APPROVED
APR 17 2019
BOARD OF RECREATION
AND PARK COMMISSIONERS

BOARD REPORT **NO.** 19-075

DATE April 17, 2019 C.D. 14

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: 1st AND BROADWAY CIVIC CENTER PARK (PRJ20781) (PRJ21252) (W.O. #E1907807) PROJECT – ADOPTION OF FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

AP Diaz		V. Israel	
for *R. Barajas	CSD	S. Piña-Cortez	
H. Fujita		N. Williams	

M. Sluce
General Manager

Approved X Disapproved ______ Withdrawn ______

RECOMMENDATIONS

1. Review, consider and adopt the Final Initial Study/Mitigated Negative Declaration (IS/MND), herein included as Attachment 1, for the proposed 1st and Broadway Civic Center Park (PRJ20781) (PRJ21252) (W.O. #E1907807) Project (Project), finding that on the basis of the whole record of proceedings of the Project, including the Final IS/MND and any public and/or agency comments received therefrom, that there is no substantial evidence that the proposed Project will have a significant effect on the environment, and that all potentially significant environmental effects of the Project have been properly disclosed, evaluated, and mitigated in the Final IS/MND in compliance with the California Environmental Quality Act (CEQA) and the State and City CEQA Guidelines, and that the Final IS/MND reflects the Board of Recreation and Park Commissioners' (Board) independent judgment and analysis;

2. Adopt the Mitigation Monitoring and Reporting Plan (MMRP), published under separate cover, herein included as Attachment 3, that specifies the mitigation measures to be implemented in accordance with CEQA Guidelines (Section 15074(d)); and,

3. Direct Staff to file a Notice of Determination (NOD) for the adopted Final IS/MND with the Los Angeles City Clerk and the Los Angeles County Registrar/Recorder within five (5) days of the Board's approval.

SUMMARY

The proposed Project is located at 126 North Broadway, Los Angeles, California 90012, in the Civic Center community of downtown Los Angeles, across the street from Los Angeles City Hall. The Project site is generally bound by the Los Angeles County's Grand Park adjacent on the north, Spring Street on the east, 1st Street on the south, and Broadway on the west.

The proposed Project would include the development of a 1.96-acre vacant lot into an open space public park, which is the result of a design competition previously initiated by the City.

The proposed Project would incorporate a two-story restaurant building with rooftop access at the northwest corner of the park; trees and green spaces for public enjoyment, walking pathways and passive recreational uses, numerous seating areas, new hardscaping and landscaped areas, bicycle parking area, 16 multi-function canopies to provide shade and lighting throughout the park, and bioswales and other Best Management Practices (BMPs) for infiltration and/or appropriate treatments of storm water runoffs.

The proposed two-story/tri-level restaurant building has a total gross area of approximately 19,200 square feet, and will accommodate up to five (5) points of sales of food and beverages (including alcoholic beverages). The ground floor will feature a café, a take-out window, and a beer garden. A full-service destination restaurant will occupy the entire second floor. The accessible rooftop terrace will have serviced bar and lounge seating and separate pubic view deck. An area on the north side of the restaurant building will accommodate essential infrastructure such as electrical vault, grease interceptor, loading dock, and trash enclosure. Public restrooms would be provided on the first floor of the restaurant building and at the rooftop for use by park patrons.

The proposed Project would remove one (1) Magnolia tree from the public sidewalk adjacent to the Project site along Broadway. The removed tree would be replaced with two (2) California Sycamore trees along 1st Street in the public right-of-way area.

Given the Project site's close proximity to numerous modes of public transportation including Metro Red and Purple Lines subway service, Metro buses, Foothill Transit, other bus lines, and the upcoming Downtown Streetcar, on-site parking is not included with the proposed Project. In addition, existing paid public parking facilities within walking distance are also available to park users and restaurant patrons. The proposed Project will include on-site bicycle parking, as well as vehicular curbside drop-off area designed in compliance with the Americans with Disabilities Act (ADA).

During construction of the Project, an appropriate combination of monitoring and resource avoidance would be employed, including implementation of Best Management Practice (BMP), specifically a Storm Water Pollution Prevention Plan (SWPPP) mandated by the State of California and the City of Los Angeles. The implementation of SWPPP will prevent contamination from water runoffs escaping the construction site and entering into storm drains.

ENVIRONMENTAL IMPACT STATEMENT

The CEQA Lead Agency on behalf of the City of Los Angeles,, the Department of Public Works, Bureau of Engineering (BOE) Environmental Management Group (EMG), has determined that an IS/MND is the appropriate CEQA document for the proposed Project. In accordance with the requirements of CEQA, an MND was prepared based on an IS, which determined that all potentially significant environmental effects would be mitigated to a level of less than significant.

The Draft IS/MND identified environmental impacts from construction activities related to biological resources, cultural resources, geological resources, noise, and traffic that required mitigation measures to reduce these impacts to less than significant. An MMRP has been prepared that specifies all the mitigation measures identified in the IS/MND, which will either reduce to a level of insignificance or eliminate the potentially significant environment impact of the proposed Project. The mitigation measures include precautions to protect migratory nesting birds in the vicinity of the proposed Project; archeological, paleontological and Native American monitoring if native soils were encountered; implementation of recommendations in the Geotechnical Investigation Report; limiting construction noise by requiring preferred equipment, installation of sound barriers, and oversight by a Noise Disturbance Coordinator; and requiring a traffic management plan in coordination with the Los Angeles Department of Transportation (LADOT) to minimize impacts from temporary lane closures. In addition to the construction mitigation measures, a number of BMPs would be implemented related to construction hours as well as dust and erosion control.

Operational impacts were found to be less than significant. As previously mentioned in this Report, there are numerous existing and future public transit services and parking facilities within walking distance from the Project site. The traffic study found that the proposed Project would not significantly impact the area’s parking supplies.

The Draft IS/MND was filed with the State Clearinghouse and released for a 30-day public comment period on January 3, 2019 and circulated to all interested parties and responsible agencies. The City also notified by mail all known stakeholders and neighbors within 500 feet of the Project site advising of the availability of the Draft IS/MND. In addition, notices were placed in the Los Angeles Times, and on the BOE website. Copies of the Draft IS/MND were placed in five local libraries as well as with the Board Office. A public hearing to discuss the findings of the Draft IS/MND was held at the Police Administration Building near the Project site on the evening of January 15, 2019. The 30-day public comment period of the Draft IS/MND concluded on February 4, 2019.

Two (2) comment letters from the California State Department of Transportation (Caltrans) and the California State Department of Toxic Substances Control (DTSC) were received on potential environmental effects. The comments did not require any additional environmental analyses or substantive changes to the IS/MND. The letters and responses have been incorporated in the Final IS/MND. The Final IS/MND was posted on the BOE website at least ten (10) days prior to the Board’s adoption.

FISCAL IMPACT STATEMENT

The project is funded by Park (Quimby) Fees and funding sources other than RAP's General Fund which will be presented to the Board in a separate Report. The assessments of future operations and maintenance costs have yet to be determined and will be addressed in future departmental annual budget requests.

This Report was prepared by Nur Malhis, Project Manager, Department of Public Works, BOE Architectural Division, and Talmage Maxwell Jordan, Environmental Specialist, BOE Environmental Management Group. Reviewed by Neil Drucker, Interim Division Head, BOE Architectural Division, and Cathie Santo Domingo, Superintendent, Planning, Maintenance and Construction Branch.

LIST OF ATTACHMENTS

1. CEQA Final Initial Study / Mitigated Negative Declaration (IS/MND)

2. Appendices to the Final IS/MND:

   - Appendix A: *Air Quality and Greenhouse Gas Analysis Technical Memorandum*
   - Appendix B: *Biological Resource Search Results*
   - Appendix C: *Cultural Resources Assessment*
   - Appendix D: *Geotechnical Data Report*
   - Appendix E *Noise and Vibration Impact Study*
   - Appendix F *Traffic Study*

3. Mitigation Monitoring and Reporting Program, dated March 2019

4. CEQA Final Study/Mitigated Negative Declaration (IS/MND) Department of Public Works, Bureau of Engineering Memo, dated April 1, 2019

Final Initial Study/ Mitigated Negative Declaration for

1st & Broadway Civic Center Park Project

State Clearinghouse No. 2019011002

March 2019

City of Los Angeles

Department of
Recreation and Parks

Department of Public Works
Bureau of Engineering

CITY OF LOS ANGELES

OFFICE OF THE CITY CLERK
ROOM 395, CITY HALL
LOS ANGELES, CALIFORNIA 90012

CALIFORNIA ENVIRONMENTAL QUALITY ACT

MITIGATED NEGATIVE DECLARATION

(Article I, City CEQA Guidelines)

LEAD AGENCY AND ADDRESS:

City of Los Angeles
c/o Los Angeles City Engineer
1149 Broadway, Suite 600
Los Angeles, CA 90015-2213

COUNCIL DISTRICT
14

PROJECT TITLE: **1st and Broadway Civic Center Park**

T.G. Page 634, Grid F3 & G3

PROJECT LOCATION: The project site is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles. The address is at 126 N. Broadway, Los Angeles, California 90012. The project site is generally bound by Los Angeles County's Grand Park adjacent on the north, Spring Street on the east, 1st Street on the south, and Broadway on the west. The project site is currently a vacant dirt lot that is fenced in to restrict access. The area immediately surrounding the project site is completely urbanized and developed with Grand Park and a Los Angeles County courthouse to the north, the Los Angeles City Hall and City Hall Park to the east, the Los Angeles Police Department Headquarters to the southeast, office buildings and the Times Mirror building (formerly the Los Angeles Times building) to the south, the Los Angeles Federal Courthouse to the southwest, and the Los Angeles Law Library to the west.

DESCRIPTION: In 2013, the City of Los Angeles acquired the project site from the State of California, with the intent to seek development opportunities that would reduce blight, and increase the health and safety at the site. The acquisition process included site demolition, and hazardous materials remediation and abatement activities. The project site is currently a vacant dirt lot that is used as a surface parking facility and holds occasional special events. The proposed project includes construction of a 1.96-acre park, featuring both landscaped and hardscaped areas to accommodate a wide variety of park activities, programs, and events, at the northeast corner of West 1st Street and Broadway in downtown Los Angeles. The proposed project would also include a new two-story, 19,200-square-foot building for restaurant uses. Other site improvements would include a bicycle parking area, outdoor seating areas, landscaping with a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting. The intent of the proposed project is to create a world-class iconic park at the core of Los Angeles' Civic Center area. Construction of the proposed project would last for approximately two years beginning in Summer/Fall 2019 and concluding in Summer/Fall 2021.

NAME AND ADDRESS OF APPLICANT IF OTHER THAN CITY AGENCY:

FINDING: The **City Engineer** of the City of Los Angeles has determined the proposed project will not have a significant effect on the environment. See attached Initial Study.

SEE THE ATTACHED PAGES FOR ANY MITIGATION MEASURES IMPOSED

Any written objections received during the public review period are attached, together with the responses of the lead City agency.

THE INITIAL STUDY PREPARED FOR THIS PROJECT IS ATTACHED

PERSON PREPARING THIS FORM: Talmage Jordan Environmental Specialist II	**ADDRESS:** 1149 S. Broadway, Suite 600, MS 939 Los Angeles, CA 90015	**TELEPHONE NUMBER:** (213) 485-5754
SIGNATURE (Official): Maria Martin, Environmental Affairs Officer Environmental Management Group		**DATE:** 12/31/2018

FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act (Division 13, Public Resources Code)

Proposed Project

The City of Los Angeles (City) Department of Recreation and Parks (RAP) and City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) are proposing to develop 1st and Broadway Civic Center Park Project (proposed Project). The proposed Project includes construction of a 1.96-acre park, featuring both landscaped and hardscaped areas to accommodate a wide variety of park activities, programs, and events, at the northeast corner of West 1st Street and Broadway in downtown Los Angeles. The proposed Project would also include a new two-story, 19,200-square-foot building for restaurant uses. Other site improvements would include a bicycle parking area, outdoor seating areas, landscaping with a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting. The intent of the proposed Project is to create a world-class iconic park at the core of Los Angeles' Civic Center area.

Determination

Based on the analysis provided in this Initial Study/Mitigated Negative Declaration (IS/MND), RAP and BOE find that, with incorporation of described revisions to the Project and mitigation measures, the proposed Project would not have a significant effect on the environment.

ORGANIZATION OF THE FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

This Final IS/MND has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] 21000 et. seq.) and the CEQA Guidelines (California Code of Regulations [CCR] 15000 et. seq.). This Final IS/MND is organized into the following sections:

Clarifications and Modifications: provides a detailed description of all clarifications and modifications that were made to the text or graphics of the Draft Initial Study/Mitigated Negative Declaration (IS/MND). Clarifications and modifications reflect changes made to the proposed Project, analysis, or mitigation measures due to editorial changes or as a result of a comment made by an agency or individual during the public review period. These clarifications and modifications do not constitute significant new information and do not change any of the conclusions of the document. This section also reflects changes necessary to combine the Draft IS/MND into this Final IS/MND.

Response to Comments on the Draft IS/MND: provides a list of agencies, organizations, and individuals commenting on the Draft IS/MND; copies of the written comments received during the Draft IS/MND public review period; and the lead agency responses to those comments.

Draft IS/MND: This portion of the document includes the Draft IS/MND in its entirety, as was circulated during the public review period, which ran from January 3, 2019 through February 4, 2019.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

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CLARIFICATIONS AND MODIFICATIONS

The following clarifications and modifications are intended to update the Draft IS/MND in response to the comments received during the public review period. These changes constitute the Final IS/MND, to be presented to the City of Los Angeles Board of Recreation and Park Commissioners for adoption. None of the changes to the IS/MND would require recirculation of the document. Revisions made to the IS/MND have not resulted in new significant impacts or mitigation measures, nor has the severity of an impact increased. None of the CEQA criteria for recirculation have been met, and recirculation of the IS/MND is not warranted.

The changes to the IS/MND are listed by section, page number, and paragraph number if applicable. Text which has been removed is shown with a ~~strikethrough~~ line, while text that has been added is shown as underlined. All the changes described in this section have also been made in the corresponding Final IS/MND sections.

Final IS/MND Page   Clarification/Revision

MND-3 *An editorial change has been made to the first paragraph on this page to update the website at which the agenda for the Board of Recreation and Park Commissioners can be obtained, as well as the website on which the Final IS/MND will be posted. The websites are updated as follows:*

Public notification of agenda items for the Board of Recreation and Park Commissioners is posted 72 hours prior to the public meeting. The agenda for the Board of Recreation and Park Commissioners can be obtained via the internet at: ~~http://laparks.org/commissioners/agendas-minutes-reports/2018~~ https://www.laparks.org/commissioners/agendas-minutes-reports/2019. However, the official electronic website posting location for the agendas for the meetings of the Board of Recreation and Park Commissioners and its Task Forces is at www.lacity.org. The Final IS/MND will be posted on the BOE website at http://eng.lacity.org/techdocs/emg/projects.htm least 10 days prior to the public hearing.

MND-11 *A clarification has been made to the parking requirements for the proposed Project. The last paragraph on this page is clarified as follows:*

No parking spaces are currently provided at the Project site. ~~Parking spaces are also not included with the proposed Project. According to the Los Angeles Municipal Code, 21 parking spaces would be required for the restaurant uses proposed. As such, a parking variance would be required and will be obtained to implement the proposed Project.~~ Due to authority granted to RAP by the Los Angeles City Charter (Charter) Section 591, RAP is exempt from the regulations of Chapter I the Los Angeles Municipal Code (LAMC). Numerous transit lines, including Metro Rail Red/Purple Line subway service, and Metro, Foothill Transit, and other bus lines provide access to the site. Existing parking facilities within walking distance and public transportation are readily available in the project area for patrons to utilize. The restaurant operators ~~could~~will lease parking spaces from local parking lots or structures in the area to provide nearby parking for restaurant patrons. The proposed Project would also include bicycle parking areas on-site, to provide additional modes of access to the project area. The proposed Project would be designed in compliance with the Americans with Disabilities Act (ADA).

MND-17 *A clarification has been made to the permits and approvals required to implement the proposed Project. Table 1 is modified as follows:*

Table 1
Required Permits and Approvals

Agency	Permit/Requirement	Issue
Local		
~~City of Los Angeles Department of City Planning~~	~~Parking Variance~~	~~Los Angeles Municipal Code requires 21 parking spaces for the restaurant operations. No parking is proposed as a part of the project.~~
~~City of Los Angeles Department of City Planning~~	~~Zoning Designation Change~~	~~The current land use is zoned as PF-2D, and will need to be rezoned to OS-2D.~~
City of Los Angeles Department of Transportation	Traffic Management Plan	Partial street closures are anticipated during construction.
City of Los Angeles Department of Building and Safety	ADA compliance review and approval; grading; structure; general permit check (mechanical plumbing; electrical; fire life safety; green building)	Site access and building plans require approval for ADA compliance.
City of Los Angeles Bureau of Street Services – Urban Forestry Division	Street tree removal permit	Removal and replacement of one street tree in public parkway.
City of Los Angeles Bureau of Engineering	Review and approval	Improvements proposed within the public right-of-way adjacent to the Project site.
City of Los Angeles Bureau of Sanitation	Review and approval	Low Impact Design related to stormwater management design.
City of Los Angeles Department of Recreation and Parks	Review and approval	Final adoption of Initial Study and Mitigated Negative Declaration
Los Angeles Fire Department	Review and approval	Restaurant building requires fire department review and approval.
City of Los Angeles, Bureau of Sanitation	Industrial Wastewater Permit Application for Food Service Establishment review and approval	Restaurant building requires wastewater permit.

Table 1
Required Permits and Approvals

Agency	Permit/Requirement	Issue
Regional		
Los Angeles Regional Water Quality Control Board	National Pollution Discharge Elimination System (NPDES) Permit for Construction	Water quality and placement to discharges associated with dewatering activities.

MND-43 *An editorial change has been made to the discussion of construction activities in Section 5(b). The section paragraph on this page is modified as follows:*

A significant impact would occur if the project caused a substantial adverse change in the significance of an archaeological resource, as defined in California Code of Regulations Section 15064.5. Construction activities would include ~~hazardous materials abatement,~~ rough grading, utility installations, landscaping and hardscaping, construction of buildings, and installation of other park structures. The project may have direct impacts on subsurface archaeological resources that may be encountered during construction. Disturbance of archaeological resources would result in a significant impact under CEQA.

MND-62 *An editorial change has been made to the discussion of groundwater in Section 9 (b). The third paragraph on this page is modified as follows:*

Construction of the proposed Project would excavate to approximately 12 feet deep for foundations and footings ~~when foundation piles are installed within the indoor pool and indoor gymnasium footprints~~. However, construction activity that has the potential to encounter groundwater would be required to comply with the recommendations set forth in the *Geotechnical Engineering Report*~~, such as proper disposal of displaced groundwater and dewatering during construction of the pool~~. Implementation of Mitigation Measures GEO-1 and GEO-2 would reduce impacts related to groundwater during construction to less than significant.

MND-63 *An editorial change has been made to Section 9(d). The first sentence in the second paragraph in this section is modified as follows:*

As discussed in Section 9 (a), the proposed Project would not result in a substantial increase of impervious surfaces at the Project site~~ as facilities within the park are to be demolished and constructed elsewhere on the site~~.

MND-67 *A clarification has been made to the discussion of zoning at the site in Section 10(b). The second paragraph on this page is modified as follows:*

The Project site is located entirely within the City of Los Angeles in the Central City Community Plan Area. The *Central City Community Plan* establishes the goals, objectives, policies, and programs applicable to the Central City Community Plan Area. The City's current zoning designation for the Project site is PF-2D (Public Facilities). The Project site would be developed into a public park~~, and would require re-zoning to OS-2D (Open Space) to reflect the change in land use~~ and changes to zoning will be reflected through the City's Community Plan update process, which will adjust the zoning at the site to OS for Open Space uses. Thus, the proposed Project will be consistent with the zoning for the site. Additionally, the park would continue to be operated under RAP jurisdiction, with a qualified business holding a contract with RAP for the restaurant food and beverage concessions within the site. Therefore, the proposed Project would not conflict with the existing zoning or General Plan designations for the Project site. No impact would occur.

MND-68 *A clarification has been made to the parking requirements for the proposed Project. The first paragraph on this page is clarified as follows:*

~~Los Angeles Municipal Code requires that 21 parking spaces be constructed for the proposed restaurant; therefore, a parking variance would be required for the Project.~~ Due to authority granted to RAP by the Los Angeles City Charter (Charter) Section 591, RAP projects are exempt from the regulation of Chapter I of the Los Angeles Municipal Code (LAMC). Existing parking and public transportation facilities, including the Metro Rail Red/Purple Line subway service, Metro bus, Foothill Transit, and other bus lines are located within walking distance and would be available to park and restaurant patrons. Additionally, nearby parking could ~~and would~~ be leased by the restaurant operators specifically to accommodate parking needs for restaurant patrons. As detailed in the Traffic Study (Appendix F), the proposed Project would not significantly impact area parking supplies. Adequate parking would remain available at the Olive Street & 1st Street Parking Lot and the Judge John Aiso Street & 1st Street Parking Structure. No impacts would result.

MND-99 *A clarification has been made to the solid waste generated during construction activities in Section 18(f). The discussion on this page is clarified as follows:*

Construction of the proposed Project would generate ~~demolition~~ construction debris during excavation and grading activities ~~removal of the remaining surface and subsurface structures~~. Uncontaminated soil may be excavated, stockpiled, redistributed, and reused. Soils that require remediation may be excavated, stabilized, and potentially hauled from the site to a certified disposal facility.

The construction ~~and demolition~~ debris would be ~~recycled whenever possible, or~~ disposed of at an appropriate facility. ~~As demonstrated above and according to the CalRecycle's SWIS database, there is sufficient inert waste disposal capacity available in Los Angeles County to adequately accommodate the anticipated demolition debris. Further, c~~ Certain landfills accept wastes considered to be beneficial-use materials, such as soil, green waste, and asphalt. Several landfills in the greater Los Angeles area accept excavated soil, including those that otherwise are restricted by ordinances from accepting municipal solid waste generated in the City of Los Angeles. When possible, the waste would be transferred to local yards to minimize traffic disruption as well as the possibility of general spills.

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A. Introduction

The 1st and Broadway Civic Center Park Project Draft IS/MND was circulated for public review and comment by the City of Los Angeles on January 3, 2019, initiating a 30-day public review period pursuant to CEQA and its implementing guidelines. The Notice of Intent/Notice of Availability was also distributed to 22 relevant agencies and organizations, as well as 34 property owners and occupants. Additionally, the IS/MND was available for review at the Little Tokyo Branch Library, Chinatown Branch Library, Los Angeles Central Library, Council District 14 Office, and the BOE headquarters. The IS/MND was also available online at the BOE website.

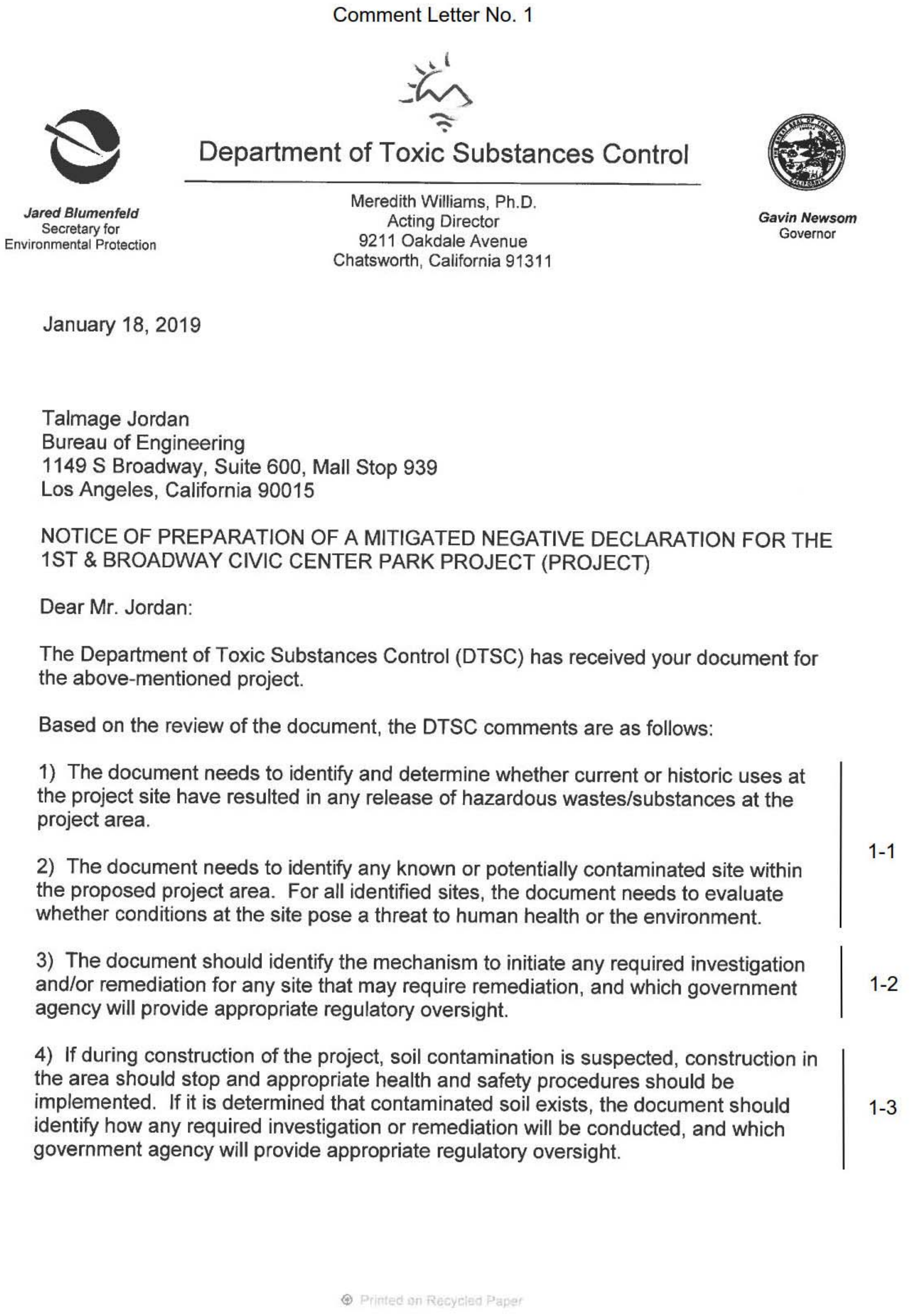
During this public review period, three (3) comment letters were received, as shown in Table 18 below. Each comment letter has been assigned a number code, and individual comments in each letter have been coded to facilitate responses. For example, the letter from the California Department of Toxic Substances Control is identified as Letter 1, with comments noted as 1-1, 1-2, 1-3, etc. Copies of each comment letter are provided prior to the response to each letter. Comments that raise issues not directly related to the substance of the environmental analysis in the IS/MND are noted but, in accordance with CEQA, did not receive a detailed response.

B. Responses to Written Comments That Address Environmental Issues in the Draft Initial Study/Mitigated Negative Declaration

The written comment letters received on the Draft IS/MND are listed in Table RTC-1 below. The comments and associated responses are arranged by the date of receipt of the comment letter or email. The individual comments in the letters have been numbered and are referred to in the responses that directly follow the comment letter.

Table RTC-1
List of Written Comment Letters Received in Response to the Draft IS/MND

Letter #	Agency/Organization/Individual	Date	Page # of Response
1	California Department of Toxic Substances Control *Signed: Pete Cooke*	January 18, 2019	RTC-4
2	California Department of Transportation *Signed: Miya Edmonson*	January 29, 2019	RTC-7
3	California Governor's Office of Planning and Research, State Clearinghouse *Signed: Scott Morgan*	February 4, 2019	RTC-12



Comment Letter No. 1

Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Acting Director
9211 Oakdale Avenue
Chatsworth, California 91311

Gavin Newsom
Governor

January 18, 2019

Talmage Jordan
Bureau of Engineering
1149 S Broadway, Suite 600, Mall Stop 939
Los Angeles, California 90015

NOTICE OF PREPARATION OF A MITIGATED NEGATIVE DECLARATION FOR THE 1ST & BROADWAY CIVIC CENTER PARK PROJECT (PROJECT)

Dear Mr. Jordan:

The Department of Toxic Substances Control (DTSC) has received your document for the above-mentioned project.

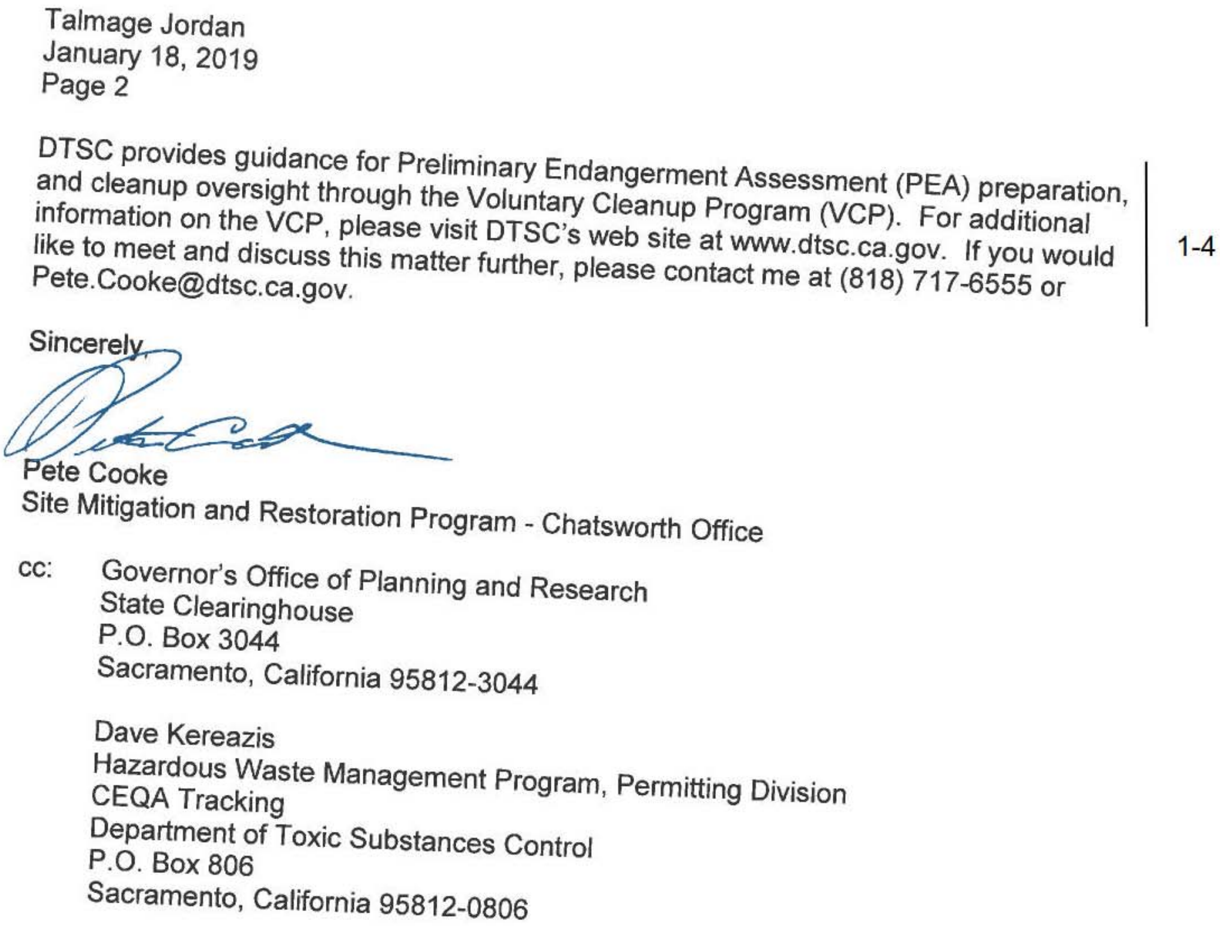
Based on the review of the document, the DTSC comments are as follows:

1) The document needs to identify and determine whether current or historic uses at the project site have resulted in any release of hazardous wastes/substances at the project area.

2) The document needs to identify any known or potentially contaminated site within the proposed project area. For all identified sites, the document needs to evaluate whether conditions at the site pose a threat to human health or the environment. 1-1

3) The document should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight. 1-2

4) If during construction of the project, soil contamination is suspected, construction in the area should stop and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil exists, the document should identify how any required investigation or remediation will be conducted, and which government agency will provide appropriate regulatory oversight. 1-3



Talmage Jordan
January 18, 2019
Page 2

DTSC provides guidance for Preliminary Endangerment Assessment (PEA) preparation, and cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP, please visit DTSC's web site at www.dtsc.ca.gov. If you would like to meet and discuss this matter further, please contact me at (818) 717-6555 or Pete.Cooke@dtsc.ca.gov. 1-4

Sincerely,

Pete Cooke
Site Mitigation and Restoration Program - Chatsworth Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Dave Kereazis
Hazardous Waste Management Program, Permitting Division
CEQA Tracking
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Letter 1: California Department of Toxic Substances Control

Response 1-1

The commenter states that the document needs to identify whether existing or previous land uses have resulted in a release of hazardous substances as well as identify any known or potentially contaminated sites in the project area. Previous remediation activities at the project site are discussed in Section 8 (a) on page 55 of the IS/MND, which states:

> *"The project area formerly contained a 13-story California State Office Building with landscaping around the building's footprint, a basement containing building operational equipment, and a sub-basement used for parking. The above-ground portions of the building were demolished in 1976 after enduring unsafe levels of damage during the San Fernando (Sylmar) earthquake in 1971. The remaining site underwent a project to remove all remaining components, and grade the site for open space uses in 2013. Trash and debris, lead-based paint, non-hazardous waste water, mold, and asbestos removal were undertaken as a part of the remediation process prior to demolition. The completed project no longer contained known environmental hazards, and has been maintained as an empty dirt lot since 2013."*

Additionally, known hazardous materials sites in the project area are discussed in Section 8 (d) on page 58 of the IS/MND, which states:

> *"A significant impact would occur if the proposed Project were 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, created a significant hazard to the public or the environment.*
>
> *The Project site is not listed in the State Water Resources Control Board (SWRCB) GeoTracker system which includes leaking underground fuel tank sites and spills, leaks, investigations, and cleanups sites; or the Department of Toxic Substances Control EnviroStor Data Management System which includes CORTESE sites, or the Environmental Protection Agency's database of regulated facilities. Although no hazardous materials sites exist on the Project site, two permitted hazardous materials sites exist 0.09 miles southwest of the Project site, however, required site activity has been limited to compliance site inspections."*

As discussed in Sections 8 (a) and 8 (d), known hazardous materials were removed from the previous land use in 2013, and the project site is not listed on any hazardous materials sites. Additionally, the IS/MND identifies that there are two listed sites in proximity to the Project site that require site inspections. Thus, the IS/MND identifies whether historic and existing uses at the Project site have resulted in the release of hazardous substances, and states that, since the remediation activities in 2013, no known environmental hazards have been present at the Project site. The IS/MND also identifies the known hazardous waste sites in the Project area.

Response 1-2

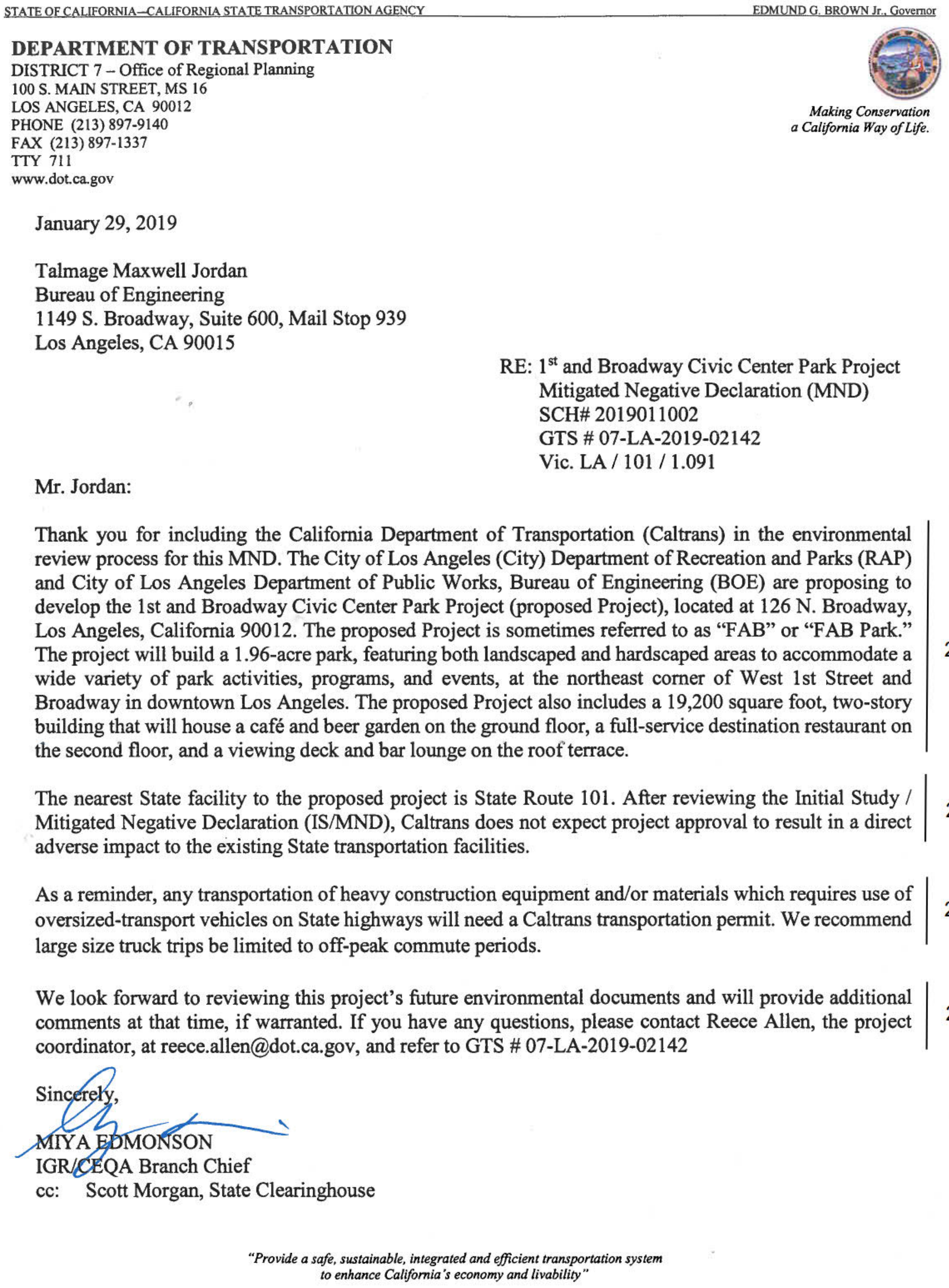
The commenter states that the document should identify the mechanism to initiate remediation activities and identify the agencies that would be involved with regulatory oversight should these activities be necessary. Additionally, the commenter states that the document should identify how remediation would occur should contaminated soil be discovered.

The commenter is referred to Section 8 (d) on page 58 of the IS/MND, which discusses the measures that would be taken should contaminated soils be identified during construction. As stated on page 58, "while unlikely, should contaminated soils be encountered during construction of the proposed Project, excavated material (e.g., soil, slurry, and groundwater) would be monitored and tested prior to disposal. Excavated material that is deemed hazardous would be subject to strict federal, state, and local regulations for its handling, transport, and disposal. These activities would occur under the oversight of the California Department of Toxic Substances Control, SWRCB, and the Los Angeles Fire Department. Adherence to federal, state, and local standards would minimize the risk to the public or the environment." The IS/MND concludes that, with adherence to these existing regulations, the impact would be less than significant.

Response 1-3

The commenter discusses where more information on Preliminary Endangerment Assessment preparation and the Voluntary Cleanup Program can be found. No response to this comment is required.

Comment Letter No. 2



STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation
a California Way of Life.

January 29, 2019

Talmage Maxwell Jordan
Bureau of Engineering
1149 S. Broadway, Suite 600, Mail Stop 939
Los Angeles, CA 90015

RE: 1st and Broadway Civic Center Park Project
Mitigated Negative Declaration (MND)
SCH# 2019011002
GTS # 07-LA-2019-02142
Vic. LA / 101 / 1.091

Mr. Jordan:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for this MND. The City of Los Angeles (City) Department of Recreation and Parks (RAP) and City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) are proposing to develop the 1st and Broadway Civic Center Park Project (proposed Project), located at 126 N. Broadway, Los Angeles, California 90012. The proposed Project is sometimes referred to as "FAB" or "FAB Park." The project will build a 1.96-acre park, featuring both landscaped and hardscaped areas to accommodate a wide variety of park activities, programs, and events, at the northeast corner of West 1st Street and Broadway in downtown Los Angeles. The proposed Project also includes a 19,200 square foot, two-story building that will house a café and beer garden on the ground floor, a full-service destination restaurant on the second floor, and a viewing deck and bar lounge on the roof terrace. 2-1

The nearest State facility to the proposed project is State Route 101. After reviewing the Initial Study / Mitigated Negative Declaration (IS/MND), Caltrans does not expect project approval to result in a direct adverse impact to the existing State transportation facilities. 2-2

As a reminder, any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods. 2-3

We look forward to reviewing this project's future environmental documents and will provide additional comments at that time, if warranted. If you have any questions, please contact Reece Allen, the project coordinator, at reece.allen@dot.ca.gov, and refer to GTS # 07-LA-2019-02142 2-4

Sincerely,

MIYA EDMONSON
IGR/CEQA Branch Chief
cc: Scott Morgan, State Clearinghouse

"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"

Letter 2: California Department of Transportation

Response 2-1

This comment correctly characterizes the proposed Project in the IS/MND. Therefore, no further response to this comment is provided.

Response 2-2

The commenter states that the nearest State facility to the proposed Project is State Route 101, and that project approval is not expected to result in a direct adverse impact at this facility. This comment does not raise issues regarding the adequacy of the analysis in the IS/MND. No further response to this comment is required.

Response 2-3

The commenter states that transportation of heavy construction equipment and/or other materials requiring the use of oversized vehicles on State highways would require a transportation permit. The proposed Project would be required to comply with all applicable California Department of Transportation regulations during construction. Additionally, to the extent practicable, large size truck trips would be limited to off-peak commute periods.

Response 2-4

The commenter states that they would like to review any future environmental documents associated with the proposed Project. The California Department of Transportation is already included in the Project mailing list and will be notified of the availability of the Final IS/MND and related documents, as well as future project hearings, as requested.

Comment Letter No. 3

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Gavin Newsom
Governor

Kate Gordon
Director

February 4, 2019

Talmage Jordan
City of Los Angeles
1149 S Broadway, Suite 600, MS 939
Los Angeles, CA 90015

Subject: 1st and Broadway Civic Center Park Project
SCH#: 2019011002

Dear Talmage Jordan:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on February 1, 2019, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that: 3-1

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. 3-2

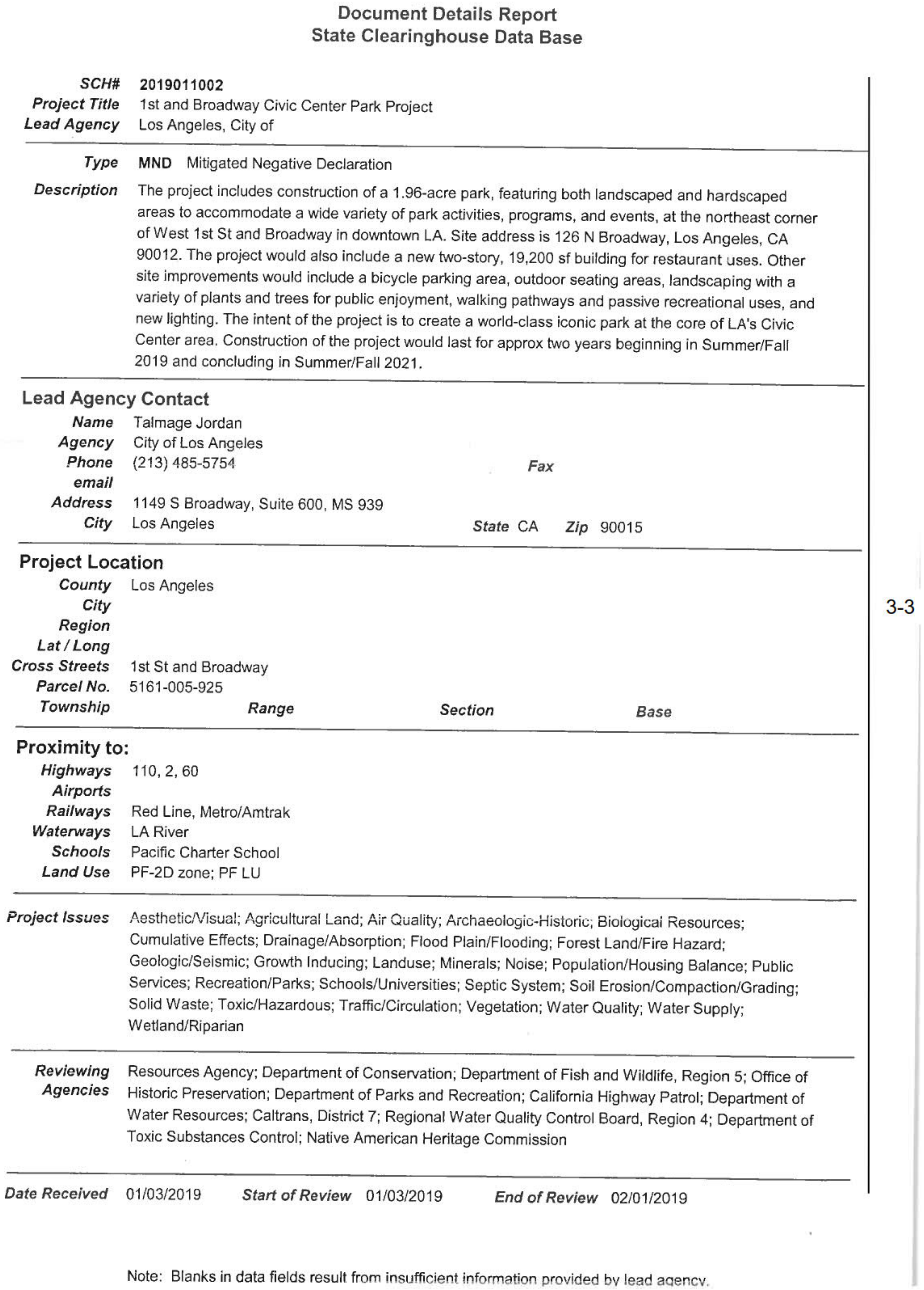
Sincerely,

Scott Morgan

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL 1-916-445-0613 state.clearinghouse@opr.ca.gov www.opr.ca.gov



Document Details Report
State Clearinghouse Data Base

SCH# **2019011002**
Project Title 1st and Broadway Civic Center Park Project
Lead Agency Los Angeles, City of

Type **MND** Mitigated Negative Declaration

Description The project includes construction of a 1.96-acre park, featuring both landscaped and hardscaped areas to accommodate a wide variety of park activities, programs, and events, at the northeast corner of West 1st St and Broadway in downtown LA. Site address is 126 N Broadway, Los Angeles, CA 90012. The project would also include a new two-story, 19,200 sf building for restaurant uses. Other site improvements would include a bicycle parking area, outdoor seating areas, landscaping with a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting. The intent of the project is to create a world-class iconic park at the core of LA's Civic Center area. Construction of the project would last for approx two years beginning in Summer/Fall 2019 and concluding in Summer/Fall 2021.

Lead Agency Contact

Name Talmage Jordan
Agency City of Los Angeles
Phone (213) 485-5754 ***Fax***
email
Address 1149 S Broadway, Suite 600, MS 939
City Los Angeles ***State*** CA ***Zip*** 90015

Project Location

County Los Angeles
City
Region 3-3
Lat / Long
Cross Streets 1st St and Broadway
Parcel No. 5161-005-925
Township ***Range*** ***Section*** ***Base***

Proximity to:

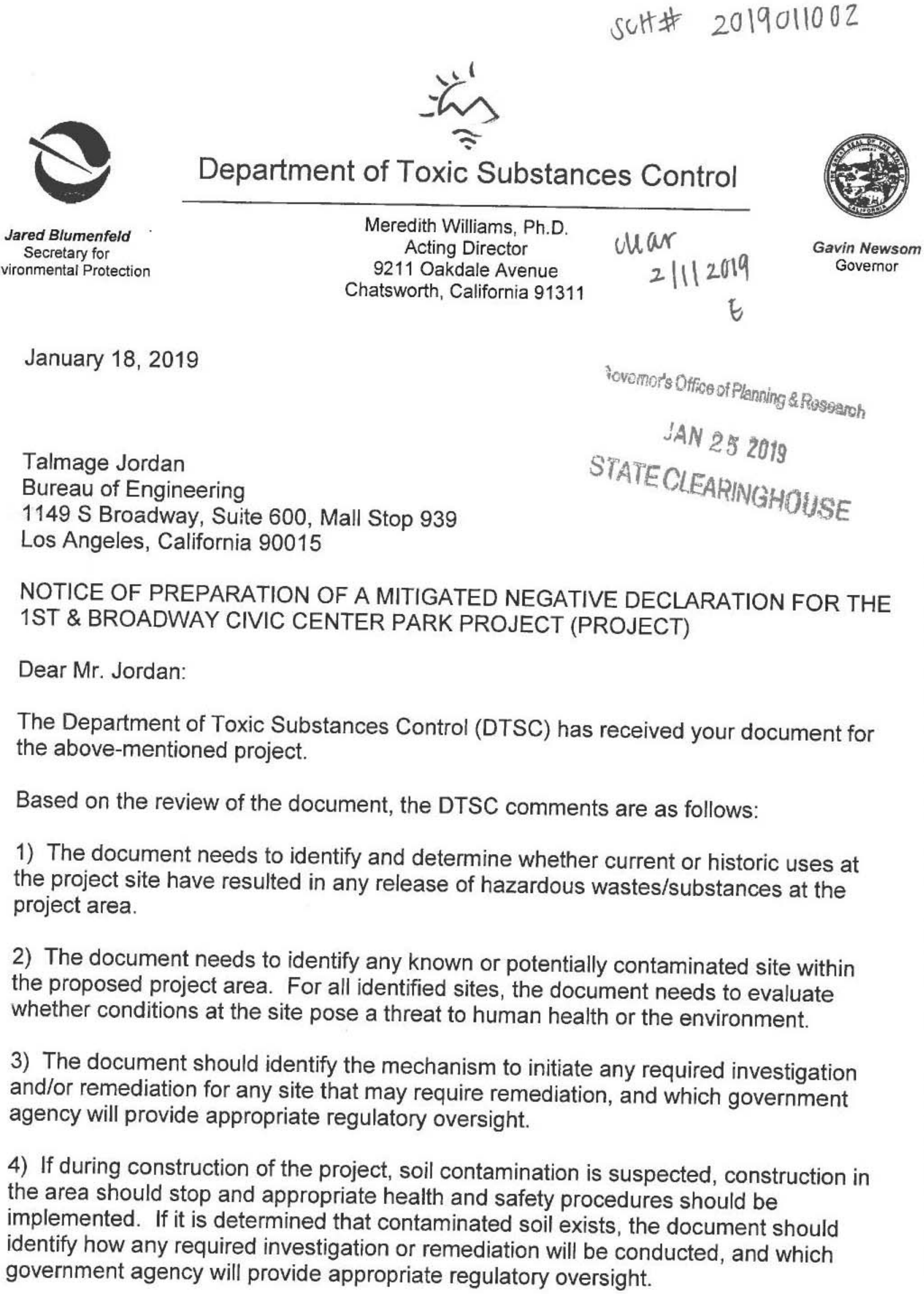
Highways 110, 2, 60
Airports
Railways Red Line, Metro/Amtrak
Waterways LA River
Schools Pacific Charter School
Land Use PF-2D zone; PF LU

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; California Highway Patrol; Department of Water Resources; Caltrans, District 7; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 01/03/2019 ***Start of Review*** 01/03/2019 ***End of Review*** 02/01/2019

Note: Blanks in data fields result from insufficient information provided by lead agency.



SCH# 2019011002

Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Acting Director
9211 Oakdale Avenue
Chatsworth, California 91311

Gavin Newsom
Governor

Mar
2/11/2019
E

January 18, 2019

Governor's Office of Planning & Research
JAN 25 2019
STATE CLEARINGHOUSE

Talmage Jordan
Bureau of Engineering
1149 S Broadway, Suite 600, Mall Stop 939
Los Angeles, California 90015

NOTICE OF PREPARATION OF A MITIGATED NEGATIVE DECLARATION FOR THE 1ST & BROADWAY CIVIC CENTER PARK PROJECT (PROJECT)

Dear Mr. Jordan:

The Department of Toxic Substances Control (DTSC) has received your document for the above-mentioned project.

Based on the review of the document, the DTSC comments are as follows:

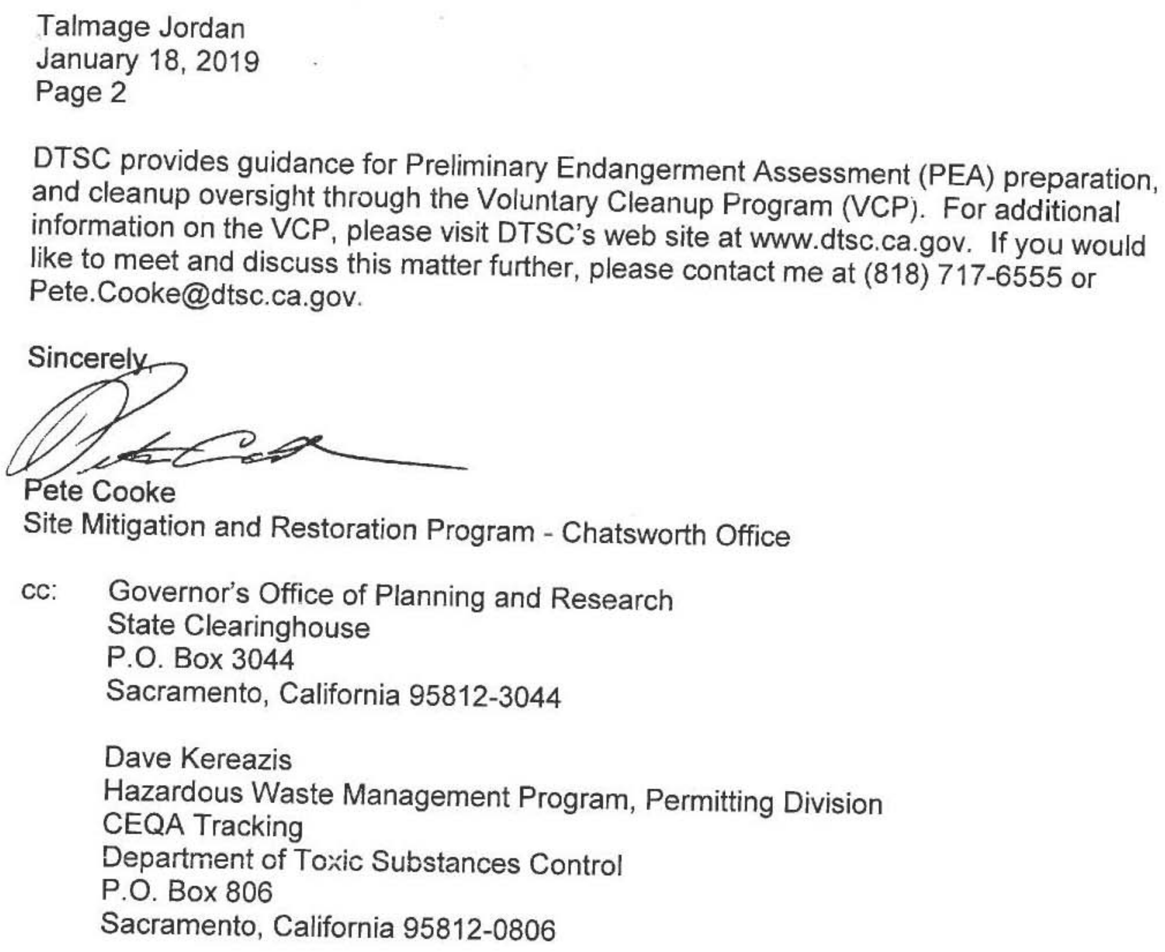
1) The document needs to identify and determine whether current or historic uses at the project site have resulted in any release of hazardous wastes/substances at the project area.

2) The document needs to identify any known or potentially contaminated site within the proposed project area. For all identified sites, the document needs to evaluate whether conditions at the site pose a threat to human health or the environment.

3) The document should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.

4) If during construction of the project, soil contamination is suspected, construction in the area should stop and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil exists, the document should identify how any required investigation or remediation will be conducted, and which government agency will provide appropriate regulatory oversight.

3-4



Talmage Jordan
January 18, 2019
Page 2

DTSC provides guidance for Preliminary Endangerment Assessment (PEA) preparation, and cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP, please visit DTSC's web site at www.dtsc.ca.gov. If you would like to meet and discuss this matter further, please contact me at (818) 717-6555 or Pete.Cooke@dtsc.ca.gov.

3-4
cont'd.

Sincerely,

Pete Cooke
Site Mitigation and Restoration Program - Chatsworth Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Dave Kereazis
Hazardous Waste Management Program, Permitting Division
CEQA Tracking
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Letter 3: California Governor’s Office of Planning and Research, State Clearinghouse

Response 3-1

The commenter states that the State Clearinghouse circulated the Draft IS/MND to selected state agencies for review during the public review period and that comments from responding agencies are attached. This comment does not raise issues regarding the adequacy of the analysis in the IS/MND. No further response to this comment is required.

Response 3-2

The commenter acknowledges that the lead agency has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA. This comment does not raise issues regarding the adequacy of the analysis in the IS/MND. No further response to this comment is required.

Response 3-3

The Document Details Report from the State Clearinghouse database explaining the distribution of the Draft IS/MND is noted. This comment does not raise issues regarding the adequacy of the analysis in the IS/MND. No further response to this comment is required.

Response 3-4

The comment letter from the California Department of Toxic Substances Control is attached. See Responses 2-1 through 2-4 above for responses to these comments.

CITY OF LOS ANGELES
CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY

Council District: 14 Date: March 2019

Lead City Agency: Department of Public Works, Bureau of Engineering

Project Title: 1st & Broadway Civic Center Park Project

I. INTRODUCTION

A. Purpose of an Initial Study

The California Environmental Quality Act (CEQA) was enacted in 1970 for the purpose of providing decision-makers and the public with information regarding environmental effects of proposed Projects; identifying means of avoiding environmental damage; and disclosing to the public the reasons behind a project’s approval even if it leads to environmental damage. The Bureau of Engineering Environmental Management Group has determined that the proposed Project is subject to CEQA and no exemptions apply. Therefore, the preparation of an Initial Study (IS) is required.

An IS is a preliminary analysis conducted by the lead agency, in consultation with other agencies (responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the IS concludes that the project, with incorporation of mitigation, may have a significant effect on the environment, an Environmental Impact Report (EIR) should be prepared; otherwise the lead agency may adopt a Negative Declaration (ND) or Mitigated Negative Declaration (MND).

The IS/MND contained herein has been prepared in accordance with CEQA (Public Resources Code §21000 et seq.), the State CEQA Guidelines (Title 14, California Code of Regulations, §15000 et seq.), and the City of Los Angeles CEQA Guidelines (1981, amended July 31, 2002).

B. Document Format

This IS/MND is organized into eight sections as follows:

Section I, Introduction: provides an overview of the project and the CEQA environmental documentation process.

Section II, Project Description: provides a description of the project location, project background, project components, and proposed construction and operation.

Section III, Existing Environment: provides a description of the existing environmental setting with focus on features of the environment that could potentially affect the proposed Project or be affected by the proposed Project.

Section IV, Environmental Effects/Initial Study Checklist: presents the City of Los Angeles' Checklist for all impact areas and mandatory findings of significance. This Section includes a discussion of the environmental effects and identifies applicable mitigation measures.

Section V, Mitigation Measures: provides the mitigation measures that would be implemented to ensure that potential adverse impacts of the proposed Project would be reduced to a less than significant level.

Section VI, Preparation and Consultation: provides a list of key personnel involved in the preparation of this report and key personnel consulted.

Section VII, Determination – Recommended Environmental Documentation: provides the recommended environmental documentation for the proposed Project.

Section VIII, References: provides a list of reference materials used during the preparation of this report.

C. CEQA Process

The proposal to adopt a ND (or MND) initiates a 20-day public comment period, 30 days if a State Agency is involved. The purpose of this comment period is to provide public agencies and the general public an opportunity to review the IS and comment on the adequacy of the analysis and the findings of the lead agency regarding potential environmental impacts of the proposed Project. If a reviewer believes there is substantial evidence that the project may have a significant effect on the environment, the reviewer should (1) identify the specific effect, (2) explain why it is believed the effect would occur, and (3) explain why it is believed the effect would be significant. Facts or expert opinion supported by facts should be provided as the basis of such comments.

Prior to making a determination, the decision-making body (for this proposed Project, it is the Board of Recreation and Park Commissioners) must consider the IS together with any comments received during the public comment review process. The decision-making body would adopt the IS only if it finds, on the basis of the whole record before it, that there is no substantial evidence that the project would have a significant effect on the environment and that the study reflects the lead agency's independent judgment and analysis.

Public notification of agenda items for the Board of Recreation and Park Commissioners is posted 72 hours prior to the public meeting. The agenda for the Board of Recreation and Park Commissioners can be obtained via the internet at: http://laparks.org/commissioners/agendas-minutes-reports/2018. However, the official electronic website posting location for the agendas for the meetings of the Board of Recreation and Park Commissioners and its Task Forces is at www.lacity.org.

If the project is approved, the City would file a Notice of Determination (NOD) with the County Clerk within 5 days. The NOD would be posted by the County Clerk within 24 hours of receipt. This begins a 30-day statute of limitations on legal challenges to the approval under CEQA. The ability to challenge the approval in court may be limited to those persons who objected to the approval of the project, and to issues which were presented to the lead agency either orally or in writing, during the public comment period.

As a covered entity under Title II of the *Americans with Disabilities Act* (ADA), the City of Los Angeles does not discriminate on the basis of disability and, upon request, would provide reasonable accommodation to ensure equal access to its programs, services, and activities.

II. PROJECT DESCRIPTION

A. Introduction

The City of Los Angeles (City) Department of Recreation and Parks (RAP) and City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) are proposing to develop 1st and Broadway Civic Center Park Project (proposed Project), located at 126 N. Broadway, Los Angeles, California 90012. The proposed Project is sometimes referred to as "FAB" or "FAB Park." The project will build a 1.96-acre park, featuring both landscaped and hardscaped areas to accommodate a wide variety of park activities, programs, and events, at the northeast corner of West 1st Street and Broadway in downtown Los Angeles. The proposed Project also includes a 19,200 square feet, two-story building that will house a café and beer garden on the ground floor, a full-service destination restaurant on the second floor, and a viewing deck and bar lounge on the roof terrace.

B. Location

The Project site is located at 126 N. Broadway, Los Angeles, CA 90012, in the Civic Center area of downtown Los Angeles and is identified as Assessor Parcel Number (APN) 5161-005-925. The Project site is generally bound by Los Angeles County's Grand Park adjacent on the north, Spring Street on the east, 1st Street on the south, and Broadway on the west. Major arterials providing access to the Project site include both 1st Street and Broadway, located adjacent south and west the Project site, respectively. In addition, East Temple Street is located approximately one block to the north, and South

Grand Avenue is located approximately two blocks to the west of the Project site. Regional access to the Project site is provided by State Route 110 (SR 110, Harbor Freeway) located approximately 0.58 miles west/northwest of the Project site; Interstate 5 (I-5, Golden State Freeway) located approximately 1.7 miles east of the Project site; U.S. Highway 101 (US 101, Santa Ana Freeway) located approximately 0.22 miles north and approximately 0.40 miles east of the Project site, respectively; and Interstate 10 (I-10, Santa Monica Freeway) located approximately 1.8 miles south of the Project site. Figure 1 shows the regional vicinity of the Project site and Figure 2 shows the project location.

All previous structures located on the Project site were demolished in 2013, and hazardous materials abatement was completed leaving the site prepared for future potential construction. The Project site is currently a vacant dirt lot that is fenced in to restrict access. There are no trees or vegetation located on the site; however, several existing trees surround the Project site from within Grand Park and within the City sidewalk right-of-way. The Project site includes a temporary surface parking lot used for occasional special events, but no permanent use was designated at the location before the currently proposed Project was developed. Figure 3 shows the existing uses in the project area, Figure 4 shows the existing Project site, and Figure 5 shows a bird's-eye view of the project area

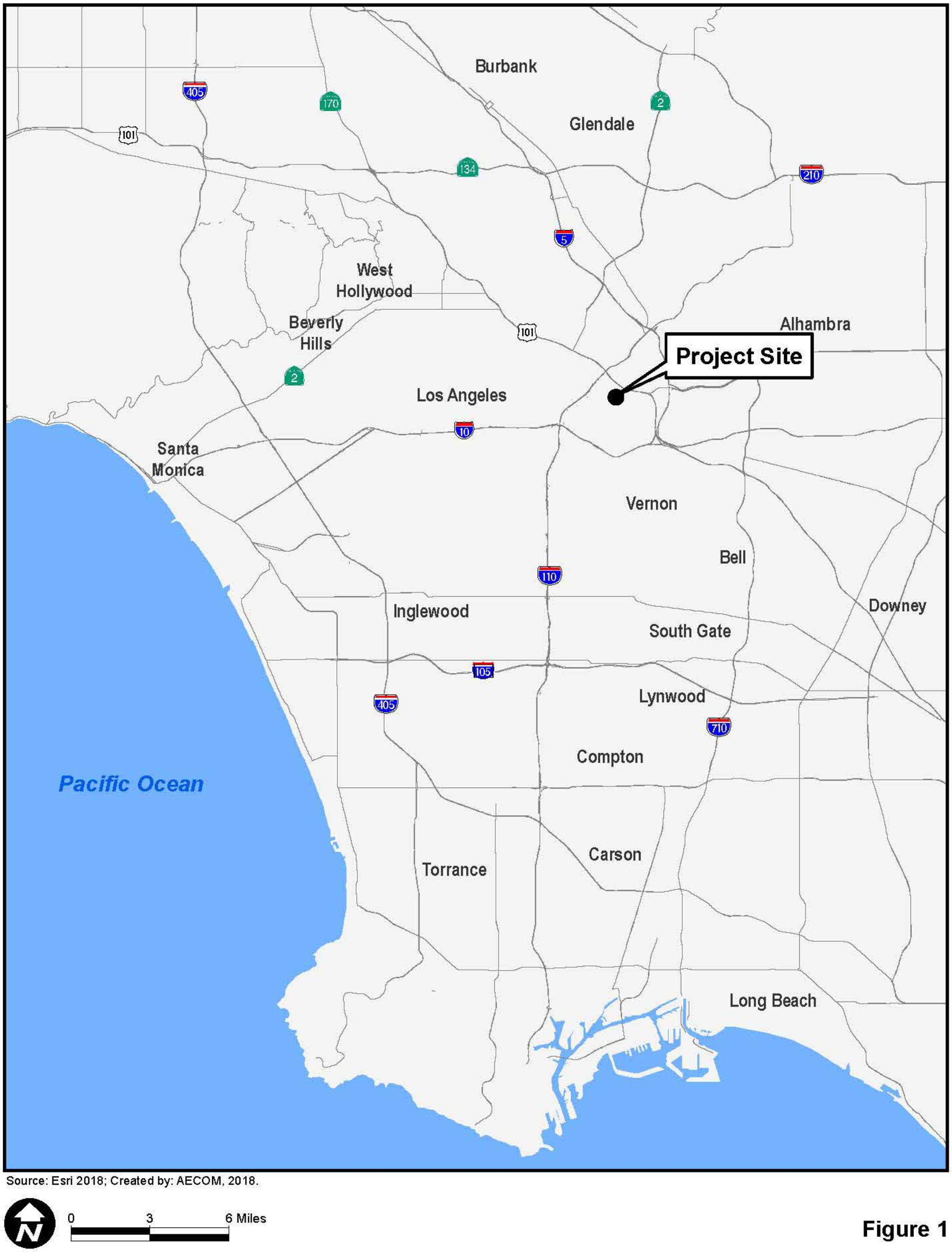
C. Setting

The area immediately surrounding the Project site is completely urbanized and developed with Grand Park and a Los Angeles County courthouse to the north, the Los Angeles City Hall and City Hall Park to the east, the Los Angeles Police Department Headquarters to the southeast, office buildings and the Times Mirror building (formerly the Los Angeles Times building) to the south, the Los Angeles Federal Courthouse to the southwest, and the Los Angeles Law Library to the west.

