (../who/pro_sharp.html)

"In the New World," said Carl Sauer in his 1932 monograph The Road to Cibola, "the routes of great explorations usually have become historic highways and thus has been forged a link connecting the distant past with the modern present. For the explorers followed main trails beaten by many generations of Indian travel."

Major Native American Trails

For thousands of years, Native Americans took to the trails in the name of the harvest, the hunt, commerce, plunder, warfare, religious fervor and celebration. They may have forged trails at least as far back as some eight or nine millennia ago, when Archaic Indian peoples likely began to follow regular seasonal circuits to harvest the ripening seeds, nuts and fruits of wild plants and to hunt migrating game of the basins and plains. As populations grew and cultures evolved over time, the Native Americans forged thousands of miles of interconnecting trails extending from Texas' Llano Estacado westward to California's Pacific Coast and from Mexico northward across the Southwest.

They left the remnants of their commodities at settlements along their route. They left debris such as broken ceramic pots and fractured stone tools scattered along the trails much as modern travelers leave aluminum and plastic soft drink containers strewn along super highways. Sometimes, Native American travelers – products of the spirituality of their cultures – left shrines beside the trails and carved or painted images on nearby stone surfaces.

Major East-to-West Arteries

According to Richard I. Ford's paper "Inter-Indian Exchange in the Southwest," published in the Handbook of North American Indians: Southwest, Volume 10, several primary east-to-west arteries began on the Llano Estacado. Leading westward, they branched and then branched again to reach the hunting and gathering tribes and the Puebloan communities of the Southern Rockies, the Colorado Plateau and the basin and range country. Ultimately, they converged at crossings at the Colorado River, one near Needles, California, and a second between Blythe, California, and Yuma, Arizona. The trail which crossed near Needles ran through the Mohave Desert and on to the Pacific Coast near Las Angeles. The one which crossed between Blythe and Yuma ran through the southern California basin and range country and on to the Pacific Coast near San Diego.

Typically, the east-to-west trails served the purpose of trade, creating, in effect, a Southwestern distribution system for the Llano Estacado's buffalo hides and meat and the Pacific Coast's sea shells as well as hundreds of other commodities.

Major South-to-North Trails

At least three well-documented major south-to-north arteries – or, connected segments of trails – began in Mexico.

One, nearly 1200 miles long, started west northwest of Mexico City, at Guadalajara in the Mexican state of Jalisco. According to Sauer, it led westward for about 150 miles, to the Pacific Coast. It turned north northwest, following the coastline for nearly 500 miles. It turned generally north, paralleled the western flanks of Mexico's Sierra Madre Occidental, crossed the border halfway between Nogales and Douglas, and continued across Arizona to the Zuni pueblos, a leg of some 600 miles. A second south-to-north artery, 1400 to 1500 miles long, began at Mexico City. It ran generally northward for more than 1000 miles across Mexico's central highlands and through the Chihuahuan Desert basin to the Rio Grande's Paso del Norte crossing. It followed the river upstream for about 400 miles to the upper drainage basin. These two south-to-north trails developed as avenues for trade; in effect, conduits for macaw, colorful feathers, copper bells and other Mesoamerican goods moving north and turquoise, obsidian, buffalo hides and other Southwestern goods moving south. Over time, the travelers from the south also introduced northern tribes to various ideas of religion and ritual; crops such as corn, beans and squash; the craft of pot-making; new products from distant workshops; and different concepts in

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architecture.

A third important south-to-north artery, more than 500 miles long, began in northern Chihuahua and Coahuila as a fan of trails with an apex at the Rio Grande's "Grand Indian Crossing" in Texas' Big Bend, at the southernmost point of the national park. It ran north, through basin and range country for 140 miles, veered generally eastward for nearly 40 miles to the Pecos River and an infamous ford called "Horsehead Crossing." It turned northwest for some 50 miles, until it struck the plains. It followed the southern and then the eastern perimeter of the Llano Estacado until it reached the headwaters of the North Fork of Red River, high in the Texas Panhandle. This trail, known as the "Comanche War Trail," summoned the Comanches and Kiowas, tribes of the southern plains, not to trade, but rather to plunder Mexican villages and haciendas, primarily for horses and slaves. Over time, the warriors of the plains returned home with so much booty that the Grand Indian Crossing resembled a "very wide, well beaten, and...much traveled thoroughfare...," according to Captain John Love, who attempted to navigate the Rio Grande by flat boat in 1850.

Unexplained Trails

While most Native American trails clearly accommodated the traveler, others served uncertain purposes, for instance, the enigmatic 400-mile network of "roads" which radiate from the famed Chaco Canyon Anasazi Puebloan complex, the early second millennium "Rome" of northwestern New Mexico. These roads, distinguished by long straight segments, unusual width (typically 30 feet), curbing, border walls, berms and small road-side "motels," usually connected Chaco Canyon – the region's commercial and religious capital – with outlying communities. Some ended at the canyon rim, at precipitously steep stairways to the canyon floor.

Some archaeologists think that the Chacoan communities may have used the roads to distribute crops and other goods from areas with surpluses to areas with shortfalls, although that would not appear to explain the prodigious investment of manpower required for the construction and maintenance. Others have suggested that the Chacoans used the roads as tracks for foot races or as avenues for hauling construction timbers. Neither would that seem to justify the labor investment. Others suspect that the Chacoan peoples may have constructed the roads to function effectively as "stage sets" for elaborate pilgrimage processions and celebrations. If so, the commitment to religion and ritual would seem to be extraordinary. The Chacoan road complex will likely remain one of the mysteries of Southwestern prehistory. We can only say for certain that all the roads led to Chaco.

The Native American Travelers

Before the arrival of Spanish horses, Native American travelers, wearing sandals or moccasins, walked the trails of the Southwest. They transported their burdens on their backs, atop their heads or, on the Llano Estacado, with pack or draft dogs. With the acquisition of horses, many Native Americans extended their range of travel and increased the sizes of their burdens.

Hunters and Gatherers

In treks repeated year after year, the foot-bound Archaic hunting and gathering bands may have worn early trails between seasonal campsites in a desert basin, where they harvested agaves; on a mountain slope, where they gathered pinyon pine nuts and juniper seeds; near a marsh, where they took migratory water fowl; and near the plains, where they hunted migrating buffalo.

Traders

With the emergence of settled villages of farmers, traders likely became the primary authors of the trails of the Southwest.

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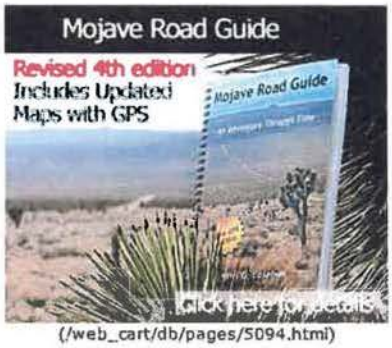


The Saguaro
(/video_pages/saguaro_movie.html)**Video** (/video_pages/saguaro_movie.html)The Saguaro often begins life in the shelter of a "nurse" tree or shrub which can provide a shaded, moister habitat for the germination of life. The Saguaro grows very slowly -- perhaps an inch a year -- but to a great height, 15 to 50 feet.

Prickly pear cactus (/video_pages/pp_movie.html) Video
Prickly pear cactus are found in all of the deserts of the American Southwest. Most prickly pears have large spines on their stems and vary in height from less than a foot to 6 or 7 feet.



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West Texas rock art panel showing possible traders carrying burdens.

While "Most of the trade was an indirect movement through many hands and several peoples...," as Donald D. Brand said in his paper "Prehistoric Trade in the Southwest," published in the New Mexico Business Review, October 1935, individual itinerant traders apparently traveled the trails to call on certain communities like modern traveling salesmen cover a "territory" to call on their customers. As late as 1895, itinerant traders "were still carrying on extensive short- and long-distance trade on foot...," in northwestern Mexico, said J. Charles Kelley in "The Aztatlan Mercantile System: Mobile Traders and the Northwestward Expansions of Mesoamerican Civilization," Chapter 9, in Greater Mesoamerica: The Archaeology of West and Northwest Mexico. These traders, probably following an ancient vocation, carried loads as heavy as 90 percent of their body weight for up to 30 to 40 miles a day.

Some individual traders, according to a romantic notion suggested by southwestern Colorado authority Michael Claypool, may have carried their goods in packs or burden baskets on their backs and played a flute to herald their arrival at a village. Bringing commodities of novelty, sacredness and high value as well as news, ideas and gossip from neighboring villages, the trader presumably found an enthusiastic welcome and perhaps even celebration and dance. It could be the itinerant trader – not a malformed, flute-playing mythical figure – whose images appear on the surfaces of prehistoric ceramics and stone across the Southwest and whose persona and charisma gave rise to the renowned "humped-back flute player," or Kokopelli.

Some Native American traders in Mexico and, probably, the Southwest drafted their families into the profession. For example, in an undated paper, "The Mobile Merchants of Molino," J. Charles Kelley drew on a 1933 account by Ralph L. Beals to describe a trading family from the Acaxee tribe of western Mexico: "The women," he said, "carried a large conical burden basket, using a tumpline. In the basket, from which hung deer hooves strung on canes and tinkling deer foot bones, there was a bushel of soft corn topped by plates...and spoons and above this a sleeping child wrapped in a mantle; at the baskets outer edge parrots and macaws [highly valued birds used in trade] were carried. The women carried their load up and down mountains apparently with great ease."

Likely, full Native American trading expeditions also took to the trails. In his paper "The Mesoamerican Connection: A View From the South," published in The Chichimec Sea, Mike Foster said, "...trading groups from the Chalchihuites, Casas Grandes, and west of Mexico appear to have reached well into the Southwest at a relatively early date, possibly as early as A. D. 350."
In addition to commodities, the Mesoamerican expeditions, said Foster, "... introduced a variety of traits – everything from new cultigens and technology to ideology – to the elementary evolving societies of the southwest."

As we know from historic accounts, itinerant Native American trading caravans wandered over the trails like gypsies, serving as middlemen in the prehistoric and early historic Southwest. For example, nomadic bands of Jumano Indians – probably remnants of southern New Mexico's Mogollon Pueblo tradition, which collapsed in the 14th century – traded along trails from the piney woods of eastern Texas to the southwestern edge of the Colorado Plateau. The Jumanos, said Nancy Parrott Hickerson in her book The Jumanos: Hunters and Traders of the South Plains, "could be encountered almost anywhere in the Southwest or South Plains."

In anticipation of trade, some tribes dispatched missions to gather raw materials which could be used as commodities. Comanche and Kiowa hunting parties, for instance, hunted buffalo, which yielded highly marketable hides, jerked meat and bone tools. Pima and Papago (nomadic tribes of southern Arizona and northern Sonora) expeditions trekked to the coast of the Gulf of California to collect that valuable mineral, salt. Mimbres

people – village farmers of southwestern New Mexico – mined turquoise, which held a sacred place in Mesoamerican cultures.

Other tribes produced finished products intended specifically for trade. According to Ford, the Yumans, of the western Sonoran Desert, produced leather clothing and bags for the market place. The Hopis, of northeastern Arizona, wove cotton textiles. The Jicarilla Apaches, of northern New Mexico, made wicker baskets and micaceous pottery. The Salinas Pueblos, of central New Mexico, manufactured a distinctively decorated pottery. The Jumanos, said Hickerson, made bows and arrows. Farming villages produced surplus corn, beans and squash to offer in the marketplace.

In his book Traders of the Western Morning, John Upton Terrell itemized nearly 250 trade items which fueled the commerce of the Native American trails and markets of the Southwest. They included items as diverse as gourd dishes, horn jars and grass sieves; feather robes, teeth pendants and bone earrings; stone clubs, bone fishhooks and shell scrapers; medicine bags, feathers and turtle rattles; corn, nuts and dried berries; dog saddles, hair ropes and woven cases; and arrow points, war clubs and lances.

Traders left the evidence of their commerce in the archaeological and historical records of the communities along their routes. "Wherever there are natural corridors of passage – easy mountain passes, and optimum conditions of water, fuel, and game – there archaeological reconnaissance has discovered sites with a greater than average number of exotic wares and other trade items," said Brand. "At crossings of such corridors are found the maxima [sic] of diverse cultural elements..." Primary trading centers arose, including, for instance, the Pecos Pueblo in northern New Mexico, Gran Quivera in central New Mexico, and the San Jose junction near northern Chihuahua's Villa Ahumada.

Some communities, for instance, the Taos and Abiquiu Pueblos of northern New Mexico and Pima settlements in southern Arizona, staged trade fairs, where vendors from across the Southwest gathered to display and exchange their commodities. Their offerings included horses and slaves in northern New Mexico during Spanish colonial times. "These were...raucous affairs," said Ford, "accentuated by drunkenness, brawls, and thievery."

Other communities evidently emerged as essentially full-time market places, where merchants, traders and consumers came to bargain and trade in settings much like los mercados of Spain and Latin America or les marches of France. Paquime, the capital of northwestern Chihuahua's late prehistoric Casas Grandes culture, served as a major market place, according to Charles C. Di Peso, the famed Southwest archaeologist who excavated almost half of the site in the mid 20th century. "The...marketplace complex was designed and zoned for commodity exchange and the surrounding structures for visual impact," he said. The marketing plaza apparently comprised trading booths, temporary living quarters and even small chapels. It percolated with trading activity. "In its pristine condition," said Di Peso, "the tract must have had made a tremendous impact..."

Although the Native American trade network of the Southwest was born of commercial purpose, those who took to the trails never forgot their spiritual roots. "Since many dangers haunted the trails," said Ford, "various supernatural precautions guided traders. Virtually every tribe had a ceremony to protect travelers before departing and a purification rite upon returning to protect the community from any bad spirits that might have accompanied the trader."

Warriors

If traders sought wealth on the trails, raiding parties pursued the fruits of plunder, the visceral thrill of battle and the rewards of personal and tribal glory. For example, the Comanches and Kiowas, those quintessential mounted warriors of the Southern Plains, rode south over the Comanche War Trail to answer their calling in raids on the settlements in the arid ranges of northern Chihuahua. On the trail, a warrior put his faith and safety in his personal "medicine," or "power;" followed the strictly prescribed choreography of the enterprise; spoke the phraseology and code words of a raiding party; faithfully obeyed the commands of his leader; and instilled horror in his human prey. He stole horses, the currency of the plains. While he massacred men and older boys, he took young women and children captive, new conscripts or trading commodities for his tribe. Returning home over the trail, he rode hard and relentlessly to avoid pursuers and reprisals, often leaving the carcasses of horses and sometimes the bodies of his captives in his wake. He left the bones of so many broken and exhausted horses at the Pecos River that the skulls of the animals gave the ford its name: Horsehead Crossing.

Pilgrims?

The travelers who followed trails such as Chaco Canyon's strange 11th and 12th roads may have been neither traders, nor raiders, but – as some researchers suspect – pilgrims. In a brief article called "Ideological Models: Pilgrimage," published in the papers of the "virtual conference," Evaluating Models of Chaco, J. McKim Malville speculated that Chacoan peoples may have followed the roads from outlying communities to the canyon in seasonal rituals of primal pageantry. The Chacoans may have viewed the pilgrimages as a "mythic re-creation of the world and spiritual transformation of the individual..."
They may have regarded the "...north-south alignments of the north road of structures in the Canyon [as] ideological expressions of connections to the place of origin or to the stable north point of the macrocosm." Within the road system, Malville said, "...segments that were vectored from outlying communities in the approximate direction of Chaco may have symbolized the commitment of the community to the regional system." During the festivals, the Chacoans would likely take advantage of opportunities for "trade, courtship, athletic contests, and other forms of social bonding." If the Chacoans ever did, in fact, undertake pilgrimages over the roads in pursuit of a mystical renewal of body and soul, they apparently lost faith in the system and leadership within a matter of decades. They had abandoned their communities and the road system forever by the end of the 12th century.

Something of Value

Of all the commodities which traders hauled over the trails connecting the prehistoric Mesoamerican and Puebloan peoples, turquoise and the brilliantly plumed scarlet macaw ranked near the top of the list in value. In his internet paper, "Meridian Addendum," October 31, 2000, Colorado University archaeologist Steve Lekson said, "Mesoamerican societies were interested in southwestern turquoise; southwestern leaders were interested in Mesoamerican civilizations and their prestige goods [for instance, the colorful macaws] as 'outside partners'" in an effort to assert and maintain political control.

"Viewed in the composite, ancient turquoise mining was very impressive," said researchers Phil C. Weigand and Garman Harbottle in their paper "The Role of Turquoises in the Ancient Mesoamerican Trade Structure," Chapter 6 in The American Southwest and Mesoamerica. "Turquoise mining was dispersed over a very broad landscape, in a rough quadrangle from the Californias to Colorado to Coahuila to Sonora." The Indians of the Southwest mined some turquoise sources intensely, "with chambered mines indicating dedicated extraction from a single outcrop," for example, at Cerrillos and Old Hachita in New Mexico and Halloron Springs in California. Some of the mines reached depths of more than 200 feet, according to the Museum of New Mexico. The Chaco Canyon communities became a major center for procuring and processing turquoise, primarily from the Cerrillos mines, and they developed the artisanship for crafting exquisite turquoise ornaments and jewelry. Prehistoric turquoise merchants and traders left their mark in the archaeological record from the Southwest "through Mesoamerica clear to the southern Maya highlands," a region where "many hundreds of thousands of pieces" have been found, said Weigand and Harbottle. Mesoamericans seem to have vested turquoise – like jade and emerald – with sacred importance, possibly because they equated its blue green hues with the fertility, abundance and prosperity promised by verdant farm crops. They incorporated Southwestern turquoise into the jewelry and clothing of the elite, symbolic decorations of skulls, offerings for the dead, mosaics for elaborate shields and tablets, the ornamentation of ceremonial masks, sacred items for ritual, and representations of deities.

While the Puebloans mined, processed and worked turquoise to meet the Mesoamerican demand for the semi-precious mineral, enterprising Mesoamericans captured and exported scarlet macaws to satisfy the Puebloan yen for the three-foot-long gloriously colored bird. Reflecting the high value placed on scarlet macaws, the Puebloans went to extraordinary lengths, in the arid Southwest, to breed, raise and nurture the bird, a native of tropical riverside rain forests. They built elaborate pens and perches for the birds at Paquime, which was probably the center for macaw distribution in the Southwest. In her book Archaeology of the Southwest, 2nd Edition, investigator Linda Cordell said, "More than 300 scarlet macaw skeletons were recovered at Casas Grandes [Paquime] from parts of the site that contained pens with eggshell, perches, and grain..." In Pueblo Bonito, archaeologist George H. Pepper's 1920 report on his excavations at the Chaco Canyon site, he reported finding 12 macaw skeletons in "Room 38," including two ritual burials of the birds. At one point in the room, he said, "...a circular cavity had been dug in the floor and in this the skeleton of a macaw was found. The hole had been carefully formed, filled with adobe, and the surface finished so that there were no evidences of its position." Nearby another macaw "had been buried in the same manner and with as great care." The Puebloan peoples memorialized scarlet macaws in imagery on stone surfaces, for instance, at Albuquerque's West Mesa

Escarpment rock art site, and on ceramic surfaces, for example, on Paquime pots and southwestern New Mexico's Mimbres Indian bowls. They used macaw feathers to decorate ceremonial masks and sacrificed macaws to commemorate the dead. The Zuni Pueblo people had a legend, "The Origin of Raven and Macaw," according to SouthWest USA, an internet site, in which a priest told those would follow the macaw that "...wherever they fly, you shall follow, and in that place there shall be everlastingly summer, and without toil, which you haven't yet experienced, fertile fields full of food shall flourish there..."

Turquoise and macaws answered spiritual needs of those at the ends of trade routes between Mesoamerican and the Puebloan peoples. Salt, a mineral essential to good health in both human and animal populations, met the universal nutritional needs of tribes across the Southwest. It occurred in some basins which had held lakes during the Ice Ages, for instance, at the Salt Flats of western Texas, the Zuni Salt Lake in western New Mexico and the Estancia lakes in central New Mexico. From the 12th through the 17th centuries, the Salinas Puebloan people harvested and traded salt from the Estancia lakes. (The term "salinas," conferred by the Spanish, means "salt works" in English.) In 1601, Spanish soldiers, realizing the importance of the Estancia salt, slaughtered some 900 Puebloans to beat back a challenge for control of the lakes, said Robert Silverberg in his book The Pueblo Revolt.

Slaves, an unwilling but perhaps the most valued commodity of the trade from the 17th through the 19th centuries, played featured roles in a sordid chapter which lasted at least from the time of Spanish arrival to the years just after the American Civil War. The Utes, for instance, made commerce in slaves a major part of their economy, hauling captives to the Taos Pueblo and Santa Fe to swap them for horses and other commodities. The Navajos paid a particularly painful price, perhaps the most of any Native American tribe in the Southwest. In a quote published in Raymond F. Locke's, The Book of the Navajo, old-time Santa Fe resident Dr. Louis Kennon said, "I think that the Navajos have been the most abused people on the continent... [I believe] the number of Captive Navajo Indians held as slaves to be underestimated. I think there are from five to six thousand. I know of no [New Mexico] family which can raise one hundred and fifty dollars but what purchases a Navajo slave, and many families own four or five, the trade in them being as regular as the trade in pigs and sheep..." Even as the Civil War wound down in the east, General James Henry Carleton, commanding officer of New Mexico, promoted the slave trade as a way of dealing with the Indians in the Southwest.



Some Native American Trails of the Southwest

Following the Trails

As you would anticipate, most Native American trails have faded or disappeared, largely obliterated by highways, development, the plow, excessive livestock grazing and abandonment. You can, however, still visit some passages, river crossings and Puebloan trade centers.

Up the Rio Grande to the Pueblos

From the ancient Paso del Norte ford, you can travel up the Rio Grande for nearly 400 miles, following, with reasonable closeness, the northern reaches of the trail which began in Mexico City and ended in the northern river basin pueblos. You will track one of the most historic roadways in the United States, following the paths, not only of prehistoric Native American traders, but also of conquistadores, colonists, soldiers, Franciscan friars, refugees, merchants and railroad barons.

If you begin at the ford, located just off Doniphan Street immediately west of downtown El Paso, Texas, and just across the river from Mexico's teeming Juarez, Chihuahua, you'll find the 1850 flour mill of Simeon Hart, a historic cemetery of the local community, the 1881 headquarters of Fort Bliss, and the 1881 location of a railroad passenger and freight terminal. Unfortunately, the ford and the historic sites lie in the midst of a sadly dilapidated area where the United States Border Patrol struggles to turn back the tide of illegal immigrants, petty criminals and drug runners who would now make the historic crossing their own.

From El Paso, you will follow IH 10 for 40 miles to Las Cruces, IH 25 for 220 miles to Albuquerque, IH 25 and US 84 for 60 miles to Santa Fe, and US 84 and NM 68 for 70 miles to Taos. If you can look beyond the profound alterations we have made along the river in historic times, you will see the Chihuahuan Desert Rio Grande basin country and the mountain ranges through which the prehistoric traders traveled, on foot, between El Paso and Albuquerque. Like the foot-bound traders, you will see the Sangre de Cristo mountains rise on the northeastern horizon as you draw near Santa Fe. You will follow the eastern flank of the Sangre de Cristo mountains and, for 30 miles, the dramatic Rio Grande gorge as you approach Taos.