The Project site and area is accessible by numerous public transportation lines, including light rail transit lines and bus lines. The Los Angeles County Metropolitan Transportation Authority (Metro) Red Line/Purple Line Civic Center/Grand Park light rail subway station is located approximately one block west of the Project site. In addition, several Metro and municipal bus lines travel along 1st Street and Broadway in the project area. Several Metro, Los Angeles Department of Transportation (LADOT) DASH, and Foothill Transit bus stops are located directly adjacent to the Project site.

D. Background

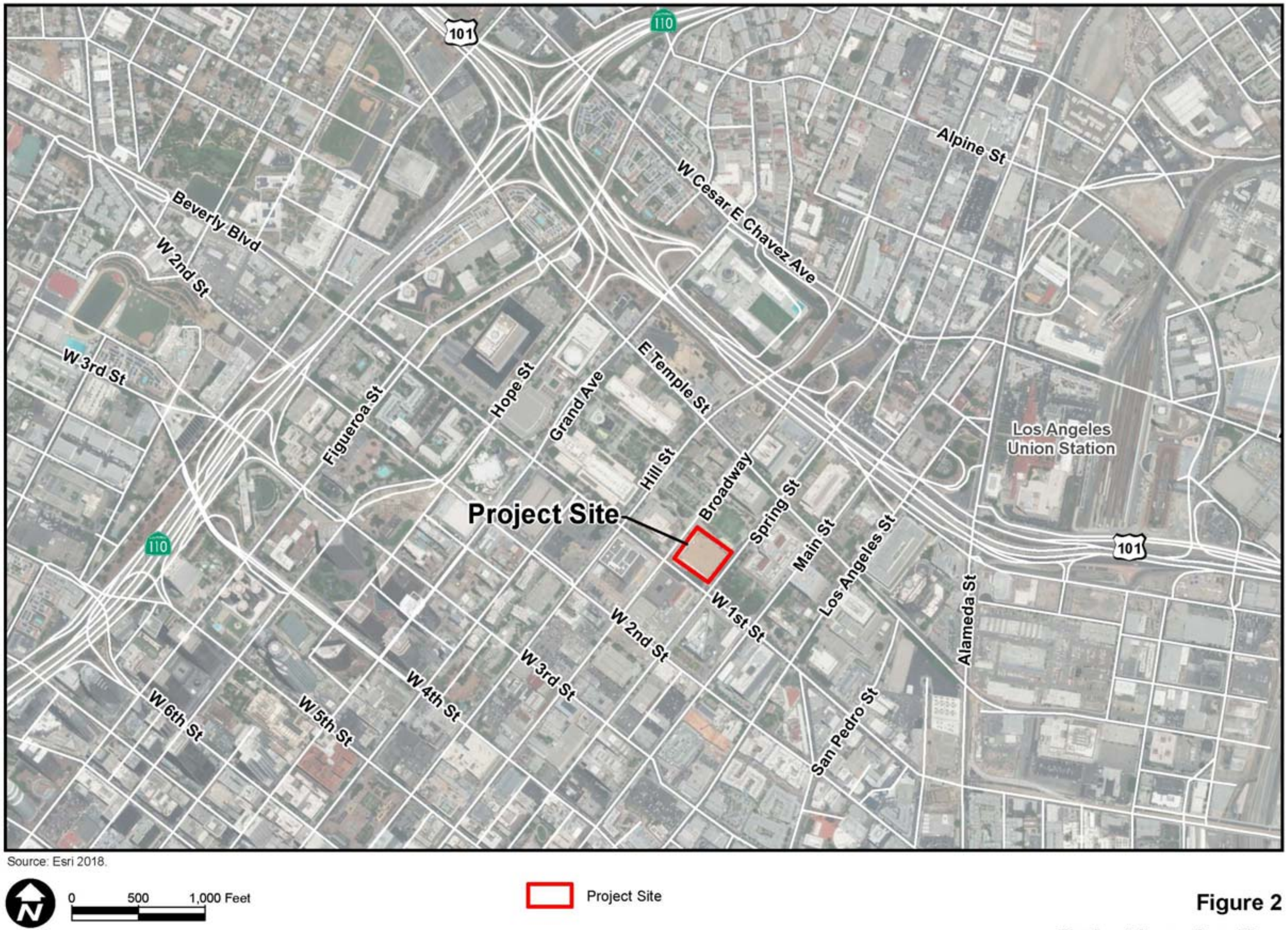
The Project site formerly contained a 13-story California State Office Building with landscaping around the building's footprint, a basement containing building operational equipment, and a sub-basement used for parking. The above-ground portions of the building were demolished in 1976 after enduring unsafe levels of damage during the San Fernando (Sylmar) earthquake in 1971. Since the early 1970s, the Project site has been in a dilapidated state, becoming a potential hazard to the public. In 2013, the City of Los Angeles acquired the Project site from the State of California, with the intent to seek development opportunities that would reduce blight, and increase the health and safety of



Source: Esri 2018; Created by: AECOM, 2018.

Figure 1

Regional Map



Source: Esri 2018.

Figure 2
Project Location Map

Source: Esri 2018.

Figure 3

Project Vicinity Map

Source: Esri 2018.

Figure 4

Project Area

Source: OMA, February 2018.

NOT TO SCALE

Figure 5

Bird’s-Eye View of Project Vicinity

the site. The acquisition process included site demolition, and hazardous materials remediation and abatement activities. The Project site is currently a vacant dirt lot that is used as a temporary parking area during occasional special events.

The intent of the proposed Project is to create a world-class iconic park at the center of Los Angeles' Civic Center area. The City recognizes that the future success of the proposed Project depends on the involvement of the public. A project design competition was initiated for the Project site in 2015. As part of this process, the City engaged in comprehensive community outreach efforts to make known all available opportunities for public participation. These efforts included providing public viewing opportunities for all design competition entries at several locations in downtown Los Angeles, holding public meetings to obtain input on project design and to update the community on the design competition and project, meetings with and outreach to various stakeholders and community associations, as well as other outreach activities. The preferred design was then selected, and a total of approximately 10 community and/or stakeholder outreach meetings were held related to the project design.

E. Purpose

The primary objectives of the proposed Project are to:

- Transform the vacant lot to a park which will provide a much needed open space for the community to enjoy;
- Provide additional dining options for the park users and surrounding patrons; and
- Create a world-class iconic park at the center of Los Angeles' Civic Center area.

F. Proposed Project

The proposed Project would include the development of a 1.96-acre vacant lot into an open space public park located in the Civic Center area of downtown Los Angeles, which is the result of a design competition previously initiated by the City. The proposed Project would incorporate a two-story restaurant building complex with rooftop access within the northwest corner of the park; trees and green spaces for public enjoyment, numerous seating areas, 16 decorative canopies to provide shade and lighting throughout the park, public art features, new hardscaping and landscaped areas, and bioswales or other treatment best management practices (BMPs).

The proposed approximately 19,200-square-foot restaurant building complex would include space for concessionaires to operate all concepts in the facility. The new building would include a rooftop patio and bar, an upscale restaurant, an approximately 1,380-square-foot café with a food service window to serve outdoor patrons, and an approximately 1,500-square-foot outdoor beer garden attached to the two-story structure. A portion of the ground level floor of the restaurant building would be externally shaped into a tiered sitting area with a capacity to seat up to 60 park patrons at a time, and would be shaded by cantilevering above. Rooftop access would be available with an approximately 450-square-foot bar, an approximately 1,330-square-foot dining and lounge area for restaurant patrons, and an approximately 1,260-square-foot public space. A loading zone would be provided on the north side of the building and Project site for use in routine restaurant operations. Public restrooms would be provided on the first floor of the restaurant building and at the rooftop. Figure 6 shows the proposed Project site plan.

The proposed Project would remove one magnolia tree from the public sidewalk adjacent to the Project site along Broadway. The removed tree would be replaced with the proposed Project along Spring Street.

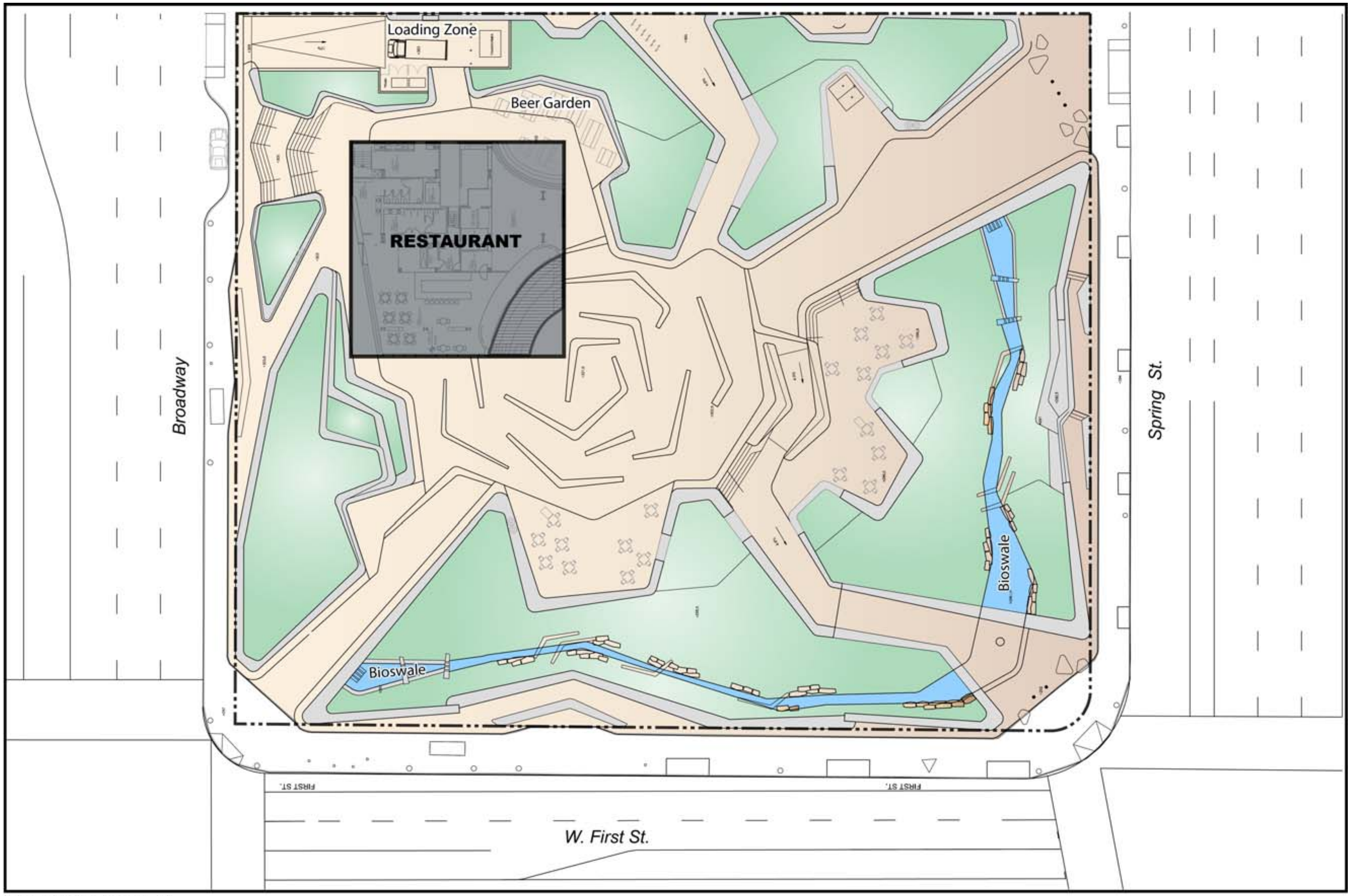
During construction of the project, BMPs would be implemented in order to prevent any contamination from water runoff entering into storm drains. Specifically, the contractor will implement a storm water pollution plan (SWPPP) which is mandated by the State of California and the City of Los Angeles to prevent contaminant from escaping the construction site. The proposed Project would include a bioswale system that would allow water infiltration into the ground.

The proposed Project would include a bicycle parking area, outdoor seating areas, planting of a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting.

Programming for the proposed Project would potentially include art exhibit events, concessionaire-sponsored events, and RAP-sponsored events. Approximately 4 or 5 art exhibit events and up to 40 concessionaire-sponsored events would occur annually. Ten concessionaire-sponsored events are anticipated for each for the 4 restaurant spaces in the new building. These events may include corporate events, fundraisers, and weddings. In addition, approximately 12 RAP-sponsored events are anticipated to be held annually, which include events organized by City representatives or officials. Other events to be held at the proposed Project would be identified by the City at a later date.

As previously mentioned, the Project site is located adjacent to the existing Grand Park, which is owned by the County of Los Angeles, and would operate separately. RAP would operate and maintain the proposed Project.

No parking spaces are currently provided at the Project site. Parking spaces are also not included with the proposed Project. According to the Los Angeles Municipal Code, 21 parking spaces would be required for the restaurant uses proposed. As such, a parking variance would be required and will be obtained to implement the proposed Project. Existing parking facilities within walking distance and public transportation are readily available in the project area for patrons to utilize. The restaurant operators could lease parking spaces from local parking lots or structures in the area to provide nearby parking for restaurant patrons. The proposed Project would also include bicycle parking areas on-site, to provide additional modes of access to the project area. The proposed Project would be designed in compliance with the Americans with Disabilities Act (ADA).



Source: OMA, February 2018.

NOT TO SCALE

⬚ Project Site

▤ Sitting Area

Figure 6

Site Plan

The hours of operation for the restaurant building complex would be 7:00 a.m. to 12:00 a.m. on Monday through Thursday, and 8:00 a.m. to 1:00 a.m. on Friday through Sunday. The park's hours of operation would be 5:30 a.m. to 10:30 p.m., in accordance with Los Angeles Municipal Code Section 63.44 and associated ordinances.

G. Project Construction

The construction of the proposed Project would last for approximately two years from Summer/Fall 2019 to Summer/Fall 2021. Construction would occur over four phases including mobilization, grading, building construction, and installation of hardscape and landscape components.

Phase 1 would occur for approximately 2 weeks and would include all mobilization efforts necessary to begin project construction. This includes obtaining any necessary permits, permissions, and entitlements necessary for park construction; as well as performing any necessary pre-construction surveys.

Phase 2 would occur for approximately 2 months and would include site grading activities and excavation work with a maximum depth of 12 feet. Excavation would be required for the area where foundations and footings would be located. An estimated 1,500 cubic yards of soil would be excavated. Construction workers would operate a bulldozer, hydraulic excavator, compactors, and up to five dump trucks or more per day as a part of the grading activities. As previously mentioned, the Project site was previously graded as part of the abatement and remediation activities during the removal of the prior State building. As such, grading activities under the proposed Project construction would be limited to areas necessary for landscape, hardscape and restaurant construction.

Phase 3 would occur for approximately 14 months and would include restaurant building construction and associated components. Construction workers would operate a crane and 2 forklifts during this phase. It is anticipated that the completion of Phase 3 would overlap for approximately 5 months with the completion of Phase 4 described below.

Phase 4 would occur for approximately 10 months and would include the installation of the hardscape and landscape components, including the 16 decorative lighted canopies that would exist throughout the park, as well as associated utilities work and a creek that serves as a bioswale system.

The construction lay down area would be entirely on-site, and would be coordinated with any other construction activities occurring in the project area to reduce the potential for cumulative construction effects in this heavily visited area of downtown Los Angeles. In addition, construction of the proposed Project would be coordinated with the adjacent Grand Park as needed. One existing bus shelter, located on 1st Street near Spring Street, would be replaced in kind.

Construction activities would occur Monday through Friday between 7:00 a.m. and 4:00 p.m. Partial street closures would be expected for two to three weeks during construction, with vehicular and pedestrian detours not anticipated. Approximately 20 to 30 construction workers would be expected to be onsite during construction hours.

Unless otherwise stated, the proposed Project will be designed, constructed and operated following all applicable laws, regulations, ordinances and formally adopted City standards including but not limited to:

- Los Angeles Municipal Code
- Bureau of Engineering Standard Plans
- Standard Specifications for Public Works Construction
- Work Area Traffic Control Handbook
- Additions and Amendments to the Standard Specifications for Public Works Construction

Best Management Practices (BMPs)

An appropriate combination of monitoring and resource avoidance would be employed during all construction activities, including implementation of the following Best Management Practices (BMPs):

- Construction of the proposed Project is anticipated to occur Monday through Friday from 7:00 a.m. to 4:00 p.m. Should construction be required outside of the anticipated hours, construction activity would comply with the allowable hours of construction as dictated in the *Los Angeles Municipal Code Section 41.40*, including 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction activity on Sundays or City holidays.

- The proposed Project would implement Rule 403 fugitive dust control measures required by the South Coast Air Quality Management District (SCAQMD), which requires reasonable precautions to be taken to prevent visible particulate matter from being airborne, under normal wind conditions, beyond the property from which the emission originates. Reasonable precautions include, but are not limited to, the following:

  - Application of water on dirt roads, material stockpiles, and other surfaces that can give rise to airborne dusts; and
  - Maintenance of roadways in a clean condition

- The proposed Project would implement erosion control where necessary that may include, but would not be limited to, the following:

  - Minimizing the extent of disturbed areas and duration of exposure;
  - Stabilizing and protecting disturbed areas;
  - Keeping runoff velocities low;
  - Retaining sediment within the construction area;
  - Use of silt fences or straw wattles;
  - Temporary soil stabilization;
  - Temporary drainage inlet protection;
  - Temporary water diversion around the immediate work area; and
  - Minimizing debris from construction vehicles on roads providing construction access

- The proposed Project would implement Rule 402 measures required by the SCAQMD, which prohibits the discharge from any source whatsoever, such quantities of air contaminants or other materials that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or that cause or have a natural tendency to cause injury or damage to business or property.

- BOE would ensure all construction crews have fire-suppression equipment (such as fire extinguishers) on site to respond to the accidental ignition of a fire.

- Spill kits will be available onsite for potential leaks or spills of hazardous materials.

- BOE or its contractor would minimize short-term construction noise through: (1) proper maintenance and tuning of all construction equipment engines to minimize noise emissions; and (2) proper maintenance and functioning of the mufflers on all internal combustion and equipment engines.

The proposed Project construction would incorporate source reduction techniques and recycling measures and maintain a recycling program to divert waste in accordance with the Citywide Construction and Demolition Debris Recycling Ordinance.

H. Operation and Maintenance

Operation and maintenance of the proposed Project would be the responsibility of RAP, under existing park operation and maintenance requirements within the City. Specific programs, events, and site operators would be developed, evaluated and selected by RAP under separate planning processes.

I. Project Actions and Approvals

Numerous approvals and/or permits would be required to implement the proposed Project. The environmental documentation for the project would be used to facilitate compliance with federal and state laws and the granting of permits by various state and local agencies having jurisdiction over one or more aspects of the project. These approvals and permits may include, but may not be limited to, the following as listed in Table 1:

Table 1
Required Permits and Approvals

Agency	Permit/Requirement	Issue
Local		
City of Los Angeles Department of City Planning	Parking Variance	Los Angeles Municipal Code requires 21 parking spaces for the restaurant operations. No parking is proposed as a part of the project.
City of Los Angeles Department of City Planning	Zoning Designation Change	The current land use is zoned as PF-2D, and will need to be rezoned to OS-2D.
City of Los Angeles Department of Transportation	Traffic Management Plan	Partial street closures are anticipated during construction.
City of Los Angeles Department of Building and Safety	ADA compliance review and approval; grading; structure; general permit check (mechanical plumbing; electrical; fire life safety)	Site access and building plans require approval for ADA compliance.
City of Los Angeles Bureau of Street Services – Urban Forestry Division	Street tree removal permit	Removal and replacement of one street tree in public parkway.
City of Los Angeles Bureau of Engineering	Review and approval	Improvements proposed within the public right-of-way adjacent to the Project site.
City of Los Angeles Bureau of Sanitation	Review and approval	Low Impact Design related to stormwater management design.
City of Los Angeles Department of Recreation and Parks	Review and approval	Final adoption of Initial Study and Mitigated Negative Declaration
Los Angeles Fire Department	Review and approval	Restaurant building requires fire department review and approval.
Regional		
Los Angeles Regional Water Quality Control Board	National Pollution Discharge Elimination System (NPDES) Permit for Construction	Water quality and placement to discharges associated with dewatering activities.

The operators of any events held at the proposed Project would be responsible for complying with all applicable local laws and regulations. Therefore, the operators of the events would also be required to obtain the appropriate permits from the local authorities with jurisdiction over such uses.

The analysis in this document assumes that, unless otherwise stated, the proposed Project would be designed, constructed and operated following all applicable laws, regulations, ordinances and formally adopted City standards (*e.g., Los Angeles Municipal Code* and Bureau of Engineering *Standard Plans*). Construction would follow the uniform practices established by the Southern California Chapter of the American Public Works Association (*e.g., Standard Specifications for Public Works Construction* and the *Work*

Area Traffic Control Handbook) as specifically adopted by the City of Los Angeles (e.g., *The City of Los Angeles Department of Public Works Additions and Amendments to the Standard Specifications For Public Works Construction* [AKA *"The Brown Book,"* formerly *Standard Plan S-610*]).

III. EXISTING ENVIRONMENT

The Project site is currently a vacant lot. The location is fenced, and has on-site temporary lighting to provide security. Site use is currently limited to City-sponsored special events, and for limited use by private renters. All current site use is managed by RAP and Board of Public Works.

The California Department of Conservation, California Geological Survey's Seismic Hazard Zonation Program Map indicates that the Project site is not within an Alquist-Priolo Earthquake Fault Zone. The nearest fault zone to the Project site is the Lower Elysian Park Thrust located approximately 2.5 miles southwest of the site and no active faults are known to cross the Project site. However, the Project site is located within a designated liquefaction zone. The Project site is not located within a 100-year floodplain, but is located within a 500-year (0.2-percent-annual-chance) floodplain.

IV. ENVIRONMENTAL EFFECTS/INITIAL STUDY CHECKLIST

This section documents the screening process used to identify and focus upon environmental impacts that could result from the proposed Project. The IS Checklist below follows closely the form prepared by the Governor's Office of Planning and Research and was used in conjunction with the City's *L.A. CEQA Thresholds Guide* and other sources to screen and focus upon potential environmental impacts resulting from this project. Impacts are separated into the following categories:

- <u>No Impact.</u> This category applies when a project would not create an impact in the specific environmental issue area. A "No Impact" finding does not require an explanation when the finding is adequately supported by the cited information sources (e.g., exposure to a tsunami is clearly not a risk for projects not near the coast). A finding of "No Impact" is explained where the finding is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

- <u>Less Than Significant Impact.</u> This category is identified when the project would result in impacts below the threshold of significance, and would therefore be less than significant impacts.

- <u>Less Than Significant After Mitigation.</u> This category applies where the incorporation of mitigation measures would reduce a "Potentially Significant Impact" to a "Less Than Significant Impact." The mitigation measures are described briefly along with a brief explanation of how they would reduce the effect to a less than significant level. Mitigation measures from earlier analyses may be incorporated by reference.

- Potentially Significant Impact. This category is applicable if there is substantial evidence that a significant adverse effect might occur, and no feasible mitigation measures could be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required. There are no such impacts for the proposed Project.

Sources of information that adequately support these findings are referenced following each question. All sources so referenced are available for review at the offices of the Bureau of Engineering, 1149 South Broadway, Suite 600, Los Angeles, California 90015.

Please contact Talmage Maxwell Jordan at (213) 485-5754 or at Talmage.Jordan@lacity.org for information regarding the environmental document. Please contact Nur Malhis at (213) 485-4737 or at Nur.Malhis@lacity.org for information regarding the proposed Project.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
1. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Sections A.1 and A.2); Central City Community Plan*

Comment: A scenic vista generally provides focal views of objects, settings, or features of visual interest; or panoramic views of large geographic areas of scenic quality, primarily from a given vantage point. A significant impact would occur if the proposed Project introduced incompatible visual elements within a field of view containing a scenic vista or substantially altered a view of a scenic vista.

Scenic views or vistas are panoramic public views of various natural features, including the ocean, striking or unusual natural terrain, or unique urban or historic features. Public access to these views may be available from nearby parklands, private and public-owned sites, and public right-of-way.

The Central City Community Plan does not delineate or designate any specific views as protected scenic vistas within the project area. The Plan does state that civic open spaces should be bounded by public streets, provide public art, and provide a sense of place. The Project site is located within an urban setting and is bounded by Grand Park adjacent on the north, Spring Street on the east, 1st Street on the south, and Broadway on the west. The Project site is currently vacant and is the location of the former 13-story California State office building.

The proposed Project would development the 1.96-acre vacant Project site into an open space public park located in the Civic Center area of downtown Los Angeles. The proposed Project would construct a two-story restaurant building complex with a rooftop within the northwest corner of the park; trees and green spaces for public enjoyment, numerous seating areas, 16 decorative canopies to provide shade and lighting throughout the park, new hardscaping and landscaped areas, and bioswales or other treatment BMPs. The development of a public park and restaurant complex would improve views in the area, compared to the existing condition; with the inclusion of quality open space, public art, a visually attractive new building, and providing a sense of place for public recreation.

The new park and restaurant building complex would be visible from many surrounding vantage points including the adjacent public streets and sidewalks, Grand Park, as well as from other existing uses in the immediate area, such as the Los Angeles City Hall and City Hall Park. Compared to existing conditions, the proposed Project would contribute to the enhancement of views of Grand

Park, City Hall Park, and the Civic Center area of downtown Los Angeles. As such, the proposed Project would not have an adverse effect on a scenic vista and no impact would result.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Sections A.1 and A.2); City of Los Angeles General Plan; Central City Community Plan*; California Department of Transportation, California Scenic Highway Mapping System

Comment: A significant impact would occur where scenic resources within a state scenic highway were damaged or removed as a result of the proposed Project.

The proposed Project is not located along or near an officially designated California Scenic Highway or locally designated scenic highway. The nearest highway to the Project site that is included in the California Scenic Highway Mapping System is Route 110, a designated Historic Parkway, also known as the Arroyo Seco Historic Parkway. The portion of Route 110 that is designated a Historic Parkway is located approximately 2.26 miles north of the Project site. Route 2, also known as the Angeles Crest Highway Scenic Byway is the nearest officially designated scenic highway, which is located approximately 10.87 miles north of the Project site in the San Gabriel Mountains.

The proposed Project would remove one magnolia tree from the public sidewalk adjacent to the Project site along Broadway. The removed tree would be replaced with the proposed Project along Spring Street. The number of trees planted as part of the Project would be in compliance with the Bureau of Street Services Urban Forestry Division’s Street Tree Replacement Policy. Additionally, no scenic resources such as groves of trees or rock outcroppings are located on the Project site. As such, no impact to scenic resources would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Sections A.1 and A.2; Central City Community Plan*

Comment: A significant impact would occur if the proposed Project introduced incompatible visual elements to the Project site or the area surrounding the Project site.

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

The Project site is located in a highly urbanized area in the Civic Center area of downtown within the City of Los Angeles. The proposed Project would improve the existing visual character and quality of the site and its surroundings by replacing a vacant lot with a public park and restaurant building complex. Installation and construction of landscaping, hardscaping, and lighting designed to function as public art, and a dining space for community enjoyment would also improve the existing visual character and quality of the site. Constructing the new public park and restaurant building complex would have a beneficial impact on the long-term visual quality of the project area because it would increase the amount of green space within the Civic Center area.

The proposed Project would be consistent with Chapter V, Urban Design, of the *Central City Community Plan*. The Plan states that “Because so little dedicated public open space exists in Downtown, creating a framework of civic open spaces and streets that provide necessary and suitable settings for the public life of the community is of the highest priority.” The proposed Project would address this by developing an open space public park for the enjoyment of the local community.

The proposed Project has the potential for short-term aesthetic effects during construction, due to grading and the storage of construction equipment and materials on-site. These effects would be temporary and occur within the property boundaries; however, these effects are similar in nature to the current temporary uses of the Project site for private events. As such, less than significant impacts to visual character would occur.

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section A.4)*

Comment: A significant impact would occur if the proposed Project caused a substantial increase in ambient illumination levels beyond the property line or caused new lighting to spill-over onto light-sensitive land uses such as residences, some commercial and institutional uses that require minimum illumination for proper function, and natural areas.

The Project site is currently illuminated by existing adjacent standard street lights along Spring Street on the east, 1st Street on the south, and Broadway on the west. Additional existing light sources associated with the Grand Park located within the same block, adjacent and north of the Project site.

Project construction would occur during daylight hours and, therefore, would

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

not require nighttime lighting. The proposed Project would include installation of new security lighting around the new facilities, which would operate regularly, and would be installed into the 16 decorative canopies that will be added throughout the park. The nighttime lighting fixtures that would be installed would direct the majority of the light within the park, and away from sensitive areas, to the maximum extent feasible; however, spillover impacts, including limited amounts of glare, could potentially occur at surrounding properties. Land uses adjacent to the Project site are commercial and public facilities, however a residential use (Times Mirror Towers) is proposed to be constructed directly south of the Project site. Compliance with applicable City regulations related to light and glare would ensure less than significant impacts. In addition, the Project area is highly urbanized and has a high level of existing lighting. As such, the proposed Project would not create a substantial source of light or glare that would result in adverse effects to day/nighttime views of the area. Impacts would be less than significant.

2. AGRICULTURE AND FOREST RESOURCES – Would the project:

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

Reference: California State Department of Conservation Farmland Mapping and Monitoring Program*; City of Los Angeles General Plan Conservation Element*; Zone Information & Map Access System (ZIMAS)

Comment: A significant impact would occur if the proposed Project resulted in the conversion of state-designated agricultural land from agricultural use to a non-agricultural use.

No prime or unique farmland, or farmland of statewide importance exists within the project area or vicinity. The Project site is not located on or near any property zoned or otherwise intended for agricultural uses. Therefore, no impact to state-designated agricultural land would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? ☐ ☐ ☐ ☒

Reference: California State Department of Conservation Farmland Mapping and Monitoring Program; *City of Los Angeles General Plan Conservation Element;* ZIMAS

Comment: A significant impact would occur if the proposed Project resulted in the conversion of land zoned for agricultural use, or indicated under a Williamson Act contract, from agricultural use to a non-agricultural use.

No land on or near the Project site is zoned for or contains agricultural uses. As the City of Los Angeles does not participate in the Williamson Act, there are no Williamson Act properties within the Project site. Therefore, no impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code Section 4526)? ☐ ☐ ☐ ☒

References: *City of Los Angeles General Plan*; ZIMAS

Comment: A significant impact would occur if the proposed Project conflicted with an existing zoning classification of forest land or timberland, or caused rezoning of an area classified as forest land or timberland.

The Project site is currently zoned Public Facility (PF) and would be rezoned to Open Space (OS-2D) to allow the development of the public park use. The Project site is not within or near any areas classified as forest land or timberland. Therefore, the proposed Project would not conflict with the existing zoning for, or cause rezoning of, forest land or timberland resources, and no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

References: Refer to Section 2 (c) above.
Comment: Refer to Section 2 (c) above.

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? ☐ ☐ ☐ ☒

Reference: Refer to Section 2 (a) and 2 (c) above.

Comment: Refer to Section 2 (a) and 2 (c) above.

3. AIR QUALITY – Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Sections B1 and B2);* South Coast Air

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

Quality Management District, *2012 Air Quality Management Plan*, 2012; *City of Los Angeles General Plan; First & Broadway Civic Center Park Air Quality Technical Memorandum,* 2018 (Appendix A)

Comment: A significant impact may occur if the proposed Project would conflict with or obstruct implementation of the applicable air quality plan.

The South Coast Air Quality Management District (SCAQMD) monitors air quality within the project area and the South Coast Air Basin, which includes Orange County and portions of Los Angeles, Riverside, and San Bernardino counties. The South Coast Air Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto mountains to the north and east; and the San Diego County line to the south.

Air quality plans describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain federal and state air quality standards into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act. The South Coast Air Basin is currently designated as nonattainment for 8-hour ozone and particulate matter with aerodynamic diameter less than 2.5 microns ($PM_{2.5}$) for both state and federal standards and nonattainment for particulate matter with aerodynamic diameter less than 10 microns (PM_{10}) for the state standards.

The most recent *Air Quality Management Plan* (AQMP) was adopted by the SCAQMD in February 2016. The AQMP was prepared by SCAQMD in partnership with the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB), and is the legally enforceable blueprint for how the region will meet and maintain state and federal air quality standards.

Projects that would be consistent with the 2016 AQMP, and growth projections within the Southern California Association of Governments (SCAG) *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), would be considered to have a less than significant impact. Consistency with the AQMP is determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations, or contribute to a new violation of the air quality standards. As described in *Draft First & Broadway Civic Center Park Air Quality Technical Memorandum,* 2018 (Appendix A), criteria established in the SCAQMD's CEQA Air Quality Handbook were utilized to determine the proposed Project's consistency with applicable SCAQMD and

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

SCAG policies, described below.

Nitrogen oxides (NO_X), carbon monoxide (CO), PM_{10}, and $PM_{2.5}$ emissions were analyzed for the proposed Project in order to: (1) ascertain potential effects on localized concentrations; and (2) determine if there is a potential for such emissions to cause or affect a violation of the ambient air quality standards. As demonstrated in the analysis in Table 2 below, localized emissions would not exceed the SCAQMD-recommended localized thresholds.

With respect to the determination of consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016–2040 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

Implementation of the proposed Project would not introduce new residential uses to the project area, and therefore population and housing projections for the region would not be affected. The commercial uses would generate minimal new employment that would have no potential to alter citywide and regional employment projections. The proposed Project would not have any potential to result in growth that would exceed the projections incorporated into the AQMP or the SCAG 2016–2040 RTP/SCS.

The proposed Project would comply with all applicable regulatory standards (e.g., SCAQMD Rules 402 and 403) as required by the SCAQMD. As demonstrated in this analysis, the proposed Project would not result in significant air quality impacts and no mitigation measures are required to reduce emissions. As such, the proposed Project meets this AQMP consistency criterion.

The proposed Project would be consistent with the *City of Los Angeles General Plan*. The Project site is zoned Public Facility (PF-2D) in the City of Los Angeles General Plan, which would be rezoned to Open Space (OS-2D) to allow for the construction of the park. The Project site is within the Central City Community Plan Area. The proposed Project would be consistent with goals and objectives within the Plan, namely to provide adequate facilities and identify neighborhoods where service is deficient. Therefore, because the proposed Project would be consistent with the goals and policies of the Plan and would be consistent with proposed zoning, the project is considered

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

consistent with the General Plan.

Implementation of the proposed Project would not interfere with air pollution control measures listed in the 2016 AQMP and would not conflict with the goals of the General Plan Air Quality Element. No significant impacts have been identified related to the proposed Project. Impacts will be less than significant and no mitigation measures are required.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Sections B1 and B2);* South Coast Air Quality Management District*, CEQA Air Quality Handbook*, 1993; *First & Broadway Civic Center Park Air Quality Technical Memorandum,* 2018 (Appendix A)

Comment: A significant impact may occur if the proposed Project would violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Construction

Construction of the proposed Project would have a potentially significant air quality impact under this criterion if maximum daily emissions of any regulated pollutant exceeded the applicable SCAQMD air quality significance thresholds presented in Table 2. Daily emissions of regulated pollutants were quantified for each phase of construction activity. The estimate of fugitive dust emissions account for Rule 403 compliance. Examples of Rule 403 compliance include: a) All exposed areas will be frequently watered to reduce the generation of dust, and b) Vehicle speed of construction vehicles/equipment in exposed areas (i.e., unpaved access) shall be reduced to reduce the generation of dust.

Table 2 shows a comparison of the maximum daily emissions during each phase of construction to the applicable SCAQMD air quality significance thresholds. Maximum daily emissions of air pollutants that would be generated by proposed Project construction activities would not exceed any applicable regional or localized threshold values. Impacts would be less than significant and no mitigation is required. Additional details can be found in the technical air quality memorandum in Appendix A.

Table 2
Estimated Daily Construction Emissions

Phase	Daily Emissions (Pounds Per Day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
SITE GRADING						
On-Site Emissions	1.6	16.7	8.9	<0.1	3.5	2.1
Off-Site Emissions	0.2	1.2	1.6	<0.1	0.4	0.1
Total	***1.8***	***17.9***	***10.5***	***<0.1***	***3.9***	***2.2***
BUILDING CONSTRUCTION						
On-Site Emissions	0.8	8.9	4.7	<0.1	0.5	0.4
Off-Site Emissions	0.2	2.2	1.9	<0.1	0.4	0.1
Total	***1.0***	***11.1***	***6.6***	***<0.1***	***0.9***	***0.5***
PAVING						
On-Site Emissions	0.5	5.3	5.7	<0.1	0.3	0.2
Off-Site Emissions	0.1	0.1	1.2	<0.1	0.3	0.1
Total	***0.7***	***5.4***	***6.9***	***<0.1***	***0.6***	***0.3***
ARCHITECTURAL COATING						
On-Site Emissions	9.2	2.0	2.4	<0.1	0.1	0.1
Off-Site Emissions	0.1	0.1	1.1	<0.1	0.3	0.1
Total	***9.3***	***2.1***	***3.5***	***<0.1***	***0.4***	***0.2***
REGIONAL ANALYSIS						
Maximum Regional Daily Emissions	**9.3**	**17.9**	**10.5**	**<0.1**	**3.9**	**12.2**
Regional Significance Threshold	75	100	550	150	150	55
Exceed Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
LOCALIZED ANALYSIS						
Maximum Localized Daily Emissions	**--**	**16.7**	**8.9**	**--**	**3.5**	**2.1**
Localized Significance Threshold	--	74	680	--	5	3
Exceed Localized Threshold?	**--**	**No**	**No**	**--**	**No**	**No**

SOURCE: TAHA, 2018.

Operation

Implementation of the proposed Project would introduce approximately 992 daily vehicle trips to the project area on weekdays and approximately 1,271 daily vehicle trips on weekends, as well as marginally increase area source emissions. The results of operational emissions modeling are presented in Table 3. Maximum daily emissions of all regulated pollutants would remain substantially below the applicable SCAQMD operational mass daily thresholds. Therefore, implementation of the proposed Project would result in a less than significant impact related to operational air pollutant emissions, and no mitigation is required.

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

Table 3
Estimated Daily Operational Emissions

Source Category	Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	0.4	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	0.1	1.2	1.0	<0.1	0.1	0.1
Mobile	1.7	7.5	16.3	<0.1	3.7	1.0
ANALYSIS						
Regional Total	**2.3**	**8.7**	**17.3**	**<0.1**	**3.8**	**1.1**
Regional Significance Threshold	55	55	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
SOURCE: TAHA, 2018.						

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

Reference: *L.A. CEQA Thresholds Guide (Sections B1 and B2); First & Broadway Civic Center Park Air Quality Technical Memorandum,* 2018 (Appendix A)

Comment: A significant impact would occur if the proposed Project's incremental air quality effects are considerable when viewed in connection with the effects of past, present, and future projects.

Construction

The South Coast Air Basin (SCAB) is designated as nonattainment of the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for ozone (O_3), PM_{10}, and $PM_{2.5}$. Therefore, there is an ongoing regional cumulative impact associated with these air pollutants. Taking into account the existing environmental conditions, the SCAQMD propagated guidance that an individual project can emit allowable quantities of these pollutants on a regional scale without significantly contributing to the cumulative impacts. As discussed above in Section 3 (b) and shown in Table 2, air pollutant emissions associated with construction of the proposed Project would not exceed any applicable SCAQMD air quality thresholds of significance. Despite the region being in nonattainment of the ambient air quality standards for O_3, PM_{10}, and $PM_{2.5}$, the SCAQMD does not consider individual project emissions of lesser magnitude than the mass daily thresholds to be cumulatively considerable. The proposed Project would not result in a cumulatively considerable net increase of nonattainment pollutants. Therefore, this impact would be less than significant and no mitigation is required.

Operation

Implementation of the proposed Project would create an open space public park incorporating a two-story restaurant building complex. Operations would not introduce a substantial source of long-term O_3 precursor emission or particulate matter emissions for which the SCAB is currently designated nonattainment. As discussed above, the SCAQMD has propagated guidance that the project-specific mass daily thresholds may be used as a reference metric to evaluate the potential for cumulatively considerable net increases in nonattainment pollutants. If the SCAQMD mass daily thresholds were exceeded, further analysis would be warranted to ensure that emissions would not be cumulatively considerable. However, as discussed above in Section 3 (b) and shown in Table 3, operation of the proposed Project would not exceed the SCAQMD mass daily threshold for VOC, NO_X, or particulate matter. Therefore, this impact would be less than significant and no mitigation is required.

d) Expose sensitive receptors to substantial pollutant concentrations? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Sections B1, B2, and B3); First & Broadway Civic Center Park Air Quality Technical Memorandum,* 2018 (Appendix A)

Comment: A significant impact may occur if construction or operation of the proposed Project generated pollutant concentrations to a degree that would significantly affect sensitive receptors.

Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. These people include children, older adults, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a location such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours.

Construction

The SCAQMD devised its Localized Significance Threshold (LST) values to prevent the occurrence of localized hot spots of criteria pollutant concentrations at sensitive receptor locations surrounding the Project site. The LST values

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

were determined using emissions modeling based on ambient air quality measured throughout the SCAB. If maximum daily emissions remain below the LST values during construction activities, it is highly unlikely that air pollutant concentrations in ambient air would reach substantial levels sufficient to create public health concerns for sensitive receptors. As shown in Table 2 above, maximum daily emissions of criteria pollutants and O_3 precursors from sources located on the Project site would not exceed any applicable LST values. Therefore, construction of the proposed Project would not result in exposure of sensitive receptors to substantial concentrations of criteria pollutants.

With regards to emissions of air toxics, carcinogenic risks, and non-carcinogenic hazards, the use of heavy duty construction equipment and haul trucks during construction activities would release diesel PM to the atmosphere through exhaust emissions. Diesel PM is a known carcinogen, and extended exposure to elevated concentrations of diesel PM can increase excess cancer risks in individuals. However, carcinogenic risks are typically assessed over timescales of several years to decades, as the carcinogenic dose response is cumulative in nature. Short term exposures to diesel PM would have to involve extremely high concentrations in order to exceed the SCAQMD Air Quality Significance Threshold of 10 excess cancers per million.

Over the course of construction activities, average diesel PM emissions from on-site equipment would be approximately 0.3 pounds per day, according to the technical air quality analysis prepared for the Project within Appendix A. Therefore, it is highly unlikely that diesel PM concentrations would be of any public health concern during the 24-month construction period, and diesel PM emissions would cease upon completion of construction activities. Therefore, this impact would be less than significant and no mitigation is required.

Operation

The proposed Project would introduce a new public park and restaurant building complex to the project area. The proposed Project does not include an industrial component that would constitute a new substantial stationary source of operational air pollutant emissions, nor does it include a land use that would generate a substantial number of heavy duty truck trips within the region. There would be no substantial source of air toxic emissions. Although a residential development (Times Mirror Towers) is planned in the future across 1st Street to the south, operation of the proposed Project would not involve any on-site sources of pollutants that would adversely affect future residents. The park and restaurant uses would not require any heavy equipment or large stationary emissions sources that could generate sufficient quantities of air pollutants to

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

result in significantly elevated concentrations at off-site locations. Additionally, as shown in Table 3 above, daily emissions of criteria pollutants would remain far below the applicable SCAQMD Air Quality Significance Thresholds. Therefore, this impact would be less than significant and no mitigation is required.

e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Sections B1 and B2); First & Broadway Civic Center Park Air Quality Technical Memorandum,* 2018 (Appendix A)

Comment: A significant impact would occur if the project created objectionable odors during construction or operation that would affect a substantial number of people.

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

Construction

A significant impact would occur if construction or operation of the proposed Project would result in the creation of nuisance odors that would be noxious to a substantial number of people. Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the Project site, and would be temporary in nature and would not persist beyond the termination of construction activities. The proposed Project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. In addition, as construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. Therefore, this impact would be less than significant and no mitigation is required.

Operation

The proposed Project would introduce a new open space public park with an incorporated restaurant building to downtown Los Angeles. According to the

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

SCAQMD CEQA Air Quality Handbook, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. Although, the restaurant would produce some odors and smells associated with the preparation of food, the restaurant operations would comply with SCAQMD Rule 402, which would prohibit any air quality discharge that would be a nuisance or pose any harm to the public. Furthermore, the Project site would not be developed with land uses that are typically associated with odor complaints. On-site trash receptacles would have the potential to create adverse odors. Trash receptacles would be located and maintained in a manner that promotes odor control in accordance with the Los Angeles Clean Streets program and no adverse odor impacts are anticipated from these types of land uses. Therefore, this impact would be less than significant and no mitigation is required.

4. BIOLOGICAL RESOURCES – Would the project:

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

Reference: *L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan Conservation Element;* California Department of Fish and Wildlife California Natural Diversity Database Biogeographic Data Branch; California Native Plant Society Rare Plant Program

Comment: A significant impact would occur if the proposed Project removed or modified habitat for any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulation, or by the state or federal regulatory agencies cited.

Special-status plant species include those listed as Endangered, Threatened, Rare or those species proposed for listing (Candidates) by the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the California Native Plant Society (CNPS).[1,2,3] The CNPS listing

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[1] Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (Title 50 Code of Federal Regulations [CFR] 17.12 [listed plants], Title 50 CFR 17.11 [listed animals] and includes notices in the Federal Register for proposed species).

[2] Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (Title 14 California Code of Regulations 670.5).

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

is sanctioned by CDFW and serves as their list of “candidate” plant species that meet the definitions of the California Endangered Species Act (CESA), and are eligible for state listing.

Special-status wildlife species include those listed by the USFWS under the federal Endangered Species Act and by CDFW under CESA. USFWS and CDFW officially list species as either Threatened, Endangered, or as Candidates for listing. Additional species receive federal protection under the Bald Eagle Protection Act (e.g., bald eagle, golden eagle), the *Migratory Bird Treaty Act* (MBTA), and state protection under the *California Environmental Quality Act (CEQA) Section 15380(d).* All birds, except European starlings, English house sparrows, rock doves (pigeons), and non-migratory game birds such as quail, pheasant, and grouse, are protected under the MBTA. However, non-migratory game birds are protected under California Fish and Game Code Section 3503. Many other species are considered by CDFW to be California Species of Special Concern, and others are on a CDFW Watch List. The California Natural Diversity Database also tracks species within California for which there is conservation concern, including many that are not formally listed, and assigns them a California Natural Diversity Database (CNDDB) rank. Although Species of Special Concern, CDFW Watch List species, and species that are tracked by the CNDDB are not formally listed or afforded official legal status, they may receive special consideration during the CEQA review process. CDFW further classifies some species as "Fully Protected," indicating that the species may not be taken or possessed except for scientific purposes, under special permit from CDFW. Additionally, California Fish and Game Code Sections 3503, 3505, and 3800 prohibit the take, destruction or possession of any bird, nest, or egg of any bird except English house sparrows and European starlings unless authorization is obtained from the CDFW.

A search of relevant regional databases for special-status biological resources in the vicinity of the project area was conducted. This included a two-quad search based on the United States Geological Survey’s Hollywood and Los Angeles, CA quadrangles of CDFW’s CNDDB and CNPS electronic Inventory. A polygon level search around the project vicinity was conducted in USFWS’ Information for Planning and Consultation (IPaC) inventory. A review of these databases indicates that a combined total of 25 plant species from the CNDDB, CNPS, and IPaC; 17 wildlife species from the CNDDB, and 3 natural vegetation communities have been documented from the Hollywood, Los Angles

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[3] Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 *et seq.*).

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

quadrangles. The CNDDB and CNPS lists are included in Appendix B.

The Project site is located in the heavily-urbanized Civic Center community of the City of Los Angeles. The site is a vacant lot, with no on-site vegetation. One magnolia tree will be from the sidewalk area.

The IPaC listed the Coastal California Gnatcatcher (*Polioptila california californica)* as a threatened species, however, there is no critical habitat located at the Project site.

The CNDDB indicates that there is no suitable habitat available within the Project site for any of the special status species identified. As a result, the proposed Project would not result in a substantial adverse impact to listed, candidate, or otherwise sensitive special-status plant or wildlife species. However, due to the presence of magnolia and ficus trees which may provide suitable nesting habitat for birds protected under the MBTA, and which the magnolia tree may be removed during construction, direct impacts to suitable nesting habitat could occur. Additionally, noise and dust generated during construction could indirectly impact nesting birds by causing them to avoid the area during construction. Should tree removal and construction activities occur during the nesting bird season, generally considered to extend from February 15 through September 15, the implementation of the avoidance and minimization measures provided in Mitigation Measure BIO-1 would reduce impacts to nesting birds to a less than significant level.

Mitigation Measure BIO-1 is required as follows:

Mitigation Measure BIO-1: Exterior building improvements shall occur outside of the nesting season (February 15 through September 15). If avoidance of exterior construction work within this time period is not feasible, the following additional measures shall be employed:

1. A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. All nests found shall be recorded.

2. If construction activities must occur within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a weekly basis and the construction activity shall be postponed until the biologist determines that the nest is no longer active.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
If the recommended nest avoidance zone is not feasible, the qualified biologist shall determine whether an exception is possible and obtain concurrence from the appropriate resource agency before construction work can resume within the avoidance buffer zone. All work shall cease within the avoidance buffer zone until either agency concurrence is obtained or the biologist determines that the adults and young are no longer reliant on the nest site.				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
Reference: *L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan Conservation Element;* California Department of Fish and Wildlife California Natural Diversity Database Biogeographic Data Branch; CDFW Descriptions of the Terrestrial Natural Communities of California				
Comment: Sensitive natural communities are those that are designated as rare in the region by the CNDDB, provide potentially suitable habitat to support special-status plant or wildlife species, or receive regulatory protection (i.e., Section 404 of the Clean Water Act and/or Section 1600 et seq. of the California Fish and Game Code). Rare communities are given the highest inventory priority. Based on the review of the CNDDB, a total of three sensitive vegetative communities have been recorded within the Los Angeles and Hollywood quadrangles. None of these records coincide with the Project site. The site occurs in a heavily-urbanized community of the City of Los Angeles and no natural vegetation communities occur on-site. As a result, the proposed Project would not adversely affect any sensitive natural community or riparian habitat. No impact would occur and no mitigation measures are required.				
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?	☐	☐	☐	☒
Reference: *L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan; U.S.C. Title 33, Chapter 26, Sections 101-607*				
Comment: A significant impact would occur if federally protected wetlands, as defined by Section 404 of the Clean Water Act, were modified or removed.				
The *Clean Water Act of 1997* (CWA), as amended, provides for the restoration and maintenance of the physical, chemical, and biological integrity of the				

nation's waters. The act sets up a system of water quality standards, discharge limitations, and permit requirements. Activities that have the potential to discharge dredge or fill materials into jurisdictional waters of the U.S., which include those waters listed in 33 Code of Federal Regulations 328.3 (Definitions), are regulated under Section 404 of the Act, as administered by US Army Corps of Engineers (Corps). Section 401 of the CWA requires a water quality certification from the state for all permits issued by the Corps under Section 404 of the Clean Water Act. The Regional Water Quality Control Board (RWQCB) is the state agency in charge of issuing a CWA Section 401 water quality certification or waiver.

The *Porter-Cologne Water Quality Control Act* is the basic water quality control law for California and works in concert with the CWA. Under Section 13000 et seq. of *Porter-Cologne Water Quality Control Act*, the RWQCB is the agency that regulates discharges of waste and fill material within any region that could affect a water of the state (Water Code 13260[a]), (including wetlands and isolated waters) as defined by the California Water Code Section 13050(e). A permit under the *Porter-Cologne Water Quality Control Act* is required prior to a project's implementation, for impacts to water bodies and riparian habitat. Additionally, under Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement from CDFW is required prior to any activity that would result in the modification of the bed, bank, or channel of a state stream, river, or lake, including water diversion and damming and removal of vegetation from the floodplain to the landward extent of the riparian zone. This permit governs both activities that modify the physical characteristics of a stream and activities that may affect fish and wildlife resource that use a stream and surrounding habitat (i.e., riparian vegetation or wetlands).

The Project site occurs in a heavily-urbanized community of the City of Los Angeles and no federal or state-protected wetlands or other waters coincide with the Project site or would be affected by implementation of the project. As a result, no impacts would occur and no mitigation measures are required.

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? ☐ ☒ ☐ ☐

Reference: *L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan*

Comment: A significant impact would occur if the proposed Project interfered or removed access to a migratory wildlife corridor or impeded the use of native wildlife nursery sites.

In an urban context, a wildlife migration corridor can be defined as a linear landscape feature of sufficient width and buffer to allow animal movement between two comparatively undisturbed habitat fragments, or between a habitat fragment and some vital resource that encourages population growth and diversity. Habitat fragments are isolated patches of habitat separated by otherwise foreign or inhospitable areas, such as urban/suburban tracts or highways. Two types of wildlife migration corridors seen in urban settings are regional corridors, defined as those linking two or more large areas of natural open space, and local corridors, defined as those allowing resident wildlife to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development.

The Project site occurs in a heavily-urbanized community of the City of Los Angeles and there are no surface waters, drainages, or other corridors that allow for wildlife movement on or within the vicinity of the Project site. The site is not within an established wildlife corridor, and the proposed Project would not interfere with the movement of any native wildlife species. As a result, the proposed Project would not interfere with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, and would not impede the use of native wildlife nursery sites. However, as further described in Section 4(c), ornamental trees on-site may provide suitable nesting habitat for birds protected under the MBTA. Nesting birds may avoid the project vicinity due to increased levels of noise or dust during construction if it occurs during the nesting bird season (February 15 through September 15). Implementation of Mitigation Measure BIO-1 would reduce potential impacts on the movement and behavior of nesting birds to a less than significant level.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan; City of Los Angeles Department of Recreation and Parks Tree Care Manual*

Comment: A significant impact would occur if the proposed Project caused an impact that was inconsistent with local regulations pertaining to biological resources.

Native tree species that measure four inches or more in cumulative diameter, four and one-half feet above the ground, including native oak (*Quercus* spp.),

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

southern California black walnut (*Juglans californica* var. *californica*), western sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*) are protected by the *Los Angeles Municipal Code*. Any tree grown or held for sale by a nursery, or trees planted or grown as part of a tree planting program, are not included in the definition of a protected tree. Should any of the species listed above that meet the size requirements need to be removed, relocated, or replaced, the proposed Project would comply with the City's protected tree ordinance.

The City of Los Angeles Board of Public Works tree removal policy requires replacing street trees at a two-to-one ratio for trees that are removed from the right-of-way. RAP also has a tree replacement policy that can be found within the RAP's *Tree Care Manual*. The RAP tree replacement policy requires "whenever trees are removed, the existing trees' aggregate diameter, measures at breast height shall be replacement at an equal or greater rate of caliper of new trees."

As part of the proposed Project one magnolia tree along Broadway would be removed and replaced in accordance with applicable City policies. However, the tree species is not considered a protected tree under the *Los Angeles Municipal Code*. Therefore, no impacts to trees protected under a tree preservation policy or ordinance would occur.

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?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan*

Comment: A significant impact would occur if the proposed Project were inconsistent with the provisions of the adopted habitat conservation plans of the cited type.

The Project site is located in a heavily-urbanized community of the City of Los Angeles and does not coincide with the boundaries of any adopted Habitat Conservation Plan or Natural Community Conservation Plan. As a result, the proposed Project would not conflict with an approved conservation plan and no impact would occur.

5. CULTURAL RESOURCES – Would the project:

a) Cause a substantial adverse change in the significance	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
of a historical resource as defined in California Code of Regulations Section 15064.5?				

Reference: *L.A. CEQA Thresholds Guide (Section D.3)*; *Cultural Resources Assessment First & Broadway Civic Center Park Project, July 2018* (Appendix C)

Comment: A significant impact would result if the proposed Project caused a substantial adverse change to the significance of a historical resource.

A resource is generally considered “historically significant” if the resource meets at least one of the four criteria for listing on the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[a]). The CRHR is used as a guide by state and local agencies, private groups, and citizens to identify the state historical resources and to include which properties are to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR evaluation criteria are similar to the National Register of Historic Places (NRHP) criteria. For a property to be eligible for inclusion in the CRHR, it must meet one or more of the following criteria:

- It is associated with events that have made a significant contribution to the broad patterns of California history and cultural heritage;
- It is associated with the lives of persons important in our past;
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- It has yielded, or may be likely to yield, important information in prehistory or history.

A significant impact would result if the project caused a substantial adverse change to the significance of a historical resource, as defined in California Code of Regulations Section 15064.5. Five historical resources were identified within the project Area of Potential Effects (APE). Based on the information compiled from previous inventories and new information, the Court of Flags, Los Angeles City Hall, Los Angeles Law Library, Los Angeles Times Building, and the Los Angeles Civic Center Historic District located within the project APE are eligible for the NRHP and CRHR. One resource, Los Angeles City Hall, is listed as a Los Angeles Historic-Cultural Monument (LAHCM No. 150). Figure 7 shows the proximity of historical resources to the Project site.

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

The project was assessed to determine whether it would diminish any of the characteristics that qualify or define these historical resources in the APE that are adjacent to the Project site. The project will not destroy or alter any of the features that are important to the character-defining features of any of the historical resources; therefore, the project will not have any direct impacts on the resources. Additionally, indirect impacts of visual or audible intrusion will not result in an indirect substantial adverse change to the resources because the proposed Project would visually improve the area. As proposed, the project would result less than significant impacts on historical resources. No mitigation measures are necessary.

Source: Esri 2018.

Figure 7

Historical Resources in Project Area

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?	☐	☒	☐	☐

Reference: *L.A. CEQA Thresholds Guide (Section D.3); Cultural Resources Assessment First & Broadway Civic Center Park Project, 2018* (Appendix C)

Comment: A significant impact would occur if the proposed Project caused a substantial adverse change in the significance of an archaeological resource, which falls under the CEQA Guidelines section cited above.

A significant impact would occur if the project caused a substantial adverse change in the significance of an archaeological resource, as defined in California Code of Regulations Section 15064.5. Construction activities would include hazardous materials abatement, rough grading, utility installations, landscaping and hardscaping, construction of buildings, and installation of other park structures. The project may have direct impacts on subsurface archaeological resources that may be encountered during construction. Disturbance of archaeological resources would result in a significant impact under CEQA.

Archival research revealed that five archaeological sites, including one burial site, are located less than 0.25-mile west of the site. The closest site is less than 0.15-mile west of the Project site. Archaeological sites may also be buried by fill imported during the construction of the California State Building or its demolition. The lack of surface evidence of archaeological materials does not preclude the possibility that subsurface archaeological materials may exist. Based on the results of archival research, the Project site is culturally sensitive for prehistoric and/or historic archaeological resources.

Because the potential to encounter archaeological resources exists for this project, archaeological monitoring should be conducted during all ground-disturbing activities into native soils. A *Final Compaction Report* prepared for the Bureau of Engineering by Geocon West Inc. on December 10, 2014, states that the depths of excavation and backfill with artificial fill at the Project site all exceed 12 feet (refer to Figure 3 of the *Final Compaction Report* in Appendix G). Based on this information it is unlikely that native soil will be encountered, however if it is encountered Mitigation Measure CULT-1 should be implemented to reduce any potential impacts to less than significant levels.

Mitigation Measure CULT-1 is required as follows:

Mitigation Measure CULT-1: A qualified archeological monitor shall be present on-site during all ground-disturbing activities, including, but not limited to, excavation, grading, and installation of utilities. The on-site archaeological monitor shall conduct worker training prior to the initiation of ground-disturbing activity in order to inform workers of the types of resources that may be encountered and apprise them of appropriate handling of such resources. If any prehistoric archaeological sites are encountered within the project area, consultation with interested Native American parties shall be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. A cultural resources monitoring and mitigation plan (CRMMP) shall be developed in order to outline monitoring protocols. The CRMMP shall identify key personnel and describe coordination, monitoring, and reporting responsibilities. Monitoring shall be completed by, or under the direction of, an archaeologist who meets Secretary of the Interior's Standards. The archaeological monitor shall have the authority to redirect construction equipment in the event that potential archaeological resources are encountered. If archaeological resources are encountered, work in the vicinity of the discovery shall halt until appropriate treatment or further investigation of the resource is determined by a qualified archaeologist in accordance with the provisions of CEQA Guidelines Section 15064.5.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Reference: *L.A. CEQA Thresholds Guide (Section D.1); Cultural Resources Assessment First & Broadway Civic Center Park Project, July 2018* (Appendix C)

Comment: A significant impact would occur if grading or excavation activities associated with the proposed Project disturbed unique paleontological resources or unique geologic features.

Project excavation activities are restricted to Phase 2 and Phase 4 of the Project and include deep excavations for foundations and footings (12-foot depth); and shallow excavation and grading for hardscaping, landscaping, and utilities. The proposed 12-foot-deep foundations and footings are in an area of the site that is documented as being covered by a 13- to 15-foot-thick layer of low paleontological potential artificial fill (refer to *Geotechnical Investigation Report* in Appendix D). Generally, ground-disturbance for hardscaping, landscaping, and utilities is shallow (less than 10 feet deep) and is therefore expected to be entirely within low paleontological potential artificial fill and Holocene alluvium. Project excavations are unlikely to uncover significant fossil vertebrate remains, however there is a potential to uncover previously unknown resources. Therefore, with implementation of Mitigation Measure CULT-2, potential impacts to paleontological resources during construction activities associated with the proposed Project would be less than significant. In addition, no impact would occur from the operation of the proposed Project.

Mitigation Measure CULT-2 is required as follows:

Mitigation Measure CULT-2: Prior to the start of construction, a Qualified Paleontologist shall be retained to prepare and present a paleontological worker's environmental awareness program to all earth-moving personnel and their supervisors. The training shall inform construction personnel of the potential for fossil discoveries, types of fossils that may be encountered, and procedures to follow if potential fossils are unearthed at the Project site.

In the event of unanticipated fossil discoveries by construction personnel, work shall be halted within 50 feet of the discovery until the Qualified Paleontologist can evaluate the discovery. If the discovery is determined to be significant, the Qualified Paleontologist shall develop the appropriate plan (e.g., documentation, salvage, fossil preparation and identification, curation, and monitoring) in consultation with the City of Los Angeles RAP and BOE.

d) Disturb any human remains, including those interred outside of formal cemeteries? ☐ ☒ ☐ ☐

Reference: *L.A. CEQA Thresholds Guide (Section D.2); Cultural Resources Assessment First & Broadway Civic Center Park Project, July 2018* (Appendix C)

Comment: A significant impact would occur if grading or excavation activities associated with the proposed Project disturbed interred human remains.

No formal cemeteries are known to exist within the Project site. However, the Project site has been determined by the Native American Heritage Commission (NAHC) to be potentially sensitive related to Native American resources. In the event that any human remains or related resources are discovered, Mitigation Measure CULT-1 above, and Mitigation Measure CULT-3 would be implemented to ensure that any potential impacts remain less than significant. In addition, no impact is anticipated from the operation of the proposed Project.

Mitigation Measure CULT-3 is required as follows:

Mitigation Measure CULT-3: A trained Native American consultant or consultants shall be engaged to monitor ground-disturbing activities when native soil is encountered. The consultant or consultants shall be selected from the interested Native American parties who consulted on the project. This monitoring shall occur on an as-needed basis as determined by BOE in consultation with interested tribes, and shall be intended to ensure that Native American concerns are taken into account during the construction process. The Native American consultant shall report findings

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

to BOE or its archaeological consultant, which will disseminate the information to the consulting Native American parties. The Native American parties identified by the NAHC shall be consulted regarding the treatment and final disposition of any materials of Native American origin found during the course of the project, if any, and will assist BOE in determining whether these materials constitute tribal cultural resources.

6. GEOLOGY AND SOILS – Would the project:
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section E.1); California Department of Conservation Publication 42; City of Los Angeles General Plan Safety Element;* California Department of Conservation Division of Mines and Geology. *Earthquake Fault Zones and Seismic Hazard Zones Map, Hollywood Quadrangle; Geotechnical Investigation Report First and Broadway Park, March 2018* (Appendix D)

Comment: A significant impact would occur if the proposed Project were located within a state-designated Alquist-Priolo Zone or other designated fault zone and appropriate building practices were not followed.

The Project site is not located within a State of California Earthquake Fault Zone/Alquist-Priolo Special Study Zone. The Project site is located in a seismically active area, as is most of southern California. The nearest fault zone to the Project site is the Lower Elysian Park Thrust located approximately 2.5 miles southwest of the Project site. No active faults are known to cross or trend towards the Project site. The proposed Project would be designed and constructed in accordance with all applicable federal, state, and local codes relative to seismic criteria. Therefore, the proposed Project would not expose people or structures to potential adverse effects from the rupture of a known earthquake fault; and no impact would occur.

ii) Strong seismic ground shaking?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section E.1)*; *City of Los Angeles General Plan Safety Element; California Department of Conservation Publication 42;*

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐

Geotechnical Investigation Report First and Broadway Park, March 2018 (Appendix D)

Comment: A significant impact would occur if the proposed Project design did not comply with building code requirements intended to protect people from hazards associated with strong seismic ground shaking.

As with most locations in southern California, the Project site is susceptible to ground shaking during an earthquake. As indicated in Section 6 (a)(i) above, the Project site is not located within an Alquist-Priolo Special Study Zone, and thus the potential for hazards associated with strong seismic ground shaking, such as ground surface rupture, affecting the site is considered low. The proposed Project would be designed and constructed in accordance with the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to seismic criteria. Therefore, the impact from strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction? ☐ ☒ ☐ ☐

Reference: *L.A. CEQA Thresholds Guide (Section E.1); City of Los Angeles General Plan Safety Element Exhibit B; California Department of Conservation Publication 42*; Earthquake Fault Zones and Seismic Hazard Zones Map, Hollywood Quadrangle; *Geotechnical Investigation Report First and Broadway Park, March 2018* (Appendix D)

Comment: A significant impact would occur if the proposed Project were located in an area identified as having a high risk of liquefaction and appropriate design measures required within such designated areas were not incorporated into the project.