Traders who made the trek around the year 1200 would have encountered pueblo villages scattered along virtually their whole route up the river. If they had repeated the trip about 1450, they would have passed abandoned pueblos until they reached the Piro- and Tompiro-speaking pueblos about 160 or 170 miles north of the Paso del Norte ford. Of the 100 or more pueblos occupied in late prehistoric times, Taos, founded roughly nine centuries ago, remains as one of only 18 pueblos still occupied today.

Puebloan Trade Centers

Based on the archaeological record, it appears that main trunk lines or branches of trails connected many of the Southwestern pueblos to a trade network, which grew and contracted and changed continuously over time like something alive. Some pueblos became important centers of trade, giving definition to their character.

If you enjoy trips outside the tourist mainstream, I would suggest that you spend a couple of days exploring the ruins of central New Mexico's 12th to 17th century Salinas trade center pueblos, Abo, Quarai and Gran Quivira (collectively, a national monument). Located in basin and range country on the border between the Puebloan world to the north and west and nomadic hunting and gathering populations to the south and east, the Salinas Pueblos became natural centers for trade and an apparent linchpin in the Jumano commercial enterprises.

Salinas artisans produced a pottery called Chupadera Black-on-white, which – possibly thanks to the Jumano trading caravans – has turned up in Native American archaeological sites from the Piney Woods of east Texas to desert lands of northwestern Chihuahua and southeastern Arizona. Salinas workmen collected and packaged salt from the Estancia lakes, delivering it as a commodity into the trade network. Like other pueblos, Abo, one of the region's most populous communities, experienced the destruction of its ceremonial chambers and icons by Spanish priests, who were obsessed with the idea of converting the Native Americans to Catholicism.

It was Quarai, according to Silverberg, that suffered the loss of the 900 people in the 1601 fight with the Spanish over control of the Estancia lakes. Gran Quivira hosted the renowned Spanish Franciscan frontier priest Alonso de Benavides, who preached to the Puebloan population in the plaza immediately in front of the church in 1626. The Puebloans and their Spanish friars abandoned Abo, Quarai and Gran Quivira around 1670 under incessant raiding by the Mescalero Apaches, who had been enraged by Spanish slaving expeditions. The Salinas Pueblos lie about 50 miles south southeast of Albuquerque, surrounding a little village by the name of Mountainair.

I would also recommend that you visit the 12th to 19th century Pecos Pueblo, another national monument, located in a mountain corridor at the southern end of the Sangre de Cristo range. Pecos emerged as a trading center – a commercial "middleman" – because of its location at the juncture between the pueblos to the west and the Plains Indians to the east. It functioned as "a two-way pass for barter and war between Pueblos and Plains tribes," according to historian Herbert Eugene Bolton, quoted in Pecos: Gateway to Pueblo & Plains – The Anthology. Located on a bluff overlooking a shallow valley which served as a marketplace, Pecos received Pedro de Castaneda, soldier and chronicler of Francisco Vasquez de Coronado's epic expedition, in 1541.

The Spaniard described the pueblo as "square, situated on a rock, with a large court or yard in the middle, containing the estufas [semi-subterranean ceremonial chambers called "kivas"]. The houses are all alike, four stories high. One can go over the top of the whole village without there being a street to hinder. There are corridors going all around it at the first two stories... The houses do not have doors below, but they use ladders, which can be lifted up like a drawbridge... As the doors of the houses open on the corridor of that story, the corridor serves as a street... The village is enclosed by a low wall of stone..." Pecos, abandoned about 1840 because of internal disputes, Comanche hostilities, and epidemic diseases, is located about 20 miles southeast of Santa Fe.

You should not miss Taos, even though the pueblo has been rebuilt during

historic times. (The ruins of the original village lie a few hundred yards to the west, according to Bolton.) In the 13th century, Taos hosted trade fairs which drew Native American peoples up the trails, not only from other pueblos, but from the Southern Plains, the Navajo and Apache ranges and northern Mexico as well. By the 18th century, Taos staged even larger trade fairs, including a lively slave market, attended by the Indians and by fur trappers and Spanish- and English-speaking merchants. For the sake and duration of the fairs, Taos managed to foster a truce across a region which was often the scene of raids and warfare. "At this village," said Castaneda, "they [the Spaniards] saw the largest and finest hot rooms or estufas that there were in the entire country, for they had a dozen pillars, each one of which was twice as large around as one could reach and twice as tall as a man." In 1680, Taos, under the leadership of a Native American named Pope, orchestrated the revolt of the pueblos, one of the pivotal events in Southwestern history.

While a visit the ruins of the Salinas and Pecos pueblos will take you out of the main stream of tourism, a trip to the ruins of the 6th to 15th century Pueblo Grande, an important trading center in the old Hohokam region, will take you straight into the midst of the booming city of Phoenix. The Hohokam (a Puebloan tradition centered in southern Arizona and northern Sonora and distinguished by elaborate irrigation systems, innovative craftsmanship and Mesoamerican-style ceremonial platform mounds and sunken ball courts) capitalized on the entire prehistoric trade network, including the trails from the Southern Plains to the Pacific coast as well as those from Mexico to Utah. According to John P. Andrews and Todd W. Bostwick in Desert Farmers at the River's Edge: The Hohokam and Pueblo Grande, "The Hohokam traded for a number of raw materials and finished craft products, and may have obtained these items by trading their cotton, surplus crops, and their shell jewelry... At Pueblo Grande, more than 50 types of imported ceramic wares have been recovered during excavation." According to Andrews and Bostwick, Pueblo Grande – more than a mile across at its peak – encompassed, not only a large platform mound, but also "two and possibly three ballcourts, several major irrigation canals, trash mounds, houses, courtyards, plazas, hornos or ovens, compounds, storage pits, cemeteries, and various other cultural features." It also included a "big house," a "large multistory adobe building..." Pueblo Grande is located just northeast of the Phoenix Sky Harbor International Airport, along the north side of the Salt River.

Of all the Puebloan trade center ruins, I suspect that the late prehistoric Paquime would rank as the most culturally diverse. Located on the Casas Grandes River in northwestern Chihuahua, Paquime had roots in all the major Puebloan traditions, including the Hohokam, the Mogollon (of southern New Mexico and northern Chihuahua) and the Anasazi (of the Colorado Plateau), and it drew inspiration from Mesoamerica. It appears to have served as the gateway for a network of mercantile trails leading into the Southwest. It provided warehousing for trade goods, exemplified by the nearly 4,000,000 salt water shells discovered by Di Peso's archaeological team during excavation of the ruins. It operated the bustling marketplace. Reflecting community planning, Paquime comprised an apartment complex, private courtyards, domestic storage, a subterranean well, a sweat bath, slave dungeons, warehousing, artisan work areas, ceremonial rooms, ceremonial item storage (mostly bear bones), and a human-skull trophy room. The public area included the open market, a plaza, effigy mounds, ceremonial mounds and ball courts. Paquime came to a violent end when some unknown enemy attacked the community, killing hundreds of its citizens, burning the support beams and demolishing the walls of structures, and smashing the sacred icons of the Paquime religion. Paquime lay in ruin, as if frozen in time, for five centuries, until unearthed by Di Peso's trowels.

The Grand Indian Crossing

Some 300 miles down the Rio Grande from the Paso del Norte ford, at the southernmost tip, or "elbow," of the great southeast-to-northeast "big bend" in the river, you will find the Grand Indian Crossing, that "very wide, well beaten, and...much traveled thoroughfare..." of the 19th century Comanche War Trail. For the Comanche and Kiowa warrior parties returning from their plundering of Mexican settlements in Chihuahua and Coahuila, the ford would have been a milestone in a successful raiding expedition and the long journey home. For their captives, it would have been a forlorn symbol of fading hope, a lost family and a fearful future.

To reach the ford, follow the paved road from the Big Bend National Park headquarters and visitor center southeast toward the Rio Grande Village visitor center for approximately 15 miles. There you will come to an intersection with an unpaved road which the National Park Service describes as "Primitive," a signal that you will likely need a "four-wheel drive, high-clearance vehicle" to proceed farther with confidence. Follow the primitive road generally southwest past the old, abandoned Mariscal mining community then generally south to the Grand Indian Crossing, just

upstream from Rio Grande's Mariscal Canyon--altogether a distance of about 30 miles from the turnoff at the paved road. Before you leave the visitor center, secure a good park map and a road condition update from the Park Service personnel. As a precaution, take food and water to tide you over in the event you have a breakdown. Not many park visitors travel the road.

The ford lies in one of the more isolated corners of our nation, in the midst of the thorny basins of the Chihuahuan Desert and the rocky slopes of volcanic hills and mountains. It was a terrible and punishing landscape for herds of hundreds of hard-running horses. Should you go there in the summer, it will become clear why the Comanches and Kiowas chose the cooler month of September – a time of year that fearful Mexicans referred to as the "Comanche Moon" – to begin their annual raids of the settlements to the south.

The Chacoan Roads

If you are intrigued by Chaco Canyon's mysterious road network, I suggest that you hike the park's Alto Mesa Trail, which will lead you to a part of one of the roads. The trail ascends from the canyon floor to its rim through a narrow break in the wall immediately behind the Kin Kletso Pueblo ruin. It follows the rim generally eastward for perhaps a half mile, passing two stone basins which the Chaco Anazasi cut into the bedrock for some reason now inexplicable. At a striking overlook just above and behind the famous Pueblo Bonito ruin, the trail turns north, toward the Pueblo Alto complex of ruins, where, apparently, several of the Chaco roads converge. On the trail between the overlook and Pueblo Alto – a distance of perhaps three quarters of a mile – you will discover remnants of one of the roads.

You will find stretches which the Anasazi obviously cleared of rubble and bermed with loose stone. You will see rock outcrops which they graded down with stone and wooden hand tools to facilitate their passage. From Pueblo Alto, the trail leads eastward for roughly three quarters of a mile across the region's high desert sage landscape, taking you back to the rim and a view of "Jackson's Staircase." That precipitous and dangerous pathway may have served for pilgrims' ceremonial descent to the canyon floor. Altogether, the round trip distance on the Alto Mesa Trail is just under five miles. You would likely spend several hours on the hike. Although the trail would rank as no more than moderate in difficulty, you should take appropriate precautions, especially on a hot summer day. Inquire about maps and trail conditions at the Chaco Canyon Visitor Center.

The Native American Legacy of Trails

The juxtaposition of our super highways and the Native American trails provides a measure of how far we have come technologically. In our sleek sedans, we cover 75 miles in an hour. Foot-bound hunting and gathering bands of Native Americans covered perhaps 20 miles in a day. In our double-trailer semis, we transport 20 tons of commodities and possessions. They transported what they could carry on their backs. In our buses, we move crowds of people from city to city. They moved in small extended families across an isolated landscape. We travel in plush seats and air-conditioned comfort. They trekked, with small children, over rocky and sandy desert basins and towering mountain ranges in the raw cold of winter and the searing heat of desert summers.

For all our technology, however, we will never equal one accomplishment of the Native Americans. They came first.

Jay W. Sharp (../who/pro_sharp.html)

More Trails

More Trails

Wild and Diverse Landscape (/desert-trails/desert-trails.html)
Coronado Expedition From Compostela to Cibola (/desert-trails/coronado-expedition-cibola.html)
Coronado Expedition From Cibola to Quivira Then Home (/desert-trails/coronado-expedition-quivira.html)
Chihuahua Trail (/desert-trails/chihuahua-trail-1.html)
Chihuahua Trail 2 (/desert-trails/chihuahua-trail-2.html)
The Juan Bautista De Anza Trai (/desert-trails/anza-trail.html)I
Jornada del Muerto Trail (/desert-trails/jornada-del-muerto.html)
Santa Fe Trail (/desert-trails/santa-fe-trail.html)
The Long Walk Trail Of The Navajos (/desert-trails/long-walk-trail-navajos.html)
The desert route to California (/desert-trails/desert-route-to-california.html)
Bradshaw's Desert Trail To Gold (/desert-trails/bradshaw-trail.html)
A Soldier view of the Trails Part 1 (/desert-trails/desert-trails-civil-war.html)
A Soldier view of the Trails Part 2 (/desert-trails/desert-trails-civil-war2.html)



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Cultural Resources from an Indigenous Perspective



Guiding Principles of Self-Determination

Many of the project's guiding principles align with those in Tuhiwai Smith's *Decolonizing Methodologies* (2012), which reinforce tribal sovereignty and self-determination. Smith articulates the process in which many indigenous peoples and their supporters are engaged via revitalization of indigenous cultures at all levels. The concept conveys the widespread effort to re-focus the standard interpretation of history and status quo to be more inclusive and less ethnocentric. These principles include but are not limited to:

- Indigenous determination of research needs and priorities;
- Indigenous articulation of the ways research should proceed;
- Training of indigenous researchers and extending opportunities for indigenous peoples;
- Discussion of culturally appropriate ethics, and ongoing development of culturally sympathetic methods;
- Increased collaboration among tribes;
- Tribal development and dissemination of literature on research;
- Continued self-reflection, evaluation and critique of the community of indigenous researchers;
- Education of the wider research and government community, including scientific, academic and policy communities regarding principles 1-7 above; and
- Accountability to and outcomes for tribes.

Grounding the project as well as the TCL approach in these principles expands the scope and reach of potential benefits far beyond the stated objectives. Adopting this approach during undertakings and initiatives serves to strengthen tribal capacity in numerous ways, improve long-term relationships among agencies and tribes, and ultimately better preserve and protect shared resources and landscapes.

A Cultural Landscape Approach for Integrated Resource Management

Federal agencies may not fully understand that indigenous people do not draw clear lines between the "natural" and "cultural" resources of a place. As a result, agencies may not adequately appreciate how this holistic perspective adversely impacts their capacity to address the complex issues of land management and regulatory undertakings. The TCL method uses a holistic cultural landscape approach (CLA), which integrates environmental science with historical, archaeological, and traditional knowledge to provide a robust and cost-effective procedure to document places and resources of past and present significance to tribal communities. A cultural landscape approach recognizes that places and cultural heritage resources can have different or multiple meanings and levels of significance based on how people from different cultures, times, or backgrounds have interacted with the respective landscapes (MPA FAC 2011). Implementing this approach increases the likelihood that cultural heritage resources will be found, recognized, and appropriately considered as decisions are made about federal actions or undertakings.

Cultural resources can suffer further from a lack of understanding for their place in the contextualized mosaic of a landscape. Generally, an indigenous worldview recognizes broad interconnections and does not consider a single artifact or a single species as existing without complex relationships. An example is an archaeological site that has culturally significant plants and modified trees above ground (peeled bark, coppiced [pruned to encourage new growth], etc.), and a lithic component (stone tools) underground, with the site's location possessing a viewshed of an important cultural or spiritual location, such as a mountain. These types of complex locations are understood by the communities that inhabit and interact with them. By contrast, many studies tend to focus solely on the archaeological components of a site, rendering the interpretation of the place incomplete. Over-emphasis on material culture skews the understanding of a place by narrowly focusing on artifacts and potentially obscuring the cultural context of that place. Additionally, cultural resources have been damaged or lost because their meanings and connections with other resources found within the mosaic of cultural landscape have gone unrecognized.

CLA represents an opportunity to integrate management of natural and cultural resources, and to incorporate multiple voices and perspectives into procedures and practices. At its most basic, CLA is based on the understanding that humans are part of the landscape, both shaping and being shaped by it. CLA considers cultural heritage and resources as part of the ecosystem and the broader landscape, and examines relationships among all the resources of a place and their environment over time. In this way, CLA integrates management of cultural and natural resources at the ecosystem and landscape level – similar and analogous

to ecosystem-based management. Significantly, CLA can identify past and living cultural voices associated with a landscape, helping ensure the fullest possible public engagement in planning and management (MPA FAC 2011).

Tribes and indigenous groups have an intimate and historical knowledge of place and should be engaged early to inform planning and future management. They hold a breadth and depth of understanding of the landscape to which they are connected. This knowledge reflects generations of engagement and interaction with the landscape. Indigenous peoples have long known that the interconnection between species ensures that management practices for particular resources influence the propagation and proliferation of other species. Additionally, geologic and seismic history may be held in oral tradition that guides and shapes settlement locations. The TCL approach recognizes that this information is valid and that it is held by tribal communities; the success of this process is therefore defined by participation of tribes and indigenous groups. The method provides tribal contextualization in a meaningful manner early in project processes, thus limiting delay and adverse impacts, and in turn reducing the need for mitigation measures.

Although the concept of CLA is not new (Sauer 1963; Westerdahl 1992), clear articulation of the process and pathways for implementation have been lacking, particularly regarding inclusion of tribal communities, resources, and places. The TCL approach outlined here can be used by indigenous communities to help recognize and record places and resources of cultural importance. It is intended to be transferable, and help tribes, agencies, and stakeholders to:

- Properly engage with tribal and indigenous communities prior to the proposal of activities that may impact tribal resources and areas;
- Involve tribal and indigenous communities in the identification of their own significant resources and areas of use; and
- Clarify tribal interests in specific planning areas.

Tribal Cultural Landscapes

TRIBAL CULTURAL LANDSCAPE: Any place in which a relationship, past or present, exists between a spatial area, resource, and an associated group of indigenous people whose cultural practices, beliefs, or identity connects them to that place. A tribal cultural landscape is determined by and known to a culturally related group of indigenous people with relationships to that place.

Archaeological sites, burial grounds and traditional use areas are imbued with special meaning to past and present indigenous communities. For these places, this connection is important for, and often inseparable from, a community's cultural identity. Connection to place is a nearly universal concept held by indigenous groups throughout the United States and its territories, and is embodied in the tribal cultural landscape (TCL) definition developed during this project:
Specific relationships may vary from group to group and may be defined temporally or

geographically through oral traditions and cultural practices. Multiple tribes may hold knowledge and connections to the same place. Some tribes relocated due to displacement or treaties, and may be extant today in places other than where they originated. These place-based connections, when viewed as a TCL, enable agencies and project applicants to understand the greater context of a place, the complexity of indigenous identity, and how indigenous communities identify places and important resources.

Three similar concepts worth differentiating from TCLs already exist in guidelines for the National Register of Historic Places (NRHP, or National Register), NHPA legislation and Section 106 implementing regulations, and the Secretary of the Interior's Treatment Standards respectively: Traditional Cultural Properties (TCPs), historic properties of religious and cultural significance to Indian tribes and Native Hawaiian organizations, and cultural landscapes. How is TCL different, and why is it necessary? TCL shares many characteristics of these three concepts, but also adds important elements, including processes for implementation as well as ongoing adaptive management grounded in traditional knowledge.

Regarding TCPs, the NRHP has transitioned to using "places" rather than "properties," and future publications will reflect this change (B. Wyatt, personal communication, July 16, 2015). Ultimately, TCP designation is linked to the National Register, which can limit its use in consultations outside of the NHPA Section 106 process. Beyond the site-level definition, TCL also refers to a holistic approach, and the National Register is just one way TCL can be applied.

A key difference between TCPs and TCLs is that the latter are defined as significant by indigenous communities, rather than by exterior criteria. Whether or not a TCP may be eligible for the National Register is largely at the discretion of the nomination evaluator. In the historic preservation community, there are some perceived shortcomings of the TCP concept. Although our intent is not to provide guidelines for designating TCPs, the Final Report includes a summary of these principal points, provided in the interest of sharing what we have learned.

TCP can refer to places of importance to any community, not just to indigenous communities. According to the Advisory Council on Historic Preservation (ACHP), "within the Section 106 process, the appropriate terminology for sites of importance to Indian tribes [and Native Hawaiian organizations] is 'historic property of religious and cultural significance to an Indian tribe [and Native Hawaiian organization]'" (ACHP 2008:19 and ACHP 2011:14). TCL carries the same meaning and utility as this phrase, and encompasses indigenous communities more inclusively. Also, it is a holistic pre-consultation approach not limited to the Section 106 process.

Cultural landscape is another useful and appropriate concept for tribes. The National Register currently does not provide a definition of cultural landscape, and criteria for evaluating significance are therefore lacking. Typically, landscapes are nominated to the NRHP as districts or sites, which must also have a defined boundary. However, in 2010, the determination of Nantucket Sound as a NRHP-eligible TCP set new precedent. The Sound was ruled to be a site with a defined boundary, and a contributing feature of a larger district and

"culturally significant landscape" whose boundary definition would require additional documentation. This unprecedented use of NRHP standards and criteria both reveals the under-used flexibility of the NRHP and TCPs, and expands the concept's utility for indigenous communities.

The Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes define a cultural landscape as a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values (Birnbaum and Peters 1996). Two types of cultural landscapes, in particular, share defining characteristics with TCLs. Historic vernacular landscapes *evolved through use by the people whose activities or occupancy shaped them*, and ethnographic landscapes contain a variety of natural and cultural resources *that associated people define as heritage resources* (Birnbaum and Peters 1996).

Recently, NPS has undertaken initiatives to better engage indigenous communities in identifying and categorizing cultural landscapes. The TCL approach not only emphasizes these two key aspects of the concept—shaping of the landscape by people, and indigenous self-determination of significance—but also emphasizes ongoing adaptive management grounded in traditional knowledge, and includes processes for implementation, delineating clear roles for both tribes and agencies in planning and management.

In this way, TCL also refers to a holistic approach beyond the site-level definition. Typically, NHPA and NEPA are applied on a project basis, because an action or undertaking is proposed, with a major goal being determination of eligibility to the National Register of Historic Places. TCL starts broadly with tribes determining important places and resources, and being equipped to represent their interests in potential actions or undertakings. The approach is grounded in tribal sovereignty and self-determined epistemology. Agencies and project applicants can derive process value from pre-consultation and planning, which in turn has the potential to help NHPA and NEPA processes and tribal consultation.

In response to "an increasing number of Section 106 reviews involving large scale historic properties of religious and cultural significance to Indian tribes or Native Hawaiian organizations (NHOs)," combined with increasing development pressures and the lack of existing guidance on cultural landscapes, ACHP released the Native American Traditional Cultural Landscapes Action Plan (ACHP 2011a:1). The plan contains two sets of action items: the first set focuses on raising awareness about the existence and importance of traditional cultural landscapes to ensure they are considered early in land management and project planning decisions; the second set focuses on the Section 106 process as well as NEPA reviews, and the development of tools to assist all participants in the recognition and consideration of Native American traditional cultural landscapes. TCL can help fulfill both sets of these goals.

TCL can also help minimize conflicts, controversy, legal challenges and procedural delays. The approach can assist in fulfilling Secretarial Order No. 3330, Improving Mitigation Policies and Practices of the Department of Interior. The Order created a Task Force charged with, among other things, identifying "any new policies or practices, revisions to existing policies or

practices, or regulatory or other changes that could be implemented to incorporate landscape-scale planning into mitigation-related decisions" (Secretarial Order No. 3330:4). TCL can assist with this goal as it would help "avoid potential environmental impacts from projects through steps such as advanced landscape-level planning that identifies areas suitable for development because of low or relatively low natural and cultural resource conflicts" (Secretarial Order No. 3330:2).