Liquefaction occurs when water saturated sediments are subjected to extended periods of shaking. Pressure increases in the soil pores temporarily alter the soil state from solid to liquid. Liquefied sediments lose strength, in turn causing the failure of adjacent infrastructure, including bridges and buildings. Whether a soil would resist liquefaction depends on a number of factors, including grain size, compaction and cementation, saturation and drainage, characteristics of the vibration, and the occurrence of past liquefaction. Granular, unconsolidated, saturated sediments are the most likely to liquefy, while dry, dense or cohesive soils tend to resist liquefaction. Liquefaction is generally considered to be a hazard where the groundwater is within 40 to 30 feet of the surface. With proper soil drainage, the pore pressure, which builds up when ground motion shakes unconsolidated soil, would be more easily dissipated; thus, soils with proper drainage are less likely to liquefy.

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

The Project site is located within a state- and City-designated liquefaction area. The potential for liquefaction to occur at the Project site is evaluated in the geotechnical the *Geotechnical Investigation Report First and Broadway Park* prepared by Fugro*,* which is included as Appendix D of this document. This investigation consisted of using SPT blow counts to determine the liquefaction susceptibility of the Project site. According to the accepted industry standard, in order to assume a soil is not susceptible, the soil should have a minimum plasticity index of 18. The tests conducted at the Project site revealed that soils tested had a plasticity index of 12 to13. As such, impacts related to seismic-related ground failure and liquefaction could occur due to implementation of the proposed Project. However, as discussed in the *Geotechnical Investigation Report First and Broadway Park*, the proposed Project was determined to be geotechnically feasible provided that the recommendations presented in the report are incorporated into the design and construction of the proposed Project. Adherence to the *Geotechnical Investigation Report First and Broadway Park*, as well as implementation of Mitigation Measures GEO-1 and GEO-2 would reduce impacts related to seismic-related ground failure and liquefaction to less than significant.

Mitigation Measures GEO-1 and GEO-2 are required as follows:

Mitigation Measure GEO-1: The proposed Project grading and foundation plans and specifications shall implement the recommendations presented in the *Geotechnical Investigation Report First and Broadway Park*. The proposed Project plans and specifications shall also be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the recommendations.

Mitigation Measure GEO-2: All grading, excavation, and construction of foundations should be performed under the observation and testing of a qualified Geotechnical Engineer during the following stages:

- Site grading;
- Excavation activities;
- Construction of building foundations and footings;
- Any other ground disturbing activities; and
- When any unusual or unexpected geotechnical conditions are encountered.

With implementation of Mitigation Measures GEO-1 and GEO-2, potential impacts related to liquefaction during construction activities associated with the proposed

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

Project would be less than significant. In addition, no impact would occur from the operation of the proposed Project.

iv) Landslides?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section E.1); City of Los Angeles General Plan Safety Element Exhibit C; California Department of Conservation Publication 42*

Comment: A significant impact would occur if the proposed Project were located in an area identified as having a high risk of landslides and appropriate design measures required within such designated areas were not incorporated into the project.

The project is located in an area that is relatively flat and is not identified as a potential landslide hazard area by the California Department of Mines and Geology. Additionally, the Project site is not located within a City-designated hillside area or earthquake induced landslide area. Therefore, the proposed Project would not expose people or structures to potential adverse effects from landslides. No impact to landslides would occur.

b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section E.2)*

Comment: A significant impact would occur if the proposed Project exposed large areas to the erosion effects of wind or water for a prolonged period of time.

The proposed Project would include ground-disturbing activities, such as excavation, grading and compaction of soil, landscaping, and paving. These activities could result in the potential for erosion to occur at the Project site, though soil exposure would be temporary and short-term in nature. During construction, standard measures would be employed to minimize soil erosion and runoff. As discussed in Section II, Subsection G, BMPs would be implemented for erosion and sedimentation control. Additionally, the majority of the Project site would be covered by landscaping, open seating areas, 16 decorative light canopies, and the restaurant facility components. No large areas of exposed soil would exist that would be exposed to the effects of erosion by wind or water. As such, the proposed Project would have less than significant impact to erosion and loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

Reference: L*.A. CEQA Thresholds Guide (Section C1); Geotechnical Investigation Report First and Broadway Park, March 2018* (Appendix D)

Comment: A significant impact would occur if the proposed Project were built in an unstable area without proper site preparation or design features to provide adequate foundations for project buildings, thus posing a hazard to life and property.

One of the major types of liquefaction induced ground failure is lateral spreading of mildly sloping ground. Lateral spreading involves primarily side-to-side movement of earth materials due to ground shaking, and is evidenced by near-vertical cracks to predominantly horizontal movement of the soil mass involved. As discussed in Sections 6 (a)(iii) and 6 (a)(iv), the Project site is located in an area identified as being at risk for liquefaction, but is not located within a designated hillside area. All construction work would adhere to the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to liquefaction criteria. Additionally, implementation of Mitigation Measures GEO-1 and GEO-2 would reduce impacts related liquefaction to less than significant.

Subsidence is the lowering of surface elevation due to changes occurring underground, such as the extraction of large amounts of groundwater, oil, or gas. When groundwater is extracted from aquifers at a rate that exceeds the rate of replenishment, overdraft occurs, which can lead to subsidence. However, the proposed Project does not anticipate the extraction of any groundwater, oil, or gas from the Project site. Therefore, no impacts to subsidence would occur.

Collapsible soils consist of loose dry materials that collapse and compact under the addition of water or excessive loading. Collapsible soils are prevalent throughout the southwestern United States, specifically in areas of young alluvial fans. Soil collapse occurs when the land surface is saturated at depths greater than those reached by typical rain events. According to the geotechnical investigation conducted for the proposed Project, the northeast portion of the Project site is mapped as alluvium consisting of clay, sand, and gravel and the southwest portion is mapped as clay and sand of pre-development marshlands. Nonetheless, the proposed Project would be constructed in accordance with the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to seismic criteria. These building codes are designed to ensure safe construction. As such, impacts associated with on- or off-site landslides, lateral spreading, subsidence, and collapses would be less than significant.

According to the geotechnical investigation conducted for the proposed Project, 13 to 15 of primary structural fill material composed of medium dense to dense and locally very dense clayey san and very stiff to hard sandy lean clay were discovered on site locally mixed with onsite concrete crushed to three inches or less and incorporated into the fill. Brick fragments were also discovered at these depths during exploration. Alluvial materials were encountered below the artificial fill at depths of about 13 to 15 feet, and extended to 28 feet. Soft, gray materials of the Fernando Formation were encountered from the depth of 28 feet to the maximum explored 51.5 feet.

Nonetheless, the proposed Project would be constructed in accordance with the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to seismic criteria. These building codes are designed to ensure safe construction. As such, impacts associated with on- or off-site landslides, lateral spreading, subsidence, and collapses would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? ☐ ☐ ☒ ☐

Reference: *Geotechnical Investigation Report First and Broadway Park, March 2018* (Appendix D)

Comment: A significant impact would occur if the proposed Project were built on expansive soils without proper site preparation or design features to provide adequate foundations for project buildings, thus posing a risk to life and property.

Expansive soils are clay-based soils that tend to expand (increase in volume) as they absorb water and shrink (lessen in volume) as water is drawn away. If soils consist of expansive clays, foundation movement and/or damage can occur if wetting and drying of the clay does not occur uniformly across the entire area.

The geotechnical investigation conducted for the proposed Project included expansion index testing. The results indicated that the near surface soil (upper 5 feet) has a low expansion potential. However, the proposed Project would be constructed in accordance with the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to seismic criteria. As such, the proposed Project would not create a substantial risk to life or property resulting from expansive soils. Impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ☐ ☐ ☐ ☒

Reference: L.A. CEQA Thresholds Guide

Comment: A significant impact would occur if the proposed Project were built on soils

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

that were incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system, and such a system were proposed.

Construction and operation of the proposed Project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact associated with the use of such systems would occur.

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?	☐	☐	☒	☐

Reference: SCAQMD. *Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold,* October 2008; *First & Broadway Civic Center Park Project Greenhouse Gas Analysis,* 2018 (Appendix B)

Comment: A significant impact may occur if the proposed Project would generate greenhouse gas emissions that would have a significant impact on the environment.

Certain gases in the earth’s atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth’s surface temperature. A portion of the solar radiation that enters earth’s atmosphere is absorbed by the earth’s surface, and a smaller portion of this radiation is reflected back toward space. This infrared radiation (i.e., thermal heat) is absorbed by GHGs within the earth’s atmosphere; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead “trapped,” resulting in a warming of the atmosphere. This phenomenon, known as the “greenhouse effect,” is responsible for maintaining a habitable climate on Earth. Without the naturally occurring greenhouse effect, Earth would not be able to support life as we know it.

GHGs are present in the atmosphere naturally, are released by natural and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. Natural sources of GHGs include the respiration of humans, animals and plants, decomposition of organic matter, and evaporation from the oceans. Anthropogenic sources include the combustion of fossil fuels, waste treatment, and agricultural processes.

Carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) are the GHGs that that are widely accepted as the principal contributors to human-induced global climate change and would be generated by the proposed Project. The majority of CO_2 emissions are byproducts of fossil fuel combustion. CH_4 is the main component of natural gas and is associated with agricultural practices and landfills. N_2O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO_2, the most abundant GHG. GHGs with lower emissions rates than CO_2 may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP). The concept of CO_2-equivalents (CO_2e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

The proposed Project would generate GHG emissions from construction equipment and vehicular traffic. CalEEMod was used to prepare estimates of annual GHG emissions. Table 4 presents the estimated emissions of GHGs that would be released to the atmosphere on an annual basis. Construction of the proposed Project would produce approximately 252.4 metric tons (MT) of CO_2e, or 8.4 MT CO_2e annually over a 30-year period. The proposed Project would generate approximately 992 daily weekday trips and approximately 1,271 daily weekend trips. The total annual operating emissions would be approximately 1,590 MT CO_2e per year after accounting for amortized construction emissions. This mass rate is substantially below the most applicable quantitative draft interim threshold of 3,000 MT CO_2e per year as recommended by the SCAQMD. Therefore, implementation of the proposed Project will result in a less than significant impact related to GHG emissions.

Table 4
Estimated Annual Greenhouse Gas Emissions

Scenario and Source	**Annual GHG Emissions (MT CO_2e per Year)**
Construction Emissions Amortized (Direct) /a/	8.6
Area Source Emissions (Direct)	<1
Mobile Source Emissions (Direct)	688.7
Energy – Natural Gas & Electricity Emissions (Indirect)	710.8
Waste Disposal Emissions (Indirect)	115.0
Water Distribution Emissions (Indirect)	67.1
Total Emissions	**1,590.2**
SCAQMD Draft Interim Significance Threshold	**3,000**
Exceed Threshold?	No

/a/ Based on SCAQMD guidance, the emissions summary also includes construction emissions amortized over a 30-year span. Source: TAHA, 2018.

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

No significant impacts have been identified related to the proposed Project. Impacts will be less than significant and no mitigation measures are required.

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Reference: California Air Resources Board, *The California Global Warming Solutions Act of 2006 (AB32), 2*006; City of Los Angeles, *Green LA -- An Action Plan to Lead the Nation in Fighting Global Warming*, 2007; *City of Los Angeles, Climate LA – Municipal Program Implementing the Green LA Climate Action Plan*, 2008; *Draft First & Broadway Civic Center Park Project Greenhouse Gas Analysis,* 2018 (Appendix B)

Comment: A significant impact may occur if the proposed Project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, requires that statewide GHG emissions be reduced to 1990 levels by 2020. ARB's *Scoping Plan* is the state's plan to achieve the GHG reductions in California required by AB 32 and also reiterates the state's role in the long-term goal established in Executive Order S-3-05, which is to reduce GHG emissions to 80% below 1990 levels by 2050.

ARB is required to update the *Scoping Plan* at least once every five years to evaluate progress and develop future inventories that may guide this process. ARB approved the first update to the *Climate Change Scoping Plan: Building on the Framework* in 2014 (ARB 2014). The Scoping Plan update confirms that the state is on track to meet the 2020 emissions reduction target, but will need to maintain and build upon its existing programs, scale up deployment of clean technologies, and provide more low-carbon options to accelerate GHG emission reductions, especially after 2020, in order to meet the 2050 target. The Scoping Plan update did not directly create any regulatory requirements for construction of the proposed Project. However, the Scoping Plan update includes recommended actions (e.g., Phase 2 heavy-duty truck GHG standard standards, enhance and strengthen the Low Carbon Fuel Standard) that would indirectly address GHG emissions from construction activities.

In May 2007, the City of Los Angeles released its Climate Action Plan (CAP), *"Green LA: An Action Plan to Lead the Nation in Fighting Global Warming."* The Plan sets forth a goal of reducing the City's greenhouse gas emissions to 35% below 1990 levels by the year 2030. The CAP is a voluntary plan that identifies over 50 action items, grouped into focus areas, to reduce emissions. ClimateLA is the

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

implementation program that provides detailed information, including a context, lead departments, and a timeline for completion, for each action item discussed in the GreenLA CAP. Where possible, the ClimateLA program document includes potential CO_2 emission reductions from full implementation of the measures.

The proposed Project would comply with plans, policies and regulations adopted for reducing emissions of GHGs including Assembly Bill 32 Scoping Plan, which includes goals such as the expansion of energy efficiency and producing energy from renewable resources. The City of Los Angeles has published the GreenLA, An Action Plan to Lead the Nation in Fighting Global Warming (the LA Green Plan), where the City will increase renewable energy generation, improve energy conservation and efficiency. Senate Bill 375 requires the metropolitan planning organizations to prepare an SCS in their regional transportation plans to achieve the per capita GHG reduction targets and the region's SCS is contained within SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS focuses on job growth in high quality transit areas, resulting in more opportunity for transit-oriented development. The proposed Project would be located within walking distance of the Los Angeles County Metropolitan Transportation Authority Red/Purple Line Civic Center/Grand Park train station; and would be surrounded by various bus lines from Metro, Los Angeles Department of Transportation (LADOT) and Foothill Transit at 1st Street/Broadway, 1st Street/Spring Street, Temple Street/Broadway and Temple Street/Spring Street. These public transit lines would serve the Los Angeles downtown area and surrounding areas. The proposed Project would be consistent with the mobility and transit accessibility objectives of the RTP/SCS.

Executive Order (E.O.) B-30-15 established an interim GHG reduction target of 40 percent below 1990 levels by 2030, and E.O. S-3-05 established a long-term goal of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050. Achieving these long-term GHG reduction policies will require systemic changes in how energy is produced and used. State sponsored studies conclude that deep reductions in GHG emissions can only be achieved with significant changes in electricity production, transportation fuels, and industrial processes. The systemic changes that will be required to achieve E.O. B-30-15 and E.O. S-3-05, if they are legislatively adopted, will require significant policy, technical, and economic solutions. The extent to which the proposed Project emissions and resulting impacts would be mitigated through implementation of statewide (and nationwide) changes is not known. However, some of the anticipated statewide actions (e.g., decarbonization, energy efficiency, alternative transportation) can be facilitated, at least to some extent, through implementation of specific GHG reduction measures in large-scale developments. The proposed Project includes policies related to planting drought-tolerant species resulting in reduced water. The proposed Project is not inconsistent with anticipated long-term statewide strategies to reduce GHG emissions. Accordingly, the proposed Project would not conflict with the goals in E.O. B-30-15 and E.O. S-3-05.

No significant impacts have been identified related to the proposed Project. Impacts would be less than significant and no mitigation measures are required.

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? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Sections F.1 & F.2); Phase I Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, August 17, 2009; Phase II Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, August 31, 2009; Supplemental Phase II Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, March 18, 2013; Pre-Demolition Remediation 217 W 1st Street Parking Structure, Los Angeles, California Technical Memorandum, November 18, 2013*

Comment: A significant impact would occur if the proposed Project utilized substantial amounts of hazardous materials as part of its routine operations and could potentially pose a hazard to the public under accident or upset conditions.

The project area formerly contained a 13-story California State Office Building with landscaping around the building's footprint, a basement containing building operational equipment, and a sub-basement used for parking. The above-ground portions of the building were demolished in 1976 after enduring unsafe levels of damage during the San Fernando (Sylmar) earthquake in 1971. The remaining site underwent a project to remove all remaining components, and grade the site for open space uses in 2013. Trash and debris, lead-based paint, non-hazardous waste water, mold, and asbestos removal were undertaken as a part of the remediation process prior to demolition. The completed project no longer contained known environmental hazards, and has been maintained as an empty dirt lot since 2013.

Implementation of the proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction of the proposed Project may include removal of subsurface structures. Construction activities would be temporary in nature and would involve the limited transport, storage, use, and disposal of hazardous materials. Such hazardous materials could include on-site fueling/servicing of construction equipment, and the transport of fuels, lubricating fluids, and solvents. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control, United States Environmental Protection Agency, the Occupational Safety & Health Administration, the City of Los Angeles Fire Department, and the Los Angeles County Department of Public Health. The transport, use, and disposal of construction-related hazardous materials would occur in accordance with applicable federal, State, and local regulations governing such activities. Therefore, the short-term construction impact would be less than significant.

Long-term operation of the proposed Project would involve the continued limited transport, storage, use, and disposal of hazardous materials. Additionally, the proposed Project would not generate industrial wastes or toxic substances during operation. Therefore, project operation would not pose a significant hazard to the public or the environment. No operational impact related to hazardous materials would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
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?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Sections F.1 & F.2); Phase I Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, August 17, 2009; Phase II Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, August 31, 2009; Supplemental Phase II Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, March 18, 2013; Pre-Demolition Remediation 217 W 1st Street Parking Structure, Los Angeles, California Technical Memorandum, November 18, 2013*

Comment: Refer to Section 8 (a) above.

Asbestos-containing materials (ACMs) are materials that contain asbestos, a naturally-occurring fibrous mineral that has been mined for its useful thermal properties and tensile strength. When left intact and undisturbed, these materials do not pose a health risk to building occupants. There is, however, potential for exposure when ACMs become damaged to the extent that asbestos fibers become airborne and are inhaled. These airborne fibers are carcinogenic and can cause lung disease. The age of a building is directly related to its potential for containing elevated levels of ACMs. Asbestos was utilized routinely in many building materials until 1978.

Lead-based paint (LBP), which can result in lead poisoning when consumed or inhaled, was widely used in the past to coat and decorate buildings. Lead poisoning can cause anemia and damage to the brain and nervous system, particularly in children. Like ACMs, LBP generally does not pose a health risk to building occupants when left undisturbed; however, deterioration, damage, or disturbance could result in hazardous exposure. In 1978, the use of LBP was federally banned by the Consumer Product Safety Commission. Therefore, structures built before 1978 are likely to contain LBP, as well as those built shortly thereafter, as the phase-out of LBP was gradual.

As discussed in section 8(a), all existing structures were remediated and removed in 2013. This remediation included pre-construction evaluation, removal, and post-construction investigation for the presence of ACMs and LBP. The Project site has remained free of the ACMs and LBP since the completion of the 2013 demolition project. Therefore, there are no potential impacts related to hazardous materials located on the Project site.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section F.2);* ZIMAS; *Los Angeles Unified School District Local District Map 2015-2016*

Comment: A significant impact would occur if the proposed Project were located within one-quarter mile of an existing or proposed school site and were projected to release toxic emissions which would pose a hazard beyond regulatory thresholds.

There are no schools located within one-quarter mile of the Project site, and there would be no release of toxic emissions.

As discussed in Section 8 (a), hazards located within the project area were remediated in 2013, with no additional hazards re-introduced to the Project site in the intervening years. The current project does not propose to utilize hazardous materials in the construction or operation of the restaurant or park facilities. Therefore, there is no potential for impacts related to hazardous materials 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,	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
would it create a significant hazard to the public or the environment?				

Reference: *L.A. CEQA Thresholds Guide (Section F.2)*; EnviroStor; GeoTracker

Comment: A significant impact would occur if the proposed Project were 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, created a significant hazard to the public or the environment.

The Project site is not listed in the State Water Resources Control Board (SWRCB) GeoTracker system which includes leaking underground fuel tank sites and spills, leaks, investigations, and cleanups sites; or the Department of Toxic Substances Control EnviroStor Data Management System which includes CORTESE sites, or the Environmental Protection Agency’s database of regulated facilities. Although no hazardous materials sites exist on the Project site, two permitted hazardous materials sites exist 0.09 miles southwest of the Project site, however, required site activity has been limited to compliance site inspections.

While unlikely, should contaminated soils be encountered during construction of the proposed Project, excavated material (e.g., soil, slurry, and groundwater) would be monitored and tested prior to disposal. Excavated material that is deemed hazardous would be subject to strict federal, state, and local regulations for its handling, transport, and disposal. These activities would occur under the oversight of the California Department of Toxic Substances Control, SWRCB, and the Los Angeles Fire Department. Adherence to federal, state, and local standards would minimize the risk to the public or the environment. Therefore, the impact would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Reference: General Plan, *L.A. CEQA Thresholds Guide (Section F.1); LACDRP Airport Land Use Commission Airports - Los Angeles County*

Comment: A significant impact would occur if the Project site were located within a public airport land use plan area, or within two miles of a public airport, and created a safety hazard.

The Project site is not located within an airport land use plan, or within two miles of a public airport or public use airport. The Project site is located approximately 12 miles southeast of the Hollywood Burbank Airport, west of the San Gabriel Valley Airport,

Issues | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant | No Impact

and north of the Compton/Woodley Airport, respectively. Therefore, no safety hazard associated with proximity to an airport is anticipated for the proposed Project. No impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section F.1);*

Comment: A significant impact would occur if the proposed Project were in the vicinity of a private airstrip and resulted in a safety hazard for people residing or working in the project area.

The Project site is not located within the vicinity of a private airstrip. Therefore, no safety hazard from proximity to a private airport or airstrip is anticipated from the proposed Project. No impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section F.1); City of Los Angeles General Plan*

Comment: A significant impact would occur if the proposed Project substantially interfered with roadway operations used in conjunction with an emergency response plan or evacuation plan or generated sufficient traffic to create traffic congestion that would interfere with the execution of these plans.

During construction activities, vehicles and equipment would access the site via the proposed entrance located along Spring Street. Limited lane closures are anticipated during construction activities. During construction, ingress and egress to the site and surrounding properties, particularly for emergency response vehicles, would be maintained at all times. In addition, operation would not permanently alter the adjacent street system. Therefore, construction and operation of the proposed Project would not impair or interfere with implementation of an adopted emergency response plan or emergency evacuation plan. The impact would be less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section F.1); City of Los Angeles General*

Plan Safety Element Exhibit D

Comment: A significant impact would occur if the proposed Project were located in a wildland area and poses a significant fire hazard, which could affect persons or structures in the area in the event of a fire.

The Project site is not located within a designated High Fire Hazard Severity Zone according to the *City of Los Angeles General Plan*. The Project site and surrounding areas are completely developed and there are no wildlands adjacent to the site. Therefore, no impact related to wildland fires would occur.

9. HYDROLOGY AND WATER QUALITY – Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section G.2); Phase I Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, August 17, 2009; Phase II Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, August 31, 2009; Supplemental Phase II Environmental Site Assessment Former California State Building (Vacant Parcel) 217 West 1st Street, Los Angeles, California 90012, March 18, 2013; Pre-Demolition Remediation 217 W 1st Street Parking Structure, Los Angeles, California Technical Memorandum, November 18, 2013*

Comment: A significant impact would occur if the proposed Project discharged water which did not meet the quality standards of agencies which regulate surface water quality and water discharge into stormwater drainage systems such as the Los Angeles Regional Water Quality Control Board. These regulations include compliance with the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts.

As discussed in section 8(a), non-hazardous waste water was removed from the Project site during the 2013 site clean-up project. Approximately 485,000 gallons of waste water containing elevated levels of coliform bacteria and soluble lead concentrations above drinking water standards were removed from the former onsite sub-basement that pooled and concentrated over time from stormwater infiltration. The Project site currently contains no pooled water, and no waste water contaminants.

The proposed Project would not violate a water quality standard or waste discharge requirement. Construction activities, such as grading and excavation, would result in the disturbance of soil and temporarily increase the potential for soil erosion. Additionally, construction activities and equipment would require the on-site use and storage of fuels, lubricants, and other hydrocarbon fluids. Storm events occurring during the construction phase would have the potential to carry disturbed sediments and spilled substances from construction activities off-site to nearby the catch basins. However, contractor will implement a storm water pollution plan (SWPPP) which is mandated by the State of California and the City of Los Angeles to prevent contaminant from escaping the construction site. Prior to issuance of grading or building permits, the Applicant shall submit a Low Impact Development (LID) Plan to the City of Los Angeles Bureau of Sanitation (LASAN) Watershed Protection Division (WPD), for review and approval. The LID Plan shall be prepared consistent with the requirements of the Development Best Management Practices Handbook.

For implementation of the proposed Project, prior to the start of construction, BOE would be required to obtain a General Construction Activity Stormwater Permit, issued by the State Water Resources Control Board. One of the conditions of the General Permit is the development and the implementation of a SWPPP, which would identify structural and nonstructural BMPs to be implemented during the construction phase. As discussed in Section II Subsection G, BOE would also develop and implement an erosion control plan for the proposed Project. BMPs developed for the SWPPP and the erosion control plan may include, but not be limited to, minimizing the extent of disturbed areas and duration of exposure; stabilizing and protecting disturbed areas; keeping runoff velocities low; retaining sediment within the construction area; and the use of temporary desilting basins, silt fences, gravel bag barriers, temporary soil stabilization, temporary drainage inlet protection, and diversion dikes and interceptor swales. With implementation of BMPs, the proposed Project would not violate any water quality standards or waste discharge requirements. Therefore, impacts on water quality from construction activities would be less than significant.

In addition, the proposed Project includes the installation of stormwater and drainage infrastructure throughout the complex. Upon completion of the proposed Project, storm flows would be directed to the existing municipal storm drain system. The proposed Project would include a bioswale system that would allow water infiltration into the ground. There would be no exposed soil remaining at the completion of rehabilitation activities; therefore, there would be no potential for soil erosion or contamination. No long-term impact to water quality would occur during project operations.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned	☐	☐	☒	☐

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

uses for which permits have been granted)?

Reference: *L.A. CEQA Thresholds Guide (Sections G.2 and G.3); Geotechnical Investigation Report First and Broadway Park, March 2018* (Appendix D); *Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle*

Comment: A project would have a significant impact on groundwater supplies if it resulted in a demonstrable and sustained reduction of groundwater recharge capacity or changed the potable water levels sufficiently that it would reduce the ability of a water utility to use the groundwater basin for public water supplies or storage of imported water, reduced the yields of adjacent wells or well fields, or adversely changed the rate or direction of groundwater flow.

The geotechnical investigation completed for the proposed Project encountered groundwater in four boring holes ranging from approximately 23 to 25 feet below the ground surface (bgs).

Construction of the proposed Project would excavate to approximately 12 feet deep when foundation piles are installed within the indoor pool and indoor gymnasium footprints. However, construction activity that has the potential to encounter groundwater would be required to comply with the recommendations set forth in the *Geotechnical Engineering Report,* such as proper disposal of displaced groundwater and dewatering during construction of the pool. Implementation of Mitigation Measures GEO-1 and GEO-2 would reduce impacts related to groundwater during construction to less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Sections G.1 and G2)*

Comment: A significant impact would occur if the proposed Project resulted in a substantial alteration of drainage patterns that resulted in a substantial increase in erosion or siltation during construction or operation of the project.

As previously discussed, the proposed Project would implement BMPs that would minimize short-term construction impacts of erosion. Therefore, the proposed Project would not result in substantial erosion from altered drainage patterns and the impact would be less than significant.

The proposed stormwater and drainage infrastructure would improve the drainage pattern of runoff and stormwater from the Project site to the existing municipal storm infrastructure in the project area by including a channelized area through which to

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

direct water runoff into existing water systems. The proposed Project would include a bioswale system that would allow water infiltration into the ground. Therefore construction and operation of the proposed Project would not result in substantial erosion or siltation off-site. Impacts would be less than significant.

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 that would result in flooding on- or off-site? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Section G.1)*

Comment: A significant impact would occur if the proposed Project resulted in increased runoff volumes during construction or operation of the proposed Project that would result in flooding conditions affecting the Project site or nearby properties.

As discussed in Section 9 (a), the proposed Project would not result in a substantial increase of impervious surfaces at the Project site as facilities within the park are to be demolished and constructed elsewhere on the site. Although the proposed Project would increase the amount of impervious surfaces, the increase would not be substantial. The proposed Project also includes the installation of stormwater and drainage infrastructure throughout the park and the installation of permeable pavers and vegetation swales. The proposed Project would include a bioswale system that would allow water infiltration into the ground. Therefore, implementation of the proposed Project would not substantially alter and would serve to improve the existing drainage pattern such that flooding would not occur. The impact would be less than significant.

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? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Section G.2)*

Comment: A significant impact would occur if the volume of runoff increased to a level, which exceeded the capacity of the storm drain system serving a Project site. A significant impact would also occur if the proposed Project substantially increased the probability that polluted runoff would reach the storm drain system.

As discussed in Section 9 (a), the proposed Project would not result in a substantial increase of impervious surfaces at the Project site as facilities within the park are to be demolished and constructed elsewhere on the site. Although the proposed Project would increase the amount of impervious surfaces, the increase would not be substantial. Furthermore, the proposed Project includes stormwater and drainage

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

infrastructure that would serve to improve the drainage pattern of the Project site. Therefore, the proposed Project would not contribute runoff water exceeding the capacity of stormwater drainage systems. As discussed, BMPs would be implemented to control runoff from the Project site during the construction phase. The proposed Project would include a bioswale system that would allow water infiltration into the ground. The impact would be less than significant.

f) Otherwise substantially degrade water quality?	☐	☐	☒	☐

Reference: Refer to Section 9 (a) above.

Comment: Other than the construction sources of pollutants described previously (i.e., fuels from construction equipment, etc.), the proposed Project would not include other potential sources of contaminants that could degrade water quality. Additionally, as discussed in Section II Subsection G, BMPs would be implemented to control runoff from the Project site during construction to prevent the degradation of water quality. The proposed Project would include a bioswale system that would allow water infiltration into the ground. Therefore, impacts to water quality would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Sections G.1 to G.3);* City *of Los Angeles General Plan Safety Element; Flood Insurance Rate Map, Panel 1636F*

Comment: A significant impact would occur if the proposed Project placed 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 100-year flood zones coincide with the Project site. However, according to Flood Insurance Rate Map Number 1636F, the entire Project site is located within an area designated as Zone X, which is categorized as an area that is within a 500-year flood zone. Notwithstanding, the proposed Project does not include a residential component. Therefore, the proposed Project would not place housing within a 100-year flood zone, and no impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐

Reference*: L.A. CEQA Thresholds Guide (Sections G.1 & G.3);* FEMA Flood Insurance Rate Map Number *1636F*

Comment: A significant impact would occur if the proposed Project placed within a 100-year flood hazard area structures that would impede or redirect flood flows.

As noted in Section 9 (g) above, the Project site is located within a 500-year flood hazard area. The proposed Project includes the installation of stormwater and drainage infrastructure throughout the park, which would serve to improve the drainage pattern of runoff and stormwater from the Project site to the existing municipal stormwater infrastructure in the project area. The impact would be less than significant.

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?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Sections E.1 & G.3)*; *City of Los Angeles General Plan Safety Element*

Comment: A significant impact would occur if the proposed Project were located in an area where a dam or levee could fail, exposing people or structures to significant risk of loss, injury or death.

According to the *City of Los Angeles General Plan Safety Element,* the Project site is not located within the potential inundation area of the Hollywood Reservoir and the Silver Lake Reservoir. The inundation area is based on an assumed catastrophic failure of dams during peak storage capacity. Furthermore, current design and construction practices and ongoing review, modification, and dam reconstruction programs are intended to ensure that all dams are capable of withstanding the maximum magnitude earthquake for the site. Therefore, the potential for the Project site to be inundated as a result of a dam failure, and potential exposure of people and structures to flooding due to dam failure, is low. Impacts would be less than significant.

Additionally, construction and operation of any below or above ground elements would be in accordance with building and seismic code requirements. No new structures would be constructed on the site that would be vulnerable to flooding or inundation in the event of a dam break and would not impede or redirect flood flows in the project area. No housing would be constructed on the site that would expose people to flooding. In the event of an emergency, the City has adopted emergency evacuation procedures that would be implemented in the case of a dam break.

Therefore, the proposed Project would not result in exposure of people or structures to significant risk of loss, injury or death related to flooding or dam inundation. Therefore, the potential impact of the proposed Project from being within an inundation area of a dam or levee is less than significant.

j) Inundation by seiche, tsunami, or mudflow? ☐ ☐ ☐ ☒

Reference: *L.A. CEQA Thresholds Guide (Section E.1); City of Los Angeles General Plan Safety Element;* Department of Conservation Tsunami Inundation Maps

Comment: A significant impact would occur if the proposed Project caused or accelerated geologic hazards, which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury.

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. The Project site is not located near an enclosed large body of water that could experience seiches during an earthquake. Thus, no impact would occur.

Tsunamis are tidal waves generated in large bodies of water caused by fault displacement or major ground movement. Hazardous tsunamis, which are rare along the Los Angeles coastline, have the potential to cause flooding in the low-lying coastal area. The Project site is located approximately 7.2 miles from the Pacific Ocean and is not located within a tsunami hazard area. Therefore, no impact would occur.

As discussed in Section 6 (a)(iv), the Project site is not located within a City-designated hillside area and would not be subject to a landslide. Therefore, no impact associated with inundation from mudflow would occur.

10. LAND USE AND PLANNING – Would the project:

a) Physically divide an established community? ☐ ☐ ☐ ☒

Reference: *L.A. CEQA Thresholds Guide (Section H.2); City of Los Angeles General Plan; Central City Community Plan*

Comment: A significant impact would occur if the project included features such as a highway, above-ground infrastructure, or an easement that would cause a permanent disruption to an established community or would otherwise create a physical barrier within an established community.

The proposed Project would be constructed within the Project site parcel in the Civic Center area of downtown Los Angeles, and is within the Central City Community Plan Area. Neither construction nor operation of the proposed Project would include features such as a highway or an easement that would cause a permanent disruption to an established community or would otherwise create a physical barrier

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

within an established community. The Project site would include the construction of a 1.96-acre public park with green spaces for public enjoyment, numerous seating areas, 16 decorative canopies for shade and lighting throughout the site, and a stream-themed bioswale. A 19,200-square-foot, two-story building would be constructed in the northwest corner of the proposed Project. This building would include a restaurant, cafe, and beer garden. None of these proposed uses would create a disruption or physical barrier to the established community, because they are intended to provide dining and gathering places within the park for visitors and residents, including residents of the future proposed Times Mirror Towers. Therefore, the proposed Project would not physically divide an established community, and no impact would occur.

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

Reference: *L.A. CEQA Thresholds Guide (Sections H.1 & H.2); City of Los Angeles General Plan*; ZIMAS; *Central City Community Plan*

Comment: A significant impact would occur if the proposed Project were inconsistent with the General Plan, or other applicable plan, or with the site's zoning if designated to avoid or mitigate a significant potential environmental impact.

The Project site is located entirely within the City of Los Angeles in the Central City Community Plan Area. The *Central City Community Plan* establishes the goals, objectives, policies, and programs applicable to the Central City Community Plan Area. The City's current zoning designation for the Project site is PF-2D (Public Facilities). The Project site would be developed into a public park, and would require re-zoning to OS-2D (Open Space) to reflect the change in land use. However, the park would continue to be operated under RAP jurisdiction, with a qualified business holding a contract with RAP for the restaurant food and beverage concessions within the site. Therefore, the proposed Project would not conflict with the existing zoning or General Plan designations for the Project site. No impact would occur.

The proposed Project is also consistent with the goals and policies set forth in the *Central City Community Plan*. The Plan advocates the development of parks in the community. Objective 4-1 encourages the addition of open spaces within the downtown area. Policy 4-1.1 encourages the creation of open spaces as focal points in downtown neighborhoods. As such, the proposed Project would be consistent with land use plans and policies contained in the *Central City Community Plan*.

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

Accordingly, no impacts to applicable land use plans would occur.

Los Angeles Municipal Code requires that 21 parking spaces be constructed for the proposed restaurant; therefore, a parking variance would be required for the Project. Existing parking and public transportation facilities within walking distance would be available to park and restaurant patrons, and would be leased by the restaurant operators specifically to accommodate parking needs for restaurant patrons. As detailed in the Traffic Study (Appendix F), the proposed Project would not significantly impact area parking supplies. Adequate parking would remain available at the Olive Street & 1st Street Parking Lot and the Judge John Aiso Street & 1st Street Parking Structure. No impacts would result.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Sections H.1 & H.2)*; *City of Los Angeles General Plan; Central City Community Plan*

Comment: A significant impact would occur if the proposed Project were located within an area governed by a habitat conservation plan or natural community conservation plan and conflicted with such plan.

As previously discussed in Section 4 (d), the Project site is not located in a habitat conservation plan or a natural community conservation plan. As such, the proposed Project would not conflict with the provisions of an approved conservation plan, and no impact would occur.

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?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section E4); City of Los Angeles General Plan;* California Geological Survey Aggregate Sustainability in California, 2012; California Department of Conservation Division of Oil, Gas, & Geothermal Resources Well Finder.

Comment: A significant impact would occur if the proposed Project were located in an area used or available for extraction of a regionally important mineral resource, if the project converted a regionally important mineral extraction use to another use, or if the project affected access to such use.

There are 11 oil wells located within one mile of the project area, and no wells located within a 0.5-mile radius of the project area. None of the wells extract

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

regionally-important mineral resources. Furthermore, the proposed Project would not include convert any regionally important mineral extractions sites to any other uses, or affect the ability mine regionally important minerals. Therefore, the proposed Project is not anticipated to result in the loss of availability of a valuable known mineral resource and no impact is anticipated.

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?	☐	☐	☐	☒

Reference: Refer to Section 11 (a) above.

Comment: Refer to Section 11 (a) above.

12. NOISE – Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐

Reference: *City of Los Angeles Municipal Code (Chapter IV, Article 1, Section 41.40; Section 112.05 of Chapter IX, Article 2); L.A. CEQA Thresholds Guide* (Section I); *Noise and Vibration Impact Study*, Terry A. Hayes Associates, 2018 (Appendix E)

Comment: A significant impact would occur if the proposed Project exposed persons to or generated noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Existing Noise Levels

The impact analysis is predicated on the location of noise- and vibration-sensitive land uses and the existing setting. Sensitive receptors are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. They typically include residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas.

The area immediately surrounding the Project site is completely urbanized and developed with Grand Park and a Los Angeles County courthouse to the north, the Los Angeles City Hall and City Hall Park to the east, the Los Angeles Police Department Headquarters to the southeast, office buildings and the Times Mirror building (formerly the Los Angeles Times building) to the south, the Los Angeles Federal Courthouse to the southwest, and the Los Angeles Law Library to the west. The existing nearby parks is not considered particularly sensitive to noise or vibration due to their urban nature. Commercial and municipal land uses are also not typically considered sensitive to noise or vibration. The proposed Times Mirror Towers project

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

would potentially include 1,127 residential units within multiple structures, which would be sensitive to changes in permanent noise levels from the existing condition. Therefore, the following analysis focuses on the Los Angeles Law Library and Times Mirror Towers, which are located approximately 115 feet to the west and south of the Project site. The Los Angeles Law Library is open Monday, Wednesday, Thursday, and Friday from 8:30 a.m. to 6:00 p.m., Tuesday from 8:30 a.m. to 8:00 p.m., and Saturday from 9:00 a.m. to 5:00 p.m.

The existing noise level at the corner of 1st Street and Broadway was monitored on Wednesday, June 20, 2018 at 12:25 p.m. using a SoundPro DL Sound Level Meter. This time of day represents a typical construction time without the added noise source of peak hour traffic. The monitored 15-minute noise level was 67.1 dBA L_{eq}.

Construction Noise

Construction activity is anticipated to begin in Summer/Fall 2019 and take approximately two years to complete, concluding in Summer/Fall 2021. LAMC allows construction activity to occur Monday through Friday between the hours of 7:00 a.m. and 9:00 p.m., although daily construction would not likely occur after 6:00 p.m. Construction would occur between the hours of 8:00 a.m. and 6:00 p.m. on Saturdays. There would be no construction activities on Sundays or federal holidays, and no construction would occur during prohibited hours.

Equipment: Typical noise levels from various types of equipment that may be used during construction are listed in Table 5. The table shows noise levels at distances of 50 feet from the construction noise source. Construction activities typically require the use of numerous pieces of noise-generating equipment. The noise levels shown in Table 6 take into account that multiple pieces of construction equipment would be operating simultaneously. When considered as an entire process with multiple pieces of equipment, project-related activity (i.e., ground clearing and site preparation) would generate noise levels between 84 and 89 dBA L_{eq} at 50 feet.

Construction noise is not typically a concern for human health and is a common occurrence within the urban environment. The existing nearby parks are not considered particularly sensitive to noise or vibration due to their urban nature. Commercial and municipal land uses are also not typically considered sensitive to noise or vibration. The proposed Project is anticipated to be completed before the construction of the Times Mirror Towers project. Therefore, the following analysis focuses on the Los Angeles Law Library, which is located approximately 115 feet to the west of the Project site. Based on a typical noise level of 89 dBA L_{eq} at 50 feet for sustained equipment activity, the maximum noise level at the Los Angeles Law Library would be 82 dBA L_{eq}. The impact analysis is based on the construction limits in the LAMC. Construction activity would comply with the allowable hours of construction in the LAMC, including 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction activity on Sundays or federal holidays. The LAMC limits equipment noise levels to 75 dBA L_{eq} at 50 feet unless technically infeasible. Unmitigated noise levels would typically exceed the allowable noise level stated in the LAMC. Therefore, without mitigation, the proposed Project would result in a significant impact related to on-site construction noise. The implementation of Mitigation Measures NOI-1 through NOI-8 would ensure impacts are reduced to a less than significant level. The equipment mufflers associated with Mitigation Measure NOI-1 would reduce construction noise levels by approximately 3 dBA and the Mitigation Measure NOI-8 would reduce noise levels by approximately 9 dBA. With implementation of these feasible mitigation measures, and based on compliance with the LAMC, construction equipment noise would be mitigated to the greatest extent feasible and would result in equipment noise being reduced to below 75 dBA at 50 feet.

Table 5
Noise Level Ranges Of Typical Construction Equipment

Noise Source	**Noise Level (dBA) /a/**	
	50 Feet	**100 Feet /a/**
Backhoe	73.6	67.6
Compressor	73.7	67.7
Concrete Mixer Truck	74.8	68.8
Concrete Pump Truck	74.4	68.4
Concrete Saw	82.6	76.6
Drum Mixer	77.0	71.0
Dump Truck	72.5	66.5
Excavator	76.7	70.7
Front End Loader	75.1	69.1
Generator	77.6	71.6
Grader	81.0	75.0
Man Lift	67.7	61.7
Tractor	80.0	74.0
Vacuum Street Sweeper	71.6	65.6

/a/ Assumes a 6-dBA drop-off rate for noise generated by a point source and traveling over hard surfaces. Actual measured noise levels of the equipment listed in this table were taken at distances of ten and 30 feet from the noise source.

Source: Federal Highway Administration, *Roadway Construction Noise Model (RCNM) Version 1.1*.

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

Table 6
Typical Outdoor Construction Noise Levels

Construction Method	Noise Level at 50 feet (dBA, L_{eq})
Ground Clearing	84
Site Preparation	89
Foundations	78
Structural	85
Finishing	89

Source: USEPA, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, PB 206717, 1971.

Trucks: In addition to on-site construction activities, noise would be generated off-site by construction-related trucks. The proposed Project would require the export of approximately 1,500 cubic yards of soil resulting in approximately 100 truck trips. It is not anticipated that there would be more than 25 truck trips per day. A doubling of traffic volume is typically needed to audibly increase noise levels along a roadway segment. An additional 25 trucks per day would not double the volume on any roadway segment in the congested downtown Los Angeles area. It is not anticipated that off-site vehicle activity would audibly change average daily noise levels due the low volume of haul truck trips per day. Therefore, the proposed Project would result in a less than significant impact related to off-site construction noise.

Operations

The primary sources of operational noise would be the restaurant facilities and landscaping activities. The restaurant facilities would include a rooftop patio and bar, an upscale restaurant, a café with a food service window to serve outdoor patrons, and an outdoor beer garden. Rooftop access would be available for a bar, dining, a lounge area for restaurant patrons, and a public space. A loading zone would be provided on the north side of the building and Project site for use in routine restaurant operations. Expected hours of operation for the restaurant complex would be Monday through Thursday from 7:00 a.m. to 11:00 p.m. and Friday through Sunday from 8:00 a.m. to 1:00 a.m. In social situations, people often talk at distances of approximately three to 12 feet. A typical very loud voice level at this distance is approximately 66 dBA. A group of 20 people speaking simultaneously, which is a reasonable assumption for the rooftop area, would result in a reference noise level of 79 dBA L_{eq} at six feet. The rooftop area would be approximately 150 feet from the Los Angeles Law Library, and the resulting noise level would be approximately 51.0 dBA L_{eq}. This noise level would be well below the existing monitoring noise level of 67.1 dBA L_{eq} and would not result in an audible noise level

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

increase. In addition, the Los Angeles Law Library closes most nights by 6:00 p.m. and by 8:00 p.m. on Tuesdays, which is before the nosiest hours for most restaurants and bars. Regarding the Times Mirror Towers project, the rooftop area would be located approximately 280 feet away, and the resulting noise level would be approximately 45.6 dBA L_{eq}. This noise level would be well below the existing monitoring noise level of 69.4 dBA L_{eq} and would not result in an audible noise level increase. Existing traffic noise would remain the dominant noise source.

The truck loading zone would be located on the northwest side of the Project site and would accommodate one truck at a time. The Project site currently includes a temporary surface parking area and related activity is not known to disturb the Los Angeles Law Library. It is not anticipated that intermittent medium-duty truck activity would be audible at the Los Angeles Law Library beyond existing traffic noise on Broadway.

Furthermore, noise generating park and restaurant activities (e.g., landscaping activities and music) would be regulated by LAMC Section 112.01 (Radios, Television Sets, and Similar Devices), LAMC Section 112.04 (Powered Equipment Intended for Repetitive Use In Residential Areas and Other Machinery, Equipment, and Devices), LAMC Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools), LAMC Section 115.02 (Amplified Sound Prohibitions and Regulations), and LAMC Section 116.01 (Loud, Unnecessary, and Unusual Noise), which would be enforced through the Los Angeles Police Department. As such, operational noise impacts would be less than significant.

Mitigation Measures NOI-1 through NOI-8 are required as follows:

Mitigation Measure NOI-1: Construction equipment shall be properly maintained and equipped with mufflers.

Mitigation Measure NOI-2: Grading and construction contractors shall use rubber-tired equipment rather than metal-tracked equipment.

Mitigation Measure NOI-3: Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.

Mitigation Measure NOI-4: The public shall be notified in advance of the location and dates of construction hours and activities.

Mitigation Measure NOI-5: Construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to noise impacts associated with construction.

Mitigation Measure NOI-6: A Noise Disturbance Coordinator shall be established by the construction contractor and responsible for responding to local complaints about construction noise. The Noise Disturbance Coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the Noise Disturbance Coordinator.

Mitigation Measure NOI-7: The Noise Disturbance Coordinator shall coordinate with the site administrator of the Los Angeles Law Library to avoid disruptions to normal operations.

Mitigation Measure NOI-8: An eight-foot barrier constructed out of manufactured noise attenuating materials (e.g., soundproof panels instead of plywood) shall be erected on the western side of the Project site between the Los Angeles Law Library and construction activities. These barriers shall be capable of reducing noise levels by at least nine decibels as described in the material specification sheet provided by the manufacturer.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section I); City of Los Angeles General Plan, City of Los Angeles Municipal Code*; *Noise and Vibration Impact Study*, Terry A. Hayes Associates, 2018 (Appendix E)

Comment: A significant impact would occur if the project exposed persons to or generated excessive groundborne vibration or groundborne noise levels.

Vibration levels rarely affect human health, although high levels of vibration may damage buildings. The peak particle velocity is most frequently used to describe vibration impacts to buildings and is measured in inches per second.

Heavy trucks can generate ground-borne vibrations that vary depending on vehicle type, weight, and pavement conditions. As heavy trucks typically operate on major streets, existing ground-borne vibration in the project vicinity is largely related to heavy truck traffic on the surrounding roadway network. Based on field visits, vibration levels from adjacent roadways are not perceptible along the proposed Project.

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

Construction

Construction activity can generate varying degrees of vibration, depending on the procedure and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to slight damage at the highest levels. In most cases, the primary concern regarding construction vibration relates to damage.

Vibration levels for various types of construction equipment with an average source level reported in terms of velocity are shown in Table 7. A large bulldozer, which would be used on the Project site, produces a peak particle velocity (PPV) of 0.089 inches per second at 25 feet. The nearest structure to the Project site is located in Grand Park, approximately 40 feet from the edge of the Project site. The vibration level at this distance from a large bulldozer would be approximately 0.04 inches per second, which would be less than the 0.3 inches per second damage criterion. Buildings located across Broadway, Spring Street, and 1st Street are at least 100 feet from construction activity and there is no potential for these buildings to be damaged by the proposed Project.

Table 7
Typical Outdoor Construction Vibration Levels

Equipment	**PPV at 25 feet (Inches/Second)**	**Approximate L_v at 25 feet /a/**
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Small Bulldozer	0.003	58

/a/ RMS velocity in decibels (VdB) related to 1 micro-inch/second.
Source: FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

Vibration annoyance is another concern related to construction activity. However, perceptible vibration is not typically a concern for human health and is a common occurrence within the urban environment. The Los Angeles Law Library is located approximately 115 feet west of the Project site and may be considered particularly sensitive to vibration annoyance. A large bulldozer produces a vibration level of 87 VdB at 25 feet. The related vibration level at the Los Angeles Law Library would be approximately 60 VdB, which would be below the most stringent annoyance threshold of 65 VdB Buildings for frequent vibration events occurring where vibration could interfere with interior operations.

In addition to on-site construction activities, construction trucks on the roadway network have the potential to expose vibration-sensitive land uses. Rubber-tired vehicles, including trucks, rarely generate perceptible vibration. It is not anticipated that project-related trucks would generate perceptible vibration adjacent to the roadway network.

The analysis above demonstrates that construction vibration would not damage buildings or annoy sensitive uses. Therefore, the proposed Project would result in a less than significant impact construction vibration.

Operation

The primary sources of proposed Project operational-related vibration would include vehicles traveling to the Project site for events and recreational activities. Vehicular movements would generate similar vibration levels as existing traffic conditions. The proposed Project would not introduce any significant stationary sources of vibration, including mechanical equipment that would be perceptible off the Project site, including at the Los Angeles Law Library or the proposed Times Mirror Towers. Therefore, operational activity would result in a less than significant impact related to vibration.

No significant impacts have been identified related to the proposed Project. Therefore, no mitigation measures are required.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section I.2); Noise and Vibration Impact Study,* Terry A. Hayes Associates, 2018 (Appendix E)

Comment: A significant impact would occur if the project substantially and permanently increased the ambient noise levels in the project vicinity above levels existing without the proposed Project.

The primary sources of operational noise would be the restaurant facilities and landscaping activities. As discussed above, operational activities would not result in significant permanent increase in noise levels related to these sources. Regarding mobile noise, the proposed Project would generate 992 daily trips, including 95 weekday p.m. peak hour and 121 Saturday mid-day peak hour trips. Roadway segments were selected for analysis based on intersections included in the traffic analysis, proximity to sensitive receptors, and trip distribution. Operational mobile noise was assessed using the Federal Highway Administration Traffic Noise Model (TNM). Table 8 shows mobile source noise and Table 9 shows changes in mobile noise. Mobile noise would increase by less than 1-dBA at the analyzed segments, which would be less than the 3-dBA audibility standard or any relevant significance threshold. Therefore, the proposed Project would result in a less than significant impact related to operational noise.

Table 8
Estimated Mobile Source Noise Levels

	Estimated dBA, L_{eq}			
Roadway Segment	**Existing (2018)**	**Existing Plus Project (2018)**	**Future No Project (2021)**	**Future With Project (2021)**
Spring St. between Temple St. and 1st St.	66.5	66.5	66.9	67.0
Broadway between Temple St. and 1st St.	68.4	68.4	68.9	68.9
1st St. between Broadway and Spring St.	70.0	70.1	70.3	70.3

Source: TAHA, 2018.

Table 9
Change In Mobile Source Noise Levels

	Estimated dBA, L_{eq}		
Roadway Segment	**Existing (2018) vs. Existing Plus Project (2018)**	**Future With Project (2021) vs. Future No Project (2021)**	**Existing (2018) vs. Future With Project (2021)**
Spring St. between Temple St. and 1st St.	0.0	0.1	0.5
Broadway between Temple St. and 1st St.	0.0	0.0	0.5
1st St. between Broadway and Spring St.	0.1	0.0	0.3

SOURCE: TAHA, 2018.

No significant impacts have been identified related to the proposed Project.

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

Therefore, no mitigation measures are required.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐

Reference: *City of Los Angeles Municipal Code; Noise and Vibration Impact Study*, Terry A. Hayes Associates, 2018 (Appendix E)

Comment: A significant impact would occur if the proposed Project created a substantial temporary increase in the ambient noise levels that would conflict with the noise conditions allowed in the City's Noise Ordinance.

As discussed in Section 12(a) above, nearby sensitive receptors would experience increased noise levels associated with construction. Construction noise impacts would be temporary in nature, but equipment noise levels would exceed 75 dBA at the Los Angeles Law Library. Therefore, without mitigation, the proposed Project would result in a significant noise impact related to temporary and periodic construction activity.

Based on compliance with the LAMC, construction equipment noise would be mitigated to the greatest extent feasible. The implementation of Mitigation Measures NOI-1 through NOI-8 would reduce 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?	☐	☐	☐	☒

Reference: *Noise and Vibration Impact Study,* Terry A. Hayes Associates, 2018 (Appendix E)

Comment: A significant impact would occur if the proposed Project exposed people residing or working in the project area to excessive noise levels due to the Project site being located within an airport land use plan or within two miles of a public airport where such a plan has not been adopted.

The Project site is not located within an airport land use plan. The Project site is located approximately 12 miles southeast of the Hollywood Burbank Airport, west of the San Gabriel Valley Airport, and north of the Compton/Woodley Airport, respectively. Due to the distance from the nearest airport, the proposed Project would not expose people working or residing in the project area to excessive noise.

Therefore, no impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
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?	☐	☐	☐	☒

Reference: *Noise and Vibration Impact Study*, Terry A. Hayes Associates, 2018 (Appendix E)

Comment: A significant impact would occur if the proposed Project exposed people residing or working in the project area to excessive noise levels due to the vicinity to a private airstrip.

The Project site is not located near a private airstrip. Therefore, no noise impacts to people working or residing in the Project area would occur.

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)?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section* J.1 and J.2); *City of Los Angeles General Plan; Central City Community Plan*

Comment: A significant impact would occur if the proposed Project induced substantial population and housing growth through new development in undeveloped areas or by introducing unplanned infrastructure that was not previously evaluated in the adopted community plan or general plan.

The proposed Project would provide a new park for the existing residents and visitors to the Civic Center neighborhood in downtown Los Angeles in accordance with existing planning goals as discussed in Section 10(b). The proposed Project is not intended to induce development, but instead would provide open space for community enjoyment.

The proposed Project would not directly induce substantial population growth because it does not include a residential or commercial element. No new employees would be hired to maintain and operate the proposed park. Therefore, the proposed Project would not generate any population growth, and the impact would be less than significant.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

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

Reference: *L.A. CEQA Thresholds Guide* (Sections J.1 and J.2)

Comment: A significant impact would occur if the proposed Project displaced substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

The Project site does not contain any housing or residential uses. As such, no housing would be displaced or changed as a result of the proposed Project. No impact to housing would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ☒

Reference: Refer to Section 13 (b) above.

Comment: Refer to Section 13 (b) above.

14. PUBLIC SERVICES –

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

i) Fire protection? ☐ ☐ ☐ ☒

Reference: *L.A. CEQA Thresholds Guide (Section K.2); City of Los Angeles General Plan Safety Element; Los Angeles Fire Department*

Comment: A significant impact would occur if the project required the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service.

The Project site and surrounding area is currently served by Los Angeles Fire Department Station 3, located at 108 North Fremont Avenue in Los Angeles, approximately 0.47 miles west of the Project site. Station 3 serves the Civic Center/Bunker Hill area. Los Angeles Fire Department Station 4 serves the Little Tokyo/Olvera Street/ Chinatown area, and is located 0.52 miles east of the Project site at 450 East Temple Street.

Between January 2018 and May 2018, Station 3 had a response time of 4 minutes 7 seconds and a turn out time of 53 seconds for emergency service calls, and a response time of 3 minutes 55 seconds and a turn out time of 52 seconds for non-emergency service calls.

Between January 2018 and May 2018, Station 4 had a response time of 4

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

minutes 11 seconds and a turn out time of 53 seconds for emergency service calls, and a response time of 4 minutes 7 seconds and a turn out time of 53 seconds for non-emergency service calls.

Station 3 and Station 4 both contain the following resources: an assessment engine, a light force engine, a paramedic rescue ambulance, and a basic life support rescue ambulance. Both fire stations would provide adequate fire service coverage.

The proposed Project does not include new housing or non-residential development that would substantially increase the residential or employee populations in the area; thus, the demand for emergency services would not substantially increase. The proposed Project is intended to provide a park facility with a restaurant building complex. As such, the proposed Project would not increase fire hazards or substantially increase the demand for fire protection services. As a part of the design process, the proposed Project would be reviewed by the Los Angeles Fire Department for compliance with fire, life, and safety standards. No impact to fire protection services would occur.

ii) Police protection?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section K.1);* Los Angeles Police Department

Comment: A significant impact would occur if the proposed Project resulted in an increase in demand for police services that would exceed the capacity of the police department responsible for serving the site.

The nearest station to the Project site is the Los Angeles Police Department Headquarters located at 100 West 1st Street in Los Angeles, which is 0.03 mile to the southeast on the corner of 1st Street and Spring Street (across the street from the Project site). The project area is served by the City of Los Angeles Police Department (LAPD), Central Community Division. The Central Community Police Station is located at 251 East Sixth Street, approximately 0.6 miles southwest of the Project site. Information on the Central Community Area's number of sworn personnel, number of constituents served, or patrol areas was not readily available.

As previously stated in Section 14 (a)(i), the proposed Project would not directly result in an increase in residential populations or a substantial increase in employee populations. The proposed Project is intended to provide a park facility with a restaurant building complex, and is not expected to generate additional calls for police protection service. As such, implementation and operation of the proposed Project would not increase the need for additional police protection services or adversely affect service ratios or response times. No impact to police protection services would occur.

iii) Schools? ☐ ☐ ☐ ☒

Reference: *L.A. CEQA Thresholds Guide (Section K.3); Los Angeles Unified School District Local District Map 2015-2016*

Comment: A significant impact would occur if the proposed Project included substantial employment or population growth that would generate demand for school facilities that exceeded the capacity of the school district responsible for serving the Project site.

The proposed Project would not provide new housing or substantial additional employment opportunities. The existing site is operated by RAP, and holds special or private events only. The proposed park would not increase the number of permanent employees in the area. Therefore, it would not generate new students or increase the demand on local school systems. Edward R. Roybal Learning Center is located approximately 0.66 miles northwest of the Project site at 1200 Colton Street in Los Angeles. No impact to schools would occur.

iv) Parks? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Section K.4)*

Comment: A significant impact would occur if the recreation and park services available could not accommodate the population increase resulting from the implementation of the proposed Project and new or physically altered facilities were needed.

The Project site is currently a vacant lot that is occasionally used for public or private events; however, it is located adjacent and south of the existing Grand Park. Grand Park is owned by the County of Los Angeles, and operated by The Music Center. Activities within the proposed Project and Grand Park would not be coordinated; however, there is the potential for public enjoyment of both spaces at the same time. Activities during construction would be completed in stages to avoid the potential for impacts to Grand Park, and would not include intrusive activities within Grand Park property.

There are additional small parks located around Downtown Los Angeles that would also not be affected by the proposed Project. The proposed Project would add additional open space for use by the public, and would not increase demand for recreation in the area or induce growth.

Issues | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant | No Impact

Therefore, potential impacts to parks would be less than significant.

v) Other public facilities? ☐ ☐ ☐ ☒

Reference: None applicable

Comment: A significant impact would occur if the project resulted in the need for new or altered public facilities, such as libraries, due to population or housing growth.

Construction and operation of the proposed Project would not induce growth, either directly or indirectly, and, therefore, would not increase the demand for or use of libraries or other public facilities in the area. Therefore, no impact to other public facilities would occur.

15. RECREATION –

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

Reference: *L.A. CEQA Thresholds Guide (Section K.4)*

Comment: A significant impact would occur if the proposed Project included substantial employment or population growth that generated demand for public park facilities that would exceed the capacity of existing parks or that substantially affected the level or service of existing park facilities.

The proposed Project would develop a 1.96-acre vacant lot into an open space public park including a two-story restaurant building complex located in the Civic Center area of downtown Los Angeles. The proposed Project would be implemented due to the documented need for open and park space in downtown Los Angeles. Additionally, the proposed Project would not induce growth, either directly or indirectly, and, therefore, would not increase the demand for parks or other recreational facilities in the area. No impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? ☐ ☐ ☒ ☐

Reference: *LA CEQA Thresholds Guide*

Comment: A significant impact would occur if the proposed Project required the construction or expansion of recreational facilities that would have an adverse

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

physical effect on the environment.

The proposed Project would develop a 1.96-acre vacant lot into an open space public park including a two-story restaurant building complex located in the Civic Center area of downtown Los Angeles. The proposed Project would be implemented due to the documented need for open and park space in downtown Los Angeles. Therefore, the proposed Project would increase and improve the recreational services available within the local community. As such, impacts would be less than significant.

16. TRANSPORTATION/TRAFFIC – Would the project:

a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section L), Traffic Study*, KOA Corporation, December 2018 (Appendix F)

Comment: A project would have a significant traffic impact if the traffic volume to roadway capacity ratio was increased.

The study area applied to the proposed Project includes six study intersections within the local area, incorporating routes to and from the project site and potential parking areas. Traffic counts were conducted to reflect existing traffic conditions at the following intersections:

1. Broadway & Temple Street
2. Spring Street & Temple Street
3. Hill Street & 1st Street
4. Broadway & 1st Street
5. Spring Street & 1st Street
6. Judge John Aiso Street/San Pedro Street & 1st Street

Methodology

The transportation and traffic impact analysis is based on the following approach:

Existing Conditions

The analysis of existing traffic conditions provides the basis for the determination of impacts. The existing conditions analysis examines the baseline conditions of the year 2018 and includes an assessment of the streets, vehicle volumes, and operating conditions of the area roadway network. Existing conditions were determined based on the intersection land configurations and the existing traffic volumes, volume-to-capacity (V/C) ratios and the corresponding levels of service (LOS) for each of the study intersections during the weekday p.m. peak hour and the Saturday mid-day peak hour. Table 10 shows the existing conditions at the study intersections. As shown in Table 10, all of the study intersections currently operate acceptable LOS C or better during both peak hours.

Table 10
Existing Peak Hour Intersection LOS

No.	Intersection	Saturday Midday Peak Hour		Weekday PM Peak Hour	
		V/C	LOS	V/C	LOS
1	Broadway & Temple Street	0.597	A	0.635	B
2	Spring Street & Temple Street	0.360	A	0.369	A
3	Hill Street &1st Street	0.379	A	0.739	C
4	Broadway and 1st Street	0.359	A	0.638	B
5	Spring Street & 1st Street	0.180	A	0.416	A
6	Judge John Aiso Street/San Pedro Street & 1st Street	0.224	A	0.562	A

Note: LOS = Level of Service; Delay = Vehicle delay in seconds.
Source: KOA Corporation, December 2018.

Future without Project Conditions

To define future conditions without the project, ambient traffic volume growth of one percent per year was added to the year-2018 traffic counts to define project-year 2021 conditions, in addition to trips from cumulative projects. A list of planned/pending projects was analyzed, and trip generation and general assignment was computed to provide this cumulative analysis and future baseline volumes. The trip generation of the cumulative projects for the project vicinity are shown in Appendix F. Table 11 shows the future without project conditions at the study intersections. As shown in Table 11, all of the study intersections would continue to operate at acceptable LOS C or better during both peak hours in the future without project condition.

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

Table 11
Future without Project Peak Hour Intersection LOS

No.	**Intersection**	**Saturday Midday Peak Hour**		**Weekday PM Peak Hour**	
		V/C	**LOS**	**V/C**	**LOS**
1	Broadway & Temple Street	0.704	C	0.694	B
2	Spring Street & Temple Street	0.485	A	0.424	A
3	Hill Street &1st Street	0.440	A	0.795	C
4	Broadway and 1st Street	0.465	A	0.687	B
5	Spring Street & 1st Street	0.216	A	0.452	A
6	Judge John Aiso Street/San Pedro Street & 1st Street	0.305	A	0.652	B

Note: V/C = Volume to Capacity ratio; LOS = Level of Service.
Source: KOA Corporation, December 2018.

Existing with Project Conditions

Per the rulings of the *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* and *Neighbors for Smart Rail v. Exposition Metro Rail Construction Authority* court cases, an existing with project scenario analyzes project impacts under current baseline conditions. The existing with project conditions are analyzed for project operation below.

Future with Project Conditions

This is an analysis of the future study area traffic conditions with Project construction. The traffic volumes for this scenario were derived by adding the project operation year (year 2021) trips to the future baseline traffic volumes estimated in the Future Without Project conditions. The future with project conditions are analyzed for the construction and operation periods below.

Determination of Significant Impacts

All six of the study intersections are signalized. For signalized study intersections, the Los Angeles Department of Transportation (LADOT) has established specific thresholds for project related increases in the volume-to-capacity (V/C) ratio. Table 12 shows the increase in peak hour V/C ratios that would result in significant impacts.

Table 12
Significant Traffic Impact Thresholds for Signalized Intersections

Level of Service	Final V/C*	LADOT Significance: Project Related V/C increase
C	< 0.70 – 0.80	Equal to or greater than 0.040
D	< 0.80 – 0.90	Equal to or greater than 0.020
E and F	0.90 or more	Equal to or greater than 0.010

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient growth, trips from area/cumulative projects, but without proposed Project traffic impact mitigations.

Construction

Construction Trip Generation

Construction of the proposed Project is anticipated to begin in summer 2019 and take approximately 2 years to complete, concluding in summer 2021. It is anticipated based on current project construction planning efforts that inbound haul trucks would travel to the project site using US-101, then travel south on Spring Street to reach the project site. Outbound haul trucks would exit the project site at Broadway and travel north to reach US-101.

It is assumed that a majority of the construction workers would arrive at the construction site by personal vehicles during the a.m. peak hour and all depart during the p.m. peak hour. Round-trip truck trips were divided into an eight hour workday, multiplied by two to create inbound and outbound one-way trips, and then multiplied by 2.5 to provide Passenger Car Equivalent (PCE) volumes due to vehicle size and speed and effect on traffic flow.

Table 13 shows the construction project construction trip generation calculations. It is estimated that the proposed Project would generate a total of 85 daily one-way weekday vehicle trips, including 34 a.m. peak hour trips and 34 p.m. peak hour trips.