FACEBOOK (HTTPS://SANCTUARIES.NOAA.GOV/EXITHTML?URL=HTTPS%3A%2F%2FWWW.FACEBOOK.COM%2FSHARER%2FSHARER.PHP%3FU=HTTPS%3A%2F%2FSANCTUARIES.NOAA.GOV%2FTRIBAL-LANDSCAPES%2FCULTURAL-RESOURCES.HTML)

TWITTER (HTTPS://SANCTUARIES.NOAA.GOV/EXITHTML?URL=HTTP%3A%2F%2FTWITTER.COM%2FHOME%3FSTATUS%3DTRIBAL%2520CULTURAL%2520LANDSCAPES%3A%2520CULTURAL%2520RESOURCES%2520FROM%2520AN%2520INDIGENOUS%2520PERSPECTIVE%2520BY%2520%26%2364%3BSANCTUARIES%2520HTTPS%3A%2F%2FSANCTUARIES.NOAA.GOV%2FTRIBAL-LANDSCAPES%2FCULTURAL-RESOURCES.HTML)

GOOGLE+ (HTTPS://SANCTUARIES.NOAA.GOV/EXITHTML?URL=HTTPS%3A%2F%2FPLUS.GOOGLE.COM%2FSHARE%3FURL%3DHTTPS%3A%2F%2FSANCTUARIES.NOAA.GOV%2FTRIBAL-LANDSCAPES%2FCULTURAL-RESOURCES.HTML%2520TRIBAL%2520CULTURAL%2520LANDSCAPES%3A%2520CULTURAL%2520RESOURCES%2520FROM%2520AN%2520INDIGENOUS%2520PERSPECTIVE)

EMAIL (MAILTO:?SUBJECT=TRIBAL CULTURAL LANDSCAPES: CULTURAL RESOURCES FROM AN INDIGENOUS PERSPECTIVE&BODY=HTTPS://SANCTUARIES.NOAA.GOV/TRIBAL-LANDSCAPES/CULTURAL-RESOURCES.HTML)

Tribal Cultural Landscapes

Error processing SSI file

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org> Fri, Jun 29, 2018 at 8:26 AM
To: Andrew Salas <gabrielenoindians@yahoo.com>
Cc: Matthew Teutimez <matt.teutimez@gmail.com>, Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>, Nuri Cho <nuri.cho@lacity.org>

Dear Mr. Salas and Mr. Tautimez,

Thank you for the discussion today and the information you provided. We will discuss this with the City Attorney.

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

Phone Call

22 messages

Nuri Cho <nuri.cho@lacity.org> Mon, Jul 16, 2018 at 8:42 AM
To: Administration Gabrieleno Indians <admin@gabrielenoindians.org>, Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>
Cc: Monique Acosta <monique.acosta@lacity.org>, Iris Wan <iris.wan@lacity.org>

Hi Andrew,

I just tried calling but couldn't reach you.

We have some follow up questions for projects located at 4850 Hollywood and 3160 Olympic. Can we set up a phone call? We are available on Tuesday, 24th at 10 am. Please let us know if that works for you, and I will send you a calendar invitation.

Thank you.

–

Nuri Cho
Central Project Planning Division
Department of City Planning
200 N. Spring St., Room 621
Los Angeles, CA. 90012
T: (213) 978-1177

Nuri Cho <nuri.cho@lacity.org> Mon, Jul 16, 2018 at 11:12 AM
To: Administration Gabrieleno Indians <admin@gabrielenoindians.org>, Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>
Cc: Monique Acosta <monique.acosta@lacity.org>, Iris Wan <iris.wan@lacity.org>

Hi Andrew,

Can we actually do 24th at 2pm?
[Quoted text hidden]

Andrew Salas <gabrielenoindians@yahoo.com> Mon, Jul 16, 2018 at 8:31 PM
To: Nuri Cho <nuri.cho@lacity.org>
Cc: Administration Gabrieleno Indians <admin@gabrielenoindians.org>, Monique Acosta <monique.acosta@lacity.org>, Iris Wan <iris.wan@lacity.org>

I'll call u tomorrow to make arrangements

Sent from my iPhone

On Jul 16, 2018, at 11:12 AM, Nuri Cho <nuri.cho@lacity.org> wrote:

> Hi Andrew,
>
> Can we actually do 24th at 2pm?
>
> On Mon, Jul 16, 2018 at 8:42 AM, Nuri Cho <nuri.cho@lacity.org> wrote:
> Hi Andrew,
>
> I just tried calling but couldn't reach you.
>
> We have some follow up questions for projects located at 4850 Hollywood and 3160 Olympic. Can we set up a phone call? We are available on Tuesday, 24th at 10 am. Please let us know if that works for you, and I will send you a calendar invitation.
>
> Thank you.
>
> –
>
> **Nuri Cho**
> **Central Project Planning Division**
> **Department of City Planning**
> 200 N. Spring St., Room 621
> Los Angeles, CA. 90012
> **T:** (213) 978-1177

–

Nuri Cho

Central Project Planning Division
Department of City Planning
200 N. Spring St., Room 621
Los Angeles, CA. 90012
T: (213) 978-1177

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Wed, Jul 18, 2018 at 3:33 PM
To: Nuri Cho <nuri.cho@lacity.org>
Cc: Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>, Iris Wan <iris.wan@lacity.org>, Monique Acosta <monique.acosta@lacity.org>

Nuri
Do you have time today or tomorrow. We have a meeting today at 4pm
[Quoted text hidden]

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

Nuri Cho <nuri.cho@lacity.org> Wed, Jul 18, 2018 at 3:36 PM
To: Administration Gabrieleno Indians <admin@gabrielenoindians.org>
Cc: Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>, Iris Wan <iris.wan@lacity.org>, Monique Acosta <monique.acosta@lacity.org>

Hi Andrew,

I am not available tomorrow. Can we do 24th at 2pm?
[Quoted text hidden]

Nuri Cho <nuri.cho@lacity.org> Thu, Jul 19, 2018 at 2:39 PM
To: Administration Gabrieleno Indians <admin@gabrielenoindians.org>
Cc: Monique Acosta <monique.acosta@lacity.org>, Iris Wan <iris.wan@lacity.org>

Hi Andrew,

I just called your office but couldn't reach you. I left a message with Brandy.

We had a couple of phone calls already for these projects, and we just have some follow up questions on the documents that were submitted to us. The projects are located at 4850 Hollywood and 3160 Olympic.

Can we schedule something sooner - perhaps next week? It can be a quick 30 minute call.

Please let me know at your earliest convenience.

On Thu, Jul 19, 2018 at 1:13 PM, Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:
Also Can you please provide the project address and name.

Thank you

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

On Thu, Jul 19, 2018 at 1:12 PM, Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:
Hello But I we are available on August 23 at 11am. Please get back to us to confirm if this time and date works for you.

Thank you
[Quoted text hidden]

[Quoted text hidden]

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Tue, Jul 24, 2018 at 8:29 AM
To: Nuri Cho <nuri.cho@lacity.org>
Cc: Administration KNRM <admin@knrm-nsn.us>, Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>, Iris Wan <iris.wan@lacity.org>, Matthew Teutimez <Matthew.Teutimez@gabrielenoindians.org>, Monique Acosta <monique.acosta@lacity.org>

Good morning Nuri,
Today I have scheduled consultations with already scheduled lead agency's I will do my best to contact you later today when I get a chance. If you have any questions please fill free to contact our office . Thank you

On Mon, Jul 16, 2018 at 8:42 AM Nuri Cho <nuri.cho@lacity.org> wrote:
[Quoted text hidden]
[Quoted text hidden]

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Tue, Jul 24, 2018 at 5:36 PM
To: Nuri Cho <nuri.cho@lacity.org>
Cc: Administration KNRM <admin@knrm-nsn.us>, Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>, Iris Wan <iris.wan@lacity.org>, Matthew Teutimez <Matthew.Teutimez@gabrielenoindians.org>, Monique Acosta <monique.acosta@lacity.org>

Hello Nuri ,
I tried contacting you today and left a phone message . Talk soon thank you
[Quoted text hidden]

Nuri Cho <nuri.cho@lacity.org> Thu, Aug 2, 2018 at 12:31 PM
To: Administration Gabrieleno Indians <admin@gabrielenoindians.org>
Cc: Iris Wan <iris.wan@lacity.org>, Monique Acosta <monique.acosta@lacity.org>

Hi Andy,

I understand that the tribe is short staffed and handling a lot of projects at once. However, it has been four months since we started the AB 52 process for this project on April 10, 2018. Since then, we had two phone calls and multiple emails, and I have yet to receive enough information to determine whether or not there are tribal cultural resources in the project vicinity and/or if the project will have a significant impact on such resources.

I've tried calling and emailing several times to schedule another consultation, but it's been extremely difficult to reach you. I am sending some follow-up questions below. I would really appreciate it if you can send me detailed written responses with supporting documents by no later than August 9th.

- Can the tribe provide any other documents to corroborate the original of the maps provided to the lead agency? If so, please send them to me.
- NAHC determined that there are no known resources within the area of potential project effect per their letter dated May 9, 2018. Are there any known, subsurface tribal cultural resources or artifacts within 0.5 mile of the project sites? I am referring to tribal cultural resources that are currently listed or eligible to be listed in the national, state or local register of historical resources. Please send me a list showing the address and details of the resources or artifacts.
- Matt and you provided oral history of the tribe during the phone calls. Who has the authority in the tribe to provide oral history? Was that authority given to both Matt and you by the tribe? Are you the only people authorized in the tribe to provide oral history?

Please be advised that the lead agency may conclude the consultation if mutual agreement could not be reached after good faith and reasonable effort.

Thank you.

On Tue, Jul 31, 2018 at 4:39 PM, Nuri Cho <nuri.cho@lacity.org> wrote:
Hi Andy,

I'm sorry I missed your call on the 24th. I left the office at 4:30pm. Can I call you tomorrow 8/1?
[Quoted text hidden]
[Quoted text hidden]

Nuri Cho <nuri.cho@lacity.org> Thu, Aug 16, 2018 at 9:57 AM
To: Monique Acosta <monique.acosta@lacity.org>

——— Forwarded message ———
From: **Administration Gabrieleno Indians** <admin@gabrielenoindians.org>
Date: Tue, Aug 14, 2018 at 3:26 PM
Subject: Re: Phone Call
To: Nuri Cho <nuri.cho@lacity.org>

Hello Nuri

Mr. Salas will get back to you as soon as possible there has been a death in the family recently. Mr. Salas will get back to you as soon as possibl.
Thank you

Sincerely,

Brandy Salas

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

On Tue, Aug 14, 2018 at 1:33 PM, Nuri Cho <nuri.cho@lacity.org> wrote:
Hello Brandy,

Thank you for the response. I requested detailed written responses to the questions with supporting documents for the project located at 4850 Hollywood Blvd in my email dated August 2nd. I asked that the tribe send us responses by no later than August 9th, but I have yet to receive responses. Can you have Mr. Salas send me a written response by the end of this week, August 17th? Thank you.

On Tue, Aug 14, 2018 at 12:40 PM, Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:
Nuri Im sorry

I just spoke with Mr. Salas , he unfortunately will not be available tomorrow. The next time we have available will be on August 29th at 11am. Please get back to us to confirm if this time and date works for you I will be able to hold this time slot open until tomorrow.
Thank you

Sincerely,

Brandy Salas

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

On Tue, Aug 14, 2018 at 12:07 PM, Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:
Can you please provide the project address and name of the project
Thank you

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

On Tue, Aug 14, 2018 at 12:06 PM, Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:
Hello Nuri

We are available on August 15th at 1pm for a phone consultation. Please get back to us to confirm if this date and time will work for you.
Thank you

Sincerely,

Brandy Sala

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

On Tue, Aug 14, 2018 at 12:05 PM, Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:
Hello Nuri

We are available on August 15th at 1pm for a phone consultation. Please get back to us to confirm if this date and time will work for you.
Thank you

Sincerely,

Brandy Sala

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

On Tue, Aug 14, 2018 at 12:05 PM, Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:
Hello Nuri

We are available on August 15th at 1pm for a phone consultation. Please get back to us to confirm if this date and time will work for you.
Thank you

Sincerely,

Brandy Salas

DO NOT USE THIS ACCOUNT. ALL EMAILS SHOULD COME FROM

- **admin@gabrielenoindians.org**

On Tue, Aug 14, 2018 at 11:19 AM, Nuri Cho <nuri.cho@lacity.org> wrote:
Hi Andrew,

When is the earliest you can schedule?

On Mon, Aug 13, 2018 at 2:23 PM, Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:
Hello Nuri,

Would you still want to set up consultation, we are so sorry for the late response.

Sincerely,
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org> Thu, Aug 16, 2018 at 3:04 PM
To: Andrew Salas <gabrielenoindians@yahoo.com>
Cc: Matthew Teutimez <matt.teutimez@gmail.com>, Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>, Nuri Cho <nuri.cho@lacity.org>

Dear Mr. Salas and Mr. Teutimez,

My colleague, Nuri Cho, and myself have been corresponding with you regarding our projects located at 4850 Hollywood and 3170 W. Olympic Boulevard, respectively. It has been 3 months since the consultation process has begun when I received your written request for consultation dated May 14, 2018 for 3170 W. Olympic Boulevard (Case No. CPC-2016-3662-CU-DB-SPR). Since then we've had two phone calls; however, one of the phone calls had to end within minutes of beginning due to an emergency with one of the Tribal representatives.

There has been numerous emails and phone calls on our part in an effort to coordinate a subsequent phone consultation to further discuss maps that were provided by you and to further our research about tribal cultural resources within the proximity of the project sites in order to determine whether or not there are tribal cultural resources in the project vicinity and/or if the project will have a significant impact on such resources. We have not been able to schedule a subsequent phone consultation and have not yet received additional information from your Tribe to make this determination.

Given our difficulties connecting with you, an email was sent on 8/2/2018 from Nuri Cho requesting detailed written responses to follow up questions with a response no later than 8/9/2018. Although the Tribe did not respond to that email by 8/9/2018, I am sending another email as the 8/2/2018 email did not include questions specific to my project. Therefore, I am requesting written responses with supporting documents to the following questions for properties located at 3170, 3188 W. Olympic Boulevard, 1006, 1010, 1012, 1014, 1020 S. Serrano Avenue, and 1007, 1011, 1015, 1017, 1019, 1021 S. Hobart Boulevard.

- Can the tribe provide any other documents to corroborate the original of the maps provided to the lead agency on 6/14/2018? If so, please send them to me.
- NAHC determined that there are no known resources within the area of potential project effect per their letter dated July 25, 2018. Are there any known, subsurface tribal cultural resources or artifacts within 0.5 mile of the project sites? I am referring to tribal cultural resources that are currently listed or eligible to be listed in the national, state or local register of historical resources. Please send me a list showing the address and details of the resources or artifacts.
- Mr. Salas and Mr. Teutimez both provided oral history of the Gabrieleno Band of Mission Indians Kizh Nation during our phone consultation on 6/28/2014. Who has the authority in the Tribe to provide oral history? Was that authority given to both Mr. Salas and Mr. Teutimez by the tribe? Are Mr. Salas and Mr. Teutimez the only people authorized in the tribe to provide oral history?

I believe you are now corresponding with Nuri Cho separately regarding property at 4850 Hollywood. Please provide a detailed written response to the questions above regarding properties located at 3170, 3188 W. Olympic Boulevard, 1006, 1010, 1012, 1014, 1020 S. Serrano Avenue, and 1007, 1011, 1015, 1017, 1019, 1021 S. Hobart Boulevard no later than 8/24/2018. Please be advised that the lead agency may conclude the consultation if mutual agreement could not be reached after good faith and reasonable effort.

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Andrew Salas <gabrielenoindians@yahoo.com> Thu, Aug 16, 2018 at 3:59 PM
To: Monique Acosta <monique.acosta@lacity.org>
Cc: Matthew Teutimez <matt.teutimez@gmail.com>, Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>, Nuri Cho <nuri.cho@lacity.org>

Monique
Sorry for the inconvenience however the reason I have not been able to return emails or responses is because we have had 3 deaths within our family the most recent this past Friday (my father inlaw) . We can schedule a Conference call after the following dates .

Mr. Venegas services are as follow Rosary/Viewing is at the Mission in San Gabriel Thursday 8/23 @ 7 pm Mass is Friday 08/24 @ 10 am then Rose Hills 🙏

Sent from my IPhones
[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Monique Acosta <monique.acosta@lacity.org> Fri, Aug 17, 2018 at 9:25 AM
To: Andrew Salas <gabrielenoindians@yahoo.com>
Cc: Matthew Teutimez <matt.teutimez@gmail.com>, Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>, Nuri Cho <nuri.cho@lacity.org>

Dear Mr. Salas and Mr. Teutimez,

My condolences on the passing of your family members. I understand this is a difficult time and a response by 8/24/2018 is unlikely. However, we do need to move forward and are now requesting a written detailed response no later than 8/31/2018. Below are the same questions from my email yesterday.

- Can the tribe provide any other documents to corroborate the original of the maps provided to the lead agency on 6/14/2018? If so, please send them to me.
- NAHC determined that there are no known resources within the area of potential project effect per their letter dated July 25, 2018. Are there any known, subsurface tribal cultural resources or artifacts within 0.5 mile of the project sites? I am referring to tribal cultural resources that are currently listed or eligible to be listed in the national, state or local register of historical resources. Please send me a list showing the address and details of the resources or artifacts.
- Mr. Salas and Mr. Teutimez both provided oral history of the Gabrieleno Band of Mission Indians Kizh Nation during our phone consultation on 6/28/2014. Who has the authority in the Tribe to provide oral history? Was that authority given to bothMr. Salas and Mr. Teutimez by the tribe? Are Mr. Salas and Mr. Teutimez the only people authorized in the tribe to provide oral history?

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | **F:** (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

Please note that I am out of the office on Mondays.

[Quoted text hidden]

Monique Acosta <monique.acosta@lacity.org>

Olympic - Serrano - Hobart project

Andy Salas <chairman@gabrielenoindians.org> Tue, Aug 28, 2018 at 3:11 PM
To: Monique Acosta <monique.acosta@lacity.org>, Nuri Cho <nuri.cho@lacity.org>
Cc: Administration Gabrieleno Indians <admin@gabrielenoindians.org>, Matthew Teutimez <Matthew.Teutimez@gabrielenoindians.org>

Ms. Acosta,

First, I would like to thank you in advance for your patience and in understanding the reasoning behind the delayed response to your requests. As I previously mentioned, we sadly had several deaths in our family (3 to be exact) within weeks of one another.
We would like to offer our resopnse to your questions below:

1. Below are explanations to the maps given to you at the time of consultation. In addition, we are including The Legend to the 1938 LA County Map for your reference. The 1938 LA County map is public and can be accessed at https://www.lapl.org/collections-resources/visual-collections/kirkman-harriman-pictorial-and-historical-map-los-angeles. The 1901 and 1903 Maps are USGS 7.5 minute Topographical maps produced by US Geological Survey and can be accessed at http://historicalmaps.arcgis.com/usgs/. The West LA area was historically known as Rancho La Brea and before that there were ancient villages of our Nation on that land. Here is a link to historical information about the Rancho La Brea area and the artifacts discovered in this area. We have also included a map of the California Rancho's to provide you with the land territory of Rancho La Brea. The information can be accessed at http://nativeamericanneltroots.net/diary/2605.

- Historical Maps 1901 & 1903 (Google Earth overlay). These USGS maps show the ancient watercourse that historically flowed within and/or adjacent to your project area. Watercourses were used by our Tribe for life sustenance as well as seasonal hamlets, trade depots, transportation of goods (trade route), and burials and cremations of our ancestors along the waterways.
- Historical Map 1938 (Google Earth overlay). This map shows the trade routes that historically traveled through this area and would have been located within and/or adjacent to your project area. Trade routes were heavily used by our Tribe and within and around them contained seasonal hamlets, trade depots, were used for transportation of goods and often contain isolated burials and cremations of our ancestors along the routes.

2. Although the NAHC Sacred Lands File search letters may indicate a negative search result, the letters also explicitly state that such a result ***DOES NOT PRECLUDE the existence of sites in the search area.*** Furthermore, said letters recommend that the requestor contact all tribes on the contact/consultation list because these databases and surface surveys do not fully quantify the presence/absence of TCR's (Please see attached emails from Frank Lelnert, NAHC and Dr. Gary Stickel, Ph.D Archaeologist). In addition, it is understood under AB52 that tribal oral history is independent and not weighted upon the amount of scientific documentation available and the absence of such information does not lessen the value or the significance of the oral history provided. Furthermore, this location is on private property, and at no time has our tribe been allowed to freely access and search for and record our Tribal Cultural Resources on private land. Thus, it may not be possible to "point" to a TCR onsite, however, topographic indicators such as stream courses, trade routes, village areas, etc are utilized to assess the probability of encountering Tribal Cultural Resources. Due to the proximity of this project location to three major Tribal Cultural Features (trade routes, waterway, and village area), there is a high potential to impact buried Tribal Cultural Resources including artifacts and human remains.

3. Authority to provide Oral History for the Gabrieleno Band of Mission Indians-Kizh Nation is given to the entire Tribe. It is through our elders and Ancestors that our History has been taught and shared. However, for Consultation purposes, the Tribe elected Andrew Salas, (son to the Chief of Gabrieleno Band of Mission Indians-Kizh Nation) who also serves as Chairman and to Matthew Teutimez who serves as the Tribal Biologist; Both have extensive knowledge of the land, along with the Gabrieleno Band of Mission Indians-Kizh Nations Oral History and traditions. As I am sure you are aware, according to AB52 and the Native American Heritage Commission, Oral History given by the Tribe supports the substantial evidence criteria (please refer to **AB52 Public Resources code 21080.3.1(A)** ... "*The Legislature finds and declares that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources*". In addition, please see the email attached for your reference from NAHC General Counsel, Terri Robinson regarding the significance of Oral testimony on a separate project in Los Angeles.

We are including mitigation language our Tribal Government has approved for use with this project.

Sincerely,
Andrew Salas, Chairman
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
Cell: (626)926-4131
website: www.gabrielenoindians.org

From: Monique Acosta <monique.acosta@lacity.org>
Date: August 17, 2018 at 9:25:40 AM PDT
To: Andrew Salas <gabrielenoindians@yahoo.com>
Cc: Matthew Teutimez <matt.teutimez@gmail.com>, Iris Wan <iris.wan@lacity.org>, Christina Toy <christina.toy-lee@lacity.org>, Nuri Cho <nuri.cho@lacity.org>
Subject: Re: CPC-2016-3662-CU-DB-SPR / AB 52 Consultation

Dear Mr. Salas and Mr. Teutimez,

My condolences on the passing of your family members. I understand this is a difficult time and a response by 8/24/2018 is unlikely. However, we do need to move forward and are now requesting a written detailed response no later than 8/31/2018. Below are the same questions from my email yesterday.

- Can the tribe provide any other documents to corroborate the original of the maps provided to the lead agency on 6/14/2018? If so, please send them to me.
- NAHC determined that there are no known resources within the area of potential project effect per their letter dated July 25, 2018. Are there any known, subsurface tribal cultural resources or artifacts within 0.5 mile of the project sites? I am referring to tribal cultural resources that are currently listed or eligible to be listed in the national, state or local register of historical resources. Please send me a list showing the address and details of the resources or artifacts.
- Mr. Salas and Mr. Teutimez both provided oral history of the Gabrieleno Band of Mission Indians Kizh Nation during our phone consultation on 6/28/2014. Who has the authority in the Tribe to provide oral history? Was that authority given to bothMr. Salas and Mr. Teutimez by the tribe? Are Mr. Salas and Mr. Teutimez the only people authorized in the tribe to provide oral history?