Table 13
Construction Trip Generation

Trip Generation	Average Daily Trips			AM Peak Hour						PM Peak Hour					
				Truck Trips		Employee Trips		Total Trips		Truck Trips		Employee Trips		Total Trips	
	Trucks[a]	Emp.	Total	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Field Personnel	0	60	60	--	--	30	0	30	0	--	--	0	30	0	30
Construction Truck	25	0	25	2	2	--	--	2	2	2	2	--	--	2	2
Total Trips	25	60	85	2	2	30	0	32	2	2	2	0	30	2	32

[a] Truck trips include a Passenger Car Equivalency (PCE) factor of 2.5.

Note: A maximum of 10 daily construction truck round trips would occur during the most intense construction period. Daily totals were multiplied by the PCE factor.

Source: KOA Corporation, December 2018.

Future with Project Construction Conditions

Project construction trips were added to the future conditions analysis to provide a future with project construction impact analysis. Four of the study intersections (1, 2, 4, and 5) were included in the construction analysis, as construction trucks would be utilizing these intersections during the construction period. The other two study intersections (3 and 6) are located adjacent to parking locations that would be used only during operation of the proposed Project. The existing and existing plus project construction traffic V/C and LOS values are provided in Table 14. Traffic impacts created by project construction were determined by comparing the existing conditions to the existing plus project construction traffic conditions.

As shown in Table 14, LADOT thresholds at the study intersections would not be exceeded. Therefore, construction of the proposed Project would result in less than significant traffic impacts in the future with project construction scenario, and no mitigation measures would be required during project construction.

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

Table 14
Future with Project Construction Peak Hour Intersection LOS

No.	Intersection	Peak Hour	Future without Project Construction Conditions		Future with Project Construction Conditions		Change in V/C	Sig. Impact?
			V/C	LOS	V/C	LOS		
1	Broadway & Temple Street	SMD	0.669	B	0.669	B	0.000	No
		WPM	0.694	B	0.702	C	0.008	No
2	Spring Street & Temple Street	SMD	0.485	A	0.492	A	0.007	No
		WPM	0.424	A	0.424	A	0.000	No
4	Broadway and 1st Street	SMD	0.652	B	0.652	B	0.000	No
		WPM	0.687	B	0.687	B	0.000	No
5	Spring Street & 1st Street	SMD	0.506	A	0.506	A	0.000	No
		WPM	0.452	A	0.452	A	0.000	No

Note: SMD = Saturday Midday Peak Hour; WPM = Weekday PM Peak Hour; V/C = Volume to Capacity ratio; LOS = Level of Service
Source: KOA Corporation, December2018.

Operation

Project Operation Trip Generation

The project site is close to numerous transit lines, including Metro Rail Red/Purple Line subway service, and Metro, Foothill transit, and other bus lines. Therefore, a 25 percent Transit Trip Credit was applied, as any incremental trip increases resulting from project operation would likely be lessened by the use of area transit services. The traffic trips estimated to be generated by operation of the proposed Project are shown in Table 15. As shown in Table 15, operation of the proposed Project would generate approximately 992 daily trips, including 95 vehicle trips during the weekday pm peak hour (54 inbound trips and 41 outbound trips) and 121 vehicle trips during the Saturday midday peak hour (65 inbound trips and 56 outbound trips).

Table 15
Project Operation Trip Generation

Land Use	**Units/Size**	**Daily Total**	**Weekday PM Peak Hour**			**Saturday Total**	**Saturday Midday Peak Hour**		
			Total	**In**	**Out**		**Total**	**In**	**Out**
Trip Generation Rates									
Public Park	acres	0.78	0.11	55%	45%	1.96	0.28	55%	45%
High-Turnover Restaurant	seats	4.37	0.42	57%	43%	5.60	0.53	53%	47%
Trip Generation Estimates									
Public Park	1.96 acres	2	0	0	0	4	1	1	0
High-Turnover Restaurant	302 seats	1,320	127	0	55	1,691	160	85	75
	Trips Subtotal	*1,322*	*127*	*72*	*55*	*1,695*	*161*	*86*	*75*
Trip Credit									
Transit Trip Credit (25 %)		-331	-32	-18	-14	-424	-40	-22	-19
	Total Trips	992	95	54	41	1,271	121	65	56

Note: Rates derived using ITE Trip Generation Manual, 10th Edition.
Source: KOA Corporation, December 2018.

Existing with Project Conditions

Project operational traffic trips were added to the existing baseline traffic conditions (shown in Table 10 above) to determine the existing with project conditions. The existing with project conditions are shown in Table 16. As shown in Table 16, all of the study intersections with continue to operate are LOS C or better in the existing with project conditions scenario. Operation of the proposed Project would not result in significant impact at any of the study intersections under the existing with project conditions during either peak hour period. As such, the impact would be less than significant under the existing with project operation conditions, and no mitigation measures are required.

Table 16
Existing with Project Operation Peak Hour Intersection LOS

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Operation Conditions		Change in V/C	Sig. Impact?
			V/C	LOS	V/C	LOS		
1	Broadway & Temple Street	SMD	0.704	C	0.600	A	0.003	No
		WPM	0.694	B	0.638	B	0.003	No
2	Spring Street & Temple Street	SMD	0.485	A	0.364	A	0.004	No
		WPM	0.424	A	0.373	A	0.004	No
3	Hill Street &1st Street	SMD	0.440	A	0.381	A	0.002	No
		WPM	0.795	C	0.741	C	0.002	No
4	Broadway and 1st Street	SMD	0.465	A	0.362	A	0.003	No
		WPM	0.687	B	0.640	B	0.002	No
5	Spring Street & 1st Street	SMD	0.216	A	0.182	A	0.002	No
		WPM	0.452	A	0.421	A	0.005	No
6	Judge John Aiso Street/San Pedro Street & 1st Street	SMD	0.305	A	0.235	A	0.011	No
		WPM	0.652	B	0.568	A	0.006	No

Note: SMD = Saturday Midday Peak Hour; WPM = Weekday PM Peak Hour; V/C = Volume to Capacity ratio; LOS = Level of Service
Source: KOA Corporation, December2018.

Future with Project Conditions

Project operation trips were added to the future without project conditions analysis to provide the future with project operation impact analysis, which is summarized in Table 17. As shown in Table 17, all of the study intersections with continue to operate are LOS C or better in the future with project operation conditions scenario. Operation of the proposed Project would not result in significant impact at any of the study intersections under the future with project conditions during either peak hour period. As such, the impact would be less than significant under the future with project operation conditions, and no mitigation measures are required.

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

Table 17
Future with Project Operation Peak Hour Intersection LOS

No.	Intersection	Peak Hour	Future without Project Operation Conditions		Future with Project Operation Conditions		Change in V/C	Sig. Impact?
			V/C	LOS	V/C	LOS		
1	Broadway & Temple Street	SMD	0.704	C	0.707	C	0.003	No
		WPM	0.694	B	0.699	B	0.005	No
2	Spring Street & Temple Street	SMD	0.485	A	0.488	A	0.003	No
		WPM	0.424	A	0.428	A	0.004	No
3	Hill Street &1st Street	SMD	0.440	A	0.442	A	0.002	No
		WPM	0.795	C	0.798	C	0.003	No
4	Broadway and 1st Street	SMD	0.465	A	0.468	A	0.003	No
		WPM	0.987	B	0.689	B	0.002	No
5	Spring Street & 1st Street	SMD	0.216	A	0.219	A	0.003	No
		WPM	0.452	A	0.456	A	0.004	No
6	Judge John Aiso Street/San Pedro Street & 1st Street	SMD	0.305	A	0.312	A	0.007	No
		WPM	0.652	B	0.658	B	0.006	No

Note: SMD = Saturday Midday Peak Hour; WPM = Weekday PM Peak Hour; V/C = Volume to Capacity ratio; LOS = Level of Service
Source: KOA Corporation, December2018.

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? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Section L); Traffic Study*, KOA Corporation, December 2018 (Appendix F)

Comment: A significant impact would occur if the proposed Project conflicted 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.

The Congestion Management Program (CMP) for Los Angeles County requires that the traffic impact of individual projects of potential regional significance be analyzed. A specific system of arterial roadways and all freeways comprises the CMP system. In accordance with the CMP Transportation Impact Analysis Guidelines, a traffic impact analysis is conducted for the following scenarios:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed Project would add 50 or more vehicle trips during either the morning or evening weekday peak hours; and

- At CMP mainline freeway monitoring locations where the project would add 150 more trips in either direction during either the morning or evening weekday peak hours.

There are two CMP intersections in the project vicinity, including:

- CMP ID 43 – Alameda Street and Washington Boulevard, approximately 2.35 miles southwest of the project site
- CMP ID 44 – Alvarado Street and Sunset Boulevard, approximately 2.0 miles northwest of the project site

Additionally, there are two CMP freeway segments along I-10 near the project site, including:

- CMP ID 1036 – north of Vignes Street, approximately 0.72 miles northeast of the project site
- CMP ID 1048 – south of US-101, approximately 0.60 miles northwest of the project site

The County of Los Angeles CMP level of significance thresholds are not intended to be applied to construction activities, thus, the estimated construction trips would not contribute to traffic impacts at the CMP monitoring locations. Based on the estimated trip generation during project operation, as shown in Table 15, the proposed Project is not expected to add 50 or more trips per hour at the nearest CMP intersections or 150 or more trips per hour, in either direction, to the I-10 CMP freeway segments. Therefore, no further analysis of potential CMP impacts is required. The impact would be less than significant and mitigation measures are required.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☐	☐	☐	☒

Reference: *L.A. CEQA Thresholds Guide (Section L; Traffic Study*, KOA Corporation, December 2018 (Appendix F)

Comment: A significant impact would occur if the proposed Project resulted 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.

The Project site is located approximately 12 miles southeast of the Hollywood Burbank Airport, west of the San Gabriel Valley Airport, and north of the Compton/Woodley Airport, respectively. Neither construction nor operation of the proposed Project would affect air traffic patterns. Therefore, no impact to air traffic

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

patterns would occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section L.5); Draft Traffic Study*, KOA Corporation, June 2018 (Appendix F)

Comment: A significant impact would occur if the proposed Project substantially increased road hazards due to a design feature or incompatible uses.

The proposed Project involves the construction and operation of a public park and restaurant. The proposed Project would not substantially increase hazards due to a design feature or incompatible uses. The existing roadways would not be altered and, as discussed in Section 10, Land Use and Planning, the proposed uses are consistent with the existing land use and zoning regulations governing development of the project site. Additionally, the proposed public park and restaurant would serve the existing community and would be located adjacent to the existing Grand Park. Thus, the proposed Project would not introduce an incompatible land use. Therefore, the proposed Project is not expected to generate any hazards from design features that would result in a safety hazard to pedestrians, personnel, visitors, or nearby neighbors. The impact would be less than significant.

e) Result in inadequate emergency access?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section L.5 and L.8); Los Angeles General Plan Safety Element*

Comment: A significant impact would occur if the proposed Project resulted in inadequate emergency access.

Temple Street is designated as “selected disaster routes” in the *City of Los Angeles General Plan Safety Element*. As part of standard specifications, construction that would disrupt Temple Street would be coordinated with applicable emergency service providers prior to start of construction so that alternative route planning can occur and be implemented if required. In addition, emergency vehicle access would be maintained at all times during construction. Construction and operation of the proposed Project would utilize the existing access areas at the project site. Therefore, the proposed Project would not affect emergency access or result in inadequate emergency access. The impact would be less than significant.

f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐

Reference: L.A. CEQA Thresholds Guide (Section L.5); Traffic Study, KOA Corporation, December 2018 (Appendix F)

Comment: A significant impact would occur if the proposed Project substantially impacted adopted policies, plans, or programs supporting alternative transportation.

The Project study area is served by bus transit lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro), Antelope Valley Transit Authority, Commerce Municipal Bus lines, Gardena Transit, Foothill Transit, LADOT Dash, LADOT Commuter Express, Montebello Transit, OCTA, Santa Clarita Transit, Santa Monica Big Blue Bus, and Torrance Transit. Pedestrian facilities include sidewalks and crosswalks surrounding the project site. Additionally, a bicycle lane currently exists along Spring Street on the east side of the project site.

Construction

Construction of the proposed Project may require temporary lane closures, which could affect existing transit, pedestrian and bicycle facilities serving the project site. The bus stop on the east side of Broadway, north of 1st Street, is served by multiple Metro bus lines, including five local lines, a limited-stop line, and a Rapid Bus line. The shelter would be remodeled as part of the proposed Project, and temporary closure of the bus stop would be necessary to implement the bus stop improvements. On Spring Street, at the east side of the Project site, there is a striped/buffered bicycle lane with special green striping to denote the lane and traffic conflict points. Project construction activities may necessitate the temporary closure of the bicycle lane along the eastern project site frontage. Additionally, project construction activities may necessitate the temporary closure of sidewalks at the west, south, and/or east frontages of the project site.

Lane closures during construction of the proposed Project would result in temporary impacts to transit, pedestrian, and bicycle facilities. As such, mitigation measure TRA-1, requiring implementation of a Traffic Management Plan, would be required. With implementation of mitigation measure TRA-1, temporary construction impacts would be less than significant.

Mitigation measure TRA-1 would be required as follows:

<u>Mitigation Measure TRA-1</u>: Prior to the start of construction, BOE shall coordinate with LADOT to prepare a Traffic Management Plan (TMP), which would include the following aspects:

- The TMP shall be prepared by a registered traffic or civil engineer, as appropriate, based on City of Los Angeles permit guidelines. Methods to inform the public regarding project construction and associated roadway and/or lane closures shall be implemented as part of the TMP.

- Additional measures to be incorporated into the TMP to improve traffic flow and ensure bicyclist and pedestrian safety shall include the following:
    - Project phasing, truck routes, construction worker parking areas, worksite truck entrance/exit locations shall be detailed.
    - Truck drivers shall be required to maintain roadway speeds of 25 miles per hour or lower while traveling through the downtown area.
    - Truck drivers shall be reminded on an ongoing basis and required throughout construction activities to pay close attention to traffic laws and pedestrian and bicyclist safety, especially at site construction access points. Use of flagmen shall be required if truck ingress/egress points will overlap with active pedestrian sidewalks or bicycle lanes.
    - Methods for spacing of both inbound and outbound haul truck shall be included to avoid caravanning of trucks on downtown roadways and queuing at intersections.

Operation

Upon completion of construction activities, complete access to all transit, pedestrian, and bicycle facilities would be fully restored. Therefore, operation of the proposed Project would not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The operational impact would be less than significant.

17. TRIBAL CULTURAL RESOURCE – Would the project cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Listed of eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or? Reference: *L.A. CEQA Thresholds Guide (Section M.2)*	☐	☐	☐	☒

Comment: A significant impact would occur if the project caused a substantial adverse change in the significance of a tribal cultural resource, as defined in California Public Resources Code Section 21074, and is listed or eligible to be listed on a state or local register.

As discussed in Section 5 (a), five historical resources were identified within the project APE. Based on the information compiled from previous inventories and new information, the Court of Flags, Los Angeles City Hall, Los Angeles Law Library, Los Angeles Times Building, and the Los Angeles Civic Center Historic District located within the project APE are eligible for listing in the NRHP and CRHR. One resource, Los Angeles City Hall, is also listed as a Los Angeles Historic-Cultural Monument (LAHCM No. 150). However, none of the five historical resources listed above are located within the Project site boundaries, or would be directly impacted by the proposed Project. Therefore, the proposed Project would not result in a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in a state or local register of historical resources. No impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
b) A resources 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Reference: *L.A. CEQA Thresholds Guide (Sections M.1 and M.2)*

Comment: A significant impact would occur if the project caused a substantial adverse change in the significance of a tribal cultural resource, as defined in California Public Resources Code Section 21074, as determined by substantial evidence, and as determined through consultation with a California Native American tribe.

A Sacred Lands File search of the project area completed by the NAHC indicated the presence of a sacred site in the project area, which could potentially be a tribal cultural resource. Moreover, the Project site is culturally sensitive for buried prehistoric and/or historic archaeological resources that could include tribal cultural resources. Native American individuals identified by the NAHC as representatives of California Native American tribes have requested that both archaeological and Native American monitoring be conducted during ground-disturbing activities. Moreover, they have requested ongoing government-to-government consultation throughout the life of the project. No specific tribal cultural resources have been identified, but the project area is identified as being sensitive for tribal cultural resources. During the construction of the proposed Project, unknown tribal cultural resources could potentially be encountered, particularly during ground-disturbing activities. As discussed in Sections 5 (b) and 5 (d) above, Mitigation Measures CULT-1 and CULT-2, which includes archaeological and Native American monitoring of project ground-disturbing activities, would be implemented to ensure that impacts to tribal or Native American cultural resources are less than significant.

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

18. UTILITIES AND SERVICE SYSTEMS – Would the project :

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section M.2)*

Comment: A significant impact would occur if the proposed Project discharged wastewater, which would exceed the regulatory limits established by the Los Angeles Regional Water Quality Control Board.

The proposed Project includes the construction and operation a new public park and restaurant building complex. Wastewater generated by the proposed Project would be collected and transported through existing local, trunk, and mainline sewers. The quality of wastewater from the proposed Project is expected to be typical and would not exceed wastewater treatment requirements of the RWQCB. Impacts would be less than significant.

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?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Sections M.1 and M.2)*

Comment: A significant impact would occur if the proposed Project resulted in the need for new construction or expansion of water or wastewater treatment facilities that could result in an adverse environmental effect that could not be mitigated.

The proposed Project includes the construction and operation of a new public park and restaurant building complex that would connect to existing water or wastewater treatment facilities only. As such, the proposed Project is not expected to substantially increase the current amount of water used or wastewater generated at the Project site. Impacts would be less than significant.

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?	☐	☐	☒	☐

Reference: *L.A. CEQA Thresholds Guide (Section M.2)*

Comment: A significant impact would occur if the volume of stormwater runoff from the proposed Project increased to a level exceeding the capacity of the storm drain system serving the Project site.

The proposed Project would involve the installation of new stormwater and drainage infrastructure within the park. These improvements would route existing storm water

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

runoff into existing storm drain facilities without increasing the volume or velocity of stormwater runoff. Therefore, the construction and operation of the proposed Project would result in less than significant impacts to the storm drain system.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Section M.1)*

Comment: Refer to Sections 17 (a) and 17 (b) above.

e) Result in a determination by the wastewater treatment provider that 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? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Section M.2)*

Comment: Refer to Sections 17 (a) and 17 (b) above.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? ☐ ☐ ☒ ☐

Reference: *L.A. CEQA Thresholds Guide (Section M.3);* Solid Waste Information System (http://www.calrecycle.ca.gov/SWFacilities/Directory/); *California Integrated Waste Management Act of 1989* (Assembly Bill 939)

Comment: The management of solid waste in the City involves public and private refuse collection services as well as public and private operation of solid waste transfer, resource recovery, and disposal facilities. A significant impact would occur if the proposed Project resulted in solid waste generation of five tons or more per week.

The City of Los Angeles Bureau of Sanitation (SAN) and private refuse companies manage the collection, transfer, and disposal of municipal solid waste. There are three types of disposal facilities within state; (1) Class III Landfills (Municipal Solid Waste Landfills), (2) Unclassified (Inert) Landfills, and (3) Transformation (waste to energy) Facilities.

Construction of the proposed Project would generate demolition debris during removal of the remaining surface and subsurface structures. Uncontaminated soil may be excavated, stockpiled, redistributed, and reused. Soils that require remediation may be excavated, stabilized, and potentially hauled from the site to a certified disposal facility.

The construction and demolition debris would be recycled whenever possible, or disposed of at an appropriate facility. As demonstrated above and according to the CalRecycle's SWIS database, there is sufficient inert waste disposal capacity

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

available in Los Angeles County to adequately accommodate the anticipated demolition debris. Further, certain landfills accept wastes considered to be beneficial-use materials, such as soil, green waste, and asphalt. Several landfills in the greater Los Angeles area accept excavated soil, including those that otherwise are restricted by ordinances from accepting municipal solid waste generated in the City of Los Angeles. When possible, the waste would be transferred to local yards to minimize traffic disruption as well as the possibility of general spills.

Construction and operation of the proposed Project would comply with the requirements of the *California Integrated Waste Management Act of 1989 (Assembly Bill 939*), which requires the implementation of aggressive solid waste management programs that focus on diverting waste from being disposed of in landfills (such as source reduction, recycling, and composting). In addition, project construction would incorporate source reduction techniques and recycling measures and maintain a recycling program to divert waste in accordance with the *Citywide Construction and Demolition Debris Recycling* Ordinance. Therefore, impacts associated with construction debris would result in a less than significant impact on landfill capacity.

Operational solid waste would be minimal and is anticipated to have a less than significant impact on landfill capacity.

g) Comply with federal, state, and local statutes and regulations related to solid waste? Reference: *L.A. CEQA Thresholds Guide (Section M.3)*	☐	☐	☒	☐

Comment: A significant impact would occur if the proposed Project generated solid waste that was in excess of or was not disposed of in accordance with applicable regulations.

The City of Los Angeles Solid Waste Management Policy Plan (SWMPP) is the long range solid waste management policy plan for the City. The objective of the SWMPP is to reduce at the source or recycle a minimum of 50 percent of the City’s waste and calls for the disposal of the remaining waste in local and possibly remote landfills. While the SWMPP is the long-range solid waste management policy plan for the City, the Source Reduction and Recycling Element (SRRE) is the strategic action policy plan for diverting solid waste from landfills. The source reduction, recycling, composting, special waste, and public education goals are defined by specific programmatic elements including tasks, roles, responsibilities, and an implementation schedule. The SRRE provides solid waste diversion objectives in accordance with the requirement of AB 939. It is updated annually and is based on an ongoing evaluation of programs and waste analysis. Guidance for, and implementation of, the solid waste diversion programs identified in the SRRE are administered by the BOS’s Solid Resources Citywide Recycling Division. The BOS

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

presently operates other solid waste reduction and recycling programs, such as its Curbside Recycling Program, which was designed to promote source reduction to achieve the goals established by AB 939 and associated City programs (e.g., the SRRE).

As discussed above in Section 17(f), the proposed Project would generate a nominal amount of solid waste. Furthermore, solid waste generated on-site would be disposed of by permitted solid waste haulers to regulated sites that have adequate capacity and are in compliance with all applicable regulations related to solid waste collection and disposal.

Solid waste disposal during construction of and operation of the proposed Project would comply with federal, state, local statutes and regulations related to solid waste. As such, impacts would be less than significant.

19. MANDATORY FINDINGS OF SIGNIFICANCE

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?	☐	☒	☐	☐

Reference: Preceding analyses

Comment: No plant or animal species listed on any state or federal lists for endangered, threatened or special status species were identified on-site. Nesting birds may use the trees directly adjacent to the Project site. Tree removal would be required to be scheduled to take place outside of breeding bird season, which generally runs from February 15 through September 15 to avoid the take of migratory non-game native bird species protected under the MBTA of 1918 (50 CFR Section 10.13). If tree removal would occur during the breeding season, Mitigation Measure BIO-1 would ensure that no nesting birds protected under the MBTA are significantly affected.

There are no known cultural resources located on-site. However, the area may be culturally-sensitive, and there are known cultural resources within the immediate vicinity; Mitigation Measures CULT-1 through CULT-3 are provided to address the potential discovery of previously unknown archeological or paleontological resources, which reduces potentially significant impacts to less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
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)?	☐	☐	☒	☐

Reference: Preceding analyses

Comment: There are related-projects that would occur within the immediate vicinity of the project area that are being tracked for purposes of understanding potential cumulative traffic impacts. These related projects are listed and evaluated in Checklist item 16, and potential additive traffic impacts are discussed.

Project-level traffic impacts during construction were all less than significant. As a result, construction of the project would not result in a cumulative considerable contribution to a significant cumulative traffic impact to construction.

Operation of the proposed Project would not result in significant impacts because the majority of traffic trips would be generated during the Saturday midday hour and would not overlap with AM or PM peak weekday hours which typically experience the highest traffic volumes. As such, the proposed Project would not result in a cumulative considerable contribution to a significant cumulative traffic impact to operation.

Based on the above, significant cumulative impacts from related-projects are not anticipated in any of the impact categories. The proposed Project is consistent with local and regional land use, air quality, and transportation plans. The development of parkland and open space, as well as the installation of water quality improvements are cumulatively beneficial. In addition, the proposed Project is not expected to make a cumulatively considerable contribution to a significant cumulative impact. The impact is anticipated to be less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
c) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☐	☒

Reference: Preceding analyses

Comment: Therefore, the overall project is anticipated to have positive long-term impacts to the environment. Short-term impacts of the project would be temporary and would be reduced by implementation of feasible mitigation measures. No impact is anticipated.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Reference: Preceding analyses

Comment: With implementation of the mitigation measures the proposed Project is not anticipated to have significant impacts that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, all potentially significant environmental effects associated with the proposed Project can be mitigated to less than significant levels.

V. MITIGATION MEASURES

The following mitigation measures form the foundation of a mitigation monitoring program (MMP) for the proposed Project. CEQA requires public agencies to adopt a reporting or monitoring program for the changes to the project that have been adopted to mitigate or avoid significant effects on the environment (Public Resources Code Section 21081.6). The program must be adopted by the public agency at the time findings are made regarding the project. The State CEQA Guidelines allow public agencies to choose whether its program will monitor mitigation, report on mitigation, or both (14 CCR Section 15097(c)).

The mitigation measures described herein are supplemental to those required as standard procedure for the City and its contractors. The City and its contractors are the parties responsible for: (1) the necessary implementing actions; (2) verifying that the necessary implementing actions are taken; and (3) the primary record documenting the necessary implementing actions.

The mechanisms for verifying that mitigation measures have been implemented include design drawings, project plans and specifications, construction documents intended for use by construction contractors and construction managers, field inspections, field reports, and other periodic or special reports. All records pertaining to this mitigation program will be maintained and made available for inspection by the public in accordance with the City’s records management systems.

Mitigation Measure BIO-1: Exterior building improvements shall occur outside of the nesting season (February 15 through September 15). If avoidance of exterior construction work within this time period is not feasible, the following additional measures shall be employed:

- A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. All nests found shall be recorded.

- If construction activities must occur within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a weekly basis and the construction activity shall be postponed until the biologist determines that the nest is no longer active.

If the recommended nest avoidance zone is not feasible, the qualified biologist shall determine whether an exception is possible and obtain concurrence from the appropriate resource agency before construction work can resume within the avoidance buffer zone. All work shall cease within the avoidance buffer zone until either agency concurrence is obtained or the biologist determines that the adults and young are no longer reliant on the nest site.

Mitigation Measure CULT-1: A qualified archeological monitor shall be present on-site during all ground-disturbing activities, including, but not limited to, excavation, grading, and installation of utilities. The on-site archaeological monitor shall conduct worker training prior to the initiation of ground-disturbing activity in order to inform workers of the types of resources that may be encountered and apprise them of appropriate handling of such resources. If any prehistoric archaeological sites are encountered within the project area, consultation with interested Native American parties shall be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. A cultural resources monitoring and mitigation plan (CRMMP) shall be developed in order to outline monitoring protocols. The CRMMP shall identify key personnel and describe coordination, monitoring, and reporting responsibilities. Monitoring shall be completed by, or under the direction of, an archaeologist who meets Secretary of the Interior's Standards. The archaeological monitor shall have the authority to redirect construction equipment in the event that potential archaeological resources are encountered. If archaeological resources are encountered, work in the vicinity of the discovery shall halt until appropriate treatment or further investigation of the resource is determined by a qualified archaeologist in accordance with the provisions of CEQA Guidelines Section 15064.5.

Mitigation Measure CULT-2: Prior to the start of construction, a Qualified Paleontologist shall be retained to prepare and present a paleontological worker's environmental awareness program to all earth-moving personnel and their supervisors. The training shall inform construction personnel of the potential for fossil discoveries, types of fossils that may be encountered, and procedures to follow if potential fossils are unearthed at the Project site.

In the event of unanticipated fossil discoveries by construction personnel, work shall be halted within 50 feet of the discovery until the Qualified Paleontologist can evaluate the discovery. If the discovery is determined to be significant, the Qualified Paleontologist shall develop the appropriate plan (e.g., documentation, salvage, fossil preparation and identification, curation, and monitoring) in consultation with the City of Los Angeles RAP and BOE.

Mitigation Measure CULT-3: A trained Native American consultant or consultants shall be engaged to monitor ground-disturbing activities. The consultant or consultants shall be selected from the interested Native American parties who consulted on the project. This monitoring shall occur on an as-needed basis as determined by BOE in consultation with interested tribes, and shall be intended to ensure that Native American concerns are taken into account during the construction process. The Native American consultant shall report findings to BOE or its archaeological consultant, which will disseminate the information to the consulting Native American parties. The Native American parties identified by the NAHC shall be consulted regarding the treatment and final disposition of any materials of Native American origin found during the course of the project, if any, and will assist BOE in determining whether these materials constitute tribal cultural resources.

Mitigation Measure GEO-1: The proposed Project grading and foundation plans and specifications shall implement the recommendations presented in the *Geotechnical Investigation Report First and Broadway Park*. The proposed Project plans and specifications shall also be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the recommendations.

Mitigation Measure GEO-2: All grading, excavation, and construction of foundations should be performed under the observation and testing of a qualified Geotechnical Engineer during the following stages:

- Site grading;
- Excavation activities;
- Construction of building foundations and footings;
- Any other ground disturbing activities; and
- When any unusual or unexpected geotechnical conditions are encountered.

With implementation of Mitigation Measures GEO-1 and GEO-2, potential impacts related to liquefaction during construction activities associated with the proposed Project would be less than significant. In addition, no impact would occur from the operation of the proposed Project.

Mitigation Measure NOI-1: Construction equipment shall be properly maintained and equipped with mufflers.

Mitigation Measure NOI-2: Grading and construction contractors shall use rubber-tired equipment rather than metal-tracked equipment.

Mitigation Measure NOI-3: Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.

Mitigation Measure NOI-4: The public shall be notified in advance of the location and dates of construction hours and activities.

Mitigation Measure NOI-5: Construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to noise impacts associated with construction.

Mitigation Measure NOI-6: A Noise Disturbance Coordinator shall be established by the construction contractor and responsible for responding to local complaints about construction noise. The Noise Disturbance Coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the Noise Disturbance Coordinator.

Mitigation Measure NOI-7: The Noise Disturbance Coordinator shall coordinate with the site administrator of the Los Angeles Law Library to avoid disruptions to normal operations.

Mitigation Measure NOI-8: An eight-foot barrier constructed out of manufactured noise attenuating materials (e.g., soundproof panels instead of plywood) shall be erected on the western side of the Project site between the Los Angeles Law Library and construction activities. These barriers shall be capable of reducing noise levels by at least nine decibels as described in the material specification sheet provided by the manufacturer.

Mitigation Measure TRA-1: Prior to the start of construction, BOE shall coordinate with LADOT to prepare a Traffic Management Plan (TMP), which would include the following aspects:

- The TMP shall be prepared by a registered traffic or civil engineer, as appropriate, based on City of Los Angeles permit guidelines. Methods to inform the public regarding project construction and associated roadway and/or lane closures shall be implemented as part of the TMP.
- Additional measures to be incorporated into the TMP to improve traffic flow and ensure bicyclist and pedestrian safety shall include the following:
    - Project phasing, truck routes, construction worker parking areas, worksite truck entrance/exit locations shall be detailed.
    - Truck drivers shall be required to maintain roadway speeds of 25 miles per hour or lower while traveling through the downtown area.
    - Truck drivers shall be reminded on an ongoing basis and required throughout construction activities to pay close attention to traffic laws and pedestrian and bicyclist safety, especially at site construction access points. Use of flagmen shall be required if truck ingress/egress points will overlap with active pedestrian sidewalks or bicycle lanes.

- Methods for spacing of both inbound and outbound haul truck shall be included to avoid caravanning of trucks on downtown roadways and queuing at intersections.

VI. PREPARATION AND CONSULTATION

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Dr. Jan Green Rebstock, Environmental Supervisor II
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VII. DETERMINATION - RECOMMENDED ENVIRONMENTAL DOCUMENTATION

A. Summary

The proposed Project would result is significant impacts that can be mitigated to below the thresholds of significance.

B. Recommended Environmental Documentation

On the basis of this initial evaluation, I find that the project could not have a significant effect on the environment, and a **Mitigated Negative Declaration** should be adopted.

Reviewed by: ____________________________

Talmage Maxwell Jordan
Environmental Specialist II

Approved by: ME Martin

Maria E. Martin
Environmental Affairs Officer
Environmental Management Group

VIII. REFERENCES

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List of Appendices

Appendix A	First & Broadway Civic Center Park Air Quality and Greenhouse Gas Analysis Technical Memorandum, 2018
Appendix B	First & Broadway Civic Center Park Project Greenhouse Gas Analysis, 2018
Appendix C	Cultural Resources Assessment, and Paleontological Inventory Report, 2018
Appendix D	Geotechnical Investigation Report First and Broadway Park, and Final Compaction Report
Appendix E	Noise and Vibration Impact Study, Terry A. Hayes Associates, 2018
Appendix F	Traffic Study, KOA Corporation, June 2018

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Final Initial Study/ Mitigated Negative Declaration Appendices for

1st & Broadway Civic Center Park Project

State Clearinghouse No. 2019011002

City of Los Angeles

Department of Recreation and Parks

Department of Public Works Bureau of Engineering

City of Los Angeles Department of Public Works
Bureau of Engineering, Environmental Management Group
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Los Angeles, California 90015

March 2019

TECHNICAL APPENDICES
TABLE OF CONTENTS

APPENDIX A

Air Quality and Greenhouse Gas Analysis Technical Memoranda

taha
environmental planners

Technical Memorandum

TO: Shannon Ledet, Senior Project Manager/Senior Associate
AECOM

FROM: Sam Silverman, Senior Associate
Andy Uk, Assistant Planner
Terry A. Hayes Associates Inc.

DATE: December 18, 2018

RE: 1st & Broadway Civic Center Park Project – Air Quality Impact Assessment

Introduction

Terry A. Hayes Associates Inc. (TAHA) has completed an Air Quality impact assessment for the 1st and Broadway Civic Center Park (proposed project) in accordance with the provisions of the California Environmental Quality Act (CEQA) Statutes and Guidelines. The project site is located in the Los Angeles County portion of the South Coast Air Basin, which falls under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

The assessment was undertaken to determine whether construction or operation of the proposed project would have the potential to result in significant environmental impacts related to Air Quality in the context of the Appendix G Environmental Checklist criteria of the CEQA Statute and Guidelines. Implementation of the proposed project may result in a significant environmental impact related to Air Quality if the proposed project would:

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

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

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment 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; and/or

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

Project Description

The project site is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles. The project site address is 126 North Broadway, Los Angeles, California 90012. The proposed project would include the development of a 1.96-acre vacant lot into an open space public park incorporating a two-story restaurant building complex with rooftop access within the northwest corner of the park; trees and green spaces for public enjoyment, numerous seating areas, 16 decorative canopies to provide shade and lighting throughout the park, new hardscaping and landscaped areas, and bioswales or other treatment best management practices.

The proposed approximately 19,200-square-foot restaurant building complex would include space for concessionaires to operate all concepts in the facility. The new building would include a rooftop patio and bar, an upscale restaurant, an approximately 1,380-square-foot café with a food service window to serve outdoor patrons, and an approximately 1,500-square-foot outdoor beer garden attached to the two-story structure. A portion of the ground level floor of the restaurant building would be externally shaped into a tiered sitting area with a capacity to seat up to 60 park patrons at a time and would be shaded by cantilevering above. Rooftop access would be available with an approximately 450-square-foot bar, an approximately 1,330-square-foot dining and lounge area for restaurant patrons, and an approximately 1,260-square-foot public space. A loading zone would be provided on the north side of the building and project site for use in routine restaurant operations. Public restrooms would be provided on the first floor of the restaurant building and at the rooftop. The proposed project would include a bicycle parking area, outdoor seating areas, planting of a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting.

An appropriate combination of monitoring and resource impact avoidance would be employed during all phases of the proposed project, including implementation of the following Best Management Practices (BMPs):

- The proposed project would implement Rule 403 fugitive dust control measures required by the SCAQMD, which requires reasonable precautions to be taken to prevent visible particulate matter from being airborne, under normal wind conditions, beyond the property from which the emission originates. Reasonable precautions include, but are not limited to, the following:

    - Application of water on dirt roads, material stockpiles, and other surfaces that can give rise to airborne dusts; and

    - Maintenance of roadways in a clean condition.

- The proposed project would implement Rule 402 measures required by the SCAQMD, which prohibits the discharge from any source whatsoever, such quantities of air contaminants or other materials that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or that cause or have a natural tendency to cause injury or damage to business or property.

Significance Thresholds

The Environmental Checklist acknowledges that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the above determinations. The Air Quality impacts assessment follow CEQA Air Quality Significance Thresholds established by the SCAQMD to substantiate significance determinations. **Table 1** shows regional and localized significance thresholds for volatile organic compounds (VOC), nitrogen oxides (NO_X), carbon monoxide (CO), sulfur oxides (SO_X), and particulate matter (PM_{10} and $PM_{2.5}$). The Localized Significance Threshold (LST) methodology document contains Source Receptor Area (SRA)-specific values for maximum allowable on-site emissions (i.e., construction equipment and fugitive dust) during construction based on locally monitored air quality, the size of maximum daily disturbed area, and the proximity of sensitive receptors. Maximum on-site emissions resulting from construction activities were quantified and assessed against the applicable LST values for a one-acre project site having sensitive receptors within 80 feet (approximately 25 meters) of the project site boundary in SRA 1. Although the project site is approximately two acres, the one acre LSTs were used in the impact analysis based on the daily site disturbance potential for the construction equipment.

TABLE 1: SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS – MASS DAILY EMISSIONS

Pollutant	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
CONSTRUCTION						
Regional Threshold (lb/day)	75	100	550	150	150	55
Localized Threshold (lb/day)	--	74	680	--	5	3
OPERATION						
Regional Threshold (lb/day)	55	55	550	150	150	55

Note: LST values selected for 1-acre daily disturbance based on equipment inventory and 25-meter receptor distance in SRA 1 (SCAQMD, 2013).
SOURCE: SCAQMD, 2018.

Methodology

The SCAQMD recommends that air pollutant emissions generated by construction activities be assessed for potentially significant air quality impacts at regional and local scales. Regional emissions include air pollutant emissions from all sources associated with construction activities, while localized emissions refer specifically to those emissions generated by sources on the project site. Maximum daily emissions were quantified for each construction activity based on the number and type of equipment required and daily hours of use, in addition to vehicle trips to and from the project site. The CalEEMod model provides regionally-specific default values for daily equipment usage rates and worker trip lengths, as well as emissions factors for heavy duty equipment and passenger vehicles that have been derived by the CARB through extensive air quality investigations and surveys.

The CalEEMod software also generates estimates of air pollutant emissions that will be generated during future operation of the proposed project. The primary sources of operational air pollutant emissions are stationary sources associated with VOC off-gassing from the paved parking lot and vehicle trips by patrons to and from the project site. The transportation study for the proposed project determined that there would be approximately 1,851 daily trips per day.

Air Quality Impact Assessment

a) *Would the proposed project conflict with or obstruct implementation of the applicable air quality plan? (Less-than-Significant Impact)*

The following analysis addresses the consistency with applicable SCAQMD and Southern California Association of Governments (SCAG) policies, including the SCAQMD's 2016 Air Quality Management Plan (AQMP) and growth projections within the SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In accordance with the procedures established in the SCAQMD's CEQA Air Quality Handbook, the following criteria are required to be addressed in order to determine the consistency with applicable SCAQMD and SCAG policies:

- Would the project result in any of the following?
  - An increase in the frequency or severity of existing air quality violations; or
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Would the project exceed the assumptions utilized in preparing the AQMP?
  - Is the project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the project include air quality mitigation measures; or
  - To what extent is project development consistent with the AQMP land use policies?

With respect to the first criterion, as discussed below, localized concentrations of nitrogen dioxide as NO_X, CO, PM_{10}, and $PM_{2.5}$ have been analyzed for the proposed project. Sulfur dioxide (SO_2) emissions, assessed as SO_X within the SCAQMD thresholds, would be negligible during construction and long-term operations, and, therefore, would not have the potential to cause or affect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. Due to the role VOCs play in ozone formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

NO_2, CO, PM_{10}, and $PM_{2.5}$ emissions were analyzed in order to: (1) ascertain potential effects on localized concentrations; and (2) determine if there is a potential for such emissions to cause or affect a violation of the ambient air quality standards. As demonstrated in the analysis below (see **Table 2**), localized emissions would not exceed the SCAQMD-recommended localized thresholds.

With respect to the determination of consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016–2040 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

- Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

Implementation of the proposed project would not introduce new residential uses to the project area, and therefore population and housing projections for the region would not be affected. The commercial uses would generate minimal new employment that would have no potential to alter citywide and regional employment projections. The proposed project would not have any potential to result in growth that would exceed the projections incorporated into the AQMP or the SCAG 2016–2040 RTP/SCS.

- Does the project implement feasible air quality mitigation measures?

The proposed project would comply with all applicable regulatory standards (e.g., SCAQMD Rules 402 and 403) as required by the SCAQMD. As demonstrated in this analysis, the proposed project would not result in significant air quality impacts and no mitigation measures are required to reduce emissions. As such, the proposed project meets this AQMP consistency criterion.

- To what extent is project development consistent with the land use policies set forth by the City of Los Angeles?

The proposed project would be consistent with the City of Los Angeles General Plan. The project site is zoned Public Facility (CR-2) in the City of Los Angeles General Plan, which would be rezoned to Open Space (OS-2D) to allow for the construction of the park. The project site is within the City of Los Angeles General Plan Civic Center Community Plan area. The project would be consistent with goals and objectives within the Community Plan, namely to provide adequate facilities and identify neighborhoods where service is deficient. Therefore, because the project would be consistent with the goals and policies of the Community Plan and would be consistent with the proposed zoning, the project is considered consistent with the General Plan.

Implementation of the proposed project would not interfere with air pollution control measures listed in the 2016 AQMP and would not conflict with the goals of the General Plan Air Quality Element.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Impacts will be less than significant and no mitigation measures are required.

b) Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Less-than-Significant Impact)

Construction

Construction activity is anticipated to begin in Summer/Fall 2019 and take approximately two years to complete, concluding in Summer/Fall 2021. Construction of the proposed project would have a potentially significant air quality impact under this criterion if maximum daily emissions of any regulated pollutant exceeded the applicable SCAQMD air quality significance thresholds presented in **Table 1**. Daily emissions of regulated pollutants were quantified for each phase of construction activity. The estimate of fugitive dust emissions account for Rule 403 compliance. Examples of Rule 403 compliance include: a) All exposed areas will be frequently watered to reduce the generation of dust, and b) Vehicle speed of construction vehicles/equipment in exposed areas (i.e., unpaved access) shall be reduced to reduce the generation of dust.

Table 2 shows a comparison of the maximum daily emissions during each phase of construction to the applicable SCAQMD air quality significance thresholds. Maximum daily emissions of air pollutants that would be generated by proposed project construction activities would not exceed any applicable regional or localized threshold values. Impacts would be less than significant and no mitigation is required.

TABLE 2: ESTIMATED DAILY CONSTRUCTION EMISSIONS

	Daily Emissions (Pounds Per Day)					
Phase	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
SITE GRADING						
On-Site Emissions	1.6	16.7	8.9	<0.1	3.5	2.1
Off-Site Emissions	0.2	1.2	1.6	<0.1	0.4	0.1
Total	***1.8***	***17.9***	***10.5***	***<0.1***	***3.9***	***2.2***
BUILDING CONSTRUCTION						
On-Site Emissions	0.8	8.9	4.7	<0.1	0.5	0.4
Off-Site Emissions	0.2	2.2	1.9	<0.1	0.4	0.1
Total	***1.0***	***11.1***	***6.6***	***<0.1***	***0.9***	***0.5***
PAVING						
On-Site Emissions	0.5	5.3	5.7	<0.1	0.3	0.2
Off-Site Emissions	0.1	0.1	1.2	<0.1	0.3	0.1
Total	***0.7***	***5.4***	***6.9***	***<0.1***	***0.6***	***0.3***
ARCHITECTURAL COATING						
On-Site Emissions	9.2	2.0	2.4	<0.1	0.1	0.1
Off-Site Emissions	0.1	0.1	1.1	<0.1	0.3	0.1
Total	***9.3***	***2.1***	***3.5***	***<0.1***	***0.4***	***0.2***
REGIONAL ANALYSIS						
Maximum Regional Daily Emissions	**9.3**	**17.9**	**10.5**	**<0.1**	**3.9**	**2.2**
Regional Significance Threshold	75	100	550	150	150	55
Exceed Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
LOCALIZED ANALYSIS						
Maximum Localized Daily Emissions	**--**	**16.7**	**8.9**	**--**	**3.5**	**2.1**
Localized Significance Threshold	--	74	680	--	5	3
Exceed Localized Threshold?	**--**	**No**	**No**	**--**	**No**	**No**

Note: Emissions modeling files can be found in the **Appendix**.
SOURCE: TAHA, 2018.

Operation

Implementation of the proposed project would introduce approximately 992 daily vehicle trips to the project area on weekdays and approximately 1,271 daily vehicle trips on weekends, as well as marginally increase area source emissions. The results of operational emissions modeling are presented in **Table 3**. Maximum daily emissions of all regulated pollutants would remain substantially below the applicable SCAQMD operational mass daily thresholds. Therefore, implementation of the proposed project would result in a less than significant impact related to operational air pollutant emissions, and no mitigation is required.

TABLE 3: ESTIMATED DAILY OPERATIONAL EMISSIONS

	Daily Emissions (Pounds Per Day)					
Source Category	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area	0.4	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	0.1	1.2	1.0	<0.1	0.1	0.1
Mobile	1.7	7.5	16.3	<0.1	3.7	1.0
ANALYSIS						
Regional Total	**2.3**	**8.7**	**17.3**	**<0.1**	**3.8**	**1.1**
Regional Significance Threshold	55	55	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: TAHA, 2018.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Impacts will be less than significant and no mitigation measures are required.

c) ***Would the proposed 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)***

Construction

The South Coast Air Basin (SCAB) is designated as nonattainment of the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for O_3, PM_{10}, and $PM_{2.5}$. Therefore, there is an ongoing regional cumulative impact associated with these air pollutants. Taking into account the existing environmental conditions, the SCAQMD propagated guidance that an individual project can emit allowable quantities of these pollutants on a regional scale without significantly contributing to the cumulative impacts. As discussed above and shown in **Table 2**, air pollutant emissions associated with construction of the proposed project would not exceed any applicable SCAQMD air quality thresholds of significance. Despite the region being in nonattainment of the ambient air quality standards for O_3, PM_{10}, and $PM_{2.5}$, the SCAQMD does not consider individual project emissions of lesser magnitude than the mass daily thresholds to be cumulatively considerable. The proposed project would not result in a cumulatively considerable net increase of nonattainment pollutants. Therefore, this impact would be less than significant and no mitigation is required.

Operation

Implementation of the proposed project would create an open space public park incorporating a two-story restaurant building complex. Operations would not introduce a substantial source of long-term O_3 precursor emission or particulate matter emissions for which the SCAB is currently designated nonattainment. As discussed above, the SCAQMD has propagated guidance that the project-specific mass daily thresholds may be used as a reference metric to evaluate the potential for cumulatively considerable net increases in nonattainment pollutants. If the SCAQMD mass daily thresholds were exceeded, further analysis would be warranted to ensure that emissions would not be cumulatively considerable. However, as shown in **Table 3**, operation of the proposed project would not exceed the SCAQMD mass daily threshold for VOC, NO_X, or particulate matter. Therefore, this impact would be less than significant and no mitigation is required.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Impacts will be less than significant and no mitigation measures are required.

d) Would the proposed project expose sensitive receptors to substantial pollutant concentrations? (Less-than-Significant Impact)

Construction

The SCAQMD devised its LST values to prevent the occurrence of localized hot spots of criteria pollutant concentrations at sensitive receptor locations surrounding the project site. The LST values were determined using emissions modeling based on ambient air quality measured throughout the SCAB. If maximum daily emissions remain below the LST values during construction activities, it is highly unlikely that air pollutant concentrations in ambient air would reach substantial levels sufficient to create public health concerns for sensitive receptors. As shown in **Table 2**, maximum daily emissions of criteria pollutants and O_3 precursors from sources located on the project site would not exceed any applicable LST values. Therefore, construction of the proposed project would not result in exposure of sensitive receptors to substantial concentrations of criteria pollutants.

With regards to emissions of air toxics, carcinogenic risks, and non-carcinogenic hazards, the use of heavy duty construction equipment and haul trucks during construction activities would release diesel PM to the atmosphere through exhaust emissions. Diesel PM is a known carcinogen, and extended exposure to elevated concentrations of diesel PM can increase excess cancer risks in individuals. However, carcinogenic risks are typically assessed over timescales of several years to decades, as the carcinogenic dose response is cumulative in nature. Short term exposures to diesel PM would have to involve extremely high concentrations in order to exceed the SCAQMD Air Quality Significance Threshold of 10 excess cancers per million.

Over the course of construction activities, average diesel PM emissions from on-site equipment would be approximately 0.3 pounds per day. Therefore, it is highly unlikely that diesel PM concentrations would be of any public health concern during the 24-month construction period, and diesel PM emissions would cease upon completion of construction activities. Therefore, this impact would be less than significant and no mitigation is required.

Operation

The proposed project would introduce a new recreational facility to the project area. The proposed project does not include an industrial component that would constitute a new substantial stationary source of operational air pollutant emissions, nor does it include a land use that would generate a substantial number of heavy duty truck trips within the region. There would be no substantial source of air toxic emissions. Although a residential development (Times Mirror Towers) is planned in the future across West 1st Street to the south, operation of the proposed project would not involve any on-site sources of pollutants that would adversely affect future residents. The park and restaurant uses would not require any heavy equipment or large stationary emissions sources that could generate sufficient quantities of air pollutants to result in significantly elevated concentrations at off-site locations. Additionally, as shown in **Table 3**, daily emissions of criteria pollutants would remain far below the applicable SCAQMD Air Quality Significance Thresholds. Therefore, this impact would be less than significant and no mitigation is required.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Impacts will be less than significant and no mitigation measures are required.

e) Would the Proposed project or its alternatives create objectionable odors affecting a substantial number of people? (Less-than-Significant Impact)

Construction

A significant impact would occur if construction or operation of the proposed project would result in the creation of nuisance odors that would be noxious to a substantial number of people. Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site and would be temporary in nature and would not persist beyond the termination of construction activities. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. In addition, as construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. Therefore, this impact would be less than significant, and no mitigation is required.

Operation

The proposed project would introduce a new open space public park with an incorporated restaurant building to downtown Los Angeles. According to the SCAQMD *CEQA Air Quality Handbook,* land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. Although, the restaurant would produce some odors and smells associated with the preparation of food, the restaurant operations would comply with SCAQMD Rule 402, which would prohibit any air quality discharge that would be a nuisance or pose any harm to individuals of the public. Furthermore, the project site would not be developed with land uses that are typically associated with odor complaints. On-site trash receptacles would have the potential to create adverse odors. Trash receptacles would be located and maintained in a manner that promotes odor control in accordance with the Los Angeles Clean Streets program and no adverse odor impacts are anticipated from these types of land uses. Therefore, this impact would be less than significant and no mitigation is required.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Impacts will be less than significant and no mitigation measures are required.

References

California Air Pollution Control Officers Association, *California Emissions Estimator Model (CalEEMod v2016.3.2) User's Guide*, November 2017.

California Air Resources Board, *Ambient Air Quality Standards*, May 2016.

Southern California Association of Governments, *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy*, April 2016.

South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.

South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology Appendix C Mass Rate Lookup Tables*, updated October 21, 2009.

South Coast Air Quality Management District, *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*, 2013.

South Coast Air Quality Management District, *SCAQMD Air Quality Significance Thresholds*, March 2015.

United States Environmental Protection Agency, *The Green Book Nonattainment Areas for Criteria Pollutants*, https://www.epa.gov/green-book, December 2013.

LABOE 1st & Broadway Civic Center Park

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.96	Acre	1.96	85,377.60	0
High Turnover (Sit Down Restaurant)	19.20	1000sqft	0.00	19,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size = 1.96 acres.

Construction Phase - construction info provided

Off-road Equipment - construction info assumption

Off-road Equipment - construction info provided.

Off-road Equipment - 'Other Construction Equipment' - 300 HP dump truck

Off-road Equipment -

Trips and VMT - construction info provided

On-road Fugitive Dust -

Grading - construction info provided

Architectural Coating -

Vehicle Trips - Traffic Report provided.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Consumer Products -

Area Coating -

Landscape Equipment -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	20.00

tblConstructionPhase	NumDays	200.00	320.00
tblConstructionPhase	NumDays	4.00	60.00
tblConstructionPhase	NumDays	10.00	220.00
tblGrading	AcresOfGrading	0.00	30.00
tblGrading	MaterialExported	0.00	1,500.00
tblLandUse	LotAcreage	0.44	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	188.00	200.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	WorkerTripNumber	8.00	30.00
tblTripsAndVMT	WorkerTripNumber	44.00	30.00
tblTripsAndVMT	WorkerTripNumber	8.00	30.00
tblTripsAndVMT	WorkerTripNumber	9.00	30.00
tblVehicleTrips	ST_TR	22.75	2.05
tblVehicleTrips	ST_TR	158.37	66.00
tblVehicleTrips	SU_TR	16.74	2.05
tblVehicleTrips	SU_TR	131.84	66.00
tblVehicleTrips	WD_TR	1.89	1.02
tblVehicleTrips	WD_TR	127.15	51.57

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0887	0.9102	0.5362	1.1900e-003	0.2231	0.0437	0.2668	0.1082	0.0402	0.1484	0.0000	109.2378	109.2378	0.0232	0.0000	109.8184
2020	0.1576	1.5808	1.1868	2.8600e-003	0.0747	0.0689	0.1436	0.0202	0.0635	0.0837	0.0000	257.4487	257.4487	0.0516	0.0000	258.7382
2021	0.1264	0.2866	0.4007	7.5000e-004	0.0207	0.0139	0.0346	5.5000e-003	0.0130	0.0185	0.0000	65.3692	65.3692	0.0143	0.0000	65.7253
Maximum	**0.1576**	**1.5808**	**1.1868**	**2.8600e-003**	**0.2231**	**0.0689**	**0.2668**	**0.1082**	**0.0635**	**0.1484**	**0.0000**	**257.4487**	**257.4487**	**0.0516**	**0.0000**	**258.7382**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0887	0.9102	0.5362	1.1900e-003	0.1031	0.0437	0.1468	0.0465	0.0402	0.0868	0.0000	109.2377	109.2377	0.0232	0.0000	109.8183
2020	0.1576	1.5808	1.1868	2.8600e-003	0.0747	0.0689	0.1436	0.0202	0.0635	0.0837	0.0000	257.4485	257.4485	0.0516	0.0000	258.7380
2021	0.1264	0.2866	0.4007	7.5000e-004	0.0207	0.0139	0.0346	5.5000e-003	0.0130	0.0185	0.0000	65.3691	65.3691	0.0143	0.0000	65.7253
Maximum	**0.1576**	**1.5808**	**1.1868**	**2.8600e-003**	**0.1031**	**0.0689**	**0.1468**	**0.0465**	**0.0635**	**0.0868**	**0.0000**	**257.4485**	**257.4485**	**0.0516**	**0.0000**	**258.7380**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**37.67**	**0.00**	**26.96**	**46.06**	**0.00**	**24.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-8-2019**	**10-7-2019**	0.6105	0.6105
2	**10-8-2019**	**1-7-2020**	0.3960	0.3960
3	**1-8-2020**	**4-7-2020**	0.3565	0.3565
4	**4-8-2020**	**7-7-2020**	0.3556	0.3556
5	**7-8-2020**	**10-7-2020**	0.5183	0.5183
6	**10-8-2020**	**1-7-2021**	0.4817	0.4817
7	**1-8-2021**	**4-7-2021**	0.1813	0.1813
8	**4-8-2021**	**7-7-2021**	0.2086	0.2086
		Highest	0.6105	0.6105

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0791	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Energy	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	708.4515	708.4515	0.0157	6.6400e-003	710.8225
Mobile	0.2576	1.1650	2.5054	7.4400e-003	0.5559	6.6300e-003	0.5625	0.1490	6.1900e-003	0.1552	0.0000	687.6868	687.6868	0.0418	0.0000	688.7320
Waste						0.0000	0.0000		0.0000	0.0000	46.4139	0.0000	46.4139	2.7430	0.0000	114.9884
Water						0.0000	0.0000		0.0000	0.0000	1.8489	59.0170	60.8659	0.1913	4.7700e-003	67.0704
Total	**0.3606**	**1.3822**	**2.6881**	**8.7400e-003**	**0.5559**	**0.0231**	**0.5791**	**0.1490**	**0.0227**	**0.1717**	**48.2628**	**1,455.1558**	**1,503.4186**	**2.9918**	**0.0114**	**1,581.6139**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0791	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Energy	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	708.4515	708.4515	0.0157	6.6400e-003	710.8225
Mobile	0.2576	1.1650	2.5054	7.4400e-003	0.5559	6.6300e-003	0.5625	0.1490	6.1900e-003	0.1552	0.0000	687.6868	687.6868	0.0418	0.0000	688.7320
Waste						0.0000	0.0000		0.0000	0.0000	46.4139	0.0000	46.4139	2.7430	0.0000	114.9884
Water						0.0000	0.0000		0.0000	0.0000	1.8489	59.0170	60.8659	0.1913	4.7700e-003	67.0704
Total	**0.3606**	**1.3822**	**2.6881**	**8.7400e-003**	**0.5559**	**0.0231**	**0.5791**	**0.1490**	**0.0227**	**0.1717**	**48.2628**	**1,455.1558**	**1,503.4186**	**2.9918**	**0.0114**	**1,581.6139**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	7/8/2019	9/27/2019	5	60	
2	Building Construction	Building Construction	9/30/2019	12/18/2020	5	320	
3	Paving	Paving	7/27/2020	5/28/2021	5	220	
4	Architectural Coating	Architectural Coating	5/31/2021	6/25/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 30

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 28,800; Non-Residential Outdoor: 9,600; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	30.00	0.00	200.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1967	0.0000	0.1967	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0480	0.5025	0.2667	4.4000e-004		0.0270	0.0270		0.0249	0.0249	0.0000	39.7486	39.7486	0.0126	0.0000	40.0630
Total	**0.0480**	**0.5025**	**0.2667**	**4.4000e-004**	**0.1967**	**0.0270**	**0.2237**	**0.1010**	**0.0249**	**0.1259**	**0.0000**	**39.7486**	**39.7486**	**0.0126**	**0.0000**	**40.0630**

3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.5000e-004	0.0317	6.7200e-003	8.0000e-005	1.7200e-003	1.1000e-004	1.8300e-003	4.7000e-004	1.1000e-004	5.8000e-004	0.0000	7.7869	7.7869	5.5000e-004	0.0000	7.8006
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5100e-003	3.7600e-003	0.0409	1.0000e-004	9.8600e-003	9.0000e-005	9.9500e-003	2.6200e-003	8.0000e-005	2.7000e-003	0.0000	9.4802	9.4802	3.3000e-004	0.0000	9.4884
Total	**5.4600e-003**	**0.0354**	**0.0476**	**1.8000e-004**	**0.0116**	**2.0000e-004**	**0.0118**	**3.0900e-003**	**1.9000e-004**	**3.2800e-003**	**0.0000**	**17.2671**	**17.2671**	**8.8000e-004**	**0.0000**	**17.2890**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0767	0.0000	0.0767	0.0394	0.0000	0.0394	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0480	0.5025	0.2667	4.4000e-004		0.0270	0.0270		0.0249	0.0249	0.0000	39.7486	39.7486	0.0126	0.0000	40.0630
Total	**0.0480**	**0.5025**	**0.2667**	**4.4000e-004**	**0.0767**	**0.0270**	**0.1037**	**0.0394**	**0.0249**	**0.0643**	**0.0000**	**39.7486**	**39.7486**	**0.0126**	**0.0000**	**40.0630**

3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.5000e-004	0.0317	6.7200e-003	8.0000e-005	1.7200e-003	1.1000e-004	1.8300e-003	4.7000e-004	1.1000e-004	5.8000e-004	0.0000	7.7869	7.7869	5.5000e-004	0.0000	7.8006
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5100e-003	3.7600e-003	0.0409	1.0000e-004	9.8600e-003	9.0000e-005	9.9500e-003	2.6200e-003	8.0000e-005	2.7000e-003	0.0000	9.4802	9.4802	3.3000e-004	0.0000	9.4884
Total	**5.4600e-003**	**0.0354**	**0.0476**	**1.8000e-004**	**0.0116**	**2.0000e-004**	**0.0118**	**3.0900e-003**	**1.9000e-004**	**3.2800e-003**	**0.0000**	**17.2671**	**17.2671**	**8.8000e-004**	**0.0000**	**17.2890**

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0276	0.2969	0.1568	3.0000e-004		0.0159	0.0159		0.0147	0.0147	0.0000	26.5570	26.5570	8.4000e-003	0.0000	26.7670
Total	**0.0276**	**0.2969**	**0.1568**	**3.0000e-004**		**0.0159**	**0.0159**		**0.0147**	**0.0147**	**0.0000**	**26.5570**	**26.5570**	**8.4000e-003**	**0.0000**	**26.7670**

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5500e-003	0.0712	0.0195	1.6000e-004	3.8000e-003	4.5000e-004	4.2500e-003	1.1000e-003	4.3000e-004	1.5200e-003	0.0000	15.0789	15.0789	1.0100e-003	0.0000	15.1041
Worker	5.0300e-003	4.2000e-003	0.0456	1.2000e-004	0.0110	1.0000e-004	0.0111	2.9300e-003	9.0000e-005	3.0100e-003	0.0000	10.5862	10.5862	3.6000e-004	0.0000	10.5953
Total	**7.5800e-003**	**0.0754**	**0.0651**	**2.8000e-004**	**0.0148**	**5.5000e-004**	**0.0154**	**4.0300e-003**	**5.2000e-004**	**4.5300e-003**	**0.0000**	**25.6651**	**25.6651**	**1.3700e-003**	**0.0000**	**25.6994**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0276	0.2969	0.1568	3.0000e-004		0.0159	0.0159		0.0147	0.0147	0.0000	26.5569	26.5569	8.4000e-003	0.0000	26.7670
Total	**0.0276**	**0.2969**	**0.1568**	**3.0000e-004**		**0.0159**	**0.0159**		**0.0147**	**0.0147**	**0.0000**	**26.5569**	**26.5569**	**8.4000e-003**	**0.0000**	**26.7670**

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5500e-003	0.0712	0.0195	1.6000e-004	3.8000e-003	4.5000e-004	4.2500e-003	1.1000e-003	4.3000e-004	1.5200e-003	0.0000	15.0789	15.0789	1.0100e-003	0.0000	15.1041
Worker	5.0300e-003	4.2000e-003	0.0456	1.2000e-004	0.0110	1.0000e-004	0.0111	2.9300e-003	9.0000e-005	3.0100e-003	0.0000	10.5862	10.5862	3.6000e-004	0.0000	10.5953
Total	**7.5800e-003**	**0.0754**	**0.0651**	**2.8000e-004**	**0.0148**	**5.5000e-004**	**0.0154**	**4.0300e-003**	**5.2000e-004**	**4.5300e-003**	**0.0000**	**25.6651**	**25.6651**	**1.3700e-003**	**0.0000**	**25.6994**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0938	1.0103	0.5662	1.1200e-003		0.0526	0.0526		0.0484	0.0484	0.0000	98.1018	98.1018	0.0317	0.0000	98.8950
Total	**0.0938**	**1.0103**	**0.5662**	**1.1200e-003**		**0.0526**	**0.0526**		**0.0484**	**0.0484**	**0.0000**	**98.1018**	**98.1018**	**0.0317**	**0.0000**	**98.8950**

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2600e-003	0.2468	0.0668	5.8000e-004	0.0143	1.1500e-003	0.0155	4.1400e-003	1.1000e-003	5.2400e-003	0.0000	56.5667	56.5667	3.5900e-003	0.0000	56.6565
Worker	0.0175	0.0141	0.1562	4.3000e-004	0.0416	3.5000e-004	0.0419	0.0111	3.3000e-004	0.0114	0.0000	38.7603	38.7603	1.2200e-003	0.0000	38.7908
Total	**0.0258**	**0.2609**	**0.2230**	**1.0100e-003**	**0.0559**	**1.5000e-003**	**0.0574**	**0.0152**	**1.4300e-003**	**0.0166**	**0.0000**	**95.3269**	**95.3269**	**4.8100e-003**	**0.0000**	**95.4473**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0938	1.0103	0.5662	1.1200e-003		0.0526	0.0526		0.0484	0.0484	0.0000	98.1017	98.1017	0.0317	0.0000	98.8949
Total	**0.0938**	**1.0103**	**0.5662**	**1.1200e-003**		**0.0526**	**0.0526**		**0.0484**	**0.0484**	**0.0000**	**98.1017**	**98.1017**	**0.0317**	**0.0000**	**98.8949**

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2600e-003	0.2468	0.0668	5.8000e-004	0.0143	1.1500e-003	0.0155	4.1400e-003	1.1000e-003	5.2400e-003	0.0000	56.5667	56.5667	3.5900e-003	0.0000	56.6565
Worker	0.0175	0.0141	0.1562	4.3000e-004	0.0416	3.5000e-004	0.0419	0.0111	3.3000e-004	0.0114	0.0000	38.7603	38.7603	1.2200e-003	0.0000	38.7908
Total	**0.0258**	**0.2609**	**0.2230**	**1.0100e-003**	**0.0559**	**1.5000e-003**	**0.0574**	**0.0152**	**1.4300e-003**	**0.0166**	**0.0000**	**95.3269**	**95.3269**	**4.8100e-003**	**0.0000**	**95.4473**

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0302	0.3032	0.3272	5.4000e-004		0.0147	0.0147		0.0136	0.0136	0.0000	46.5550	46.5550	0.0145	0.0000	46.9170
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0302**	**0.3032**	**0.3272**	**5.4000e-004**		**0.0147**	**0.0147**		**0.0136**	**0.0136**	**0.0000**	**46.5550**	**46.5550**	**0.0145**	**0.0000**	**46.9170**

3.4 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8900e-003	6.3700e-003	0.0704	1.9000e-004	0.0187	1.6000e-004	0.0189	4.9800e-003	1.5000e-004	5.1200e-003	0.0000	17.4651	17.4651	5.5000e-004	0.0000	17.4789
Total	**7.8900e-003**	**6.3700e-003**	**0.0704**	**1.9000e-004**	**0.0187**	**1.6000e-004**	**0.0189**	**4.9800e-003**	**1.5000e-004**	**5.1200e-003**	**0.0000**	**17.4651**	**17.4651**	**5.5000e-004**	**0.0000**	**17.4789**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0302	0.3032	0.3272	5.4000e-004		0.0147	0.0147		0.0136	0.0136	0.0000	46.5549	46.5549	0.0145	0.0000	46.9170
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0302**	**0.3032**	**0.3272**	**5.4000e-004**		**0.0147**	**0.0147**		**0.0136**	**0.0136**	**0.0000**	**46.5549**	**46.5549**	**0.0145**	**0.0000**	**46.9170**

3.4 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8900e-003	6.3700e-003	0.0704	1.9000e-004	0.0187	1.6000e-004	0.0189	4.9800e-003	1.5000e-004	5.1200e-003	0.0000	17.4651	17.4651	5.5000e-004	0.0000	17.4789
Total	**7.8900e-003**	**6.3700e-003**	**0.0704**	**1.9000e-004**	**0.0187**	**1.6000e-004**	**0.0189**	**4.9800e-003**	**1.5000e-004**	**5.1200e-003**	**0.0000**	**17.4651**	**17.4651**	**5.5000e-004**	**0.0000**	**17.4789**

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0263	0.2599	0.3050	5.0000e-004		0.0125	0.0125		0.0116	0.0116	0.0000	43.2743	43.2743	0.0135	0.0000	43.6109
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0263**	**0.2599**	**0.3050**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0116**	**0.0116**	**0.0000**	**43.2743**	**43.2743**	**0.0135**	**0.0000**	**43.6109**

3.4 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8400e-003	5.3300e-003	0.0601	1.7000e-004	0.0174	1.4000e-004	0.0176	4.6300e-003	1.3000e-004	4.7600e-003	0.0000	15.7238	15.7238	4.6000e-004	0.0000	15.7354
Total	**6.8400e-003**	**5.3300e-003**	**0.0601**	**1.7000e-004**	**0.0174**	**1.4000e-004**	**0.0176**	**4.6300e-003**	**1.3000e-004**	**4.7600e-003**	**0.0000**	**15.7238**	**15.7238**	**4.6000e-004**	**0.0000**	**15.7354**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0263	0.2599	0.3050	5.0000e-004		0.0125	0.0125		0.0116	0.0116	0.0000	43.2742	43.2742	0.0135	0.0000	43.6108
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0263**	**0.2599**	**0.3050**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0116**	**0.0116**	**0.0000**	**43.2742**	**43.2742**	**0.0135**	**0.0000**	**43.6108**

3.4 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8400e-003	5.3300e-003	0.0601	1.7000e-004	0.0174	1.4000e-004	0.0176	4.6300e-003	1.3000e-004	4.7600e-003	0.0000	15.7238	15.7238	4.6000e-004	0.0000	15.7354
Total	**6.8400e-003**	**5.3300e-003**	**0.0601**	**1.7000e-004**	**0.0174**	**1.4000e-004**	**0.0176**	**4.6300e-003**	**1.3000e-004**	**4.7600e-003**	**0.0000**	**15.7238**	**15.7238**	**4.6000e-004**	**0.0000**	**15.7354**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9200e-003	0.0204	0.0242	4.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	3.4043	3.4043	2.3000e-004	0.0000	3.4102
Total	**0.0919**	**0.0204**	**0.0242**	**4.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**	**0.0000**	**3.4043**	**3.4043**	**2.3000e-004**	**0.0000**	**3.4102**

3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	1.0000e-003	0.0113	3.0000e-005	3.2900e-003	3.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.9668	2.9668	9.0000e-005	0.0000	2.9689
Total	**1.2900e-003**	**1.0000e-003**	**0.0113**	**3.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3100e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.9668**	**2.9668**	**9.0000e-005**	**0.0000**	**2.9689**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9200e-003	0.0204	0.0242	4.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	3.4043	3.4043	2.3000e-004	0.0000	3.4102
Total	**0.0919**	**0.0204**	**0.0242**	**4.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**	**0.0000**	**3.4043**	**3.4043**	**2.3000e-004**	**0.0000**	**3.4102**

3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	1.0000e-003	0.0113	3.0000e-005	3.2900e-003	3.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.9668	2.9668	9.0000e-005	0.0000	2.9689
Total	**1.2900e-003**	**1.0000e-003**	**0.0113**	**3.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3100e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**2.9668**	**2.9668**	**9.0000e-005**	**0.0000**	**2.9689**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2576	1.1650	2.5054	7.4400e-003	0.5559	6.6300e-003	0.5625	0.1490	6.1900e-003	0.1552	0.0000	687.6868	687.6868	0.0418	0.0000	688.7320
Unmitigated	0.2576	1.1650	2.5054	7.4400e-003	0.5559	6.6300e-003	0.5625	0.1490	6.1900e-003	0.1552	0.0000	687.6868	687.6868	0.0418	0.0000	688.7320

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	2.00	4.02	4.02	7,413	7,413
High Turnover (Sit Down Restaurant)	990.14	1,267.20	1267.20	1,457,279	1,457,279
Total	992.14	1,271.22	1,271.22	1,464,691	1,464,691

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
High Turnover (Sit Down Restaurant)	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	472.0182	472.0182	0.0112	2.3100e-003	472.9843
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	472.0182	472.0182	0.0112	2.3100e-003	472.9843
NaturalGas Mitigated	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	236.4333	236.4333	4.5300e-003	4.3300e-003	237.8383
NaturalGas Unmitigated	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	236.4333	236.4333	4.5300e-003	4.3300e-003	237.8383

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	4.43059e +006	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	236.4333	236.4333	4.5300e-003	4.3300e-003	237.8383
Total		**0.0239**	**0.2172**	**0.1824**	**1.3000e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**	**0.0000**	**236.4333**	**236.4333**	**4.5300e-003**	**4.3300e-003**	**237.8383**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	4.43059e +006	0.0239	0.2172	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165	0.0000	236.4333	236.4333	4.5300e-003	4.3300e-003	237.8383
Total		**0.0239**	**0.2172**	**0.1824**	**1.3000e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**	**0.0000**	**236.4333**	**236.4333**	**4.5300e-003**	**4.3300e-003**	**237.8383**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	847488	472.0182	0.0112	2.3100e-003	472.9843
Total		**472.0182**	**0.0112**	**2.3100e-003**	**472.9843**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	847488	472.0182	0.0112	2.3100e-003	472.9843
Total		**472.0182**	**0.0112**	**2.3100e-003**	**472.9843**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0791	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Unmitigated	0.0791	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0702					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Total	**0.0791**	**0.0000**	**2.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.3000e-004**	**5.3000e-004**	**0.0000**	**0.0000**	**5.6000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0702					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Total	**0.0791**	**0.0000**	**2.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.3000e-004**	**5.3000e-004**	**0.0000**	**0.0000**	**5.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	60.8659	0.1913	4.7700e-003	67.0704
Unmitigated	60.8659	0.1913	4.7700e-003	67.0704

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.3353	14.4505	3.4000e-004	7.0000e-005	14.4801
High Turnover (Sit Down Restaurant)	5.82785 / 0.37199	46.4154	0.1910	4.7000e-003	52.5904
Total		**60.8659**	**0.1913**	**4.7700e-003**	**67.0704**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.3353	14.4505	3.4000e-004	7.0000e-005	14.4801
High Turnover (Sit Down Restaurant)	5.82785 / 0.37199	46.4154	0.1910	4.7000e-003	52.5904
Total		**60.8659**	**0.1913**	**4.7700e-003**	**67.0704**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	46.4139	2.7430	0.0000	114.9884
Unmitigated	46.4139	2.7430	0.0000	114.9884

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
High Turnover (Sit Down Restaurant)	228.48	46.3794	2.7409	0.0000	114.9029
Total		**46.4139**	**2.7430**	**0.0000**	**114.9884**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
High Turnover (Sit Down Restaurant)	228.48	46.3794	2.7409	0.0000	114.9029
Total		**46.4139**	**2.7430**	**0.0000**	**114.9884**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Technical Memorandum

TO: Shannon Ledet, Senior Project Manager/Senior Associate
AECOM

FROM: Sam Silverman, Senior Associate
Andy Uk, Assistant Planner
Terry A. Hayes Associates Inc.

DATE: December 18, 2018

RE: 1st & Broadway Civic Center Park Project – Greenhouse Gas (GHG) Emissions Impact Assessment

Introduction

Terry A. Hayes Associates Inc. (TAHA) has completed a GHG emissions impact assessment for the 1st and Broadway Civic Center Park (proposed project) in accordance with the provisions of the California Environmental Quality Act (CEQA) Statutes and Guidelines. The project site is located in the Los Angeles County portion of the South Coast Air Basin, which falls under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

The assessment was undertaken to determine whether construction or operation of the proposed project would have the potential to result in significant environmental impacts related to GHG emissions in the context of the Appendix G Environmental Checklist criteria of the CEQA Statute and Guidelines. Implementation of the proposed project may result in a significant environmental impact related to Greenhouse Gas Emissions if the proposed project would:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

Project Description

The project site is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles. The project site address is 126 North Broadway, Los Angeles, California 90012. The proposed project would include the development of a 1.96-acre vacant lot into an open space public park incorporating a two-story restaurant building complex with rooftop access within the northwest corner of the park; trees and green spaces for public enjoyment, numerous seating areas, 16 decorative canopies to provide shade and lighting throughout the park, new hardscaping and landscaped areas, and bioswales or other treatment best management practices.

Terry A. Hayes Associates Inc.
3535 Hayden Avenue, Suite 350
Culver City, California 90232
310.839.4200 fax 310.839.4201

The proposed approximately 19,200-square-foot restaurant building complex would include space for concessionaires to operate all concepts in the facility. The new building would include a rooftop patio and bar, an upscale restaurant, an approximately 1,380-square-foot café with a food service window to serve outdoor patrons, and an approximately 1,500-square-foot outdoor beer garden attached to the two-story structure. A portion of the ground level floor of the restaurant building would be externally shaped into a tiered sitting area with a capacity to seat up to 60 park patrons at a time and would be shaded by cantilevering above. Rooftop access would be available with an approximately 450-square-foot bar, an approximately 1,330-square-foot dining and lounge area for restaurant patrons, and an approximately 1,260-square-foot public space. A loading zone would be provided on the north side of the building and project site for use in routine restaurant operations. Public restrooms would be provided on the first floor of the restaurant building and at the rooftop. The proposed project would include a bicycle parking area, outdoor seating areas, planting of a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting.

Significance Thresholds

Section 15064.4 of the CEQA Guidelines states that a lead agency should make a good-faith effort to describe, calculate, or estimate the amount of GHG emissions resulting from a project, and that the lead agency should consider the following factors when assessing the significance of impacts from GHG emissions on the environment:

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

The CEQA Guidelines require lead agencies to adopt GHG thresholds of significance. When adopting these thresholds, the amended Guideline allows lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence, and/or to develop their own significance threshold. Neither the City nor the SCAQMD has officially adopted a quantitative threshold value for determining the significance of GHG emissions that will be generated by projects under CEQA. The SCAQMD published the *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* in October 2008.[1]

The SCAQMD convened a GHG CEQA Significance Threshold Stakeholder Working Group beginning in April of 2008 to examine alternatives for establishing quantitative GHG thresholds. The Working Group proposed a 10,000 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year threshold for industrial projects and a 3,000 $MTCO_2e$ annual threshold for commercial and residential projects, including mixed-use. Based on the available threshold concepts recommended by expert agencies, the assessment herein analyses operational emissions against SCAQMD's draft 3,000 $MTCO_2e$ bright-line threshold level. Per SCAQMD, projects below this bright-line significance criteria have a minimal contribution to cumulative global emissions and are considered to have less-than significant impacts. Further, while there is no current statewide GHG reduction plan that extends beyond 2020, the Association of Environmental Professionals recommends that CEQA GHG analyses evaluate project emissions in light of the trajectory of state climate change legislation and assess their "substantial progress" toward achieving long-term reduction targets identified in available plans, legislation, or

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[1] SCAQMD, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold,* October 2008.

executive orders. Since the project is proposed to be built out and fully operational prior to 2020, this analysis is a purely qualitative discussion regarding whether or not the project would impede "substantial progress" toward meeting statewide reduction targets.

Methodology

GHG emissions that will be generated by the proposed project were estimated using CalEEMod, as recommended by the SCAQMD. CalEEMod quantifies GHG emissions from construction activities and future operation of projects. Sources of GHG emissions during project construction will include heavy-duty off-road diesel equipment and vehicular travel to and from the project site. Sources of GHG emissions during project operation will include employee and delivery vehicular travel, natural gas demand, water use, and waste generation. In accordance with SCAQMD methodology, the total amount of GHG emissions that would be generated by construction of the proposed project was amortized over a 30-year operational period to represent long-term impacts.

Greenhouse Gas Emissions Impact Assessment

a) Would the proposed project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? (Less-than-Significant Impact)

Construction activity is anticipated to begin in Summer/Fall 2019 and take approximately two years to complete, concluding in Summer/Fall 2021. The proposed project would generate GHG emissions from construction equipment and vehicular traffic. CalEEMod was used to prepare estimates of annual GHG emissions. **Table 1** presents the estimated emissions of GHGs that would be released to the atmosphere on an annual basis. Construction of the proposed project would produce approximately 252.4 $MTCO_2e$, or 8.4 $MTCO_2e$ annually over a 30-year period. The proposed project would generate approximately 992 daily weekday trips and approximately 1,271 daily weekend trips. The total annual operating emissions would be approximately 1,590 $MTCO_2e$ per year after accounting for amortized construction emissions. This mass rate is substantially below the most applicable quantitative draft interim threshold of 3,000 $MTCO_2e$ per year as recommended by the SCAQMD. Therefore, implementation of the proposed project will result in a less-than-significant impact related to GHG emissions.

TABLE 1: ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS

Scenario and Source	Annual GHG Emissions ($MTCO_2e$ per Year)
Construction Emissions Amortized (Direct) /a/	8.6
Area Source Emissions (Direct)	<1
Mobile Source Emissions (Direct)	688.7
Energy – Natural Gas & Electricity Emissions (Indirect)	710.8
Waste Disposal Emissions (Indirect)	115.0
Water Distribution Emissions (Indirect)	67.1
Total Emissions	**1,590.2**
SCAQMD Draft Interim Significance Threshold	**3,000**
Exceed Threshold?	No

/a/ Based on SCAQMD guidance, the emissions summary also includes construction emissions amortized over a 30-year span.
SOURCE: TAHA, 2018.

Mitigation Measure

No significant impacts have been identified related to the proposed project. Impacts will be less than significant and no mitigation measures are required.

b) Would the proposed project or its alternatives conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs? (Less-than-Significant Impact)

The proposed project would comply with plans, policies and regulations adopted for reducing emissions of GHGs including Assembly Bill 32 Scoping Plan, which includes goals such as the expansion of energy efficiency and producing energy from renewable resources. The City of Los Angeles has published the GreenLA, An Action Plan to Lead the Nation in Fighting Global Warming (the LA Green Plan), where the City will increase renewable energy generation, improve energy conservation and efficiency. Senate Bill 375 requires the metropolitan planning organizations to prepare an SCS in their regional transportation plans to achieve the per capita GHG reduction targets and the region's SCS is contained within SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS focuses on job growth in high quality transit areas, resulting in more opportunity for transit-oriented development. The proposed project would be located within walking distance of the Los Angeles County Metropolitan Transportation Authority Red/Purple Line Civic Center/Grand Park train station; and would be surrounded by various bus lines from Metro, Los Angeles Department of Transportation (LADOT) and Foothill Transit at 1st Street/Broadway, 1st Street/Spring Street, Temple Street/Broadway and Temple Street/Spring Street. These public transit lines would serve the Los Angeles downtown area and surrounding areas. The proposed project would be consistent with the mobility and transit accessibility objectives of the RTP/SCS.

Executive Order (E.O.) B-30-15 established an interim GHG reduction target of 40 percent below 1990 levels by 2030, and E.O. S-3-05 established a long-term goal of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050. Achieving these long-term GHG reduction policies will require systemic changes in how energy is produced and used. State sponsored studies conclude that deep reductions in GHG emissions can only be achieved with significant changes in electricity production, transportation fuels, and industrial processes. The systemic changes that will be required to achieve E.O. B-30-15 and E.O. S-3-05, if they are legislatively adopted, will require significant policy, technical, and economic solutions. The extent to which the proposed project emissions and resulting impacts would be mitigated through implementation of statewide (and nationwide) changes is not known. However, some of the anticipated statewide actions (e.g., decarbonization, energy efficiency, alternative transportation) can be facilitated, at least to some extent, through implementation of specific GHG reduction measures in large-scale developments. The proposed project includes policies related to planting drought-tolerant species resulting in reduced water. The proposed project is not inconsistent with anticipated long-term statewide strategies to reduce GHG emissions. Accordingly, the proposed project would not conflict with the goals in E.O. B-30-15 and E.O. S-3-05.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Impacts will be less than significant and no mitigation measures are required.

References

California Air Pollution Control Officers Association, *California Emissions Estimator Model (CalEEMod v2016.3.2) User's Guide*, November 2017.

California Environmental Quality Act Guidelines Section 15064.4.

Southern California Association of Governments, *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy*, April 2016.

South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.

South Coast Air Quality Management District, *SCAQMD Air Quality Significance Thresholds*, March 2015.

LABOE 1st & Broadway Civic Center Park

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.96	Acre	1.96	85,377.60	0
High Turnover (Sit Down Restaurant)	19.20	1000sqft	0.00	19,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2021

Utility Company	Los Angeles Department of Water & Power

CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size = 1.96 acres.

Construction Phase - construction info provided

Off-road Equipment - construction info assumption

Off-road Equipment - construction info provided.

Off-road Equipment - 'Other Construction Equipment' - 300 HP dump truck

Off-road Equipment -

Trips and VMT - construction info provided

On-road Fugitive Dust -

Grading - construction info provided

Architectural Coating -

Vehicle Trips - Traffic Report provided.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Consumer Products -

Area Coating -

Landscape Equipment -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	20.00

tblConstructionPhase	NumDays	200.00	320.00
tblConstructionPhase	NumDays	4.00	60.00
tblConstructionPhase	NumDays	10.00	220.00
tblGrading	AcresOfGrading	0.00	30.00
tblGrading	MaterialExported	0.00	1,500.00
tblLandUse	LotAcreage	0.44	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	188.00	200.00
tblTripsAndVMT	VendorTripNumber	17.00	18.00
tblTripsAndVMT	WorkerTripNumber	8.00	30.00
tblTripsAndVMT	WorkerTripNumber	44.00	30.00
tblTripsAndVMT	WorkerTripNumber	8.00	30.00
tblTripsAndVMT	WorkerTripNumber	9.00	30.00
tblVehicleTrips	ST_TR	22.75	2.05
tblVehicleTrips	ST_TR	158.37	66.00
tblVehicleTrips	SU_TR	16.74	2.05
tblVehicleTrips	SU_TR	131.84	66.00
tblVehicleTrips	WD_TR	1.89	1.02
tblVehicleTrips	WD_TR	127.15	51.57

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.7985	17.9057	10.4493	0.0208	6.9488	0.9075	7.8563	3.4728	0.8351	4.3079	0.0000	2,086.4347	2,086.4347	0.4945	0.0000	2,098.7967
2020	1.6439	15.4382	13.1763	0.0295	0.7859	0.6884	1.4743	0.2110	0.6348	0.8458	0.0000	2,904.6285	2,904.6285	0.6099	0.0000	2,919.8769
2021	9.3341	5.0013	6.8593	0.0127	0.3353	0.2383	0.5736	0.0889	0.2203	0.3093	0.0000	1,221.7082	1,221.7082	0.2895	0.0000	1,228.9447
Maximum	**9.3341**	**17.9057**	**13.1763**	**0.0295**	**6.9488**	**0.9075**	**7.8563**	**3.4728**	**0.8351**	**4.3079**	**0.0000**	**2,904.6285**	**2,904.6285**	**0.6099**	**0.0000**	**2,919.8769**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.7985	17.9057	10.4493	0.0208	2.9501	0.9075	3.8576	1.4184	0.8351	2.2535	0.0000	2,086.4347	2,086.4347	0.4945	0.0000	2,098.7967
2020	1.6439	15.4382	13.1763	0.0295	0.7859	0.6884	1.4743	0.2110	0.6348	0.8458	0.0000	2,904.6285	2,904.6285	0.6099	0.0000	2,919.8769
2021	9.3341	5.0013	6.8593	0.0127	0.3353	0.2383	0.5736	0.0889	0.2203	0.3093	0.0000	1,221.7082	1,221.7082	0.2895	0.0000	1,228.9447
Maximum	**9.3341**	**17.9057**	**13.1763**	**0.0295**	**2.9501**	**0.9075**	**3.8576**	**1.4184**	**0.8351**	**2.2535**	**0.0000**	**2,904.6285**	**2,904.6285**	**0.6099**	**0.0000**	**2,919.8769**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	49.55	0.00	40.37	54.45	0.00	37.61	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4335	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6300e-003	4.6300e-003	1.0000e-005		4.9400e-003
Energy	0.1309	1.1901	0.9997	7.1400e-003		0.0904	0.0904		0.0904	0.0904		1,428.0716	1,428.0716	0.0274	0.0262	1,436.5579
Mobile	1.7383	7.4618	16.2917	0.0477	3.6969	0.0436	3.7405	0.9894	0.0407	1.0301		4,860.5145	4,860.5145	0.3044		4,868.1244
Total	**2.3028**	**8.6519**	**17.2935**	**0.0549**	**3.6969**	**0.1340**	**3.8309**	**0.9894**	**0.1311**	**1.1205**		**6,288.5907**	**6,288.5907**	**0.3318**	**0.0262**	**6,304.6872**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4335	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6300e-003	4.6300e-003	1.0000e-005		4.9400e-003
Energy	0.1309	1.1901	0.9997	7.1400e-003		0.0904	0.0904		0.0904	0.0904		1,428.0716	1,428.0716	0.0274	0.0262	1,436.5579
Mobile	1.7383	7.4618	16.2917	0.0477	3.6969	0.0436	3.7405	0.9894	0.0407	1.0301		4,860.5145	4,860.5145	0.3044		4,868.1244
Total	**2.3028**	**8.6519**	**17.2935**	**0.0549**	**3.6969**	**0.1340**	**3.8309**	**0.9894**	**0.1311**	**1.1205**		**6,288.5907**	**6,288.5907**	**0.3318**	**0.0262**	**6,304.6872**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	7/8/2019	9/27/2019	5	60	
2	Building Construction	Building Construction	9/30/2019	12/18/2020	5	320	
3	Paving	Paving	7/27/2020	5/28/2021	5	220	
4	Architectural Coating	Architectural Coating	5/31/2021	6/25/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 30

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 28,800; Non-Residential Outdoor: 9,600; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	30.00	0.00	200.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5552	0.0000	6.5552	3.3679	0.0000	3.3679			0.0000			0.0000
Off-Road	1.6002	16.7492	8.8895	0.0147		0.9008	0.9008		0.8288	0.8288		1,460.5122	1,460.5122	0.4621		1,472.0645
Total	**1.6002**	**16.7492**	**8.8895**	**0.0147**	**6.5552**	**0.9008**	**7.4560**	**3.3679**	**0.8288**	**4.1967**		**1,460.5122**	**1,460.5122**	**0.4621**		**1,472.0645**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0321	1.0346	0.2324	2.6200e-003	0.0583	3.8200e-003	0.0621	0.0160	3.6500e-003	0.0196		283.2832	283.2832	0.0206		283.7983
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1661	0.1220	1.3274	3.4400e-003	0.3353	2.8900e-003	0.3382	0.0889	2.6600e-003	0.0916		342.6392	342.6392	0.0118		342.9339
Total	**0.1982**	**1.1566**	**1.5598**	**6.0600e-003**	**0.3936**	**6.7100e-003**	**0.4003**	**0.1049**	**6.3100e-003**	**0.1112**		**625.9225**	**625.9225**	**0.0324**		**626.7322**

3.2 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5565	0.0000	2.5565	1.3135	0.0000	1.3135			0.0000			0.0000
Off-Road	1.6002	16.7492	8.8895	0.0147		0.9008	0.9008		0.8288	0.8288	0.0000	1,460.5122	1,460.5122	0.4621		1,472.0645
Total	**1.6002**	**16.7492**	**8.8895**	**0.0147**	**2.5565**	**0.9008**	**3.4573**	**1.3135**	**0.8288**	**2.1422**	**0.0000**	**1,460.5122**	**1,460.5122**	**0.4621**		**1,472.0645**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0321	1.0346	0.2324	2.6200e-003	0.0583	3.8200e-003	0.0621	0.0160	3.6500e-003	0.0196		283.2832	283.2832	0.0206		283.7983
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1661	0.1220	1.3274	3.4400e-003	0.3353	2.8900e-003	0.3382	0.0889	2.6600e-003	0.0916		342.6392	342.6392	0.0118		342.9339
Total	**0.1982**	**1.1566**	**1.5598**	**6.0600e-003**	**0.3936**	**6.7100e-003**	**0.4003**	**0.1049**	**6.3100e-003**	**0.1112**		**625.9225**	**625.9225**	**0.0324**		**626.7322**

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8239	8.8636	4.6814	8.8200e-003		0.4759	0.4759		0.4379	0.4379		873.8514	873.8514	0.2765		880.7633
Total	**0.8239**	**8.8636**	**4.6814**	**8.8200e-003**		**0.4759**	**0.4759**		**0.4379**	**0.4379**		**873.8514**	**873.8514**	**0.2765**		**880.7633**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0780	2.0859	0.6093	4.5800e-003	0.1152	0.0135	0.1287	0.0332	0.0129	0.0461		488.2988	488.2988	0.0343		489.1564
Worker	0.1661	0.1220	1.3274	3.4400e-003	0.3353	2.8900e-003	0.3382	0.0889	2.6600e-003	0.0916		342.6392	342.6392	0.0118		342.9339
Total	**0.2441**	**2.2079**	**1.9367**	**8.0200e-003**	**0.4506**	**0.0164**	**0.4670**	**0.1221**	**0.0156**	**0.1377**		**830.9380**	**830.9380**	**0.0461**		**832.0903**

3.3 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category						lb/day								lb/day		
Off-Road	0.8239	8.8636	4.6814	8.8200e-003		0.4759	0.4759		0.4379	0.4379	0.0000	873.8514	873.8514	0.2765		880.7633
Total	**0.8239**	**8.8636**	**4.6814**	**8.8200e-003**		**0.4759**	**0.4759**		**0.4379**	**0.4379**	**0.0000**	**873.8514**	**873.8514**	**0.2765**		**880.7633**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category						lb/day								lb/day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0780	2.0859	0.6093	4.5800e-003	0.1152	0.0135	0.1287	0.0332	0.0129	0.0461		488.2988	488.2988	0.0343		489.1564
Worker	0.1661	0.1220	1.3274	3.4400e-003	0.3353	2.8900e-003	0.3382	0.0889	2.6600e-003	0.0916		342.6392	342.6392	0.0118		342.9339
Total	**0.2441**	**2.2079**	**1.9367**	**8.0200e-003**	**0.4506**	**0.0164**	**0.4670**	**0.1221**	**0.0156**	**0.1377**		**830.9380**	**830.9380**	**0.0461**		**832.0903**

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7414	7.9865	4.4759	8.8200e-003		0.4156	0.4156		0.3824	0.3824		854.8513	854.8513	0.2765		861.7632
Total	**0.7414**	**7.9865**	**4.4759**	**8.8200e-003**		**0.4156**	**0.4156**		**0.3824**	**0.3824**		**854.8513**	**854.8513**	**0.2765**		**861.7632**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0669	1.9143	0.5533	4.5400e-003	0.1152	9.1600e-003	0.1244	0.0332	8.7600e-003	0.0419		485.0083	485.0083	0.0324		485.8191
Worker	0.1533	0.1087	1.2030	3.3400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		332.2261	332.2261	0.0105		332.4879
Total	**0.2202**	**2.0231**	**1.7563**	**7.8800e-003**	**0.4506**	**0.0120**	**0.4625**	**0.1221**	**0.0113**	**0.1335**		**817.2344**	**817.2344**	**0.0429**		**818.3070**

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7414	7.9865	4.4759	8.8200e-003		0.4156	0.4156		0.3824	0.3824	0.0000	854.8513	854.8513	0.2765		861.7632
Total	**0.7414**	**7.9865**	**4.4759**	**8.8200e-003**		**0.4156**	**0.4156**		**0.3824**	**0.3824**	**0.0000**	**854.8513**	**854.8513**	**0.2765**		**861.7632**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0669	1.9143	0.5533	4.5400e-003	0.1152	9.1600e-003	0.1244	0.0332	8.7600e-003	0.0419		485.0083	485.0083	0.0324		485.8191
Worker	0.1533	0.1087	1.2030	3.3400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		332.2261	332.2261	0.0105		332.4879
Total	**0.2202**	**2.0231**	**1.7563**	**7.8800e-003**	**0.4506**	**0.0120**	**0.4625**	**0.1221**	**0.0113**	**0.1335**		**817.2344**	**817.2344**	**0.0429**		**818.3070**

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5289	5.3198	5.7411	9.4900e-003		0.2580	0.2580		0.2385	0.2385		900.3166	900.3166	0.2801		907.3188
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5289**	**5.3198**	**5.7411**	**9.4900e-003**		**0.2580**	**0.2580**		**0.2385**	**0.2385**		**900.3166**	**900.3166**	**0.2801**		**907.3188**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1533	0.1087	1.2030	3.3400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		332.2261	332.2261	0.0105		332.4879
Total	**0.1533**	**0.1087**	**1.2030**	**3.3400e-003**	**0.3353**	**2.8000e-003**	**0.3381**	**0.0889**	**2.5800e-003**	**0.0915**		**332.2261**	**332.2261**	**0.0105**		**332.4879**

3.4 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5289	5.3198	5.7411	9.4900e-003		0.2580	0.2580		0.2385	0.2385	0.0000	900.3166	900.3166	0.2801		907.3188
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5289**	**5.3198**	**5.7411**	**9.4900e-003**		**0.2580**	**0.2580**		**0.2385**	**0.2385**	**0.0000**	**900.3166**	**900.3166**	**0.2801**		**907.3188**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1533	0.1087	1.2030	3.3400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		332.2261	332.2261	0.0105		332.4879
Total	**0.1533**	**0.1087**	**1.2030**	**3.3400e-003**	**0.3353**	**2.8000e-003**	**0.3381**	**0.0889**	**2.5800e-003**	**0.0915**		**332.2261**	**332.2261**	**0.0105**		**332.4879**

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4970	4.9035	5.7546	9.4900e-003		0.2355	0.2355		0.2178	0.2178		900.0329	900.0329	0.2800		907.0328
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4970**	**4.9035**	**5.7546**	**9.4900e-003**		**0.2355**	**0.2355**		**0.2178**	**0.2178**		**900.0329**	**900.0329**	**0.2800**		**907.0328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		321.6753	321.6753	9.4700e-003		321.9120
Total	**0.1431**	**0.0978**	**1.1048**	**3.2300e-003**	**0.3353**	**2.7100e-003**	**0.3380**	**0.0889**	**2.5000e-003**	**0.0914**		**321.6753**	**321.6753**	**9.4700e-003**		**321.9120**

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4970	4.9035	5.7546	9.4900e-003		0.2355	0.2355		0.2178	0.2178	0.0000	900.0329	900.0329	0.2800		907.0328
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4970**	**4.9035**	**5.7546**	**9.4900e-003**		**0.2355**	**0.2355**		**0.2178**	**0.2178**	**0.0000**	**900.0329**	**900.0329**	**0.2800**		**907.0328**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		321.6753	321.6753	9.4700e-003		321.9120
Total	**0.1431**	**0.0978**	**1.1048**	**3.2300e-003**	**0.3353**	**2.7100e-003**	**0.3380**	**0.0889**	**2.5000e-003**	**0.0914**		**321.6753**	**321.6753**	**9.4700e-003**		**321.9120**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.8992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	**9.1911**	**2.0358**	**2.4234**	**3.9600e-003**		**0.1255**	**0.1255**		**0.1255**	**0.1255**		**375.2641**	**375.2641**	**0.0258**		**375.9079**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		321.6753	321.6753	9.4700e-003		321.9120
Total	**0.1431**	**0.0978**	**1.1048**	**3.2300e-003**	**0.3353**	**2.7100e-003**	**0.3380**	**0.0889**	**2.5000e-003**	**0.0914**		**321.6753**	**321.6753**	**9.4700e-003**		**321.9120**

3.5 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.8992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079
Total	**9.1911**	**2.0358**	**2.4234**	**3.9600e-003**		**0.1255**	**0.1255**		**0.1255**	**0.1255**	**0.0000**	**375.2641**	**375.2641**	**0.0258**		**375.9079**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		321.6753	321.6753	9.4700e-003		321.9120
Total	**0.1431**	**0.0978**	**1.1048**	**3.2300e-003**	**0.3353**	**2.7100e-003**	**0.3380**	**0.0889**	**2.5000e-003**	**0.0914**		**321.6753**	**321.6753**	**9.4700e-003**		**321.9120**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7383	7.4618	16.2917	0.0477	3.6969	0.0436	3.7405	0.9894	0.0407	1.0301		4,860.5145	4,860.5145	0.3044		4,868.1244
Unmitigated	1.7383	7.4618	16.2917	0.0477	3.6969	0.0436	3.7405	0.9894	0.0407	1.0301		4,860.5145	4,860.5145	0.3044		4,868.1244

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	2.00	4.02	4.02	7,413	7,413
High Turnover (Sit Down Restaurant)	990.14	1,267.20	1267.20	1,457,279	1,457,279
Total	992.14	1,271.22	1,271.22	1,464,691	1,464,691

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
High Turnover (Sit Down Restaurant)	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1309	1.1901	0.9997	7.1400e-003		0.0904	0.0904		0.0904	0.0904		1,428.0716	1,428.0716	0.0274	0.0262	1,436.5579
NaturalGas Unmitigated	0.1309	1.1901	0.9997	7.1400e-003		0.0904	0.0904		0.0904	0.0904		1,428.0716	1,428.0716	0.0274	0.0262	1,436.5579

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	12138.6	0.1309	1.1901	0.9997	7.1400e-003		0.0904	0.0904		0.0904	0.0904		1,428.0716	1,428.0716	0.0274	0.0262	1,436.5579
Total		**0.1309**	**1.1901**	**0.9997**	**7.1400e-003**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**1,428.0716**	**1,428.0716**	**0.0274**	**0.0262**	**1,436.5579**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	12.1386	0.1309	1.1901	0.9997	7.1400e-003		0.0904	0.0904		0.0904	0.0904		1,428.0716	1,428.0716	0.0274	0.0262	1,436.5579
Total		**0.1309**	**1.1901**	**0.9997**	**7.1400e-003**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**1,428.0716**	**1,428.0716**	**0.0274**	**0.0262**	**1,436.5579**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4335	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6300e-003	4.6300e-003	1.0000e-005		4.9400e-003
Unmitigated	0.4335	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6300e-003	4.6300e-003	1.0000e-005		4.9400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0488					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3846					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-004	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6300e-003	4.6300e-003	1.0000e-005		4.9400e-003
Total	**0.4335**	**2.0000e-005**	**2.1700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.6300e-003**	**4.6300e-003**	**1.0000e-005**		**4.9400e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0488					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3846					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-004	2.0000e-005	2.1700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.6300e-003	4.6300e-003	1.0000e-005		4.9400e-003
Total	**0.4335**	**2.0000e-005**	**2.1700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.6300e-003**	**4.6300e-003**	**1.0000e-005**		**4.9400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

Biological Resource Search Results

TABLE A. SPECIAL-STATUS PLANT SPECIES AND NATURAL VEGETATION COMMUNITIES[1]

Common Name ***Scientific Name***[2]	**Status**[3]	**General Habitat Description**[4]
marsh sandwort *Arenaria paludicola*	Federal: FE State: SE CRPR: 1B.1	Sandy openings in freshwater or brackish marshes and swamps. Occurs between 3-170 meters (10-560 feet). Blooms May-August.
Braunton's milk- vetch *Astragalus brauntonii*	Federal: FE State: None CRPR: 1B.1	Closed-cone coniferous forest, chaparral, coastal scrub, and valley and foothill grassland. Prefers recent burns or disturbed areas, in stiff gravelly clay soils overlying granite or limestone. Occurs between 4-640 meters (13-2,100 feet). Blooms January-August.
Ventura marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	Federal: FE State: SE CRPR: 1B.1	Coastal dunes, coastal scrub, and edges of coastal salt or brackish marshes and swamps. Occurs between 1-35 meters (3-115 feet). Blooms June-October.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CRPR: 1B.2	Coastal bluff scrub and coastal scrub. Prefers alkaline soil. Occurs between 10-200 meters (30-660 feet). Blooms April-October.
Catalina mariposa lily *Calochortus catalinae*	Federal: None State: None CRPR: 4.2	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Occurs between 15-700 meters (50-2,300 feet). Blooms February-June.
Plummer's mariposa-lily *Calochortus plummerae*	Federal: None State: None CRPR: 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest, on rocky and sandy sites (granitic or alluvial material). Occurs between 100–1,700 meters (330-5,580 feet). Blooms May–July.
lucky morning-glory *Calystegia felix*	Federal: None State: None CRPR: 1B.1	Sometimes alkaline meadows and seeps and alluvial riparian scrub. Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline. Occurs between 30-215 meters (100-705 feet). Blooms March-September.
Lewis' evening primrose *Camissoniopsis lewisii*	Federal: None State: None CRPR 3	Sandy or clay sites in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grasslands. Occurs between 0-300 meters (0-980 feet). Blooms March-June.
southern tarplant *Centromadia parryi* ssp. *australis*	Federal: None State: None CRPR: 1B.1	Marshes and swamps (margins), valley and foothill grassland. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Occurs between 0–480 meters (0-1,570 feet). Blooms May–November.
monkey-flower savory *Clinopodium mimuloides*	Federal: None State: None CRPR: 4.2	Streambank and mesic habitats in chaparral and North Coast coniferous forest. Occurs between 305-1,800 meters (1,000-5,900 feet). Blooms June-October.

Common Name ***Scientific Name*[2]**	**Status[3]**	**General Habitat Description[4]**
small-flowered morning-glory *Convolvuluv simulans*	Federal: None State: None CRPR: 4.2	Prefers clay or serpentine seeps in open areas within chaparral, coastal scrub and valley and foothill grassland. Occurs between 30-700 meters (100-2,300 feet). Blooms March – July.
many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CRPR: 1B.2	Chaparral, coastal scrub, valley and foothill grassland. Often in clay soils. Occurs between 15-790 meters (50-2,520 feet). Blooms April-July.
Los Angeles sunflower *Helianthus nattallii* ssp. *parishii*	Federal: None State: None CRPR: 1A	Coastal salt and freshwater marshes and swamps. Occurs between 10-1,675 meters (30-5,490 feet). Blooms August-October.
vernal barley *Hordeum intercedens*	Federal: None State: None CRPR: 3.2	Coastal dunes, coastal scrub, valley and foothill grasslands in saline flats and depressions, and vernal pools. Occurs between 5-1,000 meters (15-3,280 feet). Blooms March–June.
mesa horkelia *Horkelia cuneata* ssp*. puperula*	Federal: None State: None CRPR: 1B.1	Prefers sandy or gravelly sites in chaparral, cismontane woodland, and coastal scrub. Occurs between 70-810 meters (230-2,660 feet). Blooms February-September.
Southern California black walnut *Juglans californica*	Federal: None State: None CRPR: 4.2	Prefers alluvial sites in chaparral, cismontane woodlands, coastal scrub, and riparian woodland. Occurs between 50-900 meters (160-2,950 feet). Blooms March-August.
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CRPR: 4.3	Prefers chaparral and coastal scrub habitats. Occurs between 1-885 meters (3-2,900 feet). Blooms January-July.
Gambel's watercress *Rorippa gambellii*	Federal: FE State: ST CRPR: 1B.1	Prefers freshwater or brackish marshes and swamps. Occurs between 5-330 meters (15-1,080 feet). Blooms April-October.
prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CRPR: 1B.1	Prefers mesic coastal scrub, meadows and seeps, alkaline valley and foothill grassland, and vernal pools. Occurs between 15-1,210 meters (50-3,970 feet). Blooms April-July.
Hubby's phacelia *Phacelia hubbyi*	Federal: None State: None CRPR: 4.2	Often in gravelly, rocky, talus habitats. Chaparrals, coastal scrub, valley and foothill grasslands. Occurs between 0-1,000 meters (0-3,200 feet). Blooms April-July.
white rabbit-tobacco *Pseudognaphalium leucocephalum*	Federal: None State: None CRPR: 2B.2	Prefers sandy or gravelly sites in riparian woodland, cismontane woodland, coastal scrub, and chaparral. Occurs between 0-2,100 meters (0-6,890 feet). Blooms July-December.
Parish's gooseberry *Ribes divaricatum* var. *parishii*	Federal: None State: None CRPR: 1A	Riparian woodland habitats. Occurs between 65-300 meters (215-985 feet). Blooms February-April.
salt spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CRPR: 2B.2	Prefers alkaline or mesic sites in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas. Occurs between 15-1,530 meters (50-5,020 feet). Blooms March-June.

Common Name ***Scientific Name*[2]**	**Status[3]**	**General Habitat Description[4]**
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CRPR: 1B.2	Prefers sites near ditches, streams and springs in coastal scrub, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, and in meadows and seeps. Occurs between 2–2,040 meters (6-6,690 feet). Blooms July–November.
Greata's aster *Symphyotrichum greatae*	Federal: None State: None CRPR: 1B.3	Mesic sites in broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland. Occurs between 300-2,010 meters (980-6,590 feet). Blooms June-October.
California Walnut Woodland	CNDDB	
Southern Sycamore Alder Riparian Woodland	CNDDB	
Walnut Forest	CNDDB	

[1] Special-status plant species and natural vegetation communities known from the CNDDB and CNPS to occur on the Los Angeles and Hollywood quadrangles.

[2] Nomenclature for special-status plant species conforms to CNPS.

[3] Sensitivity Status Codes

Federal	**FT** - Federally Threatened under the Federal Endangered Species Act
	FE - Federally Endangered under the Federal Endangered Species Act
	FC – A Federal Candidate for listing under the Federal Endangered Species Act
State	**ST** - State Threatened under the California Endangered Species Act
	SE - State Endangered under the California Endangered Species Act
CRPR	California Rare Plant Rank (CRPR)
	1A: Plants presumed extinct in California
	1B: Plants rare, threatened, or endangered in California and elsewhere
	2: Plants rare, threatened, or endangered in California, but more common elsewhere
	3: Plants more information is needed for
	4: Plants of limited distribution – a watch list
	0.1: Seriously threatened in California
	0.2: Fairly endangered in California
	0.3: Not very endangered in California
	California Department of Fish and Wildlife (CDFW)
CNDDB	Tracked by CDFW in the CNDDB

[4] General Habitat Descriptions from CNDDB and CNPS.

TABLE B. SPECIAL-STATUS WILDLIFE SPECIES[1]

Common Name ***Scientific Name***[2]	**Status**[3]	**General Habitat Description**[4]
Invertebrates		
Crotch bumble bee *Bombus crotchii*	Federal: None State: None Other: CNDDB	Occurs at relatively warm and dry sites, including the inner Coast Range of California and the margins of the Mojave Desert.
Busck's gallmoth *Carolella busckana*	Federal: None State: None Other: CNDDB	Coastal scrub dune. More specific habitat requirements are currently unknown.
Reptiles		
California glossy snake *Arizona elegans occidentalis*	Federal: None State: None Other: SSC	Most common is desert habitats but also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass.
coast horned lizard *Phrynosoma blainvillii*	Federal: None State: None Other: SSC	Inhabits coastal sage scrub and chaparral in arid and semiarid climates. Prefers friable, rocky, or shallow sandy soils.
Birds		
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	Federal: None State: None Other: WL	Resident in southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.
burrowing owl *Athene cunicularia*	Federal: None State: None Other: BCC, SSC	Inhabits open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, California ground squirrel.
yellow rail *Coturnicops noveboracensis*	Federal: None State: None Other: SSC	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures.
southwestern willow flycatcher *Empidonax traillii extimus*	Federal: FE State: SE	Riparian woodlands in southern California. Nests in extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters, between 2,000 and 8,000 feet (610-2,440 meters). Dense willow thickets are required for nesting and roosting. Low, exposed branches are used for singing posts/hunting perches.
coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: None Other: SSC	Obligate, permanent resident of coastal sage scrub below 2.500 feet (760 meters) in southern California. Inhabits low, coastal sage scrub in arid washes, on mesas and slopes.
bank swallow *Riparia riparia*	Federal: None State: ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, and ocean to dig nesting hole.

Common Name *Scientific Name*[2]	Status[3]	General Habitat Description[4]
least Bell's vireo *Vireo bellii pusillus*	Federal: FE State: SE	Summer resident of southern California in low riparian habitat in vicinity of water or in dry river bottoms, below 2,000 feet (610 meters).
Mammals		
pallid bat *Antrozous palidus*	Federal: None State: None Other: SSC, WBWG-H	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rock areas for roosting. Roosts must protect bats from high temperatures; very sensitive to disturbance of roosting sites.
western mastiff bat *Eumops perotis californicus*	Federal: None State: None Other: SSC, WBWG-H	Known from open semiarid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grassland, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels. Roost locations are generally high above the ground providing a 3-meter minimum clearance below the entrance for flight. Requires large open-water drinking sites.
hoary bat *Lasiurus cinereus*	Federal: None State: None Other: CNDDB, WBWG-M	May be found at any location in California. Winters along the coast and in southern California, breeding inland and north of the winter range. During migration, may be found at locations far from the normal range. Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees, feeds primarily on moths; requires water.
south coast marsh vole *Microtus californicus stephensi*	Federal: None State: None Other: SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in dead palm fronds and other trees, sometimes in urban areas.
big free-tailed bat *Nyctinomops macrotis*	Federal: None State: None Other: SSC, WBWG-MH	Low-lying arid hilly areas in Southern California to about 6,000 feet. Roosts in crevices and cliffs, buildings, and cavities in trees.
American badger *Taxidae taxus*	Federal: None State: None Other: SSC	Uncommon, permanent resident found throughout most of the state, except in the northern North Coast area. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.

[1] Special-status species known from the CNDDB to occur on the Los Angeles and Hollywood quadrangles.

[2] Nomenclature for special-status wildlife conforms to CNDDB.

[3] Sensitivity Status Codes

Federal	**FT** - Federally Threatened under Federal Endangered Species Act (FESA)
	FE - Federally Endangered under FESA
State	**ST** - State Threatened under California Endangered Species Act (CESA)

SE - State Endangered under CESA
SC – State Candidate for listing under CESA

Other

SSC – Designated as a Species of Special Concern by CDFW
WL – Designated as a Watch List species by CDFW
CNDDB - Tracked by CDFW in the California Natural Diversity Data Base or considered locally sensitive
WBWG-H - Designated by the Western Bat Working Group (WBWG 2017) as High Priority - species that are imperiled or are at high risk of imperilment
WBWG-M - Designated by the WBWG (2017) as Medium Priority – a level of concern that should warrant closer evaluation, more research, and conservation actions of both species and possible threats.

[4] General Habitat Descriptions from CNDDB.

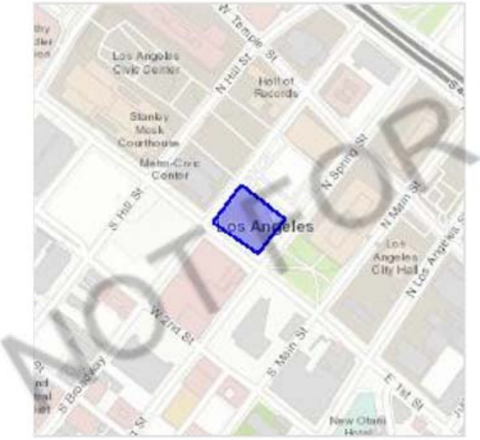
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Los Angeles County, California



Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440
📠 (760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Black Swift Cypseloides niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Costa's Hummingbird Calypte costae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Marbled Godwit Limosa fedoa This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere

Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Song Sparrow Melospiza melodia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Whimbrel Numenius phaeopus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9483	Breeds elsewhere
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (🟩)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (🟨)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

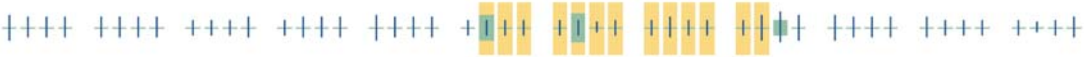
Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

🟩 probability of presence 🟨 breeding season | survey effort – no data

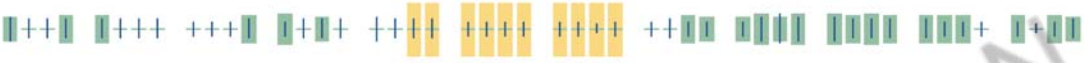
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Allen's Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Black Swift
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

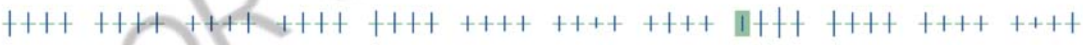


Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

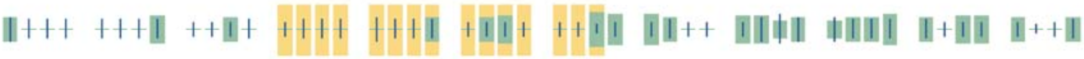


Costa's Hummingbird
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

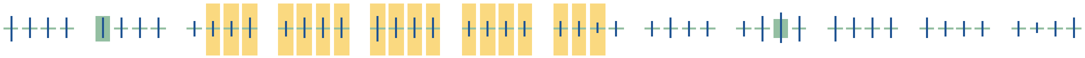
Marbled Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

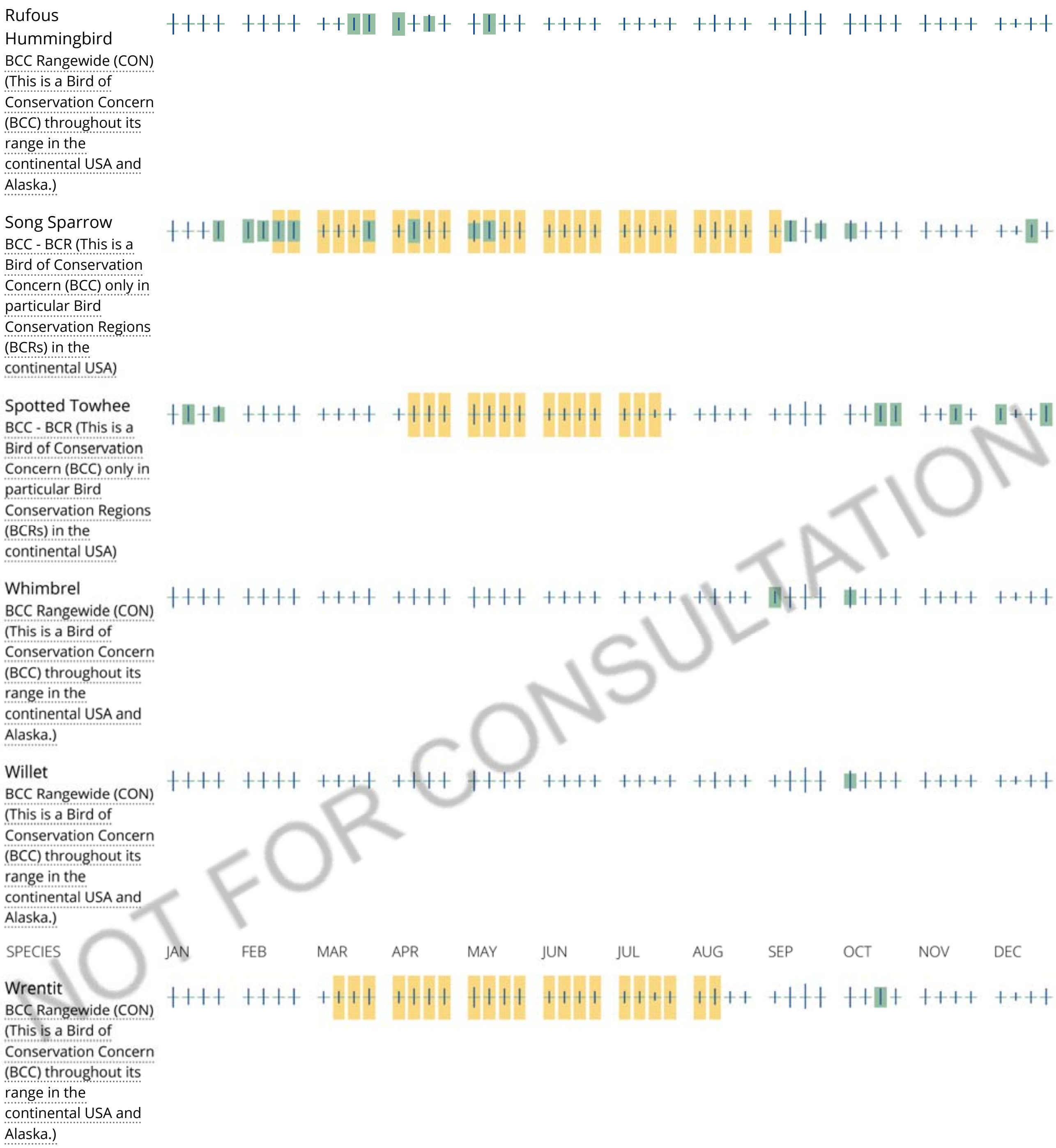


Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)





Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review.

Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX C

Cultural and Paleontological Resources Assessments

CULTURAL RESOURCES ASSESSMENT
FOR THE
FIRST AND BROADWAY CIVIC CENTER PARK PROJECT
LOS ANGELES, CALIFORNIA

Prepared for:

City of Los Angeles
Department of Public Works
Bureau of Engineering

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July 2018

TABLE OF CONTENTS

FIGURES

TABLES

PLATES

EXECUTIVE SUMMARY

The City of Los Angeles (City) Department of Recreation and Parks and City of Los Angeles Department of Public Works, Bureau of Engineering requested a cultural resources assessment of the proposed First and Broadway Civic Center Park Project (project). This document reports a cultural resources assessment conducted in compliance with the California Environmental Quality Act. The City is proposing to construct a 1.96-acre park, featuring both landscaped and hardscaped areas to accommodate a wide variety of park activities, programs, and events, at the northeast corner of West 1st Street and Broadway in downtown Los Angeles. The project site address is located at 126 N. Broadway, Los Angeles, California 90012. The proposed project would also include a new two-story, 19,200-square-foot building for restaurant uses. The primary objectives of the proposed project are to transform the vacant project site to a much needed open space for the community to enjoy; provide additional dining options for the park users and surrounding patrons; and create a world-class iconic park in the center of Los Angeles' Civic Center area.

The Area of Potential Effects (APE) for the project includes the project footprint, or Area of Direct Impact (ADI), and the first tier of adjacent properties that may be indirectly affected by the project. AECOM conducted archival research, including a cultural resources records search at the South Central Coastal Information Center housed at California State University, Fullerton. The records search revealed that the entirety of the ADI was previously studied, and no archaeological resources were identified within the ADI. Several historical properties were identified within 0.25 mile of the ADI, including five (P-19-170974, P-19-173078, P-19-173080, P-19-186619, and P-19-190545) within the APE; however, no historical resources were identified within the ADI. In addition, the boundaries of the Los Angeles Civic Center Historic District (P-19-190545) fall within the APE; however no historical resources were identified within the ADI.

AECOM conducted a survey of the APE to identify cultural resources; five historical resources previously identified in the APE were revisited for evaluation.

AECOM contacted the Native American Heritage Commission to request a Sacred Lands File search for the APE and to identify interested parties for the project. AECOM contacted five Native American groups about the project. The results of the Sacred Lands File request and Native American contact are included in a confidential appendix to this report.

Five historical resources are located in the APE: Court of Flags (P-19-170974), Los Angeles City Hall (P-19-173078), Los Angeles Time Building (P-19-173080), Los Angeles Law Library (P-19-186619), and Los Angeles Civic Center Historic District (P-19-190545). Based on an assessment of the proposed project activities and the nature of the permanent construction associated with the project, the project would not result in a substantial adverse change to the historical resources. The project would result in less-than-significant impacts on the five historical resources that are adjacent to the project site in the APE.

Although no previously documented archaeological resources exist within the APE, undocumented buried archaeological resources may be located within the ADI. The ADI is underlain by deep alluvial deposits dating to the last 10,000 years, and such deposits have the potential to contain significant archaeological resources. The APE is within the boundaries of the original land grant for the historic Pueblo of Los Angeles, which was also the site of a Gabrielino village. Due to the long occupation of the project vicinity from prehistoric to modern times, monitoring of ground-disturbing activities by a qualified archaeological monitor is recommended. Ground-disturbing activities from the surface to at least the base of younger Quaternary alluvium should be monitored for possible buried cultural resources. To guide monitoring for the project, a Cultural Resources Monitoring and Mitigation Plan should be developed by an archaeologist who meets the professional qualifications standards of the Secretary of the Interior for Archaeology.

INTRODUCTION

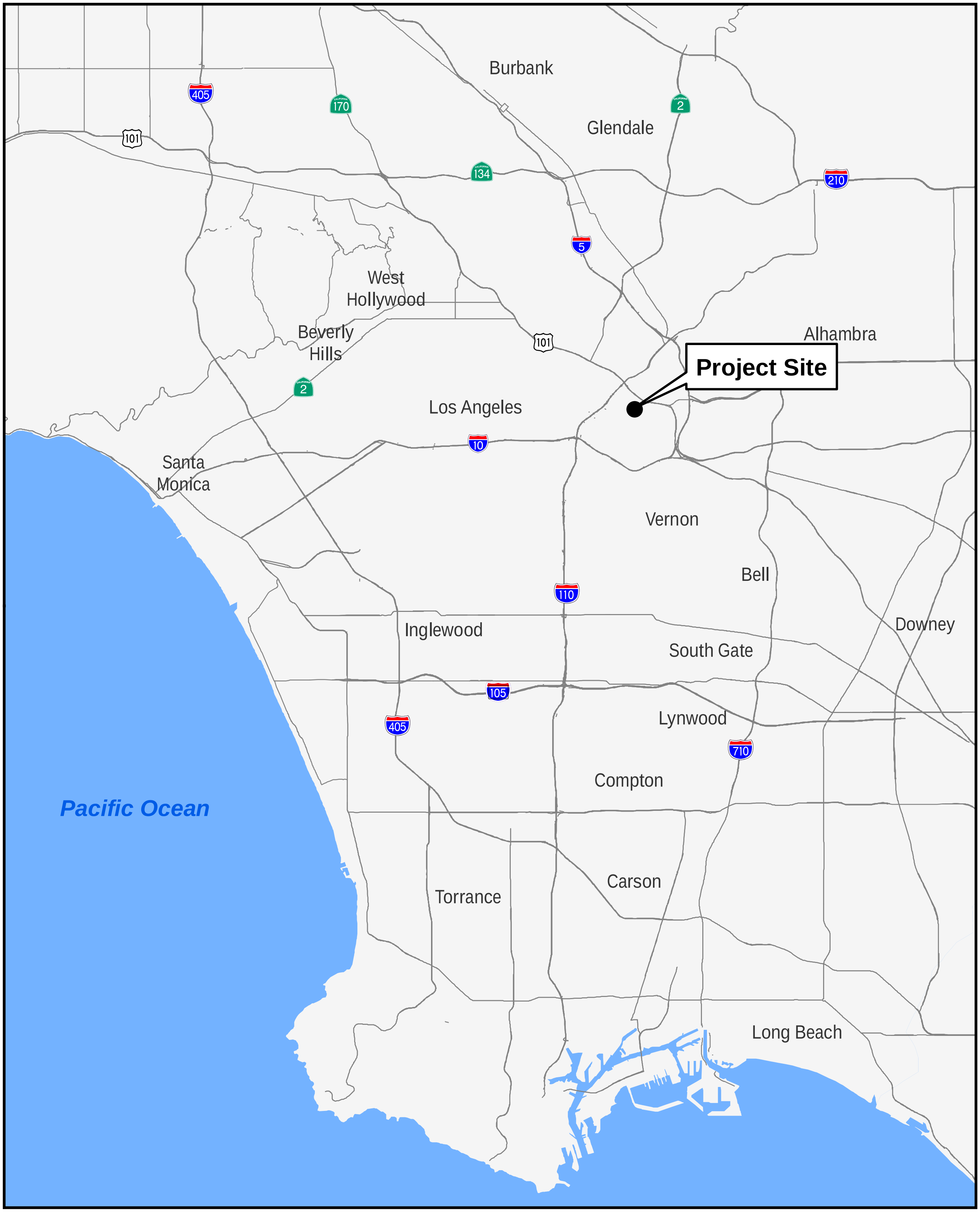
The City of Los Angeles (City) Department of Recreation and Parks (RAP) and City of Los Angeles Department of Public Works, Bureau of Engineering requested a cultural resources assessment of the proposed First and Broadway Civic Center Park Project (project). This document reports a cultural resources assessment conducted in compliance with the California Environmental Quality Act (CEQA). The City is proposing to construct a 1.96-acre park, featuring both landscaped and hardscaped areas to accommodate a wide variety of park activities, programs, and events, at the northeast corner of West 1st Street and Broadway in downtown Los Angeles. The proposed project would also include a new two-story, 19,200-square-foot building for restaurant uses. The primary objectives of the proposed project are to transform the vacant project site to a much needed open space for the community to enjoy; provide additional dining options for the park users and surrounding patrons; and create a world-class iconic park in the center of Los Angeles' Civic Center area.

This document was prepared in support of a Draft Initial Study/Mitigated Negative Declaration prepared in accordance with CEQA, California Public Resources Code (PRC) Section 21000 et seq., and the State CEQA Guidelines, California Code of Regulations Section 15000 et seq.

PROJECT LOCATION

The project is located in the City and County of Los Angeles, within Section 9 of Township 1 South, Range 13 West of the Los Angeles U.S. Geological Survey 7.5-minute quadrangle map (Figure 1). More specifically, the project is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles and is identified as Assessor Parcel Number 5161-005-925. The project site address is located at 126 N. Broadway, Los Angeles, California 90012. The project site is generally bound by Los Angeles County's Grand Park adjacent on the north, Spring Street on the east, 1st Street on the south, and Broadway on the west. The site was formerly the location of a state office building razed in 1976, with the basement portion demolished and backfilled in 2014.

The Area of Potential Effects (APE) for this project includes the project footprint, or Area of Direct Impact (ADI), and the first tier of adjacent properties that may be affected by the project, including the streets surrounding the ADI and the structures facing the ADI along 1st, Broadway, and Spring Streets. As currently planned, the ADI is approximately a 2-acre property. The ADI is currently an undeveloped vacant lot. The ADI is bordered by an existing Los Angeles County Grand Park to the north, 1st Street to the south, Broadway Street to the west, and Spring Street to the east (Figure 2).



Source: Esri 2018

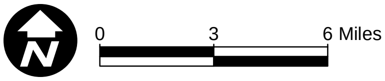
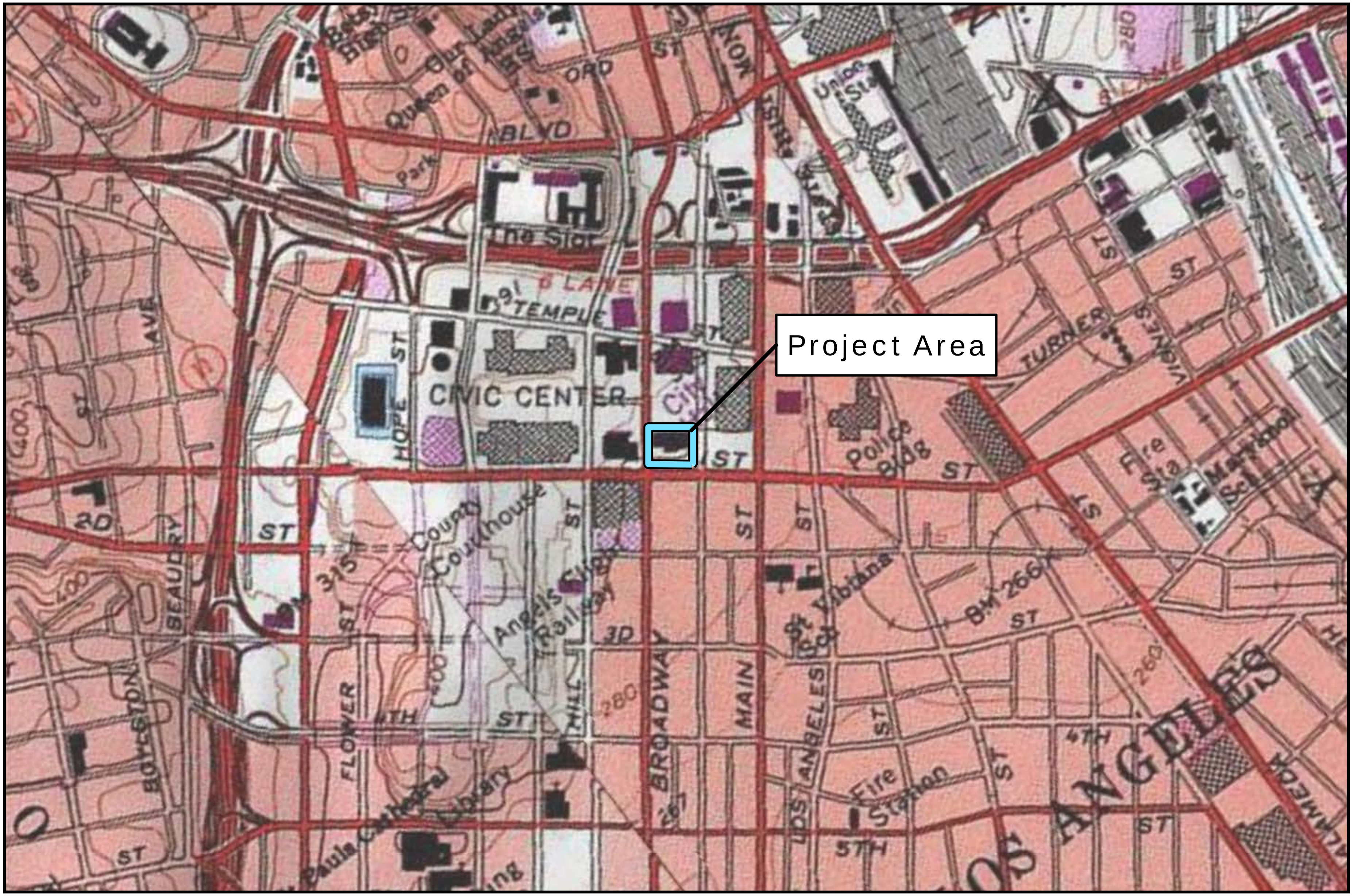


Figure 1

Regional Location Map



Source: Esri 2018.

Figure 2

Project Area Map

PROJECT DESCRIPTION

The proposed project would include the development of a 1.96-acre vacant lot into an open space public park located in the Civic Center area of downtown Los Angeles, which is the result of a design competition previously initiated by the City. The proposed project would incorporate a two-story restaurant building complex with rooftop access within the northwest corner of the park; trees and green spaces for public enjoyment; numerous seating areas; 16 decorative canopies to provide shade and lighting throughout the park; new hardscaping and landscaped areas; and bioswales or other treatment best management practices (BMPs).