Monique Acosta, City Planning Associate
Department of City Planning
T: (213) 978-1173 | F: (213) 978-1226
200 N. Spring St., Room 621
Los Angeles, CA 90012

On Thu, Jun 14, 2018 at 9:28 PM Administration Gabrieleno Indians <admin@gabrielenoindians.org> wrote:

Ms. Acosta,

As discussed over the phone, attached are screenshots of historical maps overlaid on a google earth imagery with your project area identified.

These maps show the waterways, trade routes, and prominent villages that occurred on this land which was heavily used for millennia by ancient people. We will explain our concerns further during the consultation, but wanted to provide you these reference maps for your files.

Also, we are including our Tribal Government's recommended mitigation for this project.

Sincerely,
Andrew Salas, Chairman
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
Cell: (626)926-4131
website: www.gabrielenoindians.org

6 attachments

6. 

Ranchos of Los Angeles.jpg
2295K

1. **AB52 Consultation _NAHC Oral History Explanation_Terri Robinson.pdf**
539K
2. **NAHC_Sacred Lands File_explanation_2018.pdf**
201K
3. **Proper CRM Monitoring of Properties_Dr. Gary Stickel_2018.pdf**
418K
4. **Spanish Mexican Early American Old LA County Map _ Legend.pdf**
853K
5. **Kizh Nation Mitigation Measures-August 2018.pdf**
346K

1.

From: Robinson, Terrie@NAHC
terrie.robinson@nahc.ca.gov
Subject: AB 52 Consultations with Kizh Nation on 1855-1871 S. Westwood Boulevard
Date: Sep 20, 2017 at 7:25:40 PM
To: stacy.farfan@lacity.org, jason.chan@lacity.org, gabrielenoindians@yahoo.com
Cc: Sanchez, Katy@NAHC katy.sanchez@nahc.ca.gov, Totton, Gayle@NAHC Gayle.Totton@NAHC.CA.GOV, Cypret, Samantha@NAHC Samantha.Cypret@NAHC.CA.GOV

Dear Ms. Farfan and Mr. Chan,

I'm in receipt of an email from Chairman Salas of the Kizh Nation regarding the substantial evidence standing being applied by the City of Los Angeles for the above-listed property and what appears to have been a rejection of oral testimony from the Kizh Nation to substantiate the existence of a tribal cultural resource as defined in Public Resources Code section 21074. I did not see any citation to authority for the legal standard you are using for substantial evidence and would appreciate any citation you have, and I'd appreciate it if you have it. Furthermore, I'd like to bring to your attention the Governor's Office of Planning and Research's AB 52 Technical Advisory, which provides on page four:

> Evidence that may support such a finding [of a tribal cultural resource] could include, among other evidence, elder testimony, **oral history**, tribal government archival information, testimony of a qualified archaeologist certified by the relevant tribe, testimony of an expert certified by the Tribal Government, official tribal government declarations or resolutions, formal statements from a certified Tribal Historic Preservation Officer, and historical notes, such as those found in the Harrington Papers and other anthropological records
>
> Governor's Office of Planning and Research, Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA, June, 2017 (emphasis added).

On a personal note, I have observed first-hand the accuracy of the oral history of the Kizh Nation, and I have met their elders. I routinely cite the Kizh Nation as an example in the trainings I give on AB 52 of how a tribe, through oral history alone, was accurate to within 50 feet of an ancient Native American burial ground. Had the agencies and project proponents for

mail and destroy all copies of the original message.

2.

From: Lienert, Frank@NAHC
Frank.Lienert@nahc.ca.gov
Subject: Assistance follow up
Date: Aug 20, 2018 at 1:37:02 PM
To: gabrielenoindians@yahoo.com

Chairman Salas,

In response to your inquiry about the language of the NAHC's Sacred Lands File letters, which you sent to Terrie Robinson. Sacred Lands File search letters which indicate a negative search result explicitly state that such a result does not preclude the existence of sites in the search area. Furthermore, said letters recommend that the requestor contact all tribes on the contact/consultation list.

If I can be of any further assistance please do not hesitate to contact me.

Kindest Regards,

Frank Lienert
Analyst
Native American Heritage Commission
916-573-1033

3.

ERA
ENVIRONMENTAL RESEARCH ARCHAEOLOGISTS – A SCIENTIFIC CONSORTIUM

Mr. Andrew Salas
Tribal Chairman
Kizh Tribal Office/Kizh Resources Management
910 N. Citrus Avenue
Covina, CA 91722

August 22, 2018

Re: proper CRM monitoring of properties

Dear Chairman Salas,

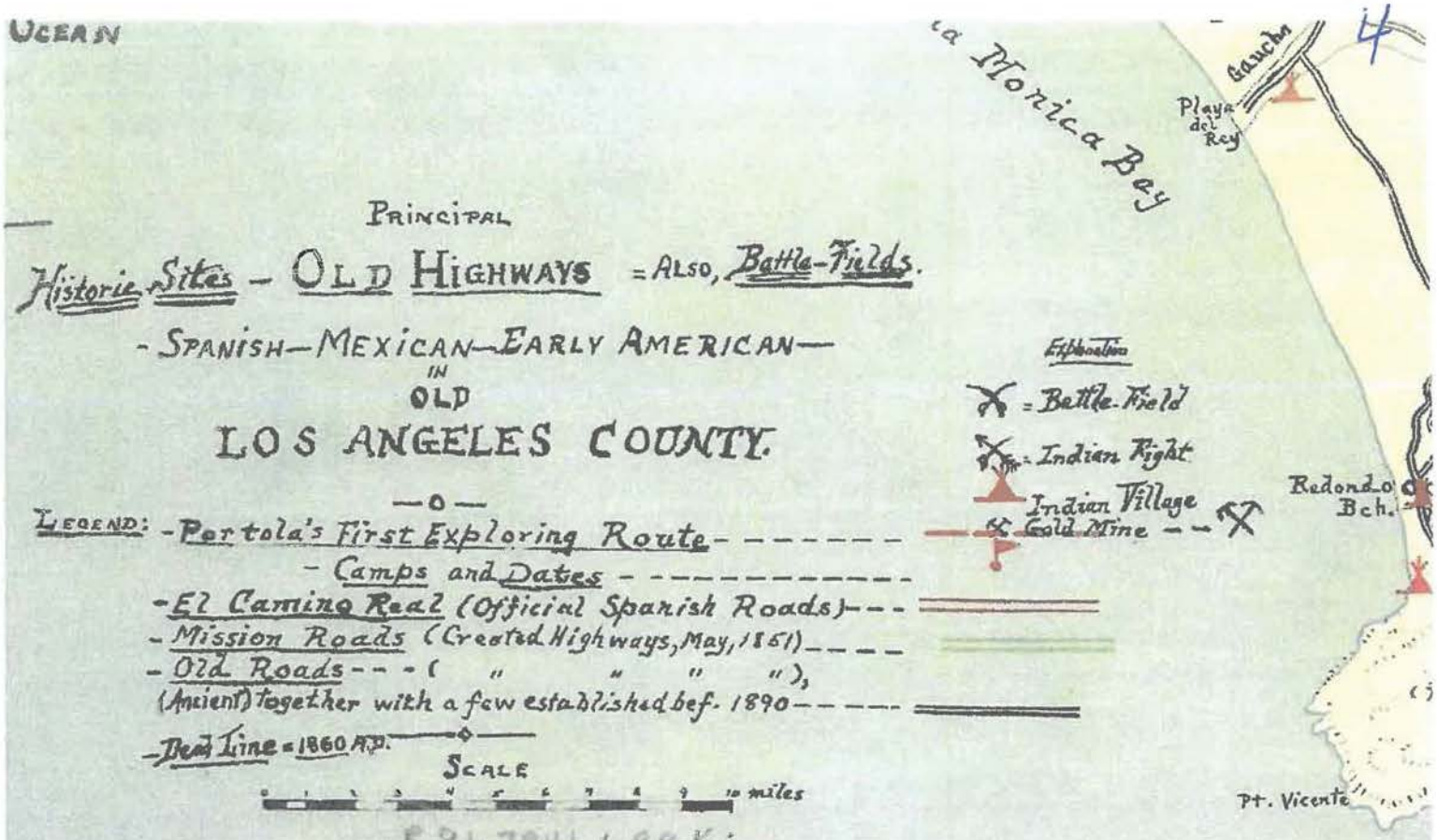
You have requested my professional opinion regarding your question: "Is traditional site survey sufficient to determine if significant cultural resources are present on a property slated for development or not? First let me give my credentials on this matter. I received my B.A. , M.A., and Ph.D. at UCLA where I also taught archaeology methods and theory. I have 50 years experience in this greater Los Angeles area. I have also, since the 1970s, conducted hundreds of Cultural Resource Management (CRM) projects at all levels (small parcel on-foot site surveys, large surveys and major excavations) for the State, County , City and Federal Governments as well for corporations and private developers. The traditional on-foot archaeological "site survey" is not adequate. There have been too many cases where significant cultural remains have been found when there were no surface indications of cultural data. A major recent example is in downtown Los Angeles last December when a LADOT development was digging a trench on Commerce Street and uncovered ancient Kizh burials. I have a good deal of experience with ground penetrating radar (GPR) which may have detected those human remains prior to the construction work. But GPR is not 100% effective. Therefore, in order for a project to be in full compliance with the legal mandate (both State and Federal) a proper monitoring program is always necessary. The only exception would be if a given property has had all of its soil deposits removed and/or destroyed beyond any reasonable doubt of containing cultural resources.

Sincerely yours,

Gary Stickel

Gary Stickel, Ph.D.
Principal Consulting Archaeologist
Environmental Research Archaeologists:
a Scientific Consortium

845 South Windsor Blvd., No. 1, Los Angeles, CA 90005
Phone: (323) 937-6997; Email: dregarystickel@att.net



4

PRINCIPAL

Historic Sites – OLD HIGHWAYS = ALSO, Battle-Fields.

- SPANISH—MEXICAN—EARLY AMERICAN—

IN

OLD

LOS ANGELES COUNTY.

—o—

Explanation

= Battle-Field

= Indian Fight

Indian Village & Gold Mine

LEGEND: - Portola's First Exploring Route - - - - - - -

- Camps and Dates - - - - - - - - - - - -

- El Camino Real (Official Spanish Roads) - - -

- Mission Roads (Created Highways, May, 1851) - - - -

- Old Roads - - - (" " " "),
(Ancient) together with a few established bef. 1890 - - - - -

- Dead Line = 1860 A.D.

SCALE

0 1 2 3 4 5 6 7 8 9 10 miles

R91.7941 L88Ki

Item:
Towns in parentheses were not founded until after 1870. Shown hereon only for location purposes.

County Boundary shown is that of 1936. In 1851 L.A. Co. included the parts of San Bernardino Co. and Orange Co. shown on this map. S. Bdno. Co. was cut off L.A. Co. in 1853; Orange Co., in 1889.

R.18W. R.17W. R.17W. R.16W. R.16W. R.15W. R.15W.

Compiled by
Geo. W. Kirkman
C.E.B.S.
August, 1937.
Los Angeles, California.

For the Map Room
of the History Dept.
Los Angeles Pub
In appreciation of the many kind
shown me, during many years of rea
by the History Librarians.
Geo. W. Kirkman

Los Angeles, April 5, 1938.

Gabrieleno Band of Mission Indians – Kizh Nation

Protection of Tribal Cultural Resources (TCRs)

Most Important Things for Agencies to Know About AB52:

- An EIR, MND or ND can not be certified, until AB-52 tribal consultation has concluded
- Agreed mitigation measures with the tribe, MUST be recommended for inclusion in the environmental document.
- Signature confirming acceptance of these mitigation measures recommended by our Tribal Government is required within 14 days of receipt to conclude AB52 consultation.

Tribal Cultural Resources Mitigation Measures within Kizh Nation Tribal Territory:

Note: To avoid compliance issues with the following laws, all Native American Monitoring shall be conducted by a documented lineal descendant from the ancestral Tribe of the project area.