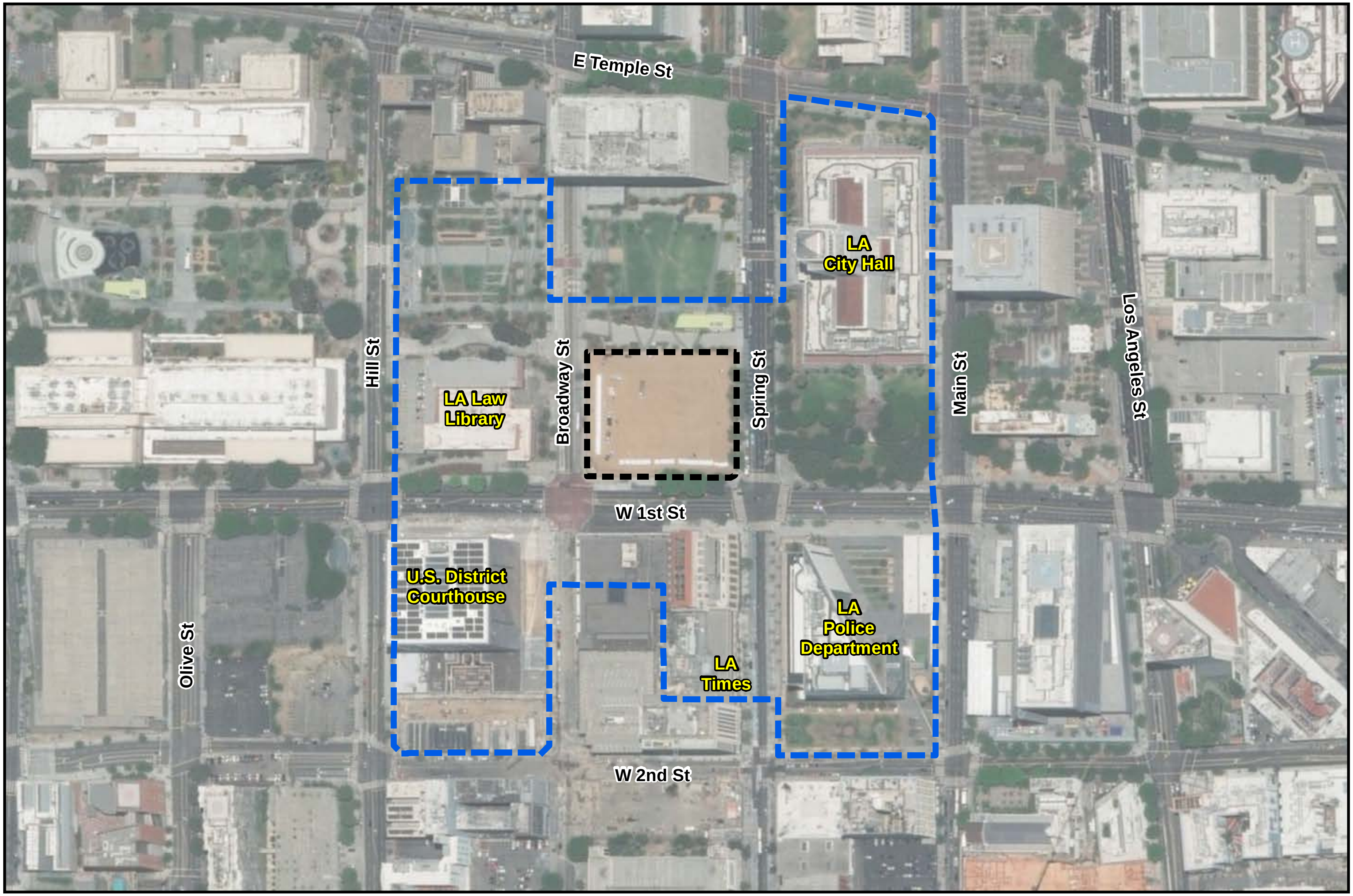
The proposed approximately 19,200-square-foot restaurant building complex would include space for concessionaires to operate all concepts in the facility. The new building would include a rooftop patio and bar, an upscale restaurant, an approximately 1,380-square-foot café with a food service window to serve outdoor patrons, and an approximately 1,500-square-foot outdoor beer garden attached to the two-story structure. A portion of the ground level floor of the restaurant building would be externally shaped into a tiered sitting area with a capacity to seat up to 60 park patrons at a time, and would be shaded by cantilevering above. Rooftop access would be available with an approximately 450-square-foot bar, an approximately 1,330-square-foot dining and lounge area for restaurant patrons, and an approximately 1,260-square-foot public space. A loading zone would be provided on the north side of the building and project site for use in routine restaurant operations. Public restrooms would be provided on the first floor of the restaurant building and at the rooftop. Figure 3 shows the proposed project site plan.

During construction of the project, BMPs would be implemented to prevent any contamination from water runoff entering into storm drains. The proposed project would include a bioswale system that would allow water infiltration into the ground.

The proposed project would include a bicycle parking area, outdoor seating areas, planting of a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting.

Programming for the proposed project would potentially include art exhibit events, concessionaire-sponsored events, and RAP-sponsored events. Approximately four or five art exhibit events and up to 40 concessionaire-sponsored events are anticipated to occur annually. Ten concessionaire-sponsored events are anticipated for each of the four restaurant spaces in the new building. These events may include corporate events, fundraisers, and weddings. In addition, approximately 12 RAP-sponsored events are anticipated to be held annually, which include events organized by City representatives or officials. Other events to be held at the proposed project would be identified by the City at a later date.

As previously mentioned, the project site is located adjacent to the existing Grand Park, which is owned by the County of Los Angeles, and would operate separately. RAP would operate and maintain the proposed project.



Source: Esri 2018.

▨ Area of Direct Impacts

▨ Area of Potential Effects

Figure 3

Area of Potential Effects Map

No new parking spaces would be provided with the proposed project. According to the Los Angeles Municipal Code, 21 parking spaces would be required for the restaurant uses proposed. As such, a parking variance would be required to implement the proposed project. Existing parking facilities within walking distance and public transportation are readily available in the project area for patrons to utilize. The restaurant operators will be required to lease parking spaces from local parking lots or structures in the area to provide nearby parking for restaurant patrons. The proposed project would also include bicycle parking areas on-site, to provide additional modes of access to the project area. The proposed project would be designed in compliance with the Americans with Disabilities Act.

The hours of operation for the restaurant building complex would be 7:00 a.m. to 12:00 a.m. Monday through Thursday, and 8:00 a.m. to 1:00 a.m. Friday through Sunday. The park's hours of operation would be 5:30 a.m. to 10:30 p.m.

The construction of the proposed project would last for approximately two years from summer/fall 2019 to summer/fall 2021. Construction would occur over four phases: mobilization, grading, building construction, and installation of hardscape and landscape components.

REGULATORY SETTING

Cultural resources in California are protected by a number of federal, state, and local regulations, statutes, and ordinances. Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance.

California Environmental Quality Act

CEQA and its guidelines require the evaluation of potential impacts to "historical resources" that are defined as resources listed in or eligible for listing in the California Register of Historical Resources (CRHR) (CNRA 2009). Under PRC Section 5024.1, the CRHR was established to serve as an authoritative guide to the state's significant historical and archaeological resources. The CRHR consists of historical resources that are (a) listed automatically, (b) listed following procedures and criteria adopted by the State Historical Resources Commission, and/or (c) nominated by an application and listed after a public hearing process. The criteria for listing historical resources in the CRHR are consistent with those developed by the National Park Service for listing in the National Register of Historic Places (NRHP), but have been modified for state use to include a range of historical resources that better reflect the history of California.

A historical resource is significant at the local, state, or national level under one or more of the following four criteria (1–4):

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. Is associated with the lives of persons important to local, California, or national history;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Historical resources must also possess integrity, the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance, and retain enough of this historic character or appearance to be recognizable as a historical resource and to convey the reasons for this significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Historical resources may include built environment and archaeological resources, as well as "unique paleontological resources" or "unique geologic features." In addition to historic properties listed in or eligible for listing in the NRHP that are automatically considered historical resources under CEQA, the CRHR includes designated California Historic Landmarks (CHLs), California Points of Historical Interest, and certain locally identified historic resources (see below). CEQA also requires that mitigation measures to reduce or avoid impacts to historical resources be incorporated into a project, and a range of alternatives be considered that could substantially lessen significant impacts to historical resources.

Under CEQA, a project would result in a significant impact to historical resources if it results in a direct or indirect substantial adverse change to the resource. A significant impact would occur if a project would directly or indirectly diminish any of the characteristics that qualify or define a historical resource. A significant impact may be resolved with mitigation measures to avoid the impact or to reduce the impact to a level of less than significant.

PROJECT SETTING

ENVIRONMENTAL SETTING

The project is located in a relatively flat area of the western Los Angeles Basin. The basin is formed by the Santa Monica Mountains to the northwest, the San Gabriel Mountains to the north, and the San Bernardino and San Jacinto Mountains to the east. The basin was formed by alluvial and fluvial deposits derived from these surrounding mountains. Prior to urban development and the channelization of the Los Angeles River, the APE (located less than 0.25 mile west of the Los Angeles River channel) was likely covered with marshes, thickets, riparian woodland, and grassland. Prehistorically, the floodplain forest of the Los Angeles Basin formed one of the most biologically rich habitats in Southern California. Willow, cottonwood, and sycamore, and dense underbrush of alder, hackberry, and shrubs once lined the Los Angeles River as it passed near present-day downtown Los Angeles. Although, historically, most of the Los Angeles River was dry for at least part of the year, shallow bedrock in what is now the Elysian Park area north of downtown forced much of the river's underground water to the surface. This allowed for a steady year-round flow of water through the area that later became known as downtown Los Angeles.

CULTURAL SETTING

This section summarizes the current understanding of major prehistoric and historic developments in and around Los Angeles. This brief overview provides a context within which the cultural resources that might be encountered in the APE may be considered and evaluated. A project-specific context that discusses development of the APE over time is also included.

Prehistory

Following the seminal work of William Wallace (1955) and Claude Warren (1968), the prehistory of the Southern California coastal region is typically divided into Early, Middle, and Late Periods, with an initial Paleo-Indian period dating to the late Pleistocene and early Holocene.

Paleo-Indian Period

In the Southern California coastal region, the earliest evidence of human occupation comes from a handful of sites with early tools and some human remains that have been dated from 7,000 years ago to greater than 10,000 years old (Moratto 1984:53).

Early Period (5,000 to 3,000 B.C.)

Although people are known to have inhabited what is now Southern California beginning at least 13,000 years Before Present (Arnold et al. 2004), the first solid evidence of human occupation in the Los Angeles Basin dates to roughly 7000 B.C. and is associated with a period known as the Early Period or the Millingstone Horizon (Wallace 1955; Warren 1968). Millingstone populations established permanent settlements that were located primarily on the coast and in the vicinity of estuaries, lagoons, lakes, streams, and marshes where a variety of resources, including seeds, fish, shellfish, small mammals, and birds, were exploited. Early Period occupations are typically identified by the presence of handstones (manos) and millingstones (metates). Sites from this time period typically contain shell middens, large numbers of milling implements, crude core and cobble tools, flaked stone tools, distinctive cogged stone implements, and infrequent side-notched dart points (Fenenga 1953). The focus at inland sites appears to be in plant food processing and hunting. Along the coast, populations invested in maritime food gathering strategies, including close-shore and deep-sea fishing, as well as shellfish collection (Grenda 1997).

Middle Period (3000 B.C. to AD 1000)

Although many aspects of Millingstone culture persisted, by 3000 B.C., a number of socioeconomic changes occurred, as understood through changes in material culture (Erlandson 1994; Wallace 1955; Warren 1968). These changes are associated with the period known as the Middle Period or Intermediate Horizon (Wallace 1955). The mortar and pestle were introduced during this period, suggesting an increased reliance on hard plant foods such as acorns (Altschul and Grenda 2002). Increasing population size coincides with intensified exploitation of terrestrial and marine resources (Erlandson 1994). This was accomplished, in part, through use of new technological innovations such as the circular shell fishhook on the coast, and, in inland areas, use of the mortar and pestle to process an important new vegetal food staple, acorns, and the dart and atlatl, resulting in a more diverse hunting capability (Warren 1968). A shift in settlement patterns from smaller to larger and more centralized habitations is understood by many researchers as an indicator of increasingly territorial and sedentary populations (Erlandson 1994). During the Middle Period, specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and non-utilitarian materials were acquired, and travel routes were extended.

Late Period (AD 1000 to 1782)

The Late Prehistoric period, spanning from approximately AD 1000 to the Spanish Mission era, is the period associated with the florescence of contemporary Native American groups. The Late Period is notable for a dramatic increase in the number of habitation and food processing sites. These sites include more bone tools, numerous types of *Olivella* shell beads, circular fishhooks, and occasional pottery vessels (Miller 1991). Between AD 1000 and 1250, small arrow-sized projectile points, of the Desert side-notched and Cottonwood triangular series, were adopted along what is now the Southern California coast (Altschul and Grenda 2002). Following European contact, glass trade beads and metal items also appeared in the archaeological record. Burial practices shifted to cremation in what is now the Los Angeles Basin and northern Orange County. However, at many coastal and most Channel Island sites, interment remained the common practice (Moratto 1984).

Some researchers argue that the changes seen at the beginning of this period reflect the movement of Shoshonean speakers from the eastern deserts into the area that is now the Southern California coast. Some researchers, though, suggest that the movement of desert-adapted Shoshonean speakers occurred as much as 2,000 years earlier (Bean and Smith 1978; Sutton 2009).

At the time of European contact, the project vicinity was occupied by Shoshonean-speaking Gabrielino people who controlled what is now the Los Angeles Basin and Orange County down to Aliso Creek (Kroeber 1925). The northern San Fernando Valley was the northernmost extent of the territory occupied by people who the Spanish referred to as the *Fernadeño*, whose name was derived from nearby Mission San Fernando. The *Fernadeño* spoke one of four regional Uto-Aztecan dialects of Gabrielino, a Cupan language in the Takic family, and were culturally identical to the Gabrielino. The Tataviam and Chumash, of the Hokan Chumashan language family, lived to the north and west of this territory, respectively, and it is likely that the territorial boundaries between these linguistically distinct groups fluctuated in prehistoric times (Bean and Smith 1978; Shipley 1978).

Occupying what is now the southern Channel Islands and adjacent mainland areas of Los Angeles and Orange Counties, the Gabrielino are reported to have been second only to their Chumash neighbors in terms of population size, regional influence, and degree of sedentism (Bean and Smith 1978). The Gabrielino are estimated to have numbered around 5,000 in the pre-contact period (Kroeber 1925). Maps produced by early explorers indicate the existence of at least 40 Gabrielino villages, but as many as 100 may have existed prior to contact with Europeans (Bean and Smith 1978; McCawley 1996; Reid 1939[1852]).

Prehistoric subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls, rabbit drives, and by burning undergrowth, and larger game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison (Bean and Smith 1978; Reid 1939[1852]). The primary plant resources were the acorn, gathered in the fall and processed with mortars and pestles, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly leafed-cherry (Reid 1939[1852]).

History

Early European exploration of the coastal and inland trade routes of what became California began in the 1500s, but more than a century passed before Spain mounted a concerted colonization effort. The historical era in California begins with Spanish colonization and is often divided into three distinctive chronological and historical periods: the Spanish or Mission Period (1542 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present).

Spanish Period (1542 to 1821)

Before direct Spanish settlement, more than two centuries of sporadic European exploration had spread disease and European goods throughout what became California, from the coasts and bays to the mountains and deserts. Introduced diseases reduced Native American populations in the area by as much as 75% (Larson et al. 1994).

The Portola Expedition of 1769 was likely the first time that Europeans made direct contact with the people living in the vicinity of the project site (Johnston 1962). Passing through what is now the Los Angeles area, Portola reached the San Gabriel Valley on August 2, 1769, and traveled west through a pass between two hills where they encountered the Los Angeles River and camped on its east bank near the present-day North Broadway Bridge. Father Juan Crespi, who was traveling with Portola and documenting their travels, recorded that they "entered a spacious valley, well grown with cottonwoods and alders, among which ran a beautiful river. This plain where the river runs is very extensive and… is the most suitable site for a large settlement" (The River Project 2001). Father Crespi goes on to describe this "green, lush valley," its "very full flowing, wide river," the "riot of color" in the hills, and the abundance of native grapevines, wild roses, grizzly, antelope, quail, and steelhead trout. Father Crespi observed that the soil was rich and "capable of supporting every kind of grain and fruit which may be planted." The river was named *El Rio y Valle de Nuestra Senora la Reina de Los Angeles de la Porciuncula*.

Gabrielino villages are reported by early explorers to have been most abundant near the Los Angeles River, in the area north of what is now downtown known as the Glendale Narrows, and those areas along the river's various outlets into the ocean. Among those villages north of what is now downtown Los Angeles were *Maawnga* near present-day Griffith Park; *Totongna* and *Kawengna* in the present-day San Fernando Valley; *Hahamongna*, northeast of present-day Glendale; and, closest to the APE, the village of *Ya'angna*, in present-day downtown Los Angeles. At the time of Portola's visit, *Ya'angna* is reported to have supported a population of at least 200 (Gumprecht 1999), and was later reported to have contained anywhere from 500 to 1,500 huts, implying an even greater population (Reid 1939 [1852]). The exact location of *Ya'angna* continues to be debated, although some believe it to have been located at the site of the present-day Civic Center (McCawley 1996). This settlement, widely regarded as a precursor of modern Los Angeles, was abandoned by 1836.

Gabrielino populations were particularly devastated by early Spanish colonization efforts, such that, by the late 1800s, very few Gabrielino people remained in their native homeland. Some fled to refuges with their kin farther inland or to villages of neighboring tribes to the north or south (Kroeber 1925). Many others perished from disease and conflict with the invading Spanish, who established the Pueblo of Los Angeles in the middle of Gabrielino territory. This early colonial pueblo quickly became a major political and economic center due to its strategic location along natural transportation corridors that ran east to west and north to south.

Missions were established in the years that followed the Portola expedition, the fourth being the Mission San Gabriel Arcangel founded in 1771 near the present-day city of Montebello. By the early 1800s, the majority of the surviving Gabrielino population had entered the mission system. The Gabrielino inhabiting present-day Los Angeles County were under the jurisdiction of either Mission San Gabriel or Mission San Fernando. Mission life promised the Native Americans security in a time when their traditional trade and political alliances were failing, and epidemics and subsistence instabilities were increasing (Jackson 1999).

On September 4, 1781, 12 years after Crespi's initial visit, El Pueblo de la Reina de Los Angeles was established, not far from the site where Portola and his men camped. Watered by the river's ample flow and the area's rich soils, the original pueblo occupied 28 square miles and consisted of a central square surrounded by 12 houses and a series of 36 agricultural fields occupying 250 acres, plotted to the east between the town and the river (Gumprecht 1999). Los Angeles' original central square was located near the present-day intersection of North Broadway and Cesar E. Chavez Boulevard. A Native American settlement was nearby, providing labor to the pueblo into the American period.

An irrigation system to carry water from the river to the fields and the pueblo was the community's first priority, and it was constructed almost immediately. The main irrigation ditch, Zanja Madre, was completed by the end of October 1781. It was constructed in the area of present-day Elysian Park, and carried water south along present-day Alameda Street to the pueblo and beyond to the fields and orchards (Gumprecht 1999).

By 1786, the flourishing pueblo attained self-sufficiency, and funding by the Spanish government ceased (Gumprecht 1999). Fed by a steady supply of water and an expanding irrigation system, agriculture and ranching grew. By the early 1800s, the pueblo produced 47 cultigens. Among the most popular were grapes used for the production of wine (Gumprecht 1999). Vineyards blanketed the landscape between present-day San Pedro Street and the Los Angeles River. By 1830, an estimated 100,000 vines were being cultivated at 26 Los Angeles vineyards (Gumprecht 1999).

Mexican Period (1821 to 1848)

Alta California became a state when Mexico won its independence from Spain in 1821. Independence and the removal of economic restrictions attracted settlers to the town of Los Angeles, and it slowly grew in size and expanded to the south and west. The population nearly doubled during this period, increasing from 650 to 1,250 between 1822 and 1845 (Weber 1982:226). Until 1832, Los Angeles was essentially a military post, with all able-bodied males listed on the muster rolls and required to perform guard duty and field duty whenever circumstances required. The Mexican Congress elevated Los Angeles from pueblo to city status in 1835, declaring it the new state capital (Robinson 1979:238–239).

After independence, the authority of the Alta California missions gradually declined, culminating with their secularization in 1834. Although the Mexican government directed that each mission's lands, livestock, and equipment be divided among its converts, the majority of these holdings quickly fell into non-Indigenous hands. Mission buildings were abandoned and fell into decay. If mission life was difficult for Native Americans, secularization was worse. After two generations of forced dependence on the missions, they were suddenly disenfranchised. After secularization, "nearly all of the Gabrielinos went north, while those of San Diego, San Luis, and San Juan overran this county, filling the Angeles and surrounding ranchos with more servants than were required" (Reid 1977 [1851]:104).

The first party of American immigrants arrived in Los Angeles in 1841, although Americans and Mexicans had previously been tied through commerce. As the possibility of a takeover of California by the United States loomed large, the Mexican government increased the number of land grants in an effort to keep the land in the hands of upper-class Californios, including the Domínguez, Lugo, and Sepúlveda families (Wilkman and Wilkman 2006:14–17). Mexican Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and

1846, putting most of the state's lands into private ownership for the first time (Gumprecht 1999). Having been established as a pueblo, property within Los Angeles could not be dispersed by the governor, and this task instead fell under the city council's jurisdiction (Robinson 1979).

American Period (1848 to Present)

The United States took control of California after the Mexican-American War of 1846, and seized Monterey, San Francisco, San Diego, and the state capital, Los Angeles, with little resistance. Local unrest soon bubbled to the surface, and Los Angeles slipped from American control in 1847. Approximately 600 U.S. sailors, Marines, Army dragoons, and mountain men converged under the leadership of Colonel Stephen W. Kearney and Commodore Robert F. Stockton in early January of that year to challenge the California resistance. Hostilities officially ended with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, which included California; Nevada; and Utah; and parts of Colorado, Arizona, New Mexico, and Wyoming. The conquered territory represented nearly half of Mexico's pre-1846 holdings. California joined the Union in 1850 as the 31st state (Wilkman and Wilkman 2006:15).

The discovery of gold in Northern California in 1849 gave rise to the California Gold Rush, leading to an enormous influx of American citizens in the 1850s and 1860s. These "forty-niners" and the people who followed them rapidly displaced the old rancho families, and Southern California's prosperity in the 1850s was largely a result of the increased demand for cattle, both for meat and hides, created by the Gold Rush. Southern California was able to meet this need, and the local ranching community profited handsomely (Bell 1881: 26).

The 1850s witnessed a number of important changes for Los Angeles. An act of the state legislature incorporated the city on April 4, 1850, granting it all the rights, claims, and powers formerly held by the pueblo. In July of that year, the city elected a mayor, treasurer, assessor, and marshal, along with a seven-member Common Council. Six of the seven original members of the Common Council had been either native born or naturalized citizens of Mexico, prior to gaining American citizenship (Guinn 1915: 270–271). The Common Council voted to continue a number of the established laws of the Mexican city council (the *ayuntamiento*), and also put in place a number of ordinances to address new problems and concerns.

As a result of growing population and the increasing diversion of water, the once plentiful water supply provided by the Los Angeles River began to dwindle. The once extensive floodplain dried up; the lushly forested landscape had been cleared for construction materials and fuel; and the tens of thousands of head of cattle, horses, and sheep owned by ranchers had decimated the local grasses (Gumprecht 1999).

As Southern California grew, the Los Angeles River became an inadequate supply of water for the residential and industrial development that gradually displaced the farmland. With the arrival of the Southern Pacific Railroad (SPRR), the demand became so great that the Los Angeles City Water Company began tapping the river's water supply before it even reached the surface. Water supply reservoirs began to be used, and the *zanja* system was dismantled ditch by ditch (Gumprecht 1999). By 1902, the Los Angeles municipal government took back jurisdiction of its own water needs and purchased the existing water system, which consisted of seven reservoirs and 337 miles of pipe.

Not long after, under the direction of William Mulholland, the Los Angeles Bureau of Water Works and Supply constructed the 233-mile-long Los Angeles Aqueduct. This 5-year project, completed in 1913, employed the labor of thousands of men, and brought millions of gallons of water from the Owens Valley into the San Fernando (now Los Angeles) Reservoir (Gumprecht 1999).

When the SPRR extended its line from San Francisco to Los Angeles in 1876, newcomers poured into Los Angeles and the population nearly doubled between 1870 and 1880. With the completion of several additional railroads, including the Santa Fe Railroad in 1886, immigration to Southern California became easier. Immigrants to Southern California also were attracted by the favorable climate and agricultural potential. Increased Anglo-American immigration into the area caused increased urbanization of Los Angeles. Commercial and industrial enterprises began to overshadow agriculture, and, by the end of the nineteenth century, the commercial center of the city had expanded, with suburban developments at its periphery. The subdivision of the large ranchos took place during this time. The city’s population rose from 11,000 in 1880 to 50,000 by 1890 (Meyer 1981:45).

The beginning of the twentieth century saw the florescence of a uniquely suburban metropolis, where a vast network of residential communities overshadowed city centers, where the single-family home was valued over the high-rise, and where private space took precedence over public space (Hawthorne 2006). Heavy industries began to locate factories and plants in the Los Angeles area and the community experienced a boom period during World War II as the demand for wartime products, such as aircraft parts, rose. The boom period continued after the war, resulting in a housing shortage and the construction of dozens of freeways, radically altering the character of Los Angeles by simultaneously dividing local neighborhoods and connecting outlying communities.

Site-Specific History

The project site is located within the boundaries of the original 17,924-acre Pueblo de Los Angeles land grant, but far from the main settlement and away from the path of the zanja. It was likely used for cattle grazing during the Spanish and Mexican periods. The property is shown on the first official map of Los Angeles, prepared by Lieutenant E.O.C. Ord in 1849, but appears undeveloped with roads along the borders of the property, including Spring Street and First Street (Ord 1849). Fort Moore was established on the hill north of the property during the Mexican-American War. Broadway, depicted as Fort Street, terminated at the fort. The property also appears on the 1876 and 1884 Stevenson maps, as part of an irregular trapezoidal parcel (due to its topography) (Stevenson 1876; 1884).

In 1882, the Larronde Block was built at the southeast corner of the project area, at the intersection of 1st Street and Spring Street (Plate 1). The Los Angeles Times described it as “one of the handsomest buildings on Spring Street” (LAT 1882:4). The two-story brick Schumacher

Block was built immediately to the north of the Larronde Block in 1883, "fill[ing] a gap that has long offended the esthetic eye" (LAT 1883).

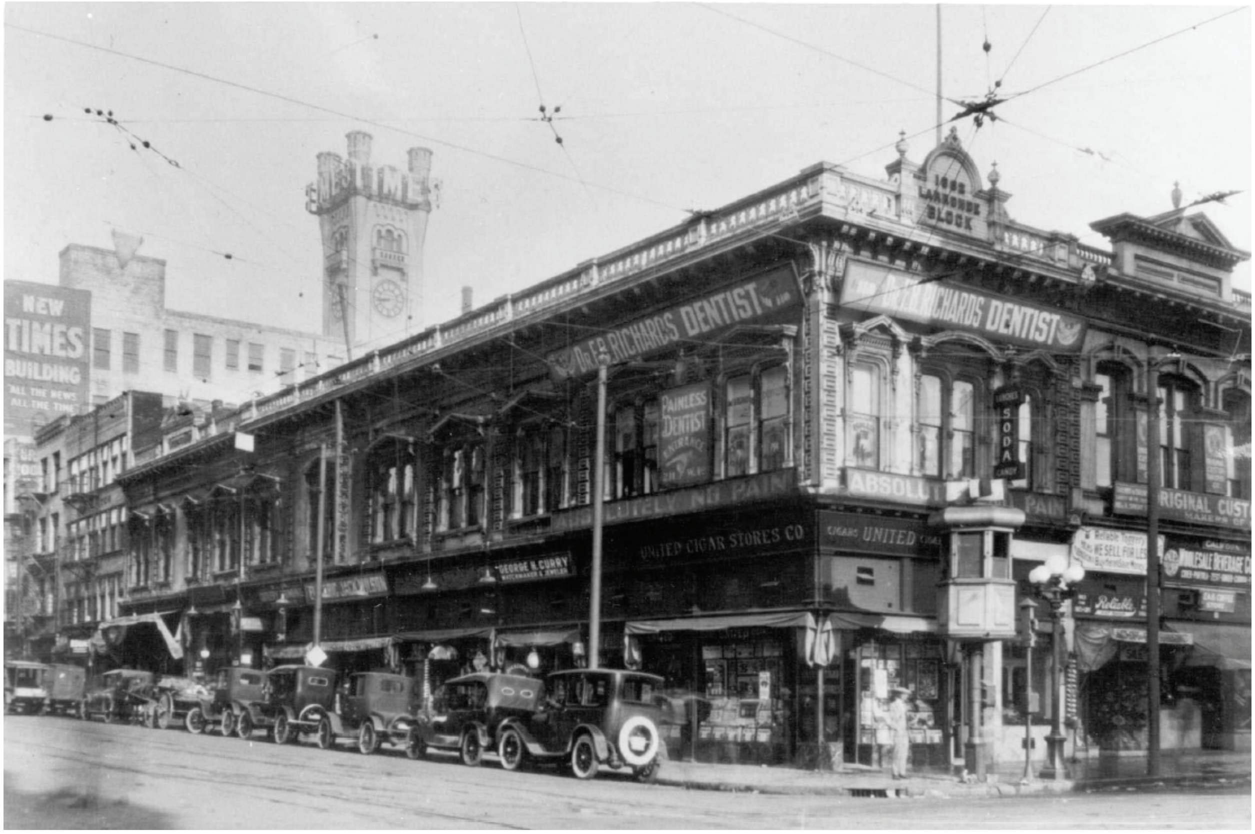


Plate 1. The project area from the intersection of Spring Street and 1st Street looking northwest, ca. 1915. Larronde Block in the foreground, the second Los Angeles Times Building at left (LAhistory n.d.).

The northeast corner of 1st Street and Broadway was the site of the first and second Los Angeles Times buildings. On July 1, 1887, the first Los Angeles Times building opened. Known locally as "the fortress," the brick building stood six stories tall. The building stood until approximately 1:07 a.m. on October 1, 1910, when the building was bombed by a group known as "the wrecking crew," an organized gang within the International Association of Bridge and Structural Iron Workers that targeted open shop businesses and projects across the United States. Twenty men were killed and the building was destroyed. The second Los Angeles Times building was erected on the same footprint, but taller and with a deeper basement; it opened on the second anniversary of the bombing (Meares 2014).

By 1888, the project area was densely packed with brick and frame buildings (Sanborn Fire Insurance Maps 1888). Over the next few decades, gaps were filled and frame construction replaced by brick. The last buildings to be constructed on the property may have been the five-story brick Thorpe Building and the D.J. Girvin Building. Both were constructed in 1904 in the northeast corner of the project area, replacing earlier buildings (LAT 1904, 1931). As shown on the 1910 to 1921 Baist Real Estate Maps, the property was densely developed with brick buildings (Baist 1910; 1921). Among the buildings on the property were the Schumacher Block, the Larronde Block, the Benton, the second Los Angeles Times Building, the Medford Hotel, the Union Mutual Building, the Thorpe Building, and the D.J. Girvin Building.

By 1907, landscape architect Charles Mulford Robinson was already reimagining the city, designing a proposed ideal administrative center for the city (LAT 1907). At the same time, Robinson’s plan required demolishing much of the city’s center. In 1909, the City Council committed itself to beginning such a plan by purchasing the Temple Block for the site of the future City Hall (LAT 1909), although it would be another 16 years before the hall was built. Over the course of the 1910s, 1920s, and 1930s, land was purchased, buildings were demolished, and the planned civic center was designed and redesigned.

Two major construction projects connected with the civic center project resulted in converting the city block into a single parcel and demolishing all the preexisting buildings on the block. The Works Progress Administration constructed the California State Building in 1931, which required the demolition of most of the buildings on the property (LAT 1931) (Plate 2). First Street was widened, resulting in the demolition of the rest of the structures, including the Los Angeles Times building, and the land that was not required for the street was incorporated into the state building grounds (LAT 1932a). Forty-four state departments were housed in the new building, which stood 13 stories tall (LAT 1932b).

On February 9, 1971, a 6.5 magnitude earthquake struck in the foothills of the San Gabriel Mountains. Many buildings and structures in Los Angeles were affected by the quake, including the California State Building. In 1974, the building was found unsound. The cost of repairing the aging structure, which was already too small to house the State’s diverse government offices, was determined to be greater than building anew. The above-ground portion of the building was demolished in 1976, but recovery from the 1973–1975 recession and conflicting visions for the Civic Center hindered construction. The subsurface portion of the building continued to be used for events such as disaster drills (Kim 2014).

The project area belonged to the State of California from at least 1931 until 2013. In 2013, the City purchased the land from the State with the intention of constructing a park on the property. The subsurface portion of the California State Building was finally demolished beginning in April 2014 (Kim 2014).

The immediate area surrounding the project site was completely developed by the 1960s. The Los Angeles Law Library located at 301 West 1st Street was constructed 1951–1953, with an addition built 1969–1970. The Los Angeles Police Department headquarters building located at 100 West 1st Street was constructed in 2008. Grand Park, located northeast of the project site, was constructed in 2012. The First Street United States District Courthouse, located at 350 West 1st Street, was completed in 2016.

Plate 2. California State Building under Construction; Larronde Block (left) and second Times Building (left, background), 1931. View northwest from intersection of Spring Street and 1st Street (Water and Power n.d.).

ARCHIVAL RESEARCH

Archival research for this project was conducted on June 13, 2018, at the South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The research focused on the identification of previously recorded cultural resources within the project area and a 0.25-mile radius (study area).

SCCIC RECORDS SEARCH

The records search at SCCIC included review of previously recorded cultural resources site records and reports; historic site and property inventories; and historic maps. Inventories of the NRHP, CRHR, California Historic Resources Inventory, California Historical Landmarks, and California Points of Interest were also reviewed to identify cultural resources within the study area. The entirety of the project area has been previously investigated for built resources, but none of the project area has been subject to archaeological survey. The records search revealed that 19 cultural resource investigations were previously conducted within 0.25 mile of the project area (Table 1). Two of the 19 studies overlap the project area. These cultural resource investigations include monitoring reports, archaeological surveys, and built environment surveys.

Table 1. Previous Surveys Conducted within 0.25 Mile of the Project

Author	Report (LA-)	Description	Date
Greenwood, Roberta S.	483	Archaeological Resources Survey the Proposed Downtown People Mover Project Corridor Area	1978
Anonymous	1577	Identification Study for Cultural Resources within Proposed Metro Rail Subway Station Locations in Metropolitan, Los Angeles, CA	1985
Anonymous	1578	Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report	1983
Greenwood, Roberta S.	3103	Cultural Resources Impact Mitigation Program Angeles Metro Red Line Segment 1	1993
Anonymous	3496	Draft Environmental Impact Report Transit Corridor Specific Plan Park Mile Specific Plan Amendments	n.d.
Frierman, Jay D.	3910	Monitoring and Resrtoration and Rehabilitation of the Sepulveda Block, 622-624 North Main Street, El Pueblo de Los Angeles State Historic Park	1983
Ashkar, Shahira	4834	Cultural Resources Inventory Report for Williams Communications, Inc. Proposed Fiber Optic Cable System Installation Project, Los Angeles to Anaheim, Los Angeles and Orange Counties	1999

Author	Report (LA-)	Description	Date
Ashkar, Shahira	4835	Cultural Resources Inventory Report for Williams Communications, Inc., Proposed Fiber Optic Cable System Installation Project, Los Angeles to Riverside, Los Angeles and Riverside Counties	1999
Strauss, Monica	7888	Archaeological Resources Assessment for the Proposed Public Safety Facilities Master Plan Project, City of Los Angeles, California	2004
Snyder, John W., Stephen Mikesell, and Pierzinski	8252	Request for Determination of Eligibility for Inclusion in the National Register of Historic Places/Historic Bridges California: Concrete Arch, Suspension, Steel Girder and Steel Arch	1986
Gregory, Carrie, and Margarita Wuellner	8514	Historical Assessment and Technical Report for the Proposed Public Safety Facilities Master Plan, Los Angeles, California	2004
McKenna, Jeanette A.	8516	Re: 3rd and San Pedro Archaeological Monitoring (Addendnum)	2004
Anonymous	8967	San Pedro Apartments, Little Tokyo Redevelopment Project, Los Angeles, California	2007
Anonymous	*10507	Technical Report – Historical/Architectural Resources – Los Angeles Rail Rapid Transit Project “Metro Rail” Draft Environmental Impact Statement and Environmental Impact Report	1983
Carnevale, Mike	11165	Draft – Environmental Impact Statement, United States General Services Administration, GSA Document Num ZCA81642/1999 Los Angeles U.S. Courthouse, Los Angeles, California	2001
Anonymous	11914	U.S. Federal Courthouse, 312 North Spring Street, Los Angeles, California. Update of 1986 Historic Structure Report, Final	2011
Bonner, Wayne	11954	Cultural Resources Records Search and Site Visit Results for Sprint Nextel Candidate LA03XC041 (Angels Flight), 242 South Broadway, Los Angeles, Los Angeles County, California	2012
Rogers, Leslie	*12584	Restoration of Historic Streetcar Service in Downtown Los Angeles	2013
Wiley, Nancy, Connie Colocho, and Andrew Garrison	12648	Archaeological Monitoring Results: The Los Angeles US Courthouse, Los Angeles, CA	2014

* Indicates study overlapping with APE.

The records search also indicated that 73 cultural resources have been previously recorded within 0.25 mile of the APE. None of these resources occur within the ADI. Of the 73 previously recorded resources, 11 are archaeological sites, and 62 are built resources. Of the archaeological sites, 10 are historic in age, and one consists of human remains that may be prehistoric or historic. Table 2 summarizes these resources and their eligibility for the NRHP, CRHR, and/or local listings.

Table 2. Previously Recorded Cultural Resources within 0.25 Mile of the Project

Permanent Trinomial (CA-LAN-)	P-Number (P-19-)	Description	Time Period	Eligibility Status
2741	002741	Buried Foundation/Structure Pads	Unknown	Unevaluated
3097	003097	Buried Foundation/Structure Pads	Mid-1900s	Unevaluated
3129	003129	Historic refuse scatter	1880–1914	Unevaluated
3337	003337	Historic refuse scatter	Pre-1920s	Unevaluated
3347	003347	Werdin place stone pavement	ca. 1800-1900	Unevaluated
4114	004114	Structural features and historic refuse scatter	1880–1914	Unevaluated
4198H	004198	Site composed of historic refuse deposits, privies, and structural remains	1848–1945	Ineligible for CRHR
4451	004451	Foundations and historic refuse scatter	Mid-1900s	Unevaluated
	100301	Isolate glass fragment	ca. 1860	Unevaluated
	120015	Human Remains	1957	Unevaluated
	120028	Buried Foundation/Structure Pads	1900s	Unevaluated
	166838	Angels Flight Railway	1905	Eligible for NRHP and/or CRHR
	166842	Religious building	1876	Eligible for NRHP and/or CRHR
	166858	Commercial building	1894	Eligible for NRHP and/or CRHR
	166982	Commercial building	1895	Eligible for local designation
	167099	Landscape architecture	1974	Ineligible for NRHP, CRHR, or local designation
	*170974	Court of Flags	1960s	Eligible for NRHP and/or CRHR
	*173078	Los Angeles City Hall	1928	Eligible for NRHP and/or CRHR; listed or eligible separately under local ordinance
	173079	Commercial building	1923	Unevaluated
	*173080	Los Angeles Times Building	1934	Eligible for NRHP and/or CRHR
	173081	Fire Station No. 3	1924	Individual property determined eligible for NRHP through Section 106 and listed in CRHR
	173083	Commercial building	1918	Ineligible for NRHP, CRHR, or local designation

Permanent Trinomial (CA-LAN-)	P-Number (P-19-)	Description	Time Period	Eligibility Status
	173103	Commercial building	1926	Ineligible for NRHP, CRHR, or local designation
	173104	Commercial building	1906	Eligible for NRHP and/or CRHR
	173174	Government building	1926	Eligible for NRHP and/or CRHR
	173225	Government building	1937-1939	Eligible for NRHP and/or CRHR
	173260	Commercial building	1904	Ineligible for NRHP, CRHR, or local designation
	174134	Commercial building	ca. 1900	Ineligible for NRHP
	174925	Commercial building	1948	Eligible for NRHP and/or CRHR
0024	174929	Los Angeles High School	1873	Eligible for NRHP and/or CRHR
	175037	Commercial building	1897	Eligible for local designation
	186616	Government building	1963	Eligible for NRHP and/or CRHR
	186617	Government building	1930	Ineligible for NRHP, CRHR, or local designation
	186618	Commercial building	Unknown	Ineligible for NRHP, CRHR, or local designation
	*186619	Los Angeles Law Library	1953	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
	186620	Commercial building	1962	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
	186621	Commercial building	1972	Appears eligible as a contributor to a fully documented district
	186622	Commercial building	1959	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
	186882	Police facilities building	1952–1955	Appears eligible as a contributor to a fully documented district
	186883	Motor Transport Division	1958	Appears eligible as a contributor to a fully documented district
	186888	The Los Angeles Police Memorial	1971	Appears eligible as a contributor to a fully documented district

Permanent Trinomial (CA-LAN-)	P-Number (P-19-)	Description	Time Period	Eligibility Status
	186952	Commercial building	1944-1945	Ineligible for NRHP, CRHR, or local designation
	186953	Commercial building	1896-1914	Ineligible for NRHP, CRHR, or local designation
	186954	Commercial building	ca. 1960	Ineligible for NRHP, CRHR, or local designation
	186955	Commercial building	1910-1944	Ineligible for NRHP, CRHR, or local designation
	190513	Engineering structure	1924	Eligible for NRHP and/or CRHR
	190514	Commercial building	1910	Eligible for NRHP and/or CRHR
	190517	Engineering structure	1968	Ineligible for NRHP, CRHR, or local designation
	190518	Commercial building	1905	Ineligible for NRHP, CRHR, or local designation
	190519	Commercial building	1905	Ineligible for NRHP, CRHR, or local designation
	190520	Commercial building	1950	Ineligible for NRHP, CRHR, or local designation
	190522	Commercial building	ca. 1907	Ineligible for NRHP
	190523	Commercial building	1964	Ineligible for NRHP
	190526	Commercial building	1965	Ineligible for NRHP
	190529	Commercial building	1964	Ineligible for NRHP
	190532	Commercial building	ca. 1913	Eligible for listing in NRHP as a separate property
	190542	Retail/hotel building	1910	Ineligible for NRHP
	*190545	Los Angeles Civic Center Historic District	1925-1972	Eligible for NRHP and/or CRHR
	190546	Commercial building	1910–1926	Ineligible for NRHP
	190548	Religious building	1934	Eligible for NRHP and/or CRHR
	190549	Commercial building	1967	Ineligible for NRHP
	190551	Theater/Civic Auditorium	2003	Eligible for NRHP and/or CRHR
	190552	Street features and objects	1880s-1959	Appears eligible as a contributor to a fully documented district
	190553	Government building and landscape architecture	1965	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
	190554	Theater/Civic Auditorium	1967	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district

Permanent Trinomial (CA-LAN-)	P-Number (P-19-)	Description	Time Period	Eligibility Status
	190555	Theater/Civic Auditorium	1967	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
	190556	Theater/Civic Auditorium	1967	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
	190557	Government building	1956-1961	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
	190558	Engineering structure	1966	Appears eligible as a contributor to a fully documented district
	190559	Government building	1958	Appears eligible as a contributor to a fully documented district
	190560	Commercial building	1973	Eligible for NRHP and/or CRHR
	190561	Government building	1954	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
	190662	Commercial building	1965	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district

* Indicates study overlapping with APE.

In addition to the archaeological sites documented at the SCCIC, AECOM is aware of an archaeological site located beneath the street and sidewalk at the northwest corner of 1st Street and Spring Street. Regional Connector Feature 12 consists of brick wall segments and associated refuse encountered just below the pavement. The feature has been identified as being associated with the Schumacher Block, which formerly stood in this location. The feature was documented by AECOM during construction monitoring for the ongoing Los Angeles County Metropolitan Transit Authority's Regional Connector Project.

Historic Resources Inventory

The Directory of Properties in the Historic Property Data File was consulted to identify historic properties within the project area. No historic properties are documented within the study area on South Broadway, South Spring Street, or West 1st Street.

California Historical Landmarks

CHLs are buildings, structures, sites, or places that have been determined to have statewide historical interest. CHL No. 769 and below may not be listed in the CRHR. Three CHLs are located within 0.25 mile of the project area. CHL 656 is the Bella Union Hotel Site, the last de facto capitol building of Mexican California. CHL 789 is the Site of the Los Angeles Star, the city's first newspaper. Both CHL 656 and CHL 789 are located in Fletcher Bowron Square. CHL 744, located at 145 South Spring Street, is the Mirror Building (the Los Angeles Times Building).

Los Angeles Historic-Cultural Monuments

Los Angeles Historic-Cultural Monuments (LAHCMs) are designated by the Los Angeles Cultural Heritage Commission. Six LAHCMs are located within 0.25 mile of the project area and are summarized in Table 3.

Table 3. LAHCMs within 0.25 Mile of the Project

Monument Number (LAHCM-)	Address	Description
4	Hill Street and Third Street	Angels Flight
6	304 South Broadway	Bradbury Building
17	114 East Second Street	Saint Vibiana's Cathedral
150	200 North Spring Street	Los Angeles City Hall
544	249 South Broadway	Irvine-Byrne Building
966	257 South Spring Street	Douglas Building

SACRED LANDS FILE SEARCH

On June 19, 2018, AECOM sent a letter to Native American Heritage Commission (NAHC) requesting a Sacred Lands File search for the project and the immediate vicinity. On June 20, 2018, AECOM sent letters to five known Native American tribes who in the past have demonstrated interest in or knowledge about the project area. The NAHC responded in a letter sent by email dated June 27, 2018, that identified the same five tribes. The letters sent to the tribes described the project and the results of the records search, and included a map of the project area. Input was requested from the tribal representatives, and a Native American response form was included with each letter to facilitate responses.

The results of the Sacred Lands File request and Native American contact are included in a confidential Appendix A.

SURVEY METHODOLOGY AND RESULTS

METHODS

AECOM conducted a cultural resources survey of the APE on June 25, 2018. The archaeological survey, conducted by Marc Beherec, Ph.D., consisted of an examination of all unpaved portions of the ADI for evidence of prehistoric or historic activities. The entire ADI was examined in transects of 15 meters or less. The built environment survey, conducted by Monica Mello, M.A., consisted of an intensive survey of the APE for architectural resources. Resources were documented, photographed, and recorded on California Department of Parks and Recreation (DPR) 523 forms.

RESULTS

The archaeological survey revealed that the ADI is currently a vacant lot. Ground visibility was approximately 100% in this area. No prehistoric cultural resources were observed within the APE.

The built environment survey identified five architectural resources (P-19-170974, P-19-173078, P-19-173080, P-19-186619, and P-19-190545) within the APE. The five resources are listed in Table 4 and described below.

Table 4. Historical Resources Identified in the APE

P-Number (P-19-)	Description	Time Period	Eligibility Status
170974	Court of Flags	1960s	Eligible for NRHP and/or CRHR
173078	Los Angeles City Hall	1928	Eligible for NRHP and/or CRHR; listed or eligible separately under local ordinance
173080	Los Angeles Times Building	1934	Eligible for NRHP and/or CRHR
186619	Los Angeles Law Library	1953	Eligible for NRHP and/or CRHR; Appears eligible as a contributor to a fully documented district
190545	Los Angeles Civic Center Historic District	1925-1972	Eligible for NRHP and/or CRHR

Court of Flags (P-19-170974)

The Court of Flags is located at 224 North Hill Street. The Court of Historic Flags is a multi-surface, rectangular-plan landscape that straddles the northwesterly upslope of the Civic Center axis from City Hall (Plate 3). The Court of Flags was completed in 1971 as a terraced assembly of open space organized around 18 flagpoles and associated interpretive plaques for their masted flags from American history. The site appears largely unaltered other than the addition of a sculpture in 1973, and new landscape elements and concrete paths added along the perimeter of the property in 2012 (HistoricAerials 2018). In 2006, the Court of Flags was found eligible as a contributor to the CRHR-eligible Los Angeles Civic Center Historic District (P-19-190545), as an integral part of the planning, design, development, and operations of the mid-twentieth-century city and county governmental complex. In 2009, the Court of Flags was found eligible for listing in the NRHP and CRHR under Criterion A/1 for association with the historic planning and development of the Los Angeles Civic Center in the 1970s, at the end of its development, and under Criterion C/3 for its minimalist design with a simple layout (SWCA 2009). Despite some alteration to the setting of the resource, it appears to retain its historic integrity, and therefore appears to continue to be eligible for listing in the NRHP and CRHR.

Plate 3. Court of Flags, 224 North Hill Street, View North

Los Angeles City Hall (P-19-173078)

The Los Angeles City Hall building was constructed in 1928. The property was designed by John Parkinson, Albert C. Martin, and John C. Austin. The property was listed as LAHCM No. 150 in 1976. Located at 200 North Spring Street (Assessor Parcel Number 5161005906), the block is surrounded by landscaped park areas, mature trees, and concrete sidewalks (Plate 4). Los Angeles City Hall is a 32-story, monumental government building, designed with academic Classical and climate-evoking Mediterranean influences, in four major masses including the base, central tower with pyramidal apex inspired by ancient mausoleums, and flanking low-rise office wings (SWCA 2009). In 1988, the resource was found eligible for listing in the NRHP; and in 2009 the building was found eligible as a contributor to a CRHR-eligible Los Angeles Civic Center Historic District (P-19-190545) (SWCA 2009). The resource appears to retain its historic integrity since its last recordation in 2009, and therefore appears to continue to be eligible for listing in the NRHP and CRHR.

Plate 4. Los Angeles City Hall, 200 North Spring Street, View East from Project Site

Los Angeles Times Building (P-19-173080)

The Los Angeles Times building, designed by Gordon B. Kaufmann in the Art Deco Moderne style was constructed in 1935 (Plate 5). In 1948, a 10-story addition at the northwest corner of

South Spring Street and West 3rd Street was added. A six-story Contemporary style addition was added to the building in 1970–1973. The building is significant for its unique design and as a representation of the development of the Times Mirror Company. The building was determined eligible for listing in the NRHP in 1978. The Los Angeles Times building continues to be eligible for listing in the NRHP and CRHR under Criterion A/1 for association with the development of Los Angeles, and under Criterion C/3 for its combination of Art Deco, Moderne, and Contemporary styles. Despite some alteration to the setting and materials of the resource, it appears to retain its historic integrity, and therefore appears to continue to be eligible for listing in the NRHP and CRHR.

Plate 5. Los Angeles Times Building, 202 West 1st Street, View Southwest from Project Site

Los Angeles Law Library Building (P-19-186619)

The Los Angeles Law Library located at 301 West 1st Street was constructed in 1953, with an addition built in 1969–1970. The Los Angeles Law Library is a Modernist style one- and three-story, split-level office building, inset into the northwesterly slope with concrete and granite exterior walls (Plate 6). The main building is reinforced concrete construction with a streel-trussed roof over wide spans and concrete beam and joist construction over shorter spans. The entrance façade is clad with geometric masonry panels in relief, and is adorned with the seals of the different courts of law. The resource was originally recorded in 2000 but was unevaluated; in 2006, the building was found eligible as a contributor to a CRHR-eligible Los Angeles Civic Center Historic District (P-19-190545) (Dolan 2000; SWCA 2009). In 2009, the property was found eligible for listing in the NRHP and CRHR under Criterion A/1 for its association with the historic planning and development of Civic Center in the 1950s and beyond, and Criterion C/3 for its architectural design as prominent example of a civic building with Modernist geometric details (SWCA 2009). Since the building's last recordation in 2009, the property has undergone some alteration. In 2012, the building underwent an extensive renovation project including repainting and applying an elastomeric coating to the exterior walls, replacing the roof, and adding new irrigation and drainage systems (SCALL 2012). In addition, the building's perimeter walkways were reoriented, and a new outdoor patio was added to the property in 2012. Despite some alteration to the setting and materials of the resource, it appears to retain its historic integrity, and therefore appears to continue to be eligible for listing in the NRHP and CRHR.

Plate 6. Los Angeles Law Library Building, 301 West 1st Street, View North from Project Site

Los Angeles Civic Center Historic District (P-19-190545)

The Los Angeles Civic Center Historic District is a closely built, informally organized complex of government buildings, structures, and landscapes (formal urban spaces integral to those buildings and structures) located in downtown Los Angeles (SWCA 2009). The district is bound by West 1st Street on the southwest, Figueroa Street on the northwest, Temple Street on the northeast, and San Pedro Street on the southeast. The district includes 21 contributing resources with a period of significance of 1925 to 1972. In 2009, the Los Angeles Civic Center Historic District was found eligible for listing in the NRHP and CRHR under Criterion A/1 for its association with the planning and development of city and county governmental institutions, and Criterion C/3 for its variety mid-twentieth-century architectural designs. It appears only minor alterations have occurred within the district since its last recordation in 2009. Despite these alterations, the Los Angeles Civic Center Historic District appears to retain its historic integrity, and therefore appears to continue to be eligible for listing in the NRHP and CRHR.

SUMMARY

Archival research and survey resulted in the identification of five historical resources (The Court of Flags, Los Angeles City Hall, Los Angeles Law Library, the Los Angeles Times Building, and the Los Angeles Civic Center Historic District) in the APE. These historical resources are eligible for listing in the NRHP and CRHR. In addition, the Los Angeles City Hall is listed as LAHCM No. 150. None of these resources are located within the ADI.

Archival research and a pedestrian survey did not reveal any previously recorded or surface-visible archaeological resources in the APE. However, review of historical maps and archival records, as well as previous investigations in the vicinity of the project, indicate the potential for encountering buried archaeological resources within the APE. As described in Project Setting, above, the project vicinity has been continuously occupied since prehistory. The APE is located near the Los Angeles River, and less than 0.5 mile from Los Angeles Plaza, which was the heart of historic Los Angeles. The Los Angeles pueblo, in turn, was situated at or near the site of *Ya'anga*, a prehistoric and Contact-period Gabrielino settlement.

Due to the construction and demolition of the California State Building's large basement and parking structure, much of the ADI has been impacted by previous disturbance. However, historical sites may underlie portions of the site, where no basement existed. In addition, prehistoric sites may lie buried beneath the levels of previous disturbance. Moreover, Native American material remains that have lost their original context may nevertheless retain some scientific value. Regardless of their archaeological value, Native American artifacts and especially human remains may be important tribal cultural resources.

MANAGEMENT RECOMMENDATIONS

BUILT ENVIRONMENT RECOMMENDATIONS

Five historical resources are located in the APE. Based on the information compiled from previous inventories and new information, the Court of Flags, Los Angeles City Hall, Los Angeles Law Library, Los Angeles Times Building, and the Los Angeles Civic Center Historic District located within the project APE are eligible for the NRHP and CRHR. One resource, the Los Angeles City Hall, is listed as an LAHCM (LAHCM No. 150).

Under CEQA, a project would result in a significant impact to historical resources if it results in a direct or indirect substantial adverse change to the resource. The project proposes to construct a park with landscaping and a two-story building. The project was assessed to determine whether it would diminish any of the characteristics that qualify or define the historical resources in the APE that are adjacent to the project site.

The Court of Flags

The Court of Flags is significant for its association with the historic planning and development of the Los Angeles Civic Center in the 1970s, at the end of its development, and for its minimalist design with a simple layout. This historical resource's features include 18 flag poles arranged symmetrically within a terraced open space park. The project will not destroy or change any of the features that are important to defining the character of the Court of Flags. The project will not have any direct impacts of the resource, and indirect impacts of visual or audible intrusion will not result in an indirect substantial adverse change to the resource.

Los Angeles City Hall

This historical resource is significant for its association with the historic planning and development of the City of Los Angeles and for its monumental design. The historical resource's features are its 32-story form with academic Classical and climate-evoking Mediterranean influences; four major masses including the base, central tower with pyramidal apex inspired by ancient mausoleums, and flanking low-rise office wings. The property's historic and contextual relationship with the larger cityscape will be retained, and the project will not alter or diminish features that are important to defining the character of the resource. The project will not have any direct impacts of the resource, and indirect impacts of visual or audible intrusion will not result in an indirect substantial adverse change to the resource.

The Los Angeles Times Building

This historical resource is significant for its association with the development of Los Angeles, and for its combination of Art Deco, Moderne, and Contemporary styles. The historical resource's features include its irregular plan, multi-story form, central clock tower with tile roof, and marble and stone cladding. The project will not have an obtrusive appearance or form and will not result in the destruction or change of any features that are important to defining the character of the Los Angeles Times Building. The project will not have any direct impacts of the resource, and indirect impacts of visual or audible intrusion will not result in an indirect substantial adverse change to the resource.

The Los Angeles Law Library Building

This historical resource is significant for its association with the historic planning and development of the Civic Center in the 1950s and beyond, and for its architectural design as prominent example of a civic building with Modernist geometric details. The Los Angeles Law Library's features include its walls clad with geometric masonry panels in relief and court seals, irregular plan and terraced multi-story arrangement, and concrete construction. The project will not alter the visual character of the building or the resource's setting, feeling, or historic features. The project will not have any direct impacts of the resource, and indirect impacts of visual or audible intrusion will not result in an indirect substantial adverse change to the resource.

Los Angeles Historic District

This historical resource includes 21 contributing resources with a period of significance of 1925 to 1972. The Los Angeles Civic Center Historic District is significant for its association with the planning and development of city and county governmental institutions, and for its variety of mid-twentieth-century architectural designs. The project site is located in the southwestern portion of the district boundary, and is surrounded by three contributors (Court of Flags, Los Angeles City Hall, and Los Angeles Law Library). The design and scale of the project will not have any direct impacts on the district contributors, and indirect impacts of visual or audible intrusion will not result in an indirect substantial adverse change to the district.

In summary, five historical resources are located within the APE. As proposed, the project would result in less-than-significant impacts on historical resources.

ARCHAEOLOGICAL RECOMMENDATIONS

The background research and survey indicate a high probability for buried archaeological resources, either redeposited or in situ, within the APE. The APE is in the general vicinity of the Gabrielino settlement *Ya'anga*, and near an important water source, the Los Angeles River. In addition, the APE is within 0.5 mile of the Los Angeles Plaza, the historic heart of el Pueblo de Nuestra Senora la Reina de los Angeles. Also, the area has been intensively used since the late nineteenth century. It is recommended that a qualified cultural resources specialist be retained to monitor ground-disturbing activities from the surface to at least the base of younger Quaternary alluvium. This monitor will have the authority to divert work to quickly and safely examine archaeological finds and evaluate and determine appropriate treatment for the resource in accordance with California PRC Section 21083.2(i).

In addition, it is recommended that a qualified tribal consultant be retained. The tribal consultant should be present during ground-disturbing activities and document the results of excavation in logs that will be made available to the interested parties identified by the NAHC. The tribal consultant (or Native American monitor) will have the authority to divert work to quickly and safely examine any potential finds of Native American significance. The consultant should be hired from among the interested parties who commented on the project.

If any Native American cultural material is encountered within the project site, further consultation with interested Native American parties should be conducted to apprise them of the findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources, and to assist in determining whether such finds constitute significant tribal cultural resources as defined by PRC Section 21074.

If human remains are discovered, work in the immediate vicinity of the discovery will be suspended and the Los Angeles County Coroner will be contacted. If the remains are deemed Native American in origin, the County Coroner will contact the NAHC, which will identify a Most Likely Descendant pursuant to PRC Section 5097.98 and California Code of Regulations Section 15064.5. Work may be resumed at the landowner’s discretion, but will only commence after consultation and treatment have been concluded. Work may continue on other parts of the project while consultation and treatment are conducted.

PROJECT PERSONNEL

AECOM personnel involved in the cultural resources assessment are as follows: Marc Beherec, Ph.D., Registered Professional Archaeologist (RPA), served as report author and conducted archival research and archaeological survey; Monica Mello, M.A., served as report author, conducted built environment survey, and evaluated the built environment resources; M. K. Meiser, M.A., performed senior review; and Jang Seo, B.A., provided graphics and GIS support. Resumes of key personnel are included in Appendix C.

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APPENDIX A

Native American Contact Program
(Confidential)

APPENDIX B

DPR Forms

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

HISTORIC RESOURCES INVENTORY

Ser. No. HRI prop. #024957 2F

HABS ____ HAER ____ NR 4(d) SHL ____ Loc ____

UTM: A ________ B ________

C ________ D ________

IDENTIFICATION

[illegible] 19-170974

1. Common name: Court of Flags, Civic Center Mall
2. Historic name: Court of Flags, Civic Center Mall
3. Street or rural address: 100 block Hill Street

City Los Angeles Zip ________ County Los Angeles

4. Parcel number: 5161-005-910
5. Present Owner: County of Los Angeles Address: --

City Los Angeles Zip ________ Ownership is: Public X Private ________

6. Present Use: Memorial park Original use: Memorial park

DESCRIPTION

7a. Architectural style: park

7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

The Court of Historic American Flags consists of a concrete mall and open park area with fourteen flagpoles and their metal plaques, and a series of stairs with a granite-based pedestal and a dedication plaque at the Hill Street end. Decorative 5-luminaire lampposts and black granite facings accent the Court of Flags. The Court of Flags is an integral part of the open space which forms the Civic Center Mall between Los Angeles County and City buildings.

Attach Photo(s) Here

8. Construction date: Estimated 1960s Factual ________
9. Architect ________
10. Builder County of Los Angeles
11. Approx. property size (in feet) Frontage ________ Depth ________ or approx. acreage ________
12. Date(s) of enclosed photograph(s) 11/28/1982

DPR 523 (Rev. 4/79)

19-170974

13. Condition: Excellent X Good ____ Fair ____ Deteriorated ____ No longer in existence ____

14. Alterations: Addition of memorial to Vietnam veterans.

15. Surroundings: (Check more than one if necessary) Open land ____ Scattered buildings ____ Densely built-up ____
Residential ____ Industrial ____ Commercial X Other: ____

16. Threats to site: None known ____ Private development ____ Zoning ____ Vandalism ____
Public Works project ____ Other: Removal of portion of park for RID Metro Rail station location.

17. Is the structure: On its original site? X Moved? ____ Unknown? ____

18. Related features: Other portions of Civic Center Mall.

SIGNIFICANCE

19. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site.)

The construction of the Court of Historic American Flags in the 1960s was sponsored by the County of Los Angeles Board of Supervisors and the Los Angeles County Council of the Veterans of Foreign Wars. Tastefully carried out, this court is in an important open space in Los Angeles' Civic Center Mall.

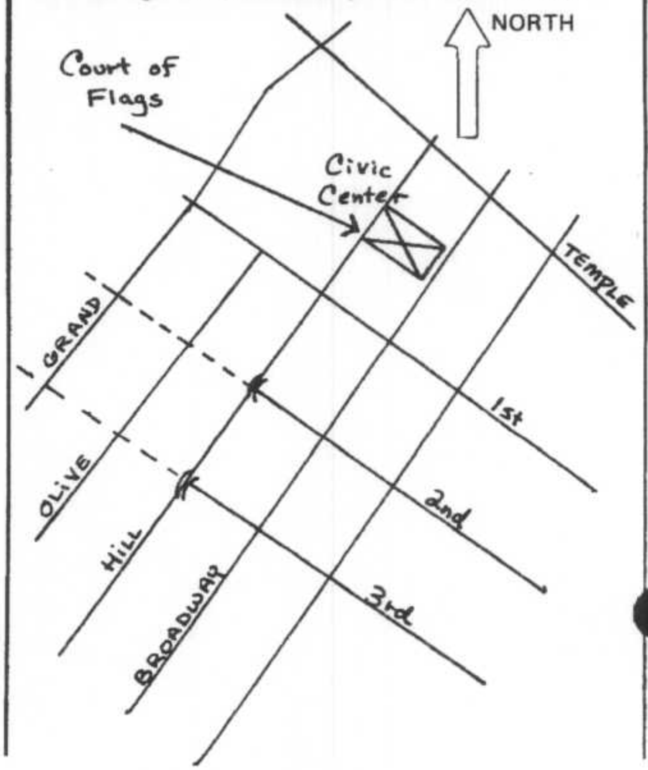
20. Main theme of the historic resource: (If more than one is checked, number in order of importance.)
Architecture ____ Arts & Leisure ____
Economic/Industrial ____ Exploration/Settlement ____
Government ____ Military X
Religion ____ Social/Education ____

21. Sources (List books, documents, surveys, personal interviews and their dates).

See attached listing.

22. Date form prepared 12/15/1982
By (name) Terri Jacques
Organization Westec Services, Inc.
Address: 3211 Fifth Avenue
City San Diego Zip 92103
Phone: (619) 294-9770

Locational sketch map (draw and label site and surrounding streets, roads, and prominent landmarks):



Continuation Sheet

21. Sources:

County of Los Angeles Assessors Office, County of Los Angeles Hall of Administration.

City of Los Angeles Land Use Planning and Management System (LUPAMS files), Planning Department, Los Angeles City Hall.

Gebhard, D. and Robert Winter, A guide to architecture in Los Angeles and southern California. Salt Lake City: Peregrine Smith, 1982.

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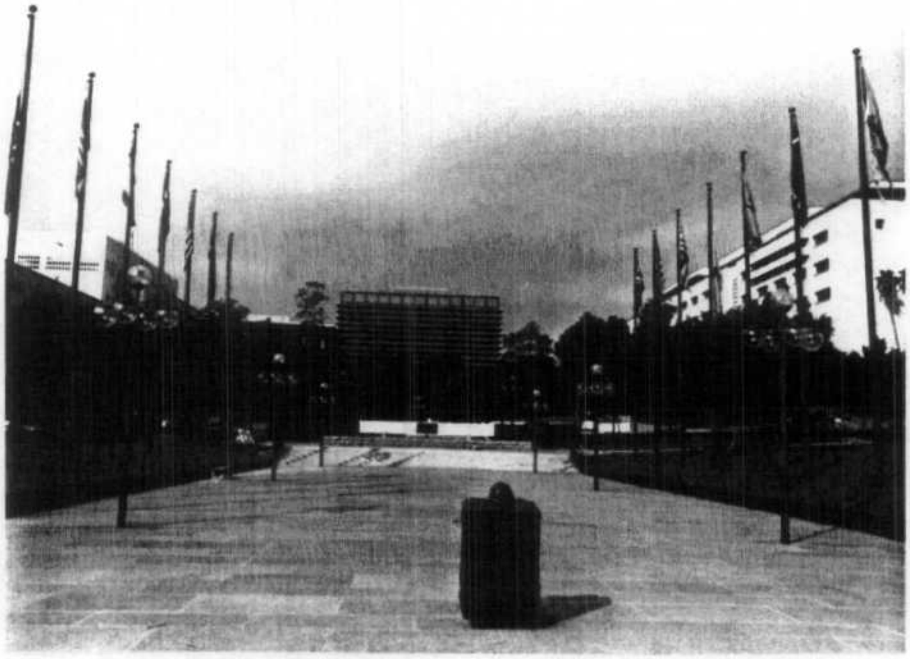
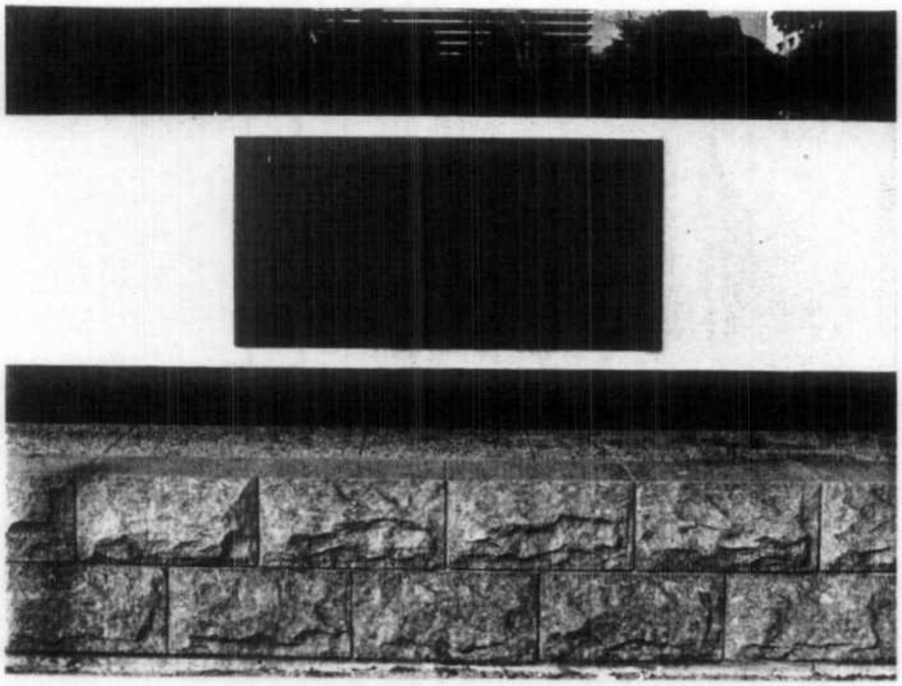
Los Angeles Times, Index, California Room, Los Angeles Public Library.

Map department, Los Angeles Bureau of Engineering, Los Angeles City Hall.

Sanborn Fire Insurance Maps, California State, Northridge, various dates.





State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 19-170974 (Update)
HRI # 024957
Trinomial
NRHP Status Code 3D, 3CD, 5S2

Other Listings District # 19-190545
Review Code **Reviewer** **Date**

Page 20 **of** 39 *__Resource Name or #:__ 224 North Hill Street landscape, 100 Block Hill Street (No. 5-10)

P1. Other Identifier: Court of Historic American Flags, Court of Historic Flags, "Court of Flags, Civic Center Mall" (1982 DPR)

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 224 North Hill Street, 100 Block Hill Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-916

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Court of Historic Flags is viewed by the public and Civic Center employees as a multi-surface, rectangular-plan landscape that straddles the northwesterly upslope of the Civic Center axis from City Hall. Completed in 1971 as a terraced assembly of open space organized around 18 flagpoles and associated interpretive plaques for their masted flags from American history, the site appears largely unaltered other than the addition of a sculpture in 1973. The flag court is part of El Paso de los Pobladores de Los Angeles and its southeasterly continuation of the Civic Center mall and axis (Gebhard and Winter).

The Court of Flags is one major part of the dispersed services of the "county courthouse" as part of local governments' response to development of Civic Center in the mid 20th century. Its formal landscape is merely the public cover for a 4-level underground parking garage and records storage, probably built to double as an air raid/fallout shelter during the height of the Cold War, along with the extensive garages beneath older parts of the mall immediately northwest. The flag court's garage connects through pedestrian tunnels to adjacent county buildings and those across Hill Street and Broadway.

***P3b. Resource Attributes:** (List attributes and codes) HP29. Landscape architecture, HP11. Engineering structure

***P4. Resources Present:** ☐Building ☒ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, April 16, 2009,
Photograph # 0944

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1971, *Los Angeles Times*

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 18, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # 19-170974 (Update)
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3D, 3CD, 5S2

***Resource Name or #** (Assigned by recorder) 224 North Hill Street landscape, 100 Block Hill Street (No. 5-10)

B1. Historic Name: Court of Historic American Flags
B2. Common Name: Court of Historic Flags
B3. Original Use: commemorative hardscape B4. Present Use: commemorative hardscape

***B5. Architectural Style:**

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1971 (*Los Angeles Times*). Alterations: Vietnam Memorial added (1973).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architect: b. Builder:

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1972 **Property Type:** objects **Applicable Criteria:** A/1, C/3

The Court of Historic Flags or Court of Historic American Flags is a rectangular, granite paved area, flanked on either side by 18 flagpoles, nine on each side. The flagpoles are evenly spaced, and each is anodized metal, of uniform height and terminates in a brass ball. The poles each fly American flags, dating in history from 1774 to 1960 (United States, incorporating 50 states). The flags are sponsored by different service and non-profit organizations. Each flagpole contains a plaque bearing an inscription describing the significance of the flag in American history and identifying the sponsors.

The rectangular, flat court is line by continuous wedge-shaped, low walls. Atop the walls, on broad, flat, continuous pathway, flagpoles and plaques containing descriptions and sponsoring organizations are set evenly spaced. At the one end of the court, continuous, open stairs with polished metal railings lead from another level of the large plaza. At the other end, an American Flag flies on the tallest flagpole in the assemblage. In front of the American flag, the Vietnam Memorial is set in the open plaza. It is a large granite cube with dressed sides, designed to include a bronze combat helmet at the top (no longer extant) with an incised commemorative tablet (Frank Ackerman, 1973). In 1994, the Confederate flag was removed from the display (*Sentinel*).

Known alterations include the addition of the Vietnam memorial (1973), and its later vandalism (date unknown); it is recognizable to its original appearance and to the period of significance. The Court was found to contribute to a California Register-eligible Civic Center historic District (2006). It was also found to be eligible for local listing or designation, in an unknown survey, Reference # 0053-2347-0000 (no date). The Court, while commemorative, fits the overall setting and is appropriate to the landscaped, terraced plazas. The Court of Flags is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1970s, at the end of its development, and under Criteria C/3 for its simple design. The Court contributes to the Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

(Sketch Map with north arrow required.)

***B12. References:**

Bolden, James. “Confederate Flag is Removed from Display” *Los Angeles Sentinel.* June 9, 1994, n.p.

Grand Avenue Project. *Los Angeles Grand Avenue Project.* 2006: 275.

B13. Remarks:

***B14. Evaluator:** F. Smith

***Date of Evaluation:** 3/26/09

(This space reserved for official comments.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # 19-170974
HRI #
Trinomial
NRHP Status Code

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 224 North Hill Street landscape, 100 Block Hill Street (Court of Flags)

☐ Continuation ☒ Update

***P3a. Description:**

The Court of Flags is located at 224 North Hill Street. The Court of Historic Flags is viewed by the public and Civic Center employees as a multi-surface, rectangular-plan landscape that straddles the northwesterly upslope of the Civic Center axis from City Hall (**Photograph 1**). Completed in 1971 as a terraced assembly of open space organized around 18 flagpoles and associated interpretive plaques for their masted flags from American history, the site appears largely unaltered other than the addition of a sculpture in 1973.

***B10. Significance Evaluation**

The Court of Flags is eligible for listing in the National and California registers under Criterion A or CRHR Criterion 1 for association with the historic planning and development of Civic Center in the 1970s, at the end of its development, and under Criterion C or CRHR Criterion 3 for its simple design. The Court contributes to the CRHR-eligible Los Angeles Civic Center Historic District.

***P8. Recorded by:** M. Mello, AECOM, 401 West A Street, Suite 1200, San Diego, CA 92101

***P9. Date Recorded:** July 2018

***P10. Survey Type:** Reconnaissance

***P11. Report Citation**: Cultural Resources Assessment for the First and Broadway Civic Center Park Project, Los Angeles, California, AECOM 2018

P5a. Photographs:

Photograph 1. Court of Flags, 224 North Hill Street, View southeast from Spring Street, July 25, 2018.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

HISTORIC RESOURCES INVENTORY

19-173078

(State use only)
Ser 19-0[redacted]1 Site ______ Mo. ______ Yr. ______
UTM ______ Q 110 C NR 2 3/4 SHL ______
Lat ______ Lon ______ Era ______ Sig ______
Adm ____ T2 ____ T3 ____ Cat ____ HABS ____ HAER ____ Fed ____
UTM 11/385340/3768610

19-0053-~~214~~ 4433

IDENTIFICATION

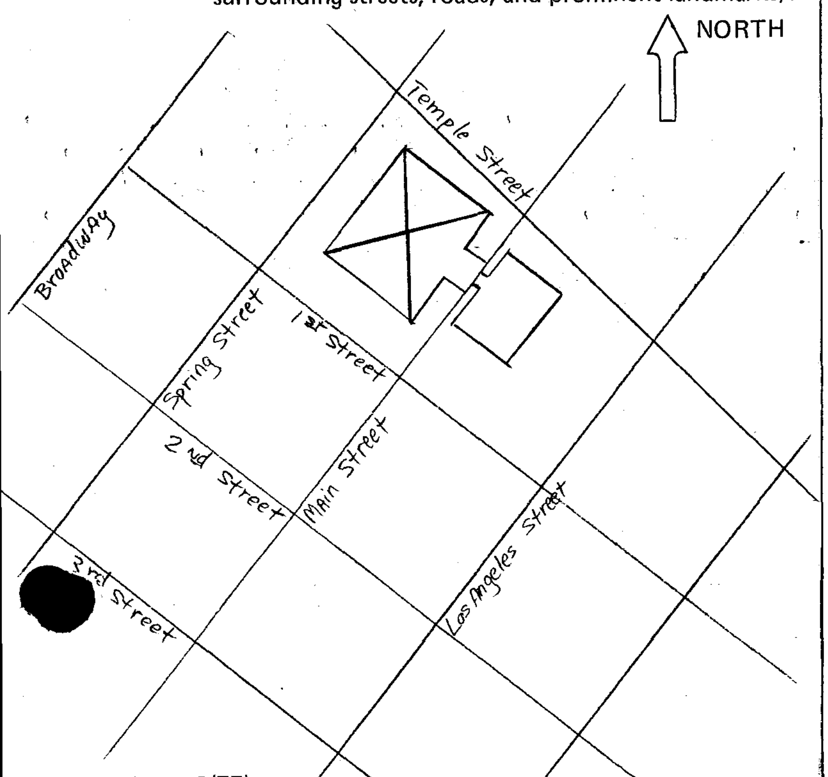
1. Common name: LOS ANGELES CITY HALL
2. Historic name, if known: Los Angeles City Hall
3. Street or rural address 200 North Spring Street
City: Los Angeles ZIP: 90012 County: Los Angeles
4. Present owner, if known: city of Los Angeles Address: 200 North Spring Street
City: Los Angeles ZIP: 90012 Ownership is: Public ☒ Private ☐
5. Present Use: government offices Original Use: government offices
Other past uses: ______

DESCRIPTION

6. Briefly describe the present physical appearance of the site or structure and describe any major alterations from its original condition:

The structure consists of three distinct units: the three story base or foundation portion, the "wings" flanking the tower, and the 452 foot tall tower. The wing sections are height limit and the tower has twenty-nine levels accessible to the public and three levels for building machinery. Atop the structure is the Lindbergh beacon, named in honor of the aviator. Architectural styles are mixed--Grecian details are used in the main entrance; Romanesque for the forecourt arcade, rotunda, council chambers and board of public works chambers; and "modern American" for the tower and flanking wings. Only minor alterations have taken place.

7. Locational sketch map (draw and label site and surrounding streets, roads, and prominent landmarks):



8. Approximate property size:
Lot size (in feet) Frontage 430'
Depth 250';
or approx. acreage ______.

9. Condition: (check one)
a. Excellent ☒ b. Good ☐ c. Fair ☐
d. Deteriorated ☐ e. No longer in existence ☐

10. Is the feature a. Altered? ☒ b. Unaltered? ☐

11. Surroundings: (Check more than one if necessary)
a. Open land ☐ b. Scattered buildings ☐
c. Densely built-up ☐ d. Residential ☐
e. Commercial ☒ f. Industrial ☐
g. Other ☒ government structures

12. Threats to site:
a. None known ☒ b. Private development ☐
c. Zoning ☐ d. Public Works project ☐
e. Vandalism ☐ f. Other ☐ ______

13. Date(s) of enclosed photograph(s): September 1976

NOTE: The following (Items 14-19) are for structures only.

14. Primary exterior building material: a. Stone ☒ b. Brick ☐ c. Stucco ☐ d. Adobe ☐ e. Wood ☐
f. Other ☐ ____________

15. Is the structure: a. On its original site? ☒ b. Moved? ☐ c. Unknown? ☐

16. Year of initial construction 1926 This date is: a. Factual ☒ b. Estimated ☐

17. Architect (if known): John C. Austin, John Parkinson and Albert C. Martin

18. Builder (if known): C. J. Kubach Company

19. Related features: a. Barn ☐ b. Carriage house ☐ c. Outhouse ☐ d. Shed(s) ☐ e. Formal garden(s) ☐
f. Windmill ☐ g. Watertower/tankhouse ☐ h. Other ☒ city hall annex i. None ☐

SIGNIFICANCE

20. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site when known):

Three of the most prominent architects in Los Angeles--Austin, Parkinson and Martin--collaborated on this edifice and, although the result was in some ways disappointing, the structure was, and is, still impressive as a symbol of Los Angeles. At the time of its construction, the tower was the most visible object on the city skyline, far exceeding the height limit then enforced. Since the height limit was revoked, many buildings have been erected which surpass the City Hall tower in height but none have managed to epitomize the soaring spirit of Los Angeles as well as the City Hall did in the 1920's. Additionally, with the opening of the new City Hall annex, the structure continues to be a functional seat of municipal government.

The City Hall has been declared historic-cultural landmark number 150 by the Los Angeles Cultural Heritage Board.

22. (cont.) Architect and Engineer, Vol 93, No. 2, May 1928, Pages 35-39.

21. Main theme of the historic resource: (Check only one): a. Architecture ☐ b. Arts & Leisure ☐
c. Economic/Industrial ☐ d. Exploration/Settlement ☐ e. Government ☒ f. Military ☐
g. Religion ☐ h. Social/Education ☐

22. Sources: List books, documents, surveys, personal interviews, and their dates:
"A British Citicism of the New Los Angeles City Hall," Architect and Engineer, Vol. 91, No. 2, November 1927, Page 63. Architectural Digest, Vol. 4, No. 4, 1928, Pages 4 and 5. Hales, George P. Los Angeles City Hall. Los Angeles: Board of Public Works, 1928. Jennings, Frederick, "The Los Angeles City Hall," (cont.)

23. Date form prepared: 9/1976 By (name): Dennis Smith-Tom Sitton
Address: 900 Exposition Boulevard City Los Angeles ZIP: 90007
Phone: (213) 746-0410 x241 Organization: Natural History Museum

(State Use Only)

19-173078

19.036

~~0053-4433-0~~

NRH 251

19-173078 _619.0-HP-88-19-032

Amount Requested: $ 2,474,567

RECEIVED
DEC 1 1988
OHP

OFFICE OF HISTORIC PRESERVATION
Department of Parks and Recreation
P.O. Box 942896
Sacramento, California 94296-0001

(DO NOT RETYPE THIS FORM
Use continuation sheets
as necessary to provide
additional information.)

1988 HISTORY AND ARCHEOLOGY GRANT PROGRAM
CALIFORNIA WILDLIFE, COASTAL, AND PARK LAND CONSERVATION ACT OF 1988
APPLICATION

1. Property name (as listed on the National Register of Historic Places, if so listed; otherwise common name, followed by historic name, if any):

LOS ANGELES CITY HALL (88-19-032)

Address: 200 North Spring Street

City: Los Angeles County: Los Angeles

2. Legislative districts of property:

Congressional No. 25 and Name Edward Roybal

State Senate No. 24 and Name Art Torres

State Assembly No. 56 and Name Lucille Roybal Allard

3. Designations of historic significance: (Complete all that apply)

______ California Historical Landmark Number

______ Point of Historical Interest Number

53230 0 Date placed on the National Register of Historic Places

______ Included in local inventory on approved Office of Historic Preservation Inventory Form #`DPR 523 (submit copy of the form).

Is inventory covered by a local preservation ordinance? Include a copy of the ordinance.

May 1976 Designated by local review body (include a copy of the designation and ordinance).

______ Part of a local or regional plan (include pertinent element of the plan).

4. Property owner: City of Los Angeles

Address: 200 North Spring Street

If not owned and operated by applicant, what is applicant's method of ownership control? Easement ______ Lease ______ Other XX

5. Applicant: PROJECT RESTORE
(must be eligible unit of local government or non-profit organization)

Address: 200 North Main Street, Room 300-CHE, Los Angeles, CA 90012

6. Contact person: *Katherine Moret*
(Local government or non-profit organization)

Address: *200 North Main Street, Room 300-CHE*

Phone: *(213) 485-6163*

7. PROPERTY DESCRIPTION: (Use Continuation Page following this application.) (DO NOT WRITE MORE THAN ONE (1) PAGE FOR THIS QUESTION -- ONLY ONE PAGE WILL BE READ.)

Condition--excellent ____ good *XX* fair ____ deteriorated ____

ruins ____ unexposed ____

Appearance--unaltered *XX* altered ____

Location--original site *XX* moved ____ date ____

Describe the present and original (if known) physical appearance, providing dates for changes made to original appearance. Include photographs showing overall property, main resource(s) from several angles, and details where preservation work is required. Include copies of historic photographs that are available, to show property's appearance at earlier periods of history. (If application proposes relocating a historic structure, include adequate documentation and photos to show that the new site adequately resembles the historic site, and that the relocation will not adversely affect the historic resources of the new site. Give address of new site.)

Also complete either the Historic Resources Inventory form (Appendix I) or the Archeological Site Record form (Appendix II), if the property is not only ready in the inventory and/or if you did not include a copy of the previously completed form.

8. PROPERTY SIGNIFICANCE: (Use Continuation Page following this application.) (DO NOT WRITE MORE THAN ONE (1) PAGE FOR THIS QUESTION -- ONLY ONE PAGE WILL BE READ.) *SEE ATTACHED: PAGE 22*

Period: prehistoric ____ 1700-1799 ____ 1800-1899 ____ 1900-*1926*

Area of significance--check and justify below: archeology ____ community planning ____ conservation *XX* economics *XX* education *XX* engineering ____ exploration/settlement ____ industry ____ invention ____ landscape architecture ____ law ____ literature ____ military ____ music ____ philosophy ____ politics/government *XX* religion ____ science ____ sculpture ____ social/humanitarian *XX* theater ____ transportation ____ other (specify) ____

Specific dates: *Erected 1926-1928*

Builder/architect: *John C. Austin, Albert C. Martin, John Parkinson*

8. *PROPERTY SIGNIFICANCE:*

The Los Angeles City Hall serves as the seat of all government affairs for this City's residents. In addition to housing governmental functions, the public rooms and Spring Street forecourt function as the major ceremonial spaces and civic forums for numerous City Commissions and community organizations.

This historic city landmark holds great value as both architecture and as the centerpiece of our civic history. For many years its Tower was the highest visible landmark on the City's urban horizon and consequently became the internationally recognized symbol for Los Angeles. A contemporary of the Central Library, its architectural design reflects an era when many of Los Angeles' great civic buildings were erected using a mixture of Grecian, Romanesque and Modern American styles, as exemplified by the ornately decorated ceilings, inlaid marble floors and friezes. Such workmanship is all the more valued today because it is irreplaceable. The architects, John Parkinson, A.C. Martin and John Austin were responsible for many of Los Angeles' finest landmark buildings including St. Vincent de Paul Church, the Million Dollar Theater, and the Alexandria Hotel.

Historically, the building is the cornerstone of the City's civic and public life. Built in an era of great regional growth, the erection of Los Angeles City Hall heralded the development boom in the Central Business District of the 1920's when Los Angeles came of age as a recognized metropolis.

This restoration will assure that the architectural heritage of this landmark will be returned to its original beauty and preserved for future generations who will continue using this civic resource on a daily basis.

ENT OF PARKS AND RECREATION

HISTORIC RESOURCES INVENTORY

(State use only)
UTM ______ Q ______ Mo. Yr.
NR 2 3 SHL 56
1979
Lat ______ Lon ______ Era ______ Sig ______
Adm ___ T2 ___ T3 ___ Cat ___ HABS ___ HAER ___ Fed ___
19-173078-UMTA781024A

19-173078

~~4433~~ ~~4378~~

IDENTIFICATION

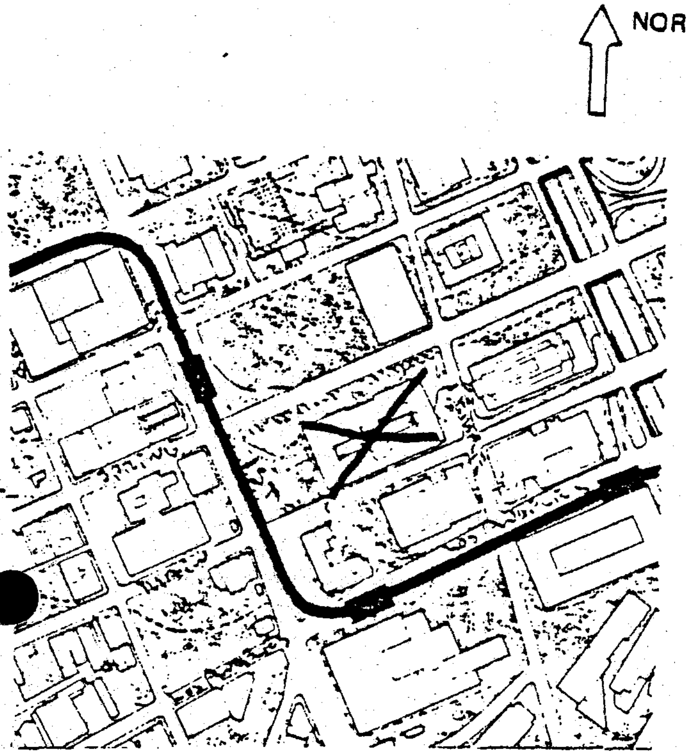
1. Common name: Los Angeles City Hall
2. Historic name, if known: Los Angeles City Hall
3. Street or rural address 200 N. Spring St.,
City: Los Angeles ZIP: 90012 County: Los Angeles
4. Present owner, if known: City of Los Angeles Address: 200 N. Spring St.,
City: Los Angeles ZIP: 90012 Ownership is: Public ☒ Private ☐
5. Present Use: Government office Original Use: Government office
Other past uses:

DESCRIPTION

6. Briefly describe the present physical appearance of the site or structure and describe any major alterations from its original condition:

os Angeles City Hall is a steel reinforced concrete skyscraper stepped back i
egular and symetrical manner and faced with stone. The form is representative
"modern" architectural ideal common to governmental buildings of the 1920's a
930's. The style is similar to Bertram Goodhue's Nebraska State Capitol, and
forerunner of what has come to be known as WPA moderne. The fenestration of
indows is classcially inspired, emphasizing the continuity of the wall surface
ith some of the windows set back behind the wall in vertical bays. The tower
lso accentuates the massiveness of the walls through the use of solid pier cor
[illegible]. Detailed to appear as buttresses. This is further emphasized by the pie
[illegible] elements which fills in the angles of the Greek cross tower plan.
he Building is eclectic employing elements from a range of periods. The detai
ng is neo-classic, combining low pitched tile roofs, large scale and simply

7. Locational sketch map (draw and label site and surrounding streets, roads, and prominent landmarks):



8. Approximate property size:
Lot size (in feet) Frontage 430'
Depth 250'
or approx. acreage ______

9. Condition: (check one)
a. Excellent ☒ b. Good ☐ c. Fair ☐
d. Deteriorated ☐ e. No longer in existence ☐

10. Is the feature a. Altered? ☒ b. Unaltered? ☐

11. Surroundings: (Check more than one if necessary)
a. Open land ☐ b. Scattered buildings ☐
c. Densely built-up ☐ d. Residential ☐
e. Commercial ☒ f. Industrial ☐
g. Other ☒ government building

12. Threats to site:
a. None known ☐ b. Private development ☐
c. Zoning ☐ d. Public Works project ☐
e. Vandalism ☐ f. Other ☐

13. Date(s) of enclosed photograph(s): May 1978

NOTE: The following (Items 14-19) are for structures only.

14. Primary exterior building material: a. Stone ☒ b. Brick ☐ c. Stucco ☐ d. Adobe ☐ e. Wood ☐
f. Other ☐ ____________________

Is the structure: a. On its original site? ☒ b. Moved? ☐ c. Unknown? ☐

16. Year of initial construction 1926 This date is: a. Factual ☒ b. Estimated ☐

17. Architect (if known): John Parkinson, John Austin, Albert Martin

18. Builder (if known): C. J. Kubach

19. Related features: a. Barn ☐ b. Carriage house ☐ c. Outhouse ☐ d. Shed(s) ☐ e. Formal garden(s) ☐
f. Windmill ☐ g. Watertower/tankhouse ☐ h. Other ☒ City Hall annex i. None ☐

SIGNIFICANCE

20. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site when known):

Three of the most important architects of the period, Austin, Parkinson and Martin, designed this structure as a joint project. This was the result of the desire of the City of Los Angeles to design an impressive and monumental edific The result was spectacular. City Hall was for many years the tallest structure in the city, serving as a symbol of the modern and progressive city of Los Angeles. This building was an attempt to impart a new building style to the ci through its use of the neo-classical skyscraper form.

It has become an architectural landmark in the downtown area. It is also CHB landmark 150.

The landscaping and open spaces surrounding the structure serve to make this an important social as well as architecturally important building. The trees alon First Street help to enclose this park-like space and are an important aspect the overall design.

21. Main theme of the historic resource: (Check only one): a. Architecture ☐ b. Arts & Leisure ☐
c. Economic/Industrial ☐ d. Exploration/Settlement ☐ e. Government ☒ f. Military ☐
g. Religion ☐ h. Social/Education ☐

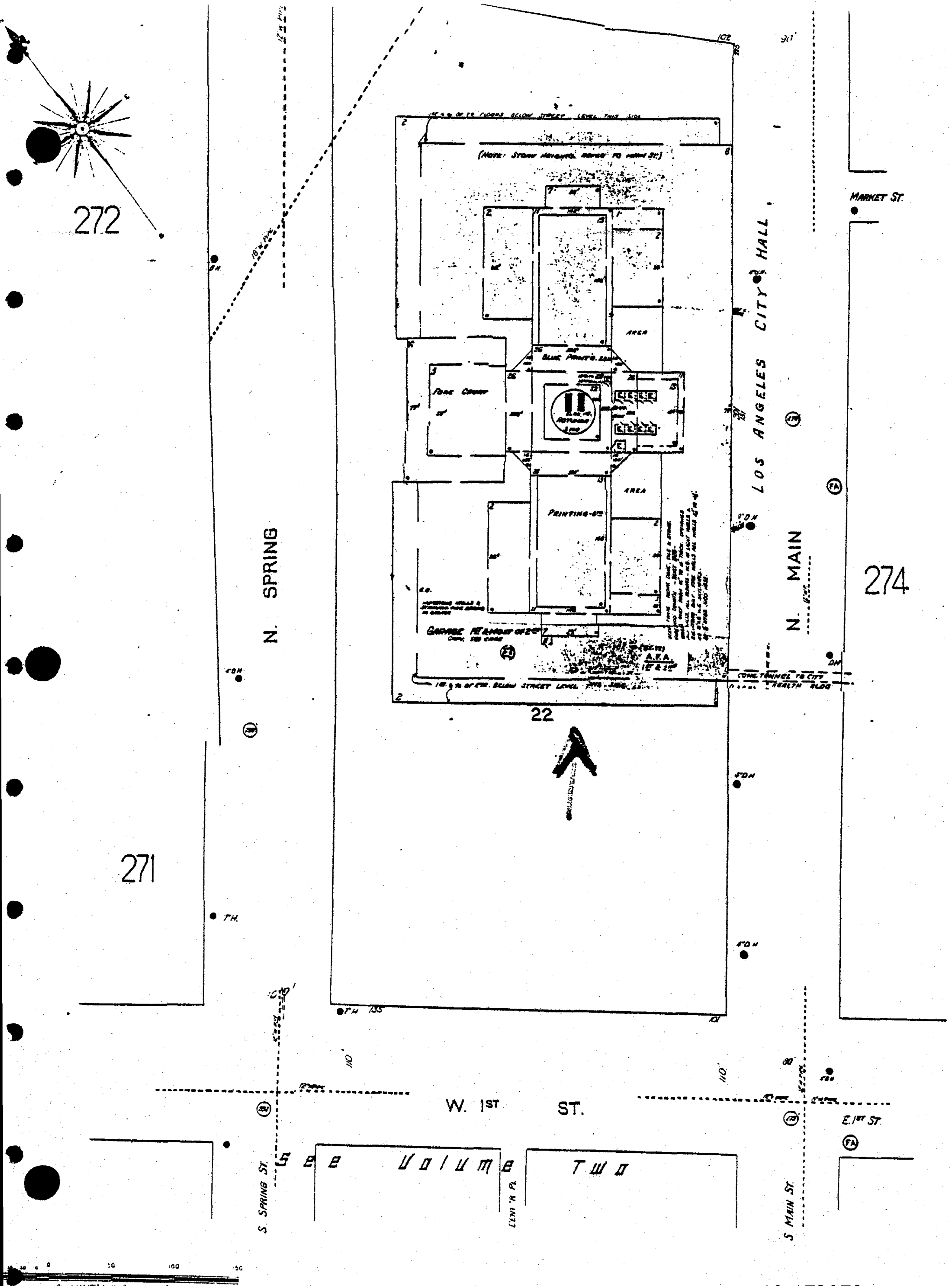
22. Sources: List books, documents, surveys, personal interviews, and their dates: Lupams; Sanborn maps, Baist's Atlas; WPA drawings; Building permit cards; Architectural Digest, vol 4, no. 4 1928; "The Los Angeles City Hall", Architect and Engineer, vol 93, no. 2 (May 1928); Pacific Coast Architect, v. 33, no. 5 (May 1928); Architect and Engineer vol 91, no. 2, November 1927.

23. Date form prepared: June 1978 By (name): Roger Hatheway John Chase
Address: 727 W. 7th St., City Los Angeles Zip 90017
Phone: 688-7520 Organization: [illegible]

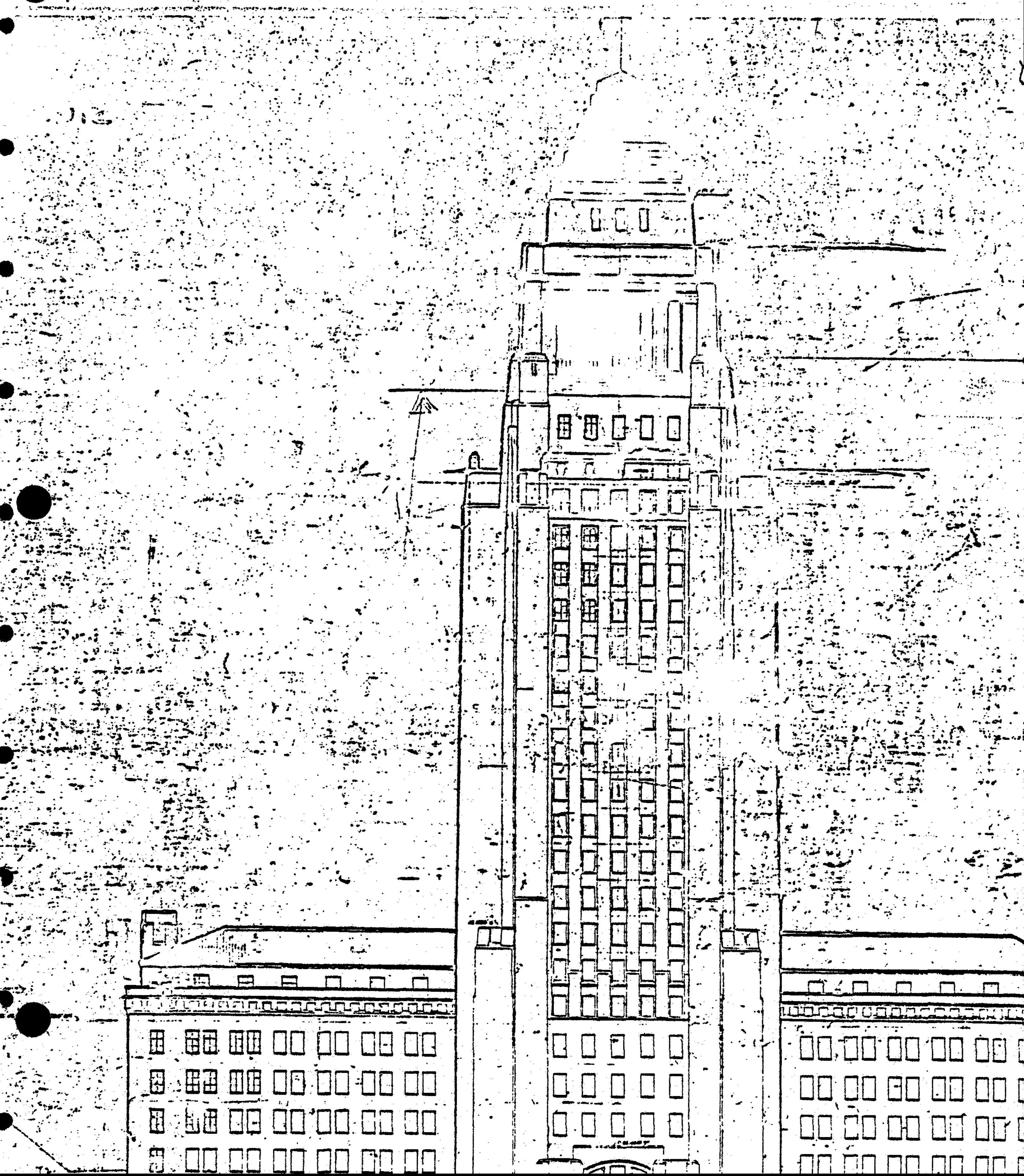
(State Use Only)

description-cont.

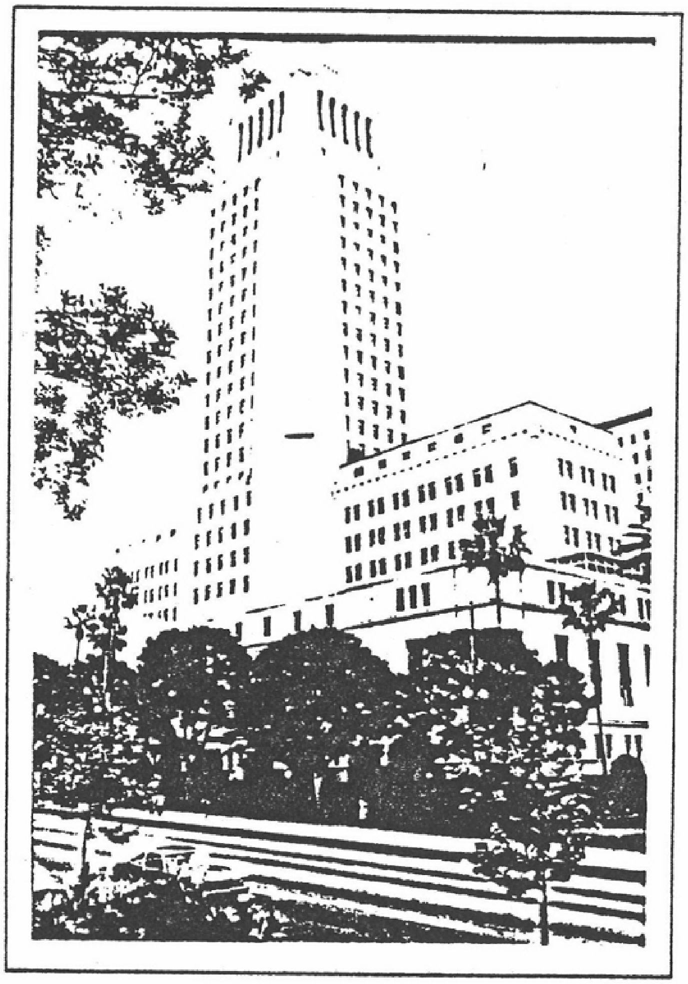
detailed cornices below attic stories.
The top of the building is seen as a free interpretation of the Temple of Halicarnassus, with the battered walls suggesting Egyptian influence. The stepped roof is representative of the 1920's interest in antiquity and in geometrically based primary forms.
The landscape is simple and consists of Moretan Bay figs, palm trees and several varieties of flowering plants.


272
271
274
N. SPRING
N. MAIN
LOS ANGELES CITY HALL
MARKET ST.
W. 1ST ST.
E. 1ST ST.
S. SPRING ST.
S. MAIN ST.
LEN'R PL
SEE VOLUME TWO
22
(NOTE: STORY HEIGHTS REFER TO MAIN ST.)
1ST & ½ OF 2ND FLOORS BELOW STREET LEVEL THIS SIDE
1ST & ½ OF 2ND BELOW STREET LEVEL THIS SIDE
BLUE PRINT'G. 2ND FL.
FORE COURT
PRINTING
AREA
AREA
ROTUNDA
GARAGE 1ST & MOST OF 2ND
A.F.A.
1ST & 2ND
CONC. TUNNEL TO CITY HEALTH BLDG
E.E.E.E.
E.E.E.E.
102
90'
101
135
110'
110'
80'
T.H.
T.H.
4"D.H.
5"D.H.
4"D.H.
D.H.
FA
FA
0 50 100 150

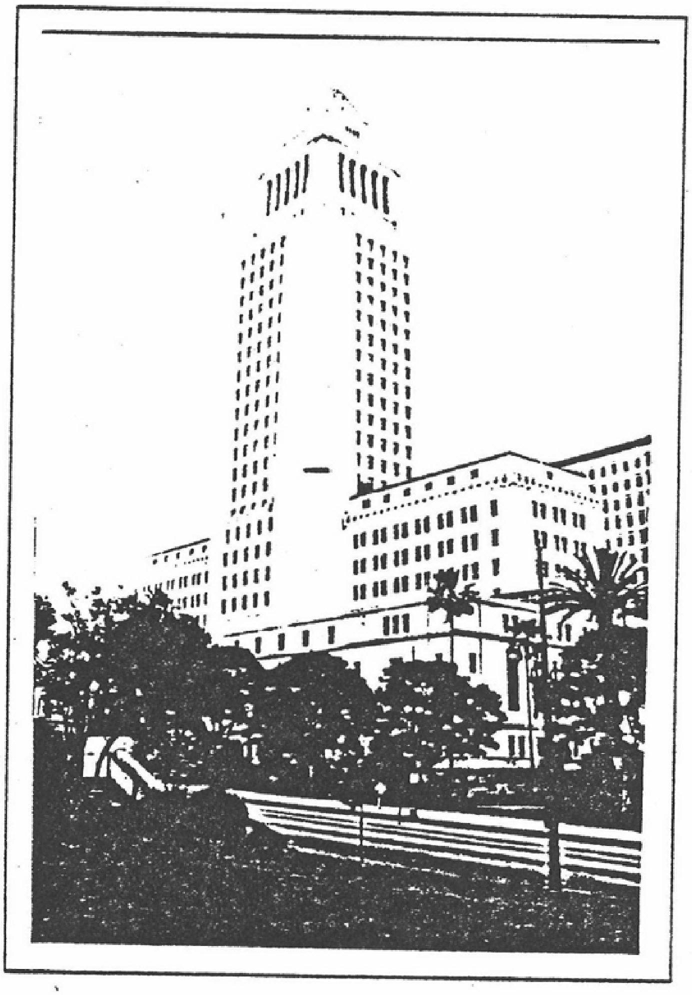
19-173078



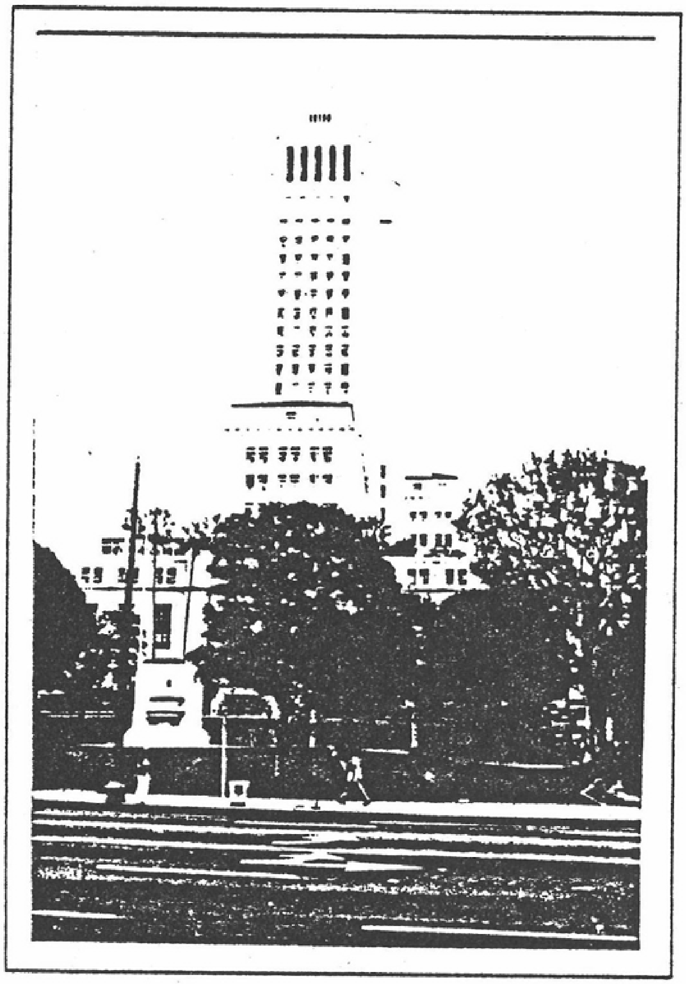
19-173078



19-173078



19-173078



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-173078 (Update)
HRI #
Trinomial
NRHP Status Code 2S2; 3S, 3D, 3CB
Other Listings City of Los Angeles Historic-Cultural Monument #150
Review Code **Reviewer** **Date**

District
#19-190545

***Resource Name or #:** 200 North Spring Street building (No. 6-2)

P1. Other Identifier: Los Angeles City Hall

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 200 North Spring Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-906

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Los Angeles City Hall is a 32-story, monumental government building, designed with academic Classical and climate-evoking Mediterranean influences, in four major masses including the base, central tower with pyramidal apex inspired by ancient mausoleums, and flanking low-rise office wings. The 1928 composition rises from a rectangular plan oriented to the downtown street grid (NE-SW), and is constructed with a reinforced concrete foundation and steel framing, clad in white glazed terra cotta with red barrel-tile roofs on the side wings. The interior public spaces, including a grand central rotunda, are highly decorated with terrazzo floors, walls of stone ashlar, pillars of marble, and ceilings of colorful images on plaster, in “Byzantine mood” (Gebhard and Winter), but perhaps intending Moorish or Spanish Renaissance references.

Original construction incorporated “flexible compression zones” at each tower floor for earthquake resistance, and recent historical rehabilitation and seismic retrofit of the foundation made City Hall the “tallest base isolated structure in the world" (L.A. Historic-Cultural Monuments). The building and landscape occupy the entire block bounded by Spring, Temple, Main, and West 1st Streets. City Hall is the anchor of Civic Center as planned before the 1920s and fulfilled with modifications primarily in the 1950s, surrounded by an eclectic group of city and county offices, courts, records, mechanical, and garage buildings and formal landscapes. The wooded lawn at City Hall's south is a rare informal landscape in Civic Center.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building, HP31. Urban open space

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
Photograph #0958

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1928, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper, and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 19, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☐ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

UPDATE SHEET

Primary # 19-173078
HRI #
Trinomial
NRHP Status Code

Page 1 **of** 2

***Resource Name or #:** (Assigned by recorder) 200 North Spring Street building

☐ Continuation ☒ Update

***P3a. Description:**

The Los Angeles City Hall building was constructed in 1928. The property was designed by John Parkinson, Albert C. Martin, and John C. Austin. The property was listed as a Los Angeles Historic-Cultural Monument (LAHCM) in 1976 (no. 150). Located at 200 North Spring Street (Assessor Parcel Number 5161005906), the block is surrounded by landscaped park areas, mature trees, and concrete sidewalks (Plate 6). Los Angeles City Hall is a 32-story, monumental government building, designed with academic Classical and climate-evoking Mediterranean influences, in four major masses including the base, central tower with pyramidal apex inspired by ancient mausoleums, and flanking low-rise office wings (SWCA 2009).

***B10. Significance Evaluation**

The resource was originally recorded and listed as a LAHCM in 1976; in 1988 the resource was found eligible for listing in the NRHP; and in 2009 the building was found eligible as a contributor to a CRHR-eligible Civic Center historic district (SWCA 2009). The resource appears to retain its historic integrity of its last recordation in 2009, and therefore appears to continue to be eligible for listing in the National and California registers.

***P8. Recorded by:** M. Mello, AECOM, 401 West A Street, Suite 1200, San Diego, CA 92101

***P9. Date Recorded:** July 2018

***P10. Survey Type:** Reconnaissance

***P11. Report Citation**: Cultural Resources Assessment for the First and Broadway Civic Center Park Project, Los Angeles, California, AECOM 2018

***B12. References**

SWCA Environmental Consultants (SWCA)
2009 Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # 19-173078
HRI #
Trinomial
NRHP Status Code

Page 2 **of** 2

***Resource Name or #:** (Assigned by recorder) 200 North Spring Street building

☐ Continuation ☒ Update

P5a. Photographs:

Photograph 1. Los Angeles City Hall, 200 North Spring Street, View east, July 25, 2018.

Photograph 2. Los Angeles City Hall, 200 North Spring Street, View east, July 25, 2018.

DEPARTMENT OF PARKS AND RECREATION

HISTORIC RESOURCES INVENTORY

(State use only)
No. 2 1 Yr.
UTM ______ Q ______ NR ______ SHL ______ 69
Lat ______ Lon ______ Era ______ Sig ______
Adm ____ T2 ____ T3 ____ Cat ____ HABS ____ HAER ____ Fed ____
5149-01-06

IDENTIFICATION

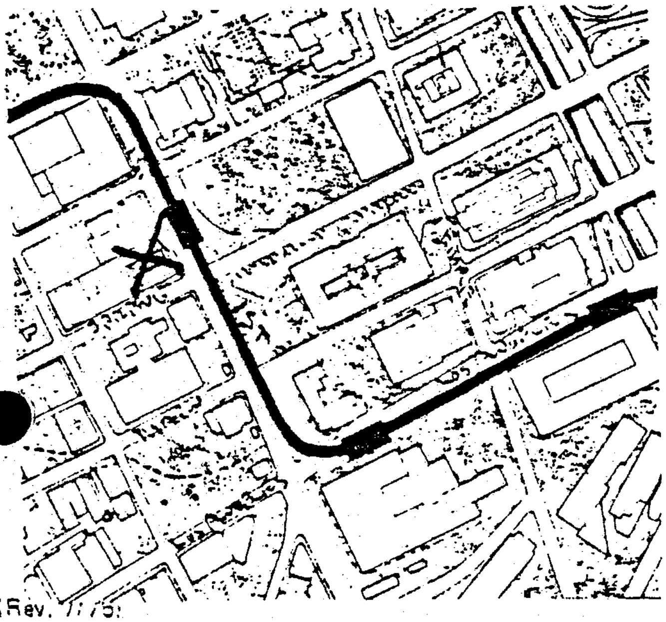
1. Common name: L. A. Times Complex 19-173080 4435 ~~4380~~
2. Historic name, if known: L. A. Times
3. Street or rural address 202 West First Street
City: Los Angeles ZIP: 90012 County: Los Angeles
4. Present owner, if known: Times Mirror Company Address: Times Mirror Square
City: Los Angeles ZIP: 90012 Ownership is: Public ☐ Private ☒
1706 5. Present Use: Office Bldg., Newspaper Original Use: Newspaper
Other past uses:

DESCRIPTION

6. Briefly describe the present physical appearance of the site or structure and describe any major alterations from its original condition: The building consists of a multi-story structure ranging up to ight stories with basement. The structure is built of steel frame construction ith reinforced concrete, metal lath, and reinforced concrete floors and decking. e exterior facade is of marble at the base, and stone facing with spandrel anels capped by a tile roof above the central clock tower. The form of the uilding is stepped in a symmetrical and pyramidal manner with a central entranc he building is articulated through the use of grooved vertical ribs dividing he window base. Ornamentation is confined to spandrel panels and tops of piers. [illegible]ilding shows a simplicity of detailing and massiveness of form characterist: [illegible] WPA moderne. The Times Mirror complex consists of several associated and ljacent structures including a press, warehouse, mailing room, machine shops, anc fices. The most notable addition is located at the corner of Broadway and First is addition consists of metal panels and stone facing in a form influenced by_ th corporate international style.

7. Locational sketch map (draw and label site and surrounding streets, roads, and prominent landmarks):

NORTH



8. Approximate property size:
Lot size (in feet) Frontage 164.7'
Depth 364.36'
or approx. acreage 1.392

9. Condition: (check one)
a. Excellent ☒ b. Good ☐ c. Fair ☐
d. Deteriorated ☐ e. No longer in existence ☐

10. Is the feature a. Altered? ☒ b. Unaltered? ☐

11. Surroundings: (Check more than one if necessary)
a. Open land ☐ b. Scattered buildings ☐
c. Densely built-up ☐ d. Residential ☐
e. Commercial ☒ f. Industrial ☐
g. Other ☐

12. Threats to site:
a. None known ☐ b. Private development ☐
c. Zoning ☐ d. Public Works project ☐
e. Vandalism ☐ f. Other ☐

13. Date(s) of enclosed photograph(s) May 1978

NOTE: The following (Items 14-19) are for structures only. 19-173080

70

14. Primary exterior building material: a. Stone ☐ b. Brick ☐ c. Stucco ☐ d. Adobe ☐ e. Wood ☐
f. Other ☒ Concrete and metal

15. Is the structure: a. On its original site? ☒ b. Moved? ☐ c. Unknown? ☐

16. Year of initial construction 1934 This date is: a. Factual ca ☒ b. Estimated ☐

17. Architect (if known): Gordon B. Kaufmann

18. Builder (if known): P. J. Walker

19. Related features: a. Barn ☐ b. Carriage house ☐ c. Outhouse ☐ d. Shed(s) ☐ e. Formal garden(s) ☐
f. Windmill ☐ g. Watertower/tankhouse ☐ h. Other ☒ Additions to structure None ☐

SIGNIFICANCE

20. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site when known):

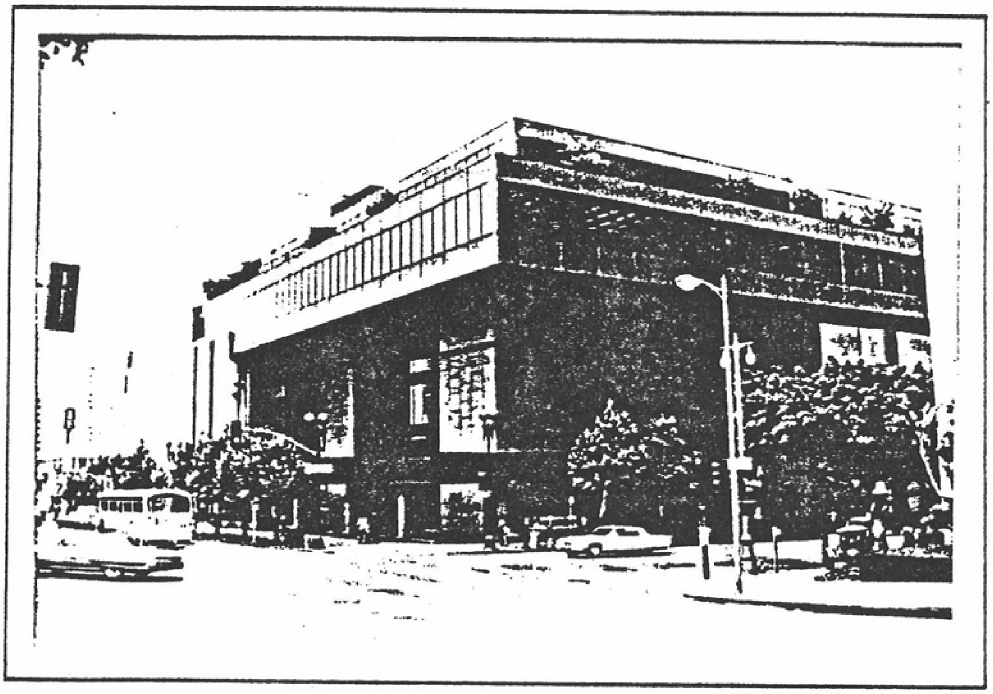
The structure was designed by the prominent architect Gordan B. Kaufmann. Th original structure is perhaps the best example of what has come to be known a WPA modeme architecture in the downtown area. The entire Times Mirror Compan is an impressive architectural and industrial achievement. The additions to the original have been well integrated into a structural whole. The building is the home of a major American newspaper which has long been an important business enterprise in the City of Los Angeles.

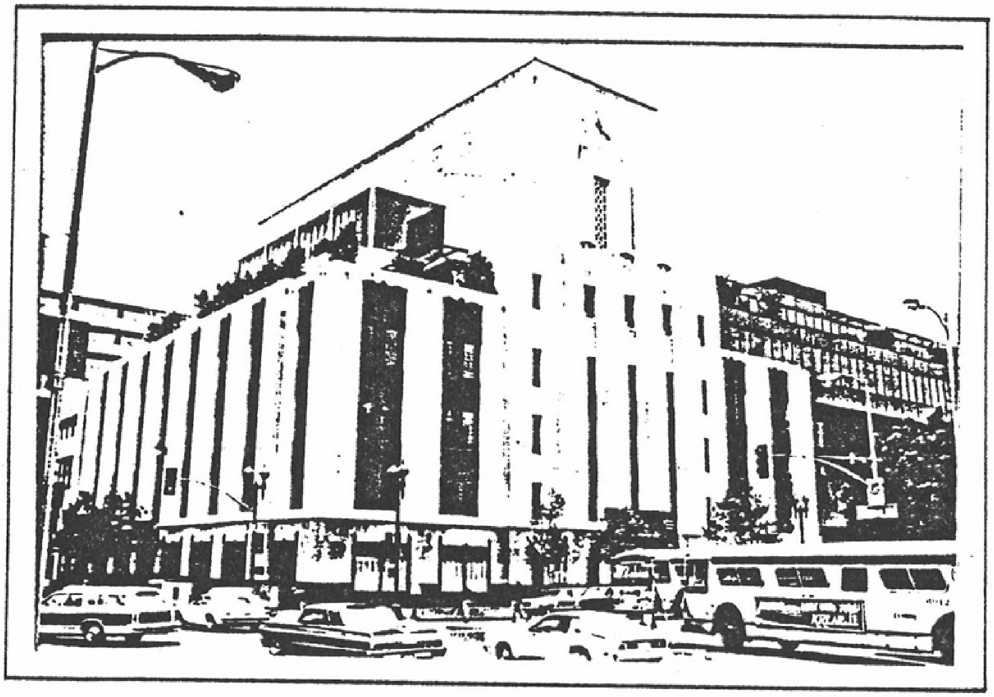
21. Main theme of the historic resource: (Check only one): a. Architecture ☐ b. Arts & Leisure ☐
c. Economic/Industrial ☒ d. Exploration/Settlement ☐ e. Government ☐ f. Military ☐
g. Religion ☐ h. Social/Education ☐

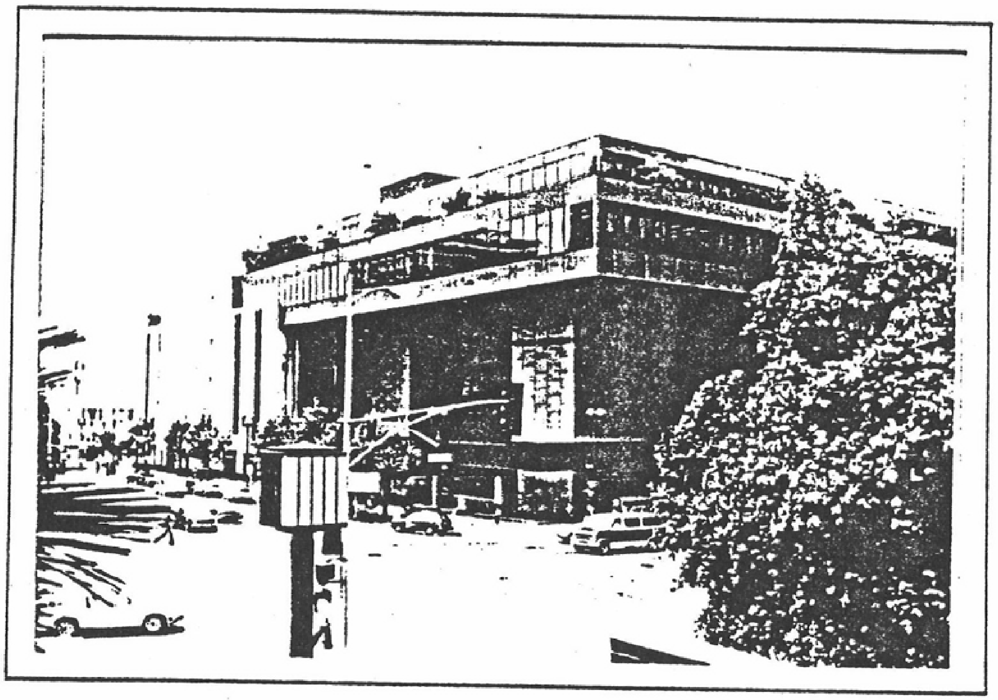
22. Sources: List books, documents, surveys, personal interviews, and their dates: LUPAMS; Sanborn Maps, Baist's Atlas, WPA drawings, Building permit cards, Southwest Builder & Contractor 4-13-34, pp 18-20, L. A. City Directories 1933-34.

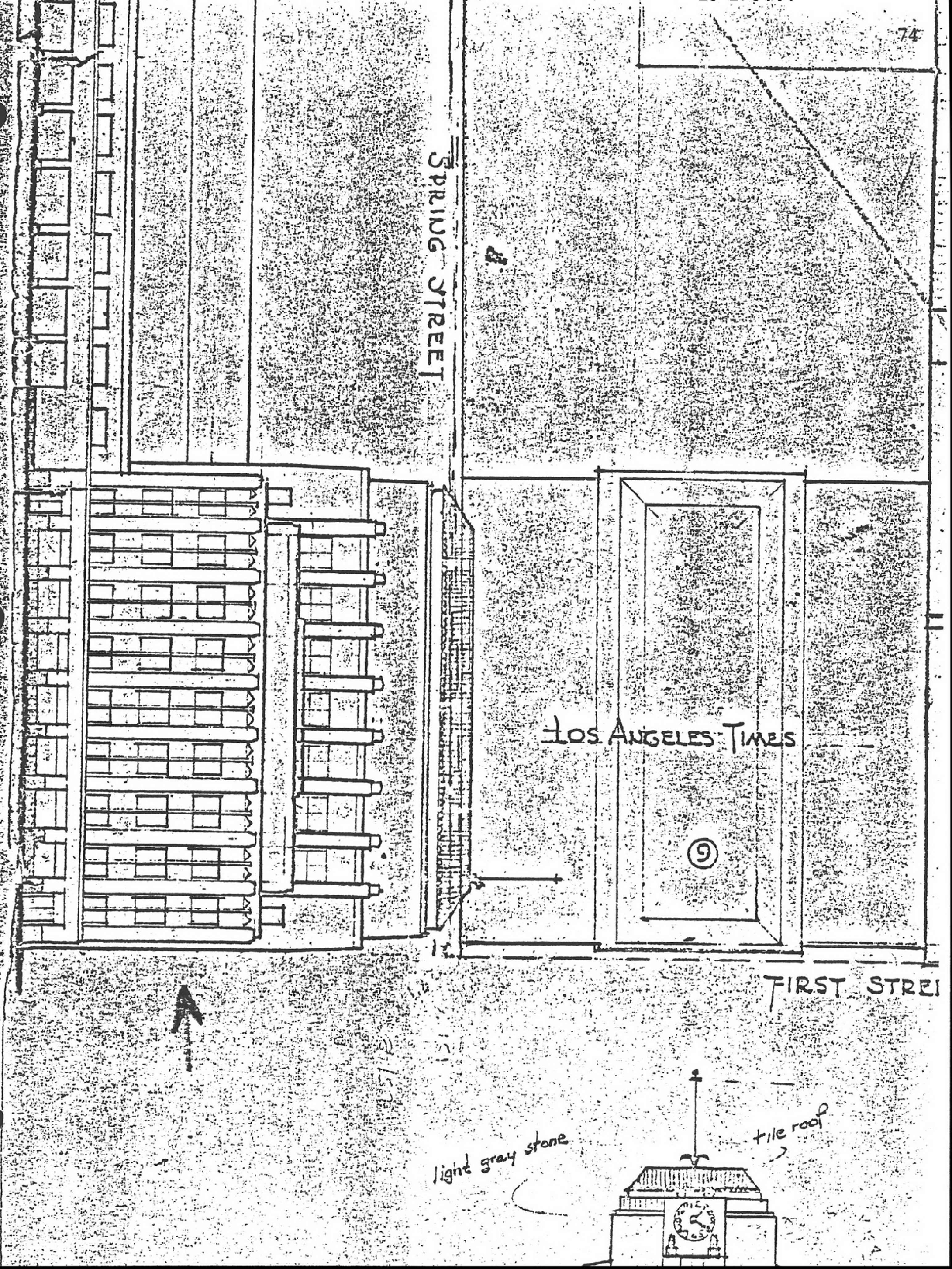
23. Date form prepared: June, 1978 By (name): Roger Hatheway - John Chase
Address: 727 West 7th Street City Los Angeles, California ZIP 90017
Phone: 688-7520 Organization: Community Redevelopment Agency of the City of Los Angeles

(State Use Only)



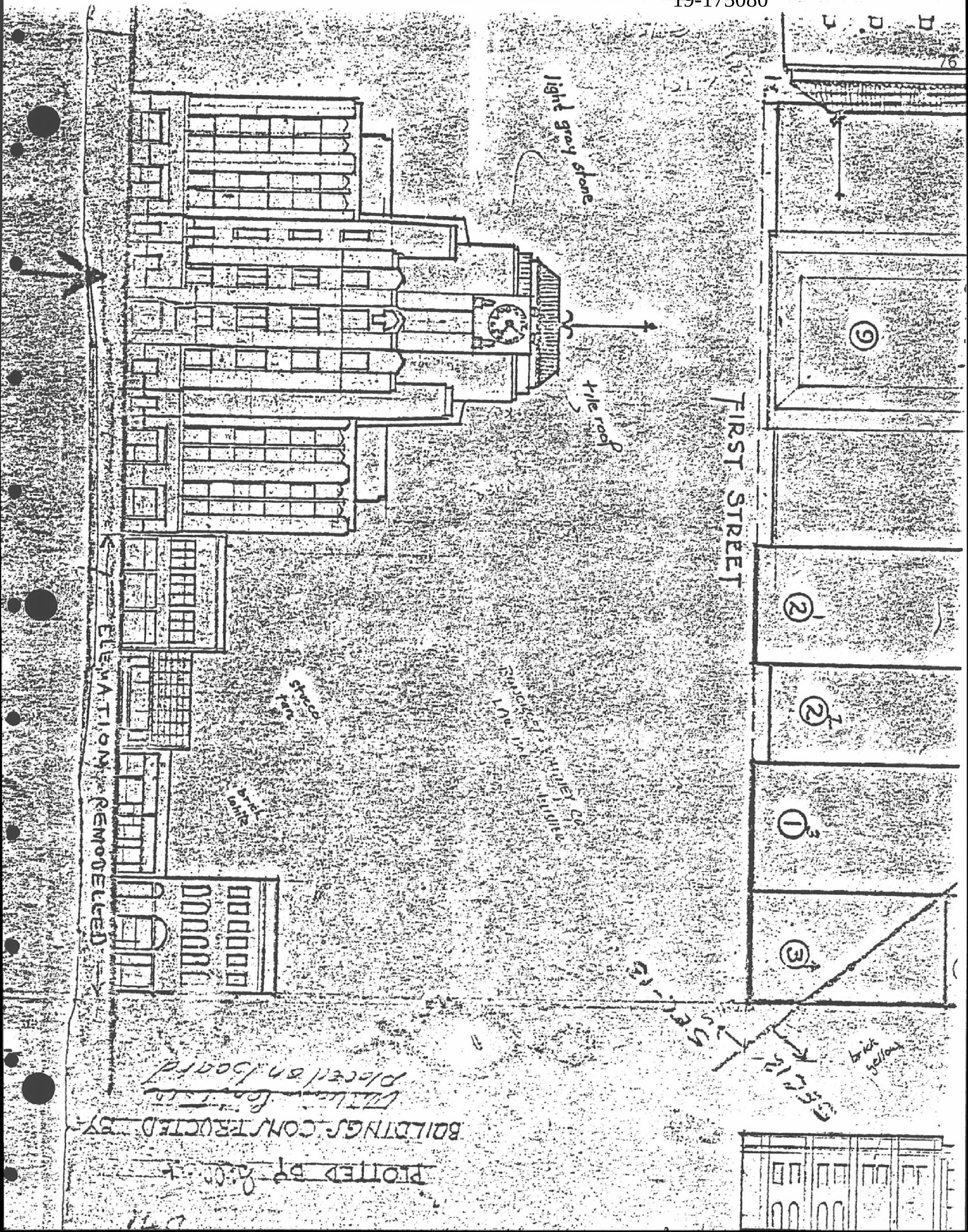





SPRING STREET
LOS ANGELES TIMES
9
FIRST STREI
light gray stone
tile roof


stone gray
ELEVATION REMODELLED
brick yellow
brick gray-buff
ELEVATION REMODELLED
TIMES MIRROR PRINTING & BINDING HOUSE
stucco light gray
BROADWAY
3
1
4
3
4
3
1
400
50

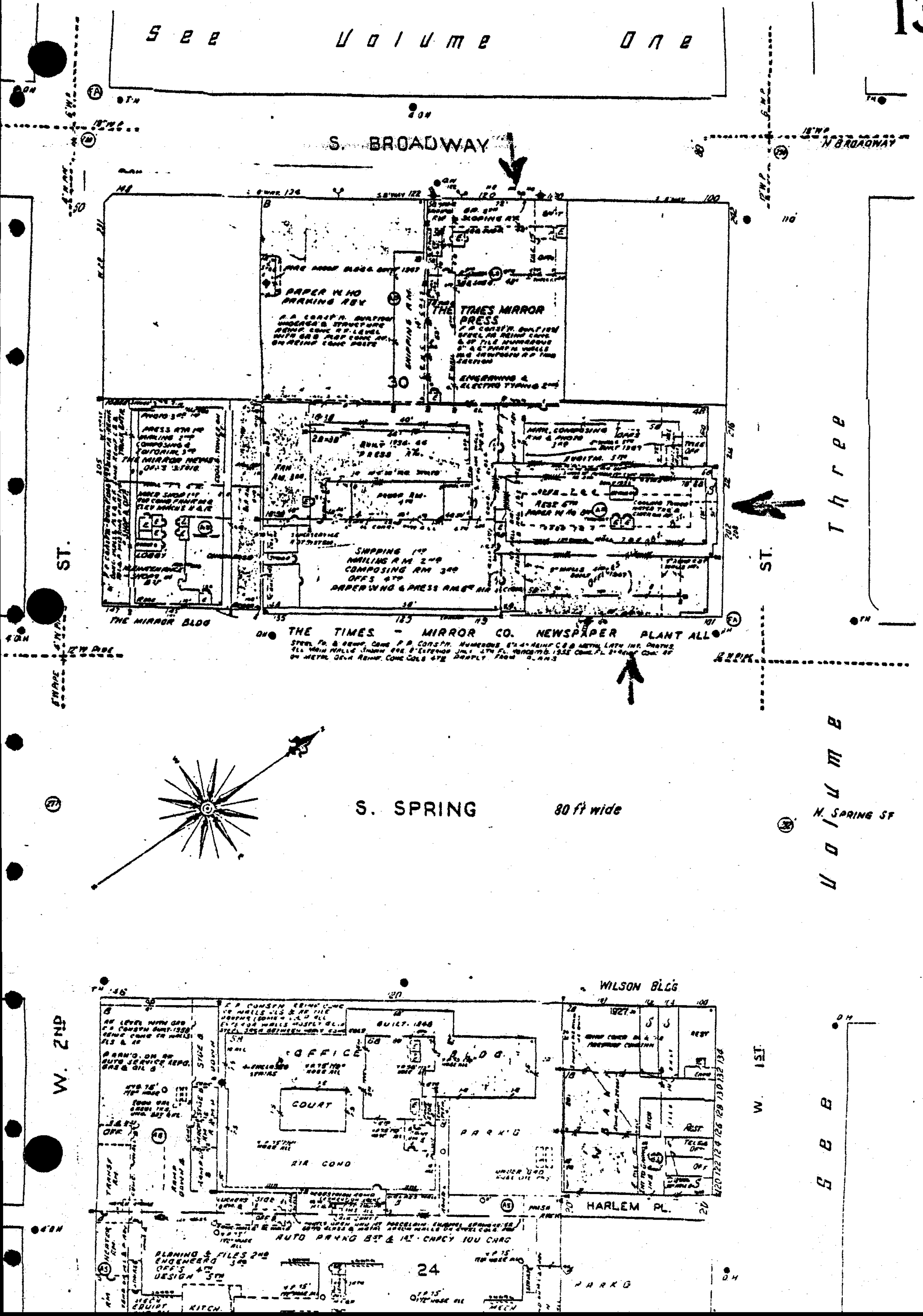
19-173080


76
light gray stone
tile roof
FIRST STREET
9
2
2
1
3
ELEVATION REMODELLED
stucco tan
brick white
brick yellow
BUILDINGS CONSTRUCTED BY
PLOTTED BY

19-173080

77

132



Los Angeles Downtown People Mover Program
Historic Resources Inventory Form

19-173080

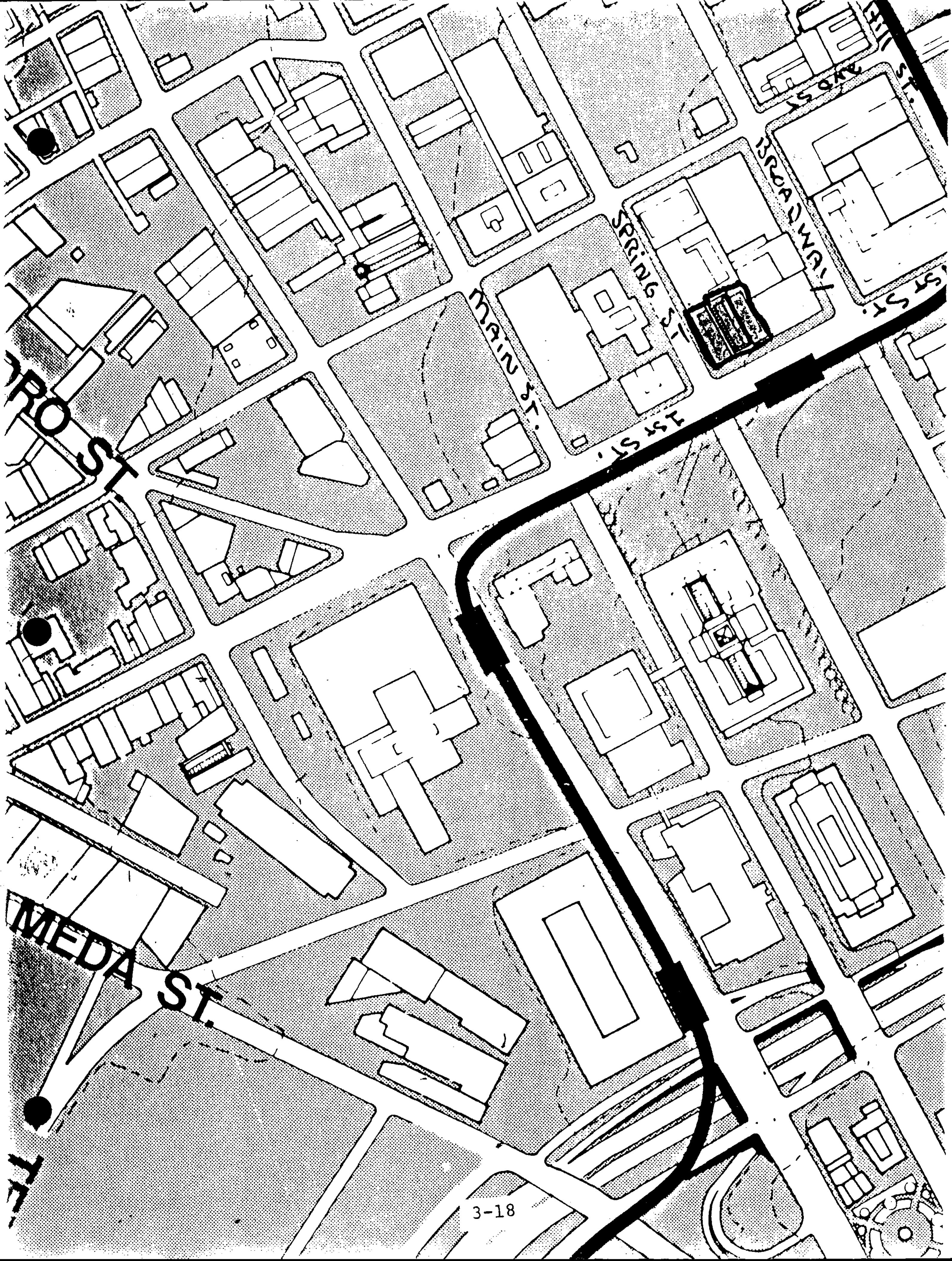
UMTA781024A

Prop# 027/21

Hist. Res. DOE-19.79-0004-0000

IDENTIFICATION

1. Common name: Los Angeles Times Building.
2. Historic name, if known: Los Angeles Times Building.
3. Street or rural address 202 W. First Street. 201 W First St
City: Los Angeles ZIP: 90012 County: Los Angeles
4. Present owner, if known: Times Mirror Co. Address: Times Mirror Square
City: Los Angeles ZIP: 90012 Ownership is: Public ☐ Private ☒
5. Present Use: Publishing Co. Original Use: Publishing Co.
Other past uses:
6. Classification Building
7. Approximate property size:
Lot size (in feet) Frontage 164.7'
Depth 364.36'
or approx. acreage 1.392
8. Condition: (Check one)
a. Excellent ☒ b. Good ☐ c. Fair ☐
d. Deteriorated ☐ e. No longer in existence ☐
9. Is the feature a. Altered? ☒
b. Unaltered? ☐
10. Surroundings: (Check more than one if necessa
a. Open land ☐ b. Scattered buildings ☐
c. Densely built-up ☒ d. Residential ☐
e. Commercial ☒ f. Industrial ☐
g. Other ☒ City Government Building
11. Threats to site:
a. None known ☐ b. Private development ☐
c. Zoning ☐ d. Public Works project ☐
e. Vandalism ☐ f. Other ☒ See Attached Technical Report
12. Date(s) of enclosed photograph(s) Nov. 197
13. Primary exterior building material: a. Stone ☒ b. Brick ☐ c. Stucco ☐ d. Adobe ☐
e. Wood ☐ f. Other ☒ Concrete
14. Is the structure: a. On its original site? ☒ b. Moved? ☐ c. Unknown? ☐
15. Year of initial construction 1933 This date is: a. Factual ☒ b. Estimated ☐
16. Architect (if known): Gordon B. Kaufmann
17. Builder (if known): P.J. Walker
18. Related features: a. Barn ☐ b. Carriage house ☐ c. Outhouse ☐ d. Shed(s) ☐
e. Formal garden(s) ☐ f. Windmill ☐ g. Watertower/tankhouse ☐ h. Other ☒ Several
i. None ☐ Additions to Structure (See Sections 21 and 22)
19. Main theme of the historic resource: (Check only one): a. Architecture
b. Arts & Leisure ☐ c. Economic/Industrial ☒ d. Exploration/Settlement ☐
e. Government ☐ f. Military ☐ g. Religion ☐ h. Social/Education ☐
20. Date form prepared: Dec. 1978 By (name): Roger G. Hatheway
Address: 727 W. 7th St. City Los Angeles ZIP: 90017
Phone: 688-7520 Organization: C.R.A.


Hill St.
2nd St
BROADWAY
1st St.
SPRING ST.
MAIN ST.
1st St.
RO ST.
MEDA ST.
TE

21. DESCRIPTION

The building is a monitor shaped, multi-story structure ranging from five to eight stories in height with a basement and sub-basement. The building is of Class A fireproof construction , with skeleton steel frame, and reinforced concrete filler walls, floors and roof slabs. Granite and Indiana limestone are the primary facing materials. Exterior spandrel are of deplated aluminum and the showcase windows are set in bronze. The form of the building is stepped in a symmetrical and pyramidal manner with a central entrance on First Street. The facade is articulated throug the use of grooved vertical ribs dividing the window bays. Ornamentation is confined primarily to spandrel panels although there is some decorative detail surrounding the showcase windows, a repeating eagle motiff in stone and three carved figures above the central entrance. The building is designed in the Moderne style, representing the importance of structural form and utility in design rather than ornamentation.

There have been several additions to the Kaufmann designed Times Structure These additions now comprise the Times Mirror Square

(Continued on following page)

22. SIGNIFICANCE

The structure was designed by the prominent Southern California Architect, Gordon B. Kaufmann. This structure is perhaps the best example of what has come to be known as the WPA moderne in the downtown area.

When it was built the Times Building was the largest structure in the west designed for and occupied entirely by a daily newspaper. It embodied the latest ideas in planning, construction and equipment and was a symbol of the growth and progress of the Los Angeles Times.

Two of the most outstanding construction features were the earthquake resistant design and the building air-conditioning plant. The building was actually designed as two separate structural units. A space of six inches separates the two units and they are connected by slip joints of metal. This insured that the building components would have two different periods of oscillation, and would be safer in the event of a severe earthquake. The air-conditioning system was then the most extensive and comple of any in the west. It included special humidity controls designed to maintain the proper moisture level in the mechanical and printing departments.

The building itself must also be viewed as part of growth of the Times Mirror Company. The first issue of the T imes appeared on December 4, 188 Six months later the orginal publishers sold an interest in the paper to

(Continued on following page)

23. REPRESENTATION IN EXISTING SURVEYS

The Times Building is not represented in any survey other than the initial Los Angeles Downtown People Mover Historical Resources inventory. A form does, however exist for the Butterfield Stage Station which was locat at the site of the present Times Complex, the form is California Historica Resources Inventory #466.

21. DESCRIPTION (Continued)

a complex of structures devoted entirely to the publishing industry. The most notable addition is located at the corner of Broadway and First Street and is directly adjacent to the older Kaufmann designed building. This newer building was erected in 1973 and is in a form influenced by the corporate international style. All of the addition are compatible with the original.

The interior of the building has been remodeled to accommodate the growth of the newspaper. The lobby remains, however much in its original condition. Floors are of inlaid marble with bronze relief; panels surround a large, centrally located globe. The elevator waiting area is ornamented in a mixture of deco and streamline modern motifs. The only major alteration to the lobby area consists of the covering up of a large circular painted mural with metal screening.

22. SIGNIFICANCE (Continued)

Harrison Gray Otis, a prominent and influential citizen. As the majo stockholder Otis moved the paper to the Broadway and First Street location in downtown Los Angeles.

This structure was destroyed by a bombing in 1910, but a new building was erected on the same site. This structure served as the Times office until the Kaufmann designed building was erected.

The Times building must therefore, be considered as significant not only for its design and structural characteristics, but as a symbol of the growth of the Times Mirror Company.

24. BIOGRAPHICAL NOTES ON THE ARCHITECT

Kaufmann, Gordon B. (1888 - 3/1/1949)

Kaufmann was born in London, England. He was educated at the London Polytechnic Institute, and graduated at the age of twenty. He moved to and established residence in Los Angeles, California in 1914 and, in 1920 formed a partnership with Reginald Johnson and Roland Coate.

The partnership produced a considerable number of residential and public buildings, perhaps the most notable of which is St. Pauls Cathedral.

continued on next page

25. ADDITIONAL HISTORICAL NOTES

Leadership of the Times passed to Harry Chandler in 1917, upon the death of his father-in-law Otis. The Times has since remained under the guidance of the Chandler family. Today the Times is the third ranked newspaper in the nation according to a publishers survey.

26. BIBLIOGRAPHY

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December 29, 1933, p. 23.

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May 1937, Vol 129, No. 2, p. 13-18.

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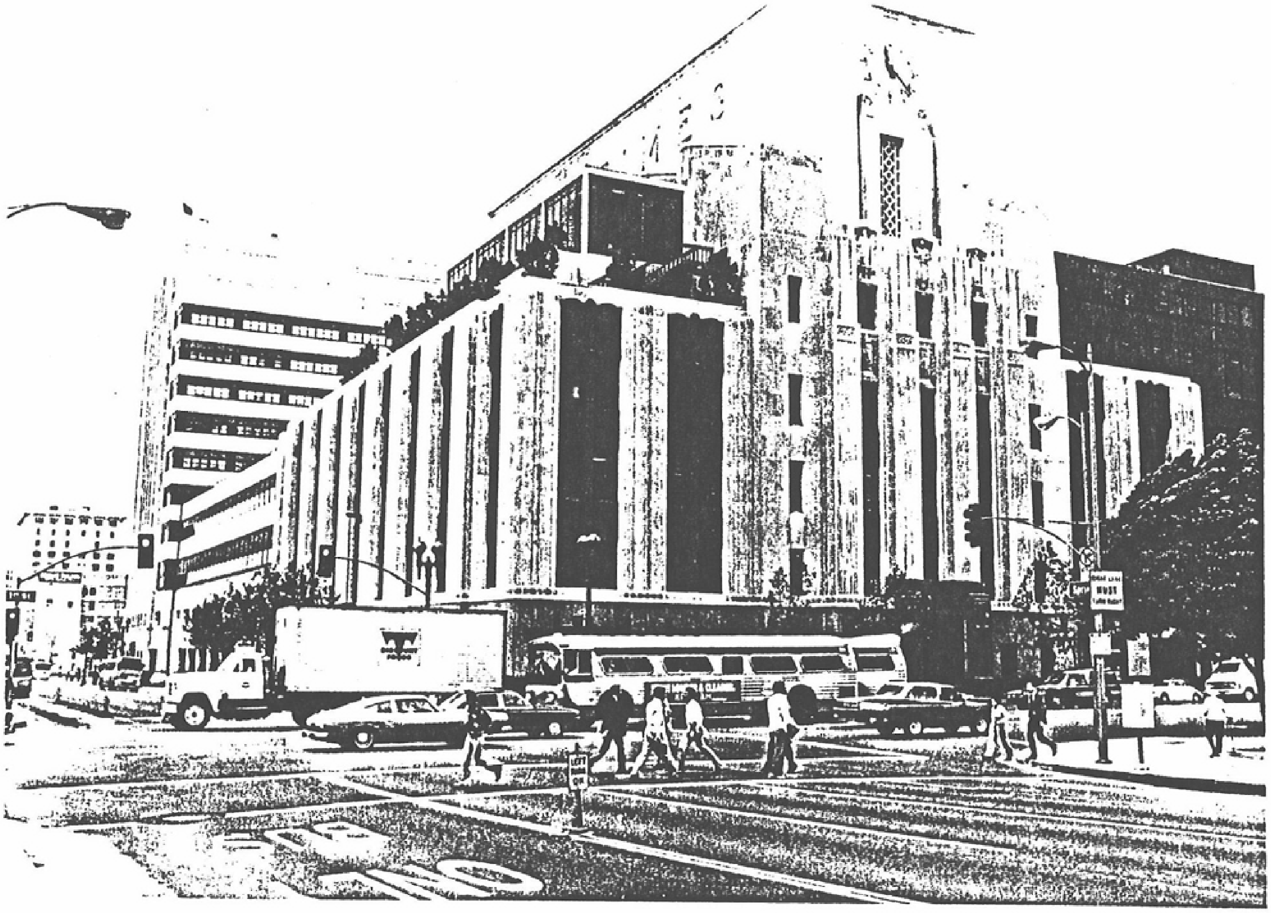
City of Los Angeles, City Hall.

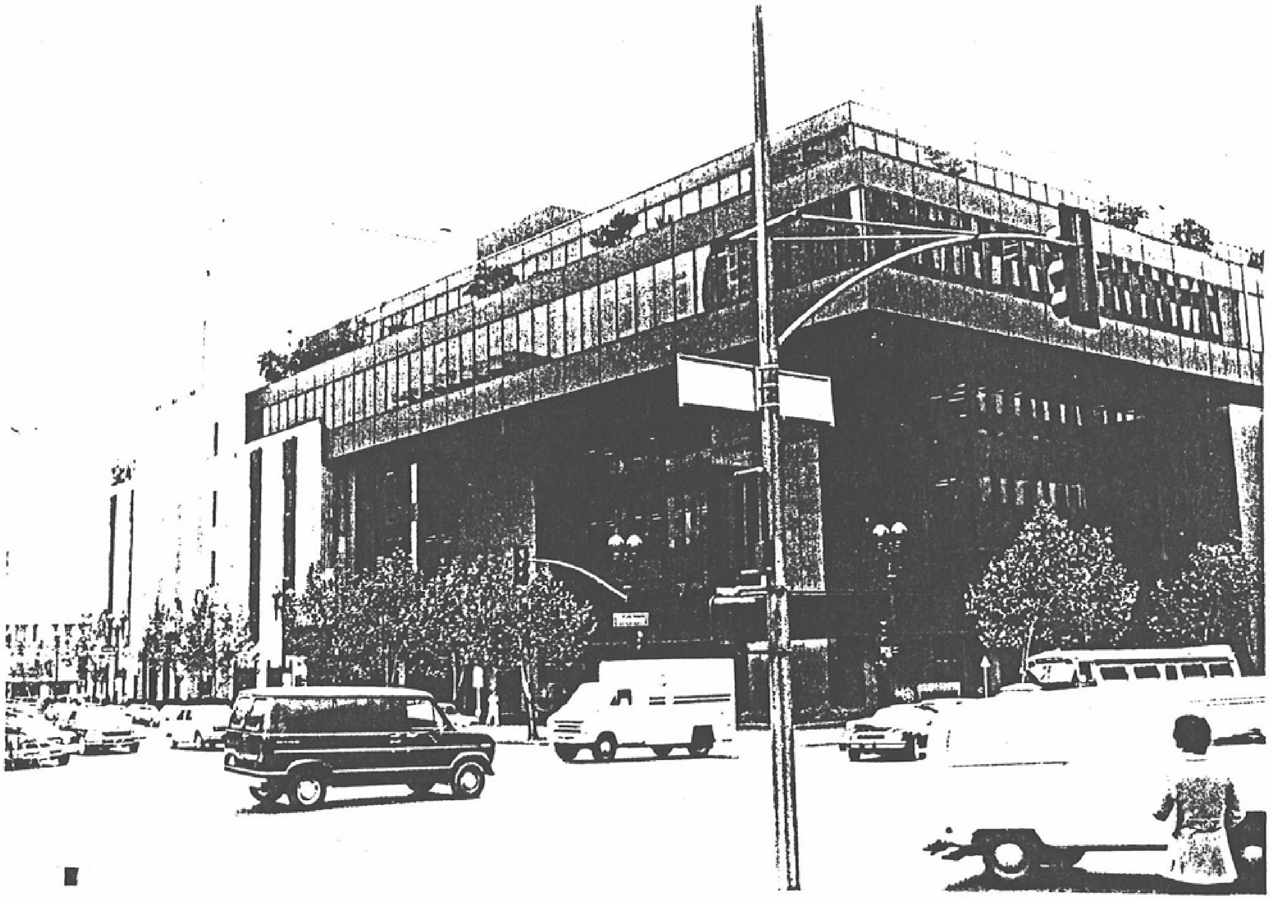
24. BIOGRAPHICAL NOTES ON THE ARCHITECT cont....

Kaufmann designed the Times building as an independent project and it is generally regarded as the outstanding example of his architectural creativity, although he was equally familiar with a number of other styles including Italian, Spanish, French, English, and Old World Renaissance.

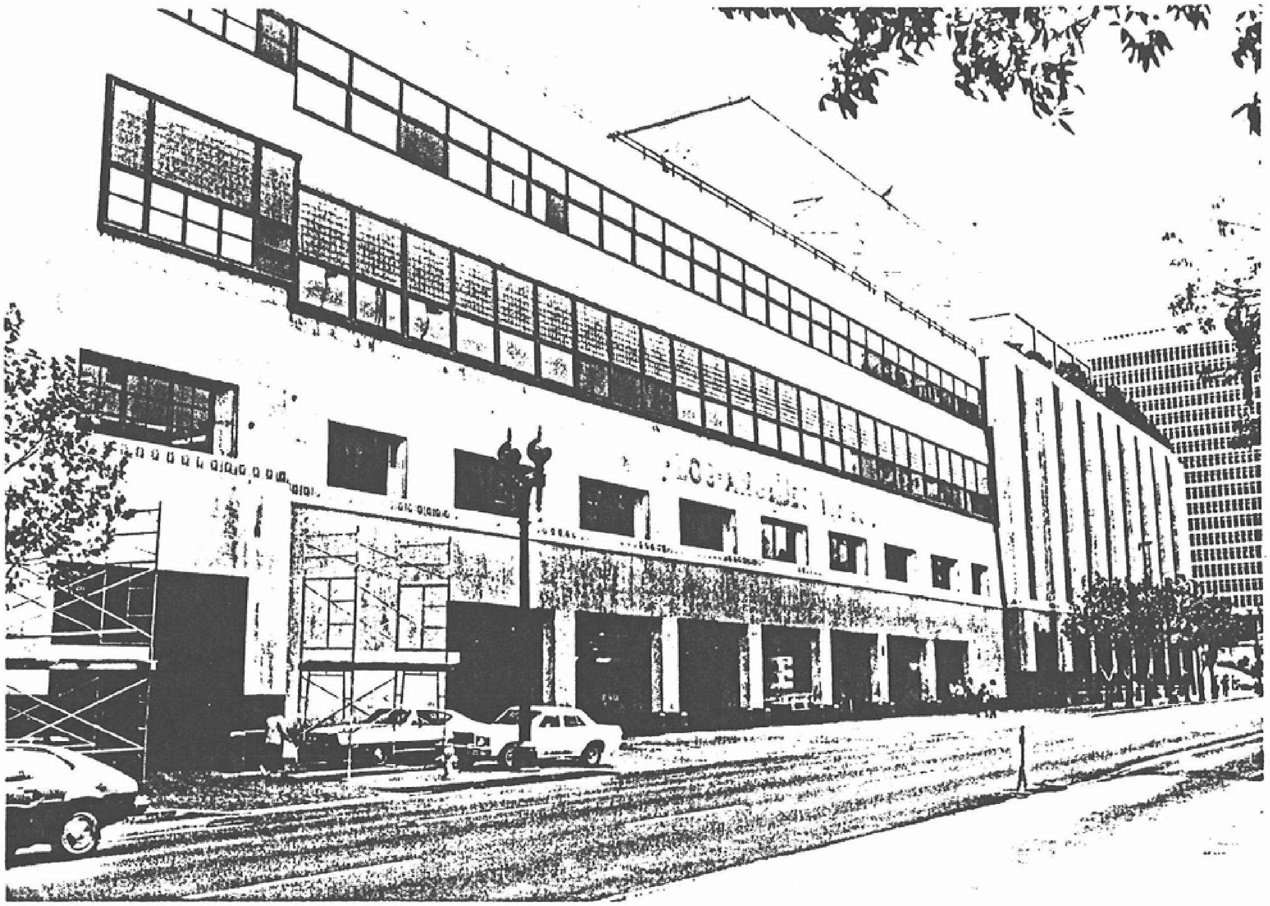
Kaufmann designed structures throughout Southern California, and was a well known and respected member of the American Institute of Architects.



LOS ANGELES TIMES BLDG.
FROM N.E. CORNER OF FIRST
AND SPRING STREETS



LOS ANGELES TIMES BUILDING
FROM THE N.W. CORNER OF
FIRST AND BROADWAY



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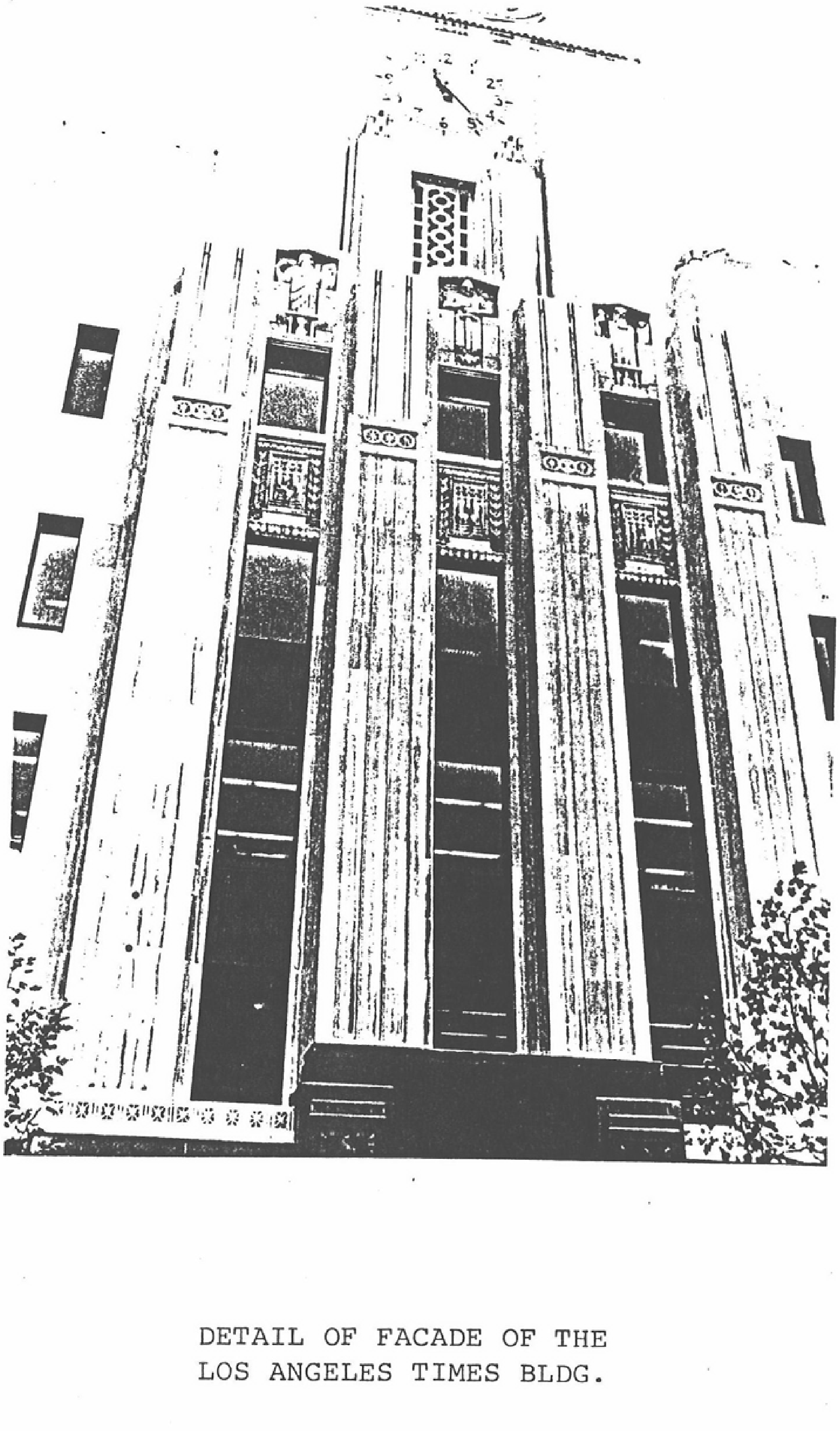
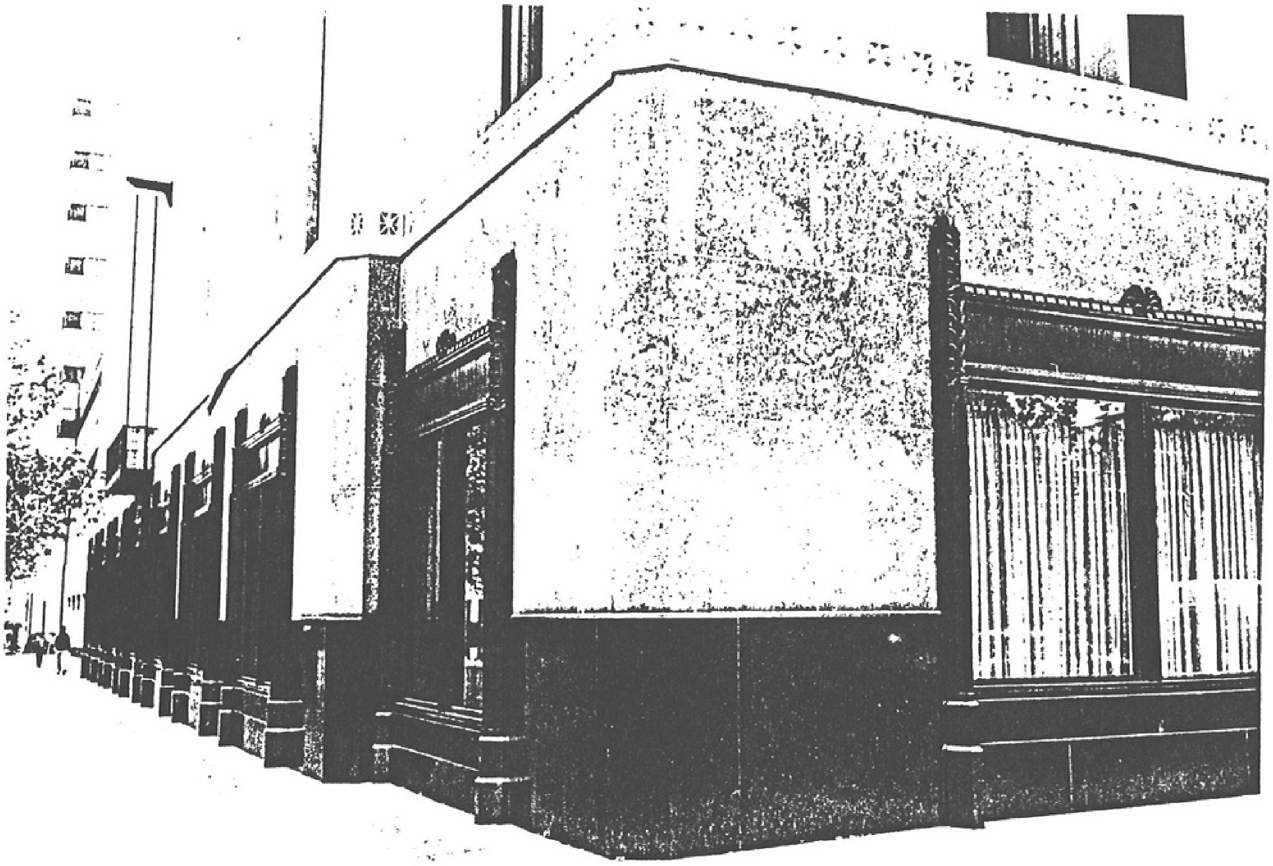
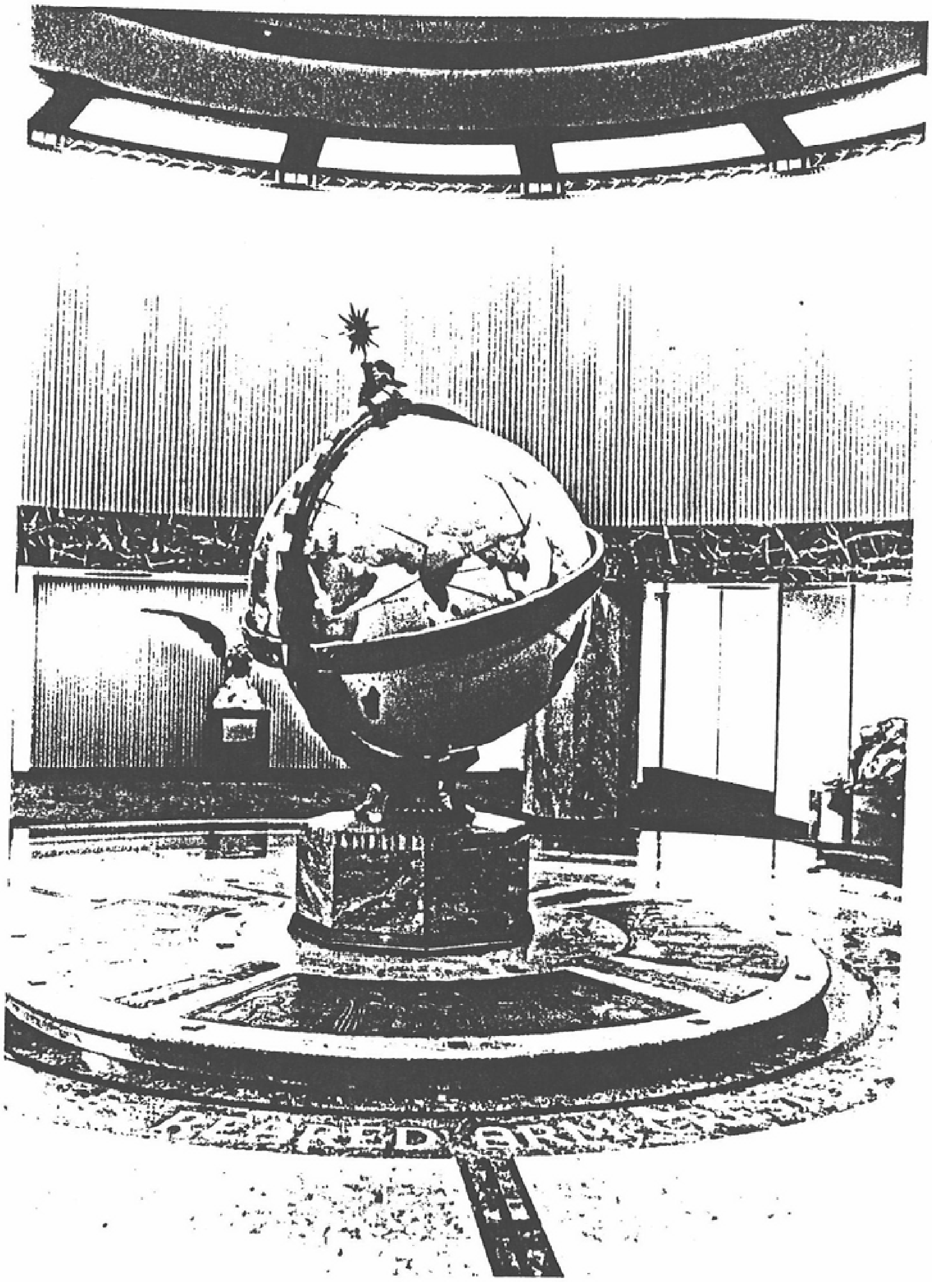
FROM THE S.E. CORNER OF
SECOND AND SPRING STS.



DETAIL OF FACADE OF THE
LOS ANGELES TIMES BLDG.

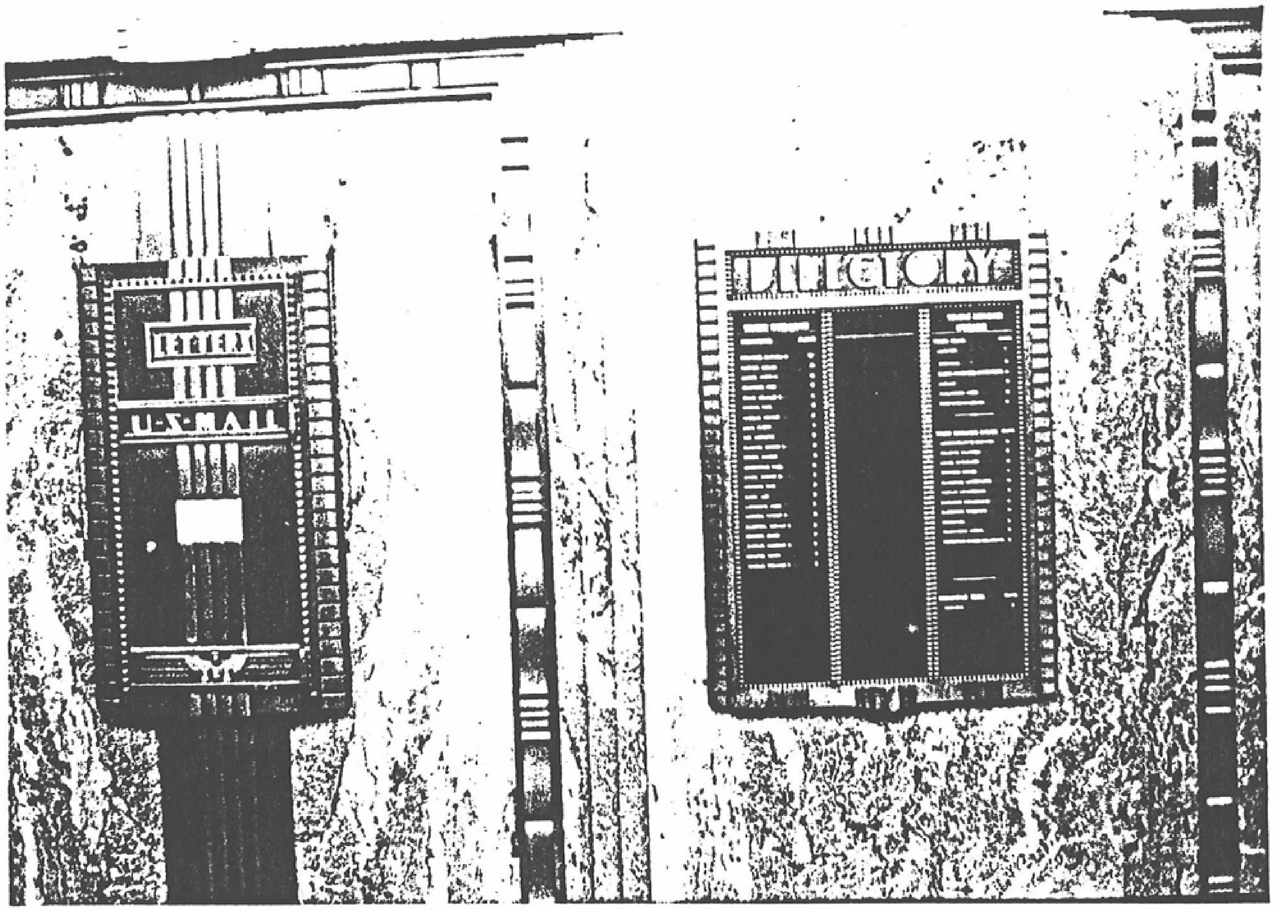


DETAIL OF SHOWCASE WINDOWS - LOS ANGELES TIMES BUILDING



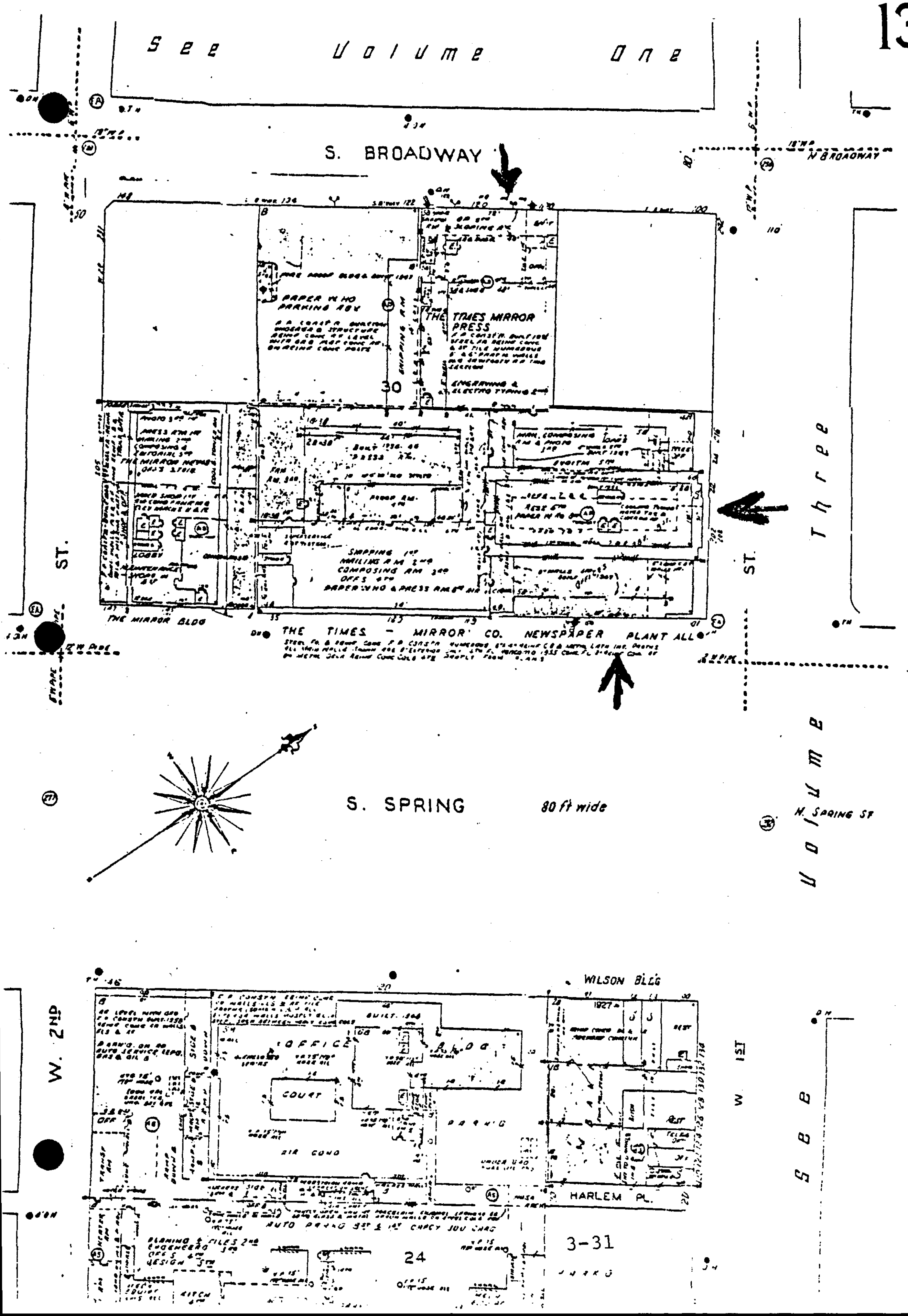
L. A. TIMES BUILDING
LOBBY

ELEVATOR LOBBY
LOS ANGELES TIMES BLDG.



LOBBY DETAIL OF
LOS ANGELES TIMES BLDG.

19-173080


See Volume One
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N BROADWAY
THE TIMES MIRROR PRESS
PAPER W HO PARKING ABV
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THE MIRROR BLDG
THE MIRROR NEWS
ST.
ST.
Three
Volume
THE TIMES - MIRROR CO. NEWSPAPER PLANT ALL
S. SPRING
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N. SPRING ST
WILSON BLDG
W. 2ND
W. 1ST
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COURT
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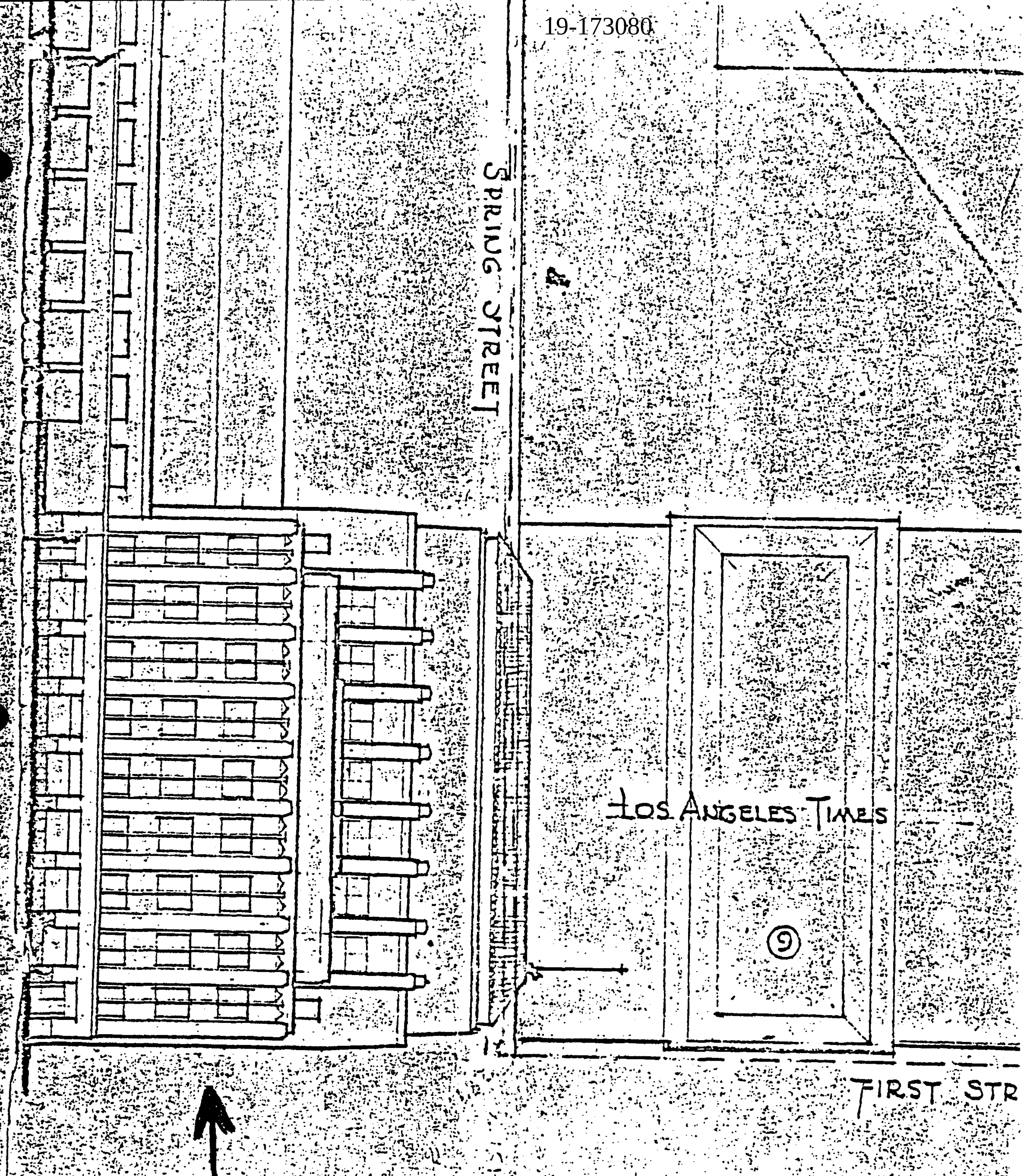
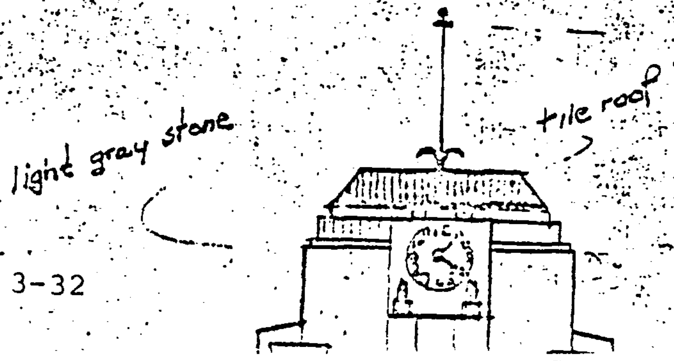
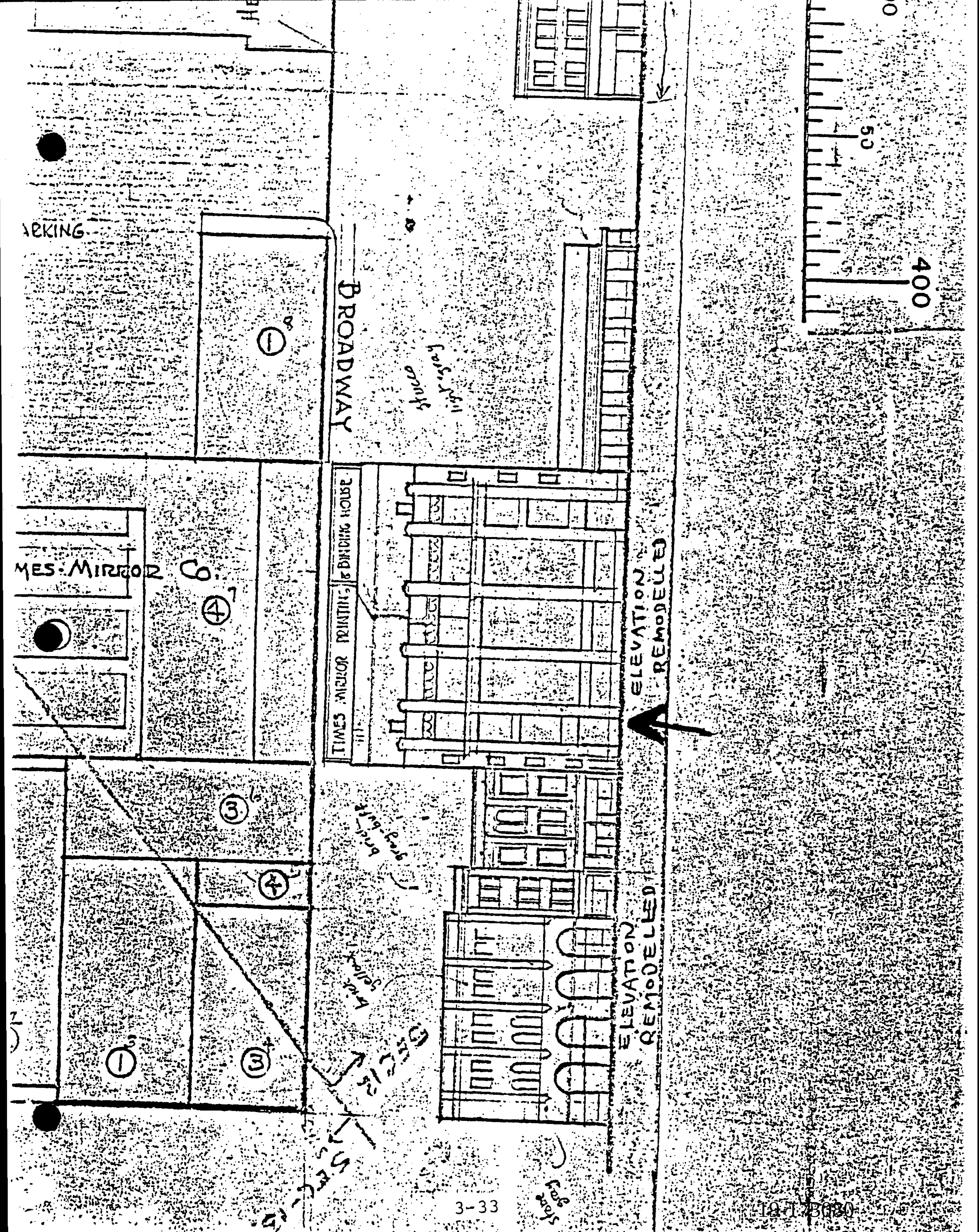
HARLEM PL.
24
3-31


SPRING STREET
LOS ANGELES TIMES
9
FIRST STR


light gray stone
tile roof


ARKING
BROADWAY
①
④
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④
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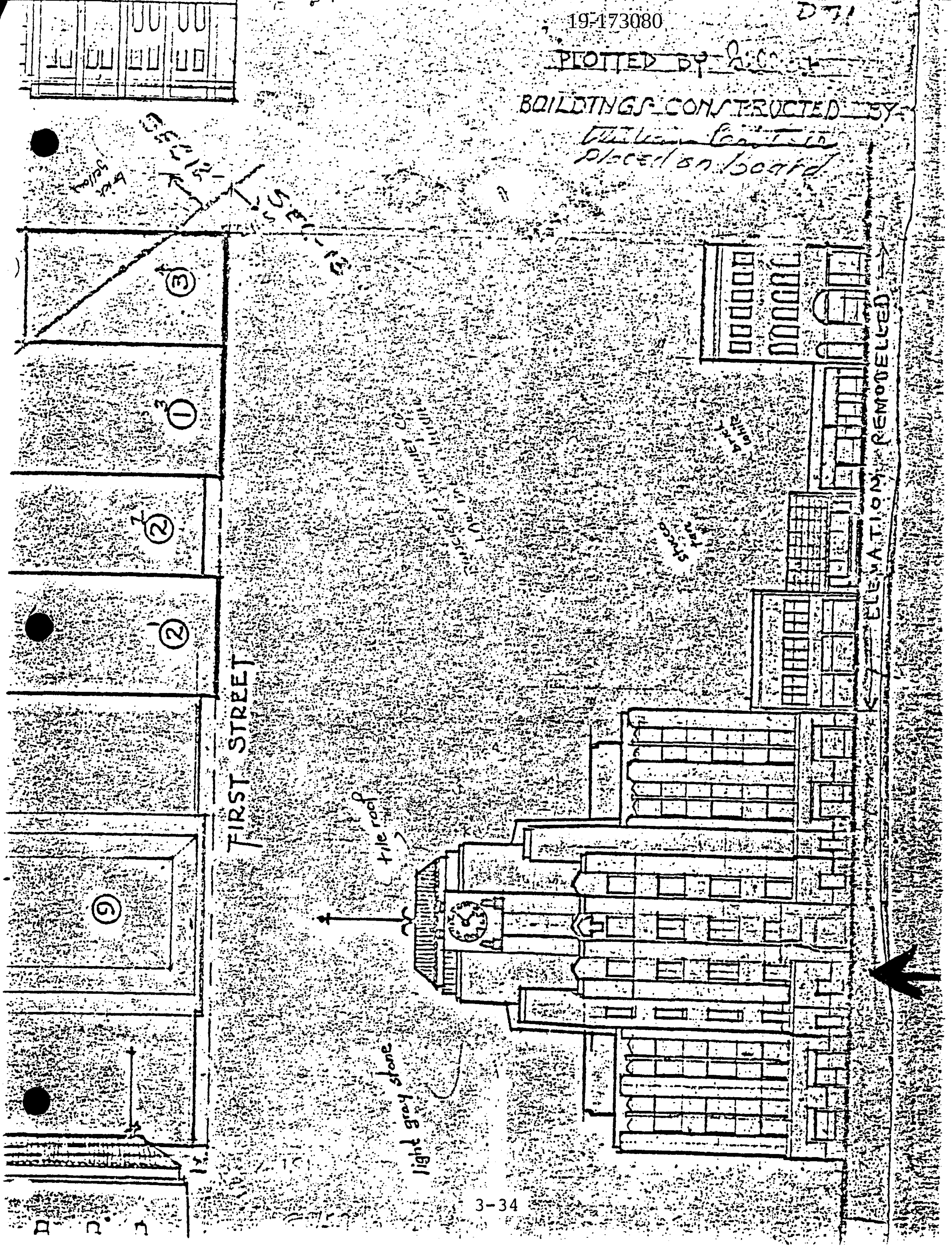
③
MES-MIRROR CO.
TIMES MIRROR PRINTING & BINDING HOUSE
ELEVATION REMODELLED
ELEVATION REMODELLED
stucco
400
50

19-173080

D71

PLOTTED BY

BUILDINGS CONSTRUCTED BY
William [illegible]
Placed on board



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # P-19-173080
HRI #
Trinomial
NRHP Status Code

Page 1 **of** 2

***Resource Name or #:** (Assigned by recorder) Los Angeles Times Building

☐ Continuation ☒ Update

***P3a. Description:**

The Los Angeles Times building, constructed by Gordon B. Kaufmann in the Art Deco Moderne style was constructed in 1935 (**Photographs 1 and 2**). In 1948, a 10 story addition at the northwest corner of South Spring Street and West 3rd Street was added. A six story Contemporary style addition was added to the building from 1970-1973.

***B10. Significance Evaluation**

The building was previously determined eligible for listing in the NRHP in 1978. The Los Angeles Times building continues to be eligible for listing in the National and California registers under Criterion A or CRHR Criterion 1 for association with the development of Los Angeles, and under Criterion C or CRHR Criterion 3 for its combination of Art Deco, Moderne, and Contemporary styles.

***P8. Recorded by:** M. Mello, AECOM, 401 West A Street, Suite 1200, San Diego, CA 92101

***P9. Date Recorded:** June 2018

***P10. Survey Type:** Reconnaissance

***P11. Report Citation**: Cultural Resources Assessment for the First and Broadway Civic Center Park Project, Los Angeles, California, AECOM 2018

P5a. Photographs:

Photograph 1. Los Angeles Times Building, 202 West First Street, camera facing southeast, June 25, 2018.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

UPDATE SHEET

Primary # P-19-173080
HRI #
Trinomial
NRHP Status Code

Page 2 **of** 2

***Resource Name or #:** (Assigned by recorder) Los Angeles Times Building

☐ Continuation ☒ Update

Photograph 2. Los Angeles Times Building, 202 West First Street, camera facing south, June 25, 2018.

19-186619 19-186619

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 3
Other Listings
Review Code Reviewer Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) Los Angeles County Law Library

P1. Other Identifier:

***P2. Location:** ■ **Not for Publication** ☐ **Unrestricted** ***a. County** Los Angeles
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles Date 1966 (rev 1994) T ; R : ¼ of ¼ of Sec ; B.M.
c. Address 301 West 1st Street **City** Los Angeles **Zip** 90012
d. UTM: (Give more than one for large and/or linear resources) **Zone:** ; mE/ mN
***e. Other Locational Data:** (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)
Parcel number 5161-005-912

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.) This multi-story, modular building is constructed of reinforced concrete and steel girders. A penthouse is centered on the building and a black granite skirt surrounds the exterior. Glass block windows are on the western facade and air conditioning vents can be seen on the southern end.

***P3b. Resource Attributes:** (See attributes and codes) HP14

***P4. Resources Present:** ■ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) SW, 11/10/00, 00150-CP-2-20

***P6. Date Constructed / Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both
Built in 1953.

***P7. Owner and Address:**
County of Los Angeles
500 West Temple Street, Room 754
Los Angeles, CA 90012

***P8. Recorded by:** (Name, affiliation, and address) C. Dolan
KEA Environmental, Inc.
1420 Kettner Blvd. Ste 620
San Diego, CA 92101

***P9. Date Recorded:** 11/10/00
***P10. Survey Type:** (Describe)
Intensive pedestrian survey

***P11. Report Citation:** (Cite Survey report and other sources, or enter "none.") 2000 Dolan, Christy. Cultural and Historical Research and Technical Report for the Proposed Los Angeles Federal Courthouse Los Angeles, California. Prepared for Burns and McDonnell by KEA Environmental, Inc., San Diego, California.

*Attachments: ☐ None ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ■ Building, Structure, and Object Record ☐ Linear Resource Record ☐ Archaeological Record ☐ District Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List)

19-186619

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # __________
HRI #l __________

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2

***NRPH Status Code**
***Resource Name or #** (Assigned by recorder) Los Angeles County Law Library

B1. **Historic Name:** None Known

B2. **Common Name:** County Law Library

B3. **Original Use:**

B4. **Present Use:** Law library

***B5.** **Architectural Style:**

***B6.** **Construction History:** (Construction date, alterations, and date of alternations.) Constructed in 1953. Additions made between 1968-1970.

***B7.** **Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** **Original Location:**

***B8.** **Related Features:**

B9a. **Architect:**

B9b. **Builder:**

***B10.** **Significance: Theme** Civic Architecture **Area** Southern California
Period of Significance 1950-1975 **Property Type** **Applicable Criteria**
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Several structures were built between 1950 and 1975 in Los Angeles' Civic Center. They were designed as L.A.'s need for space in which to house the local, state and federal govemments increased. Many of these buildings have had significant events happen within their walls and many were designed by prominent architects or architectural firms. The Los Angeles County Law building was finished in 1953 and sat between city hall and the county courthouse.

B11. **Additional Resource Attributes:** (List attributes and codes):

***B12.** **References:**

B13. **Remarks:**

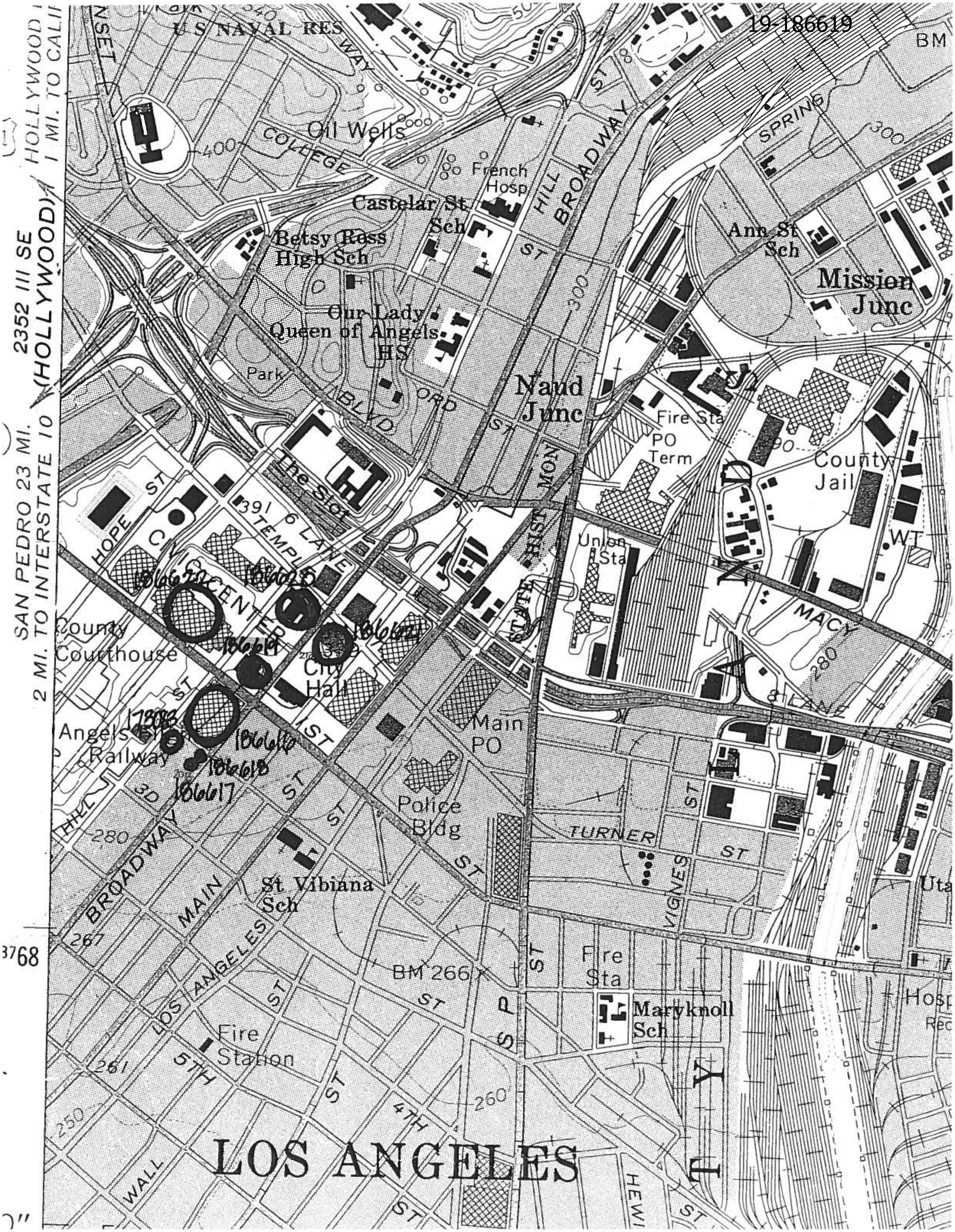
***B14.** **Evaluator:** C. Dolan

KEA Environmental, Inc.
1420 Kettner Blvd. Ste 620
San Diego, CA 92101

***Date of Evaluation:** 11/22/00

(This space reserved for official comments.)

19-186619



HOLLYWOOD 1 MI. TO CALI
2352 III SE (HOLLYWOOD)
SAN PEDRO 23 MI. 2 MI. TO INTERSTATE 10
U S NAVAL RES
Oil Wells
COLLEGE
French Hosp
Castelar St Sch
Betsy Ross High Sch
Our Lady Queen of Angels HS
Park
BLVD
ORD
HILL
ST
BROADWAY
SPRING
Ann St Sch
Mission Junc
Naud Junc
Fire Sta
PO Term
County Jail
WT
MACY
Union Sta
STATE HIST MON
The Slot
TEMPLE
6 LANE
8 LANE
HOPE ST
CIVIC CENTER
County Courthouse
City Hall
1ST
Angels Flight Railway
3D
BROADWAY
MAIN
Main PO
Police Bldg
TURNER
VIGNES
St Vibiana Sch
LOS ANGELES
BM 266
Fire Sta
Maryknoll Sch
Fire Station
5TH
4TH
WALL
HEWI
Hosp
Uta
LOS ANGELES
CITY
BM
300
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267
261
260
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391
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178083
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19-186619

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 3D, 3CD

Other Listings District # 19-190545
Review Code **Reviewer** **Date**

Page 22 **of** 39 *__Resource Name or #:__ 301 West 1st Street building (No. 5-11)

P1. Other Identifier: Los Angeles County Law Library, Mildred L. Lillie Building

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad: Date:** **T** **R ¼ of ¼ of Sec.** **B.M.**

c. Address: 301 West 1st Street, 100 North Hill Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-912

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Los Angeles County Law Library is a 1- and 3-story, split-level office building, inset into the northwesterly slope of the Civic Center mall on its south side along West 1st Street. The main building is of an architectural concrete construction with a streel-trussed roof over wide spans and concrete beam and joist construction over shorter spans. Interior features of the original building include a foreign and rare book reading room, a public stenographer's room, pay lockers for use by patrons, air conditioning, and book lifts. A list of original interior materials includes acoustic tile insulation, steel and metal lath and plaster interior walls, mahogany and maple woodwork and doors. (LA Times)

Spacious entrance steps and planting spaces lead to the lower portion of the front façade of the building which is faced with granite. The main façade is clad with geometric masonry panels in relief, and is adorned the seals of the different courts of law. The building couples a drive-in entrance and small parking lot on its northwest side on Hill Street with the pedestrian entry facing southwest on West 1st Street. The building is rectangular in plan and is in the Civic Center complex, forming part of its south side along West 1st Street, adjacent the Mosk County Courthouse to the northwest, and the Court of Historic