- The Native American Graves Protection and Repatriation Act (NAGPRA), Public Law - 101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048.
- CEQA Guidelines Section15064.5, PRC 5097.98 (d)(1).
- The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

If you are receiving these measures, The Gabrieleño Band of Mission Indians Kizh -Nation are the direct lineal descendants of your project area. The Kizh Nation ONLY responds and consults on projects within their ANCESTRAL tribal territory. Therefore, to remain in compliance with above referenced laws and to enable our Tribe with the ability to protect and preserve our last remaining and irreplaceable Tribal Cultural Resources, it is recommended that the project applicant retain a qualified professional tribal monitor/consultant from the Gabrieleño Band of Mission Indians Kizh -Nation. The Kizh Nation possesses Tribal archives including documented historical information as well as multiple members who possess unique knowledge derived from oral tradition passed down through generations of the Tribe in order to provide the expertise needed to identify whether a project is located within a culturally sensitive area given its proximity to village areas, commerce areas, recreation areas, ceremonial areas, and burial locations.

Native American Heritage Commission (NAHC) Guidelines for Native American Monitors/Consultants (approved 9/13/05): By acting as a liaison between Native American, archaeologist, developers, contactors and public agency, a Native American monitor/consultant can ensure that cultural features are treated appropriately from the Native American point of view. This can help others involved in a project to coordinate mitigation measures. These guidelines are intended to provide prospective monitors/consultants, and people who hire monitors/consultants, with an understanding of the scope and extant of knowledge that should be expected.

Mitigation Guidelines for Tribal Cultural Resources (TCRs): CEQA now defines TCRs as an independent element separate from archaeological resources. Environmental documents shall address a separate Tribal Cultural Resources section that includes a thorough analysis of the impacts to only TCRs and includes separate and independent mitigation measures created with tribal input under AB-52 consultations. Therefore, all agreements, mitigation, and conditions of approval regarding TCRs shall be handled solely with the Tribal Government and conversely all agreements, mitigation, and conditions of approval regarding Archaeological Resources shall be handled by an Archaeological resource company.

Retain a Native American Monitor/Consultant: The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

Unanticipated Discovery of Tribal Cultural and Archaeological Resources: Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and

Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

Unanticipated Discovery of Human Remains and Associated Funerary Objects:
Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

Resource Assessment & Continuation of Work Protocol:
Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

Kizh-Gabrieleno Procedures for burials and funerary remains:
If the Gabrieleno Band of Mission Indians - Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

Treatment Measures:
Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

Acceptance of Tribal Government Recommended Mitigation Measures:

By _____ Date: _____
Lead Agency Representative Signature

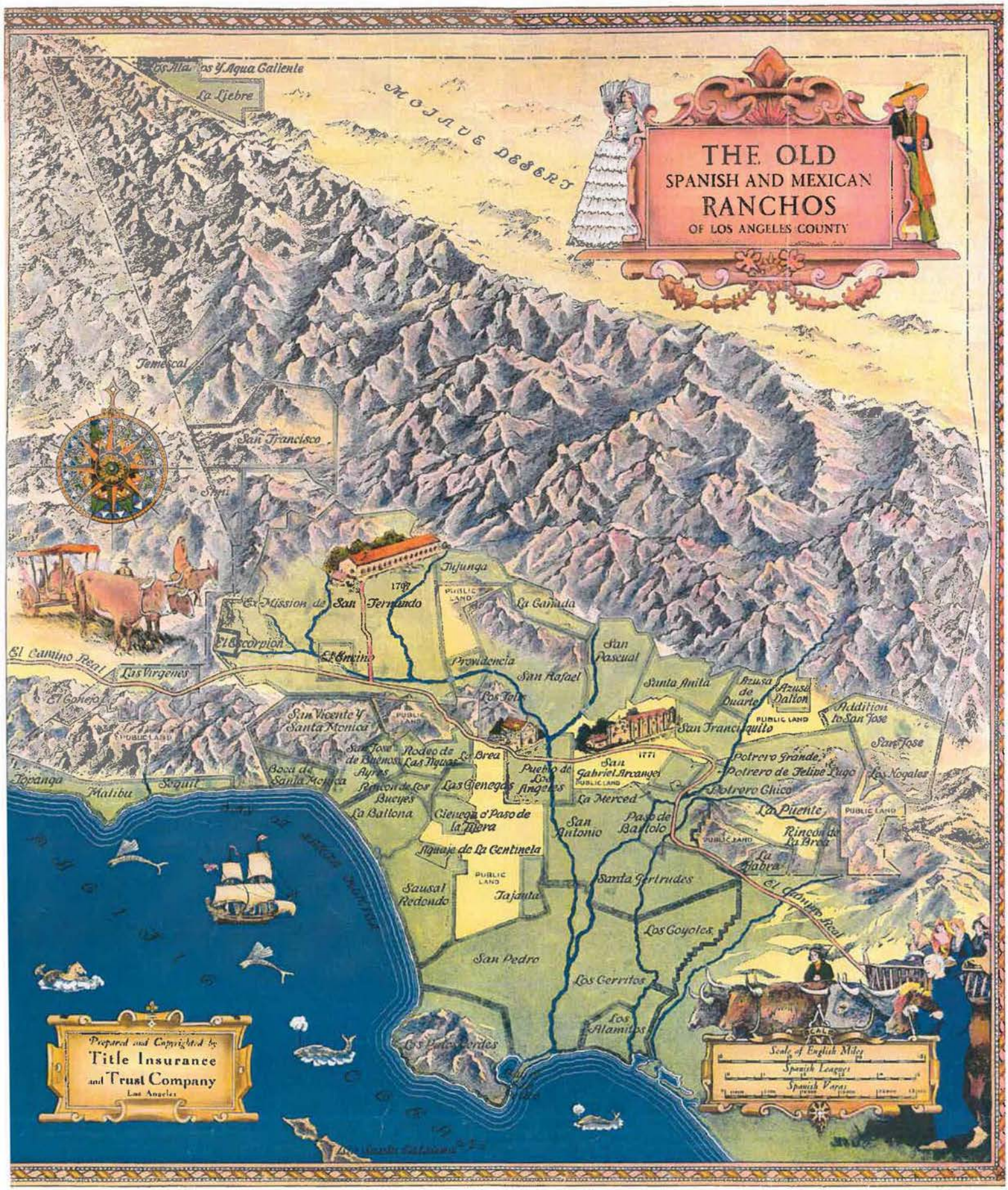
Revised: August 2018

Gabrieleño Band of Mission Indians
Kizh Nation

Attachment A

Kizh Nation Ancestral Tribal Territory extended along the coast from Malibu Creek in Los Angeles County down to Aliso Creek in Orange County and encompassed the Channel Islands of Catalina (Pimugna), San Nicolas (Haraasnga), and San Clemente (Kiinkenga). Our inland border was the San Gabriel Mountains (Hidakupa) and eastwardly our territory extended to parts of San Bernardino (Waatsngna), Orange, and Riverside counties.




THE OLD
SPANISH AND MEXICAN
RANCHOS
OF LOS ANGELES COUNTY
MOJAVE DESERT
Los Alamos Y Agua Caliente
La Liebre
Temescal
San Francisco
Simi
Tujunga
1797
El Mission de San Fernando
La Canada
El Escorpion
El Encino
El Camino Real
Las Virgenes
Providencia
San Rafael
San Pascual
Santa Anita
Azusa de Duarte
Azusa Dalton
Addition to San Jose
San Francisquito
San Jose
El Cohejo
San Vicente Y Santa Monica
San Jose de Buenos Ayres
Rodeo de Las Aguas
La Brea
1771
Potrero Grande
Potrero de Felipe Lugo
Los Nogales
Topanga
Malibu
Sequit
Boca de Santa Monica
Rancon de los Bueyes
Las Cienegas
Pueblo de Los Angeles
San Gabriel Arcangel
La Merced
Potrero Chico
La Puente
La Ballona
Cienega d'Paso de la Tierra
San Antonio
Paso de Bartolo
Rincon de la Brea
La Habra
Aguaje de La Centinela
Santa Jertrudes
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Monique Acosta <monique.acosta@lacity.org>

Olympic - Serrano - Hobart project

Administration Gabrieleno Indians <admin@gabrielenoindians.org> Fri, Aug 31, 2018 at 7:59 AM
To: Monique Acosta <monique.acosta@lacity.org>, Nuri Cho <nuri.cho@lacity.org>
Cc: Matthew Teutimez <Matthew.Teutimez@gabrielenoindians.org>

The Nature of Knowledge in Oral Traditions and Archaeology

As archaeologists begin once again to incorporate Native American oral traditions into archaeological research, it is important to recognize that oral traditions and archaeology represent two separate, but overlapping, ways of knowing the past. Because they are qualitatively distinct, different standards apply in the way that information is collected, evaluated, and used to understand the past. These sources of knowledge converge in a broad sense on certain issues and themes, however, such as migrations, warfare, residential mobility, land use, and ethnic coresidence. Both sources can therefore be used productively to investigate these issues, among others.

There is no doubt that a real history is embedded in Native American oral traditions, and that this is the same history that archaeologists study. Oral traditions contain cultural information about the past carefully preserved and handed down from generation to generation within a tribe. The archaeological record contains material remains of past human behavior that provide physical evidence for many of the same events and processes referred to in oral traditions. Since oral traditions and archaeology have inherent limitations, combining them in research can create knowledge that goes beyond what is possible using either source by itself.

Tessie Naranjo (1995, Thoughts on Migration by Santa Clara Pueblo. Journal of Anthropological Archaeology 14:247-250) recently pointed out that Native American oral traditions are often axiomatic rather than hypothetical. Whereas scientists search for exclusive and universal truth, Native Americans use their oral traditions to attain a multiversal understanding of the past that simultaneously operates on many different levels of meaning.

In this regard, it needs to be understood that oral traditions and archaeology are both palimpsests of history. Oral traditions incorporate the cultural knowledge of many ancestors at multiple levels of signification. Similarly, archaeological sites incorporate a complex record of past human behavior embedded in artifacts and archaeological deposits. Both oral traditions and archaeology thus constitute sources of knowledge that have intricate structures that must be systematically and carefully analyzed in terms of their own internal logic in order to use them in scholarly research.

Uses of Oral Tradition and Archaeological Research

Archaeologists are interested in learning about the past. Native Americans are interested in maintaining the cultural traditions they inherited from their ancestors who lived in the past. For Native American tribes with strong oral traditions, the primary sense of history comes from the narratives, stories, and accounts told by tribal elders. In this context, archaeology constitutes a secondary source of supplemental information about tribal heritage. Some, but not all, tribal members may find this supplemental information useful in the transmission of family values.

Archaeology can also be used by tribes to achieve their own political and legal goals in relation to the larger society. Archaeological data can be used to help document land claims and water rights, and manage tribal cultural resources on lands managed by state and federal agencies. A small but increasing number of Native Americans are realizing that archaeology can be used constructively to validate tribal history.

In recent years, archaeologists have been called upon to expand their professional activities with respect to historic preservation by collecting information about traditional cultural properties and sacred places, as well as historic archaeological sites of interest to particular tribes. ***Native American oral traditions contain essential information about cultural values and beliefs pertaining to traditional cultural places, natural features, specific sites, and landscapes that are important*** *cultural resources for Native Americans (e.g., K. B. Kelley, and H. Francis, 1994, Navajo Sacred Places. Indiana University Press: Bloomington). In order to successfully meet the mandate for historic preservation, contemporary archaeologists must either work with oral traditions or coordinate their work with other researchers who are working with this source of information.* ***This creates an ethical and methodological imperative for archaeologists to work closely with Native Americans so that the information needed to properly manage tribal cultural resources can be collected and reported in an appropriate manner.***

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Sincerely,
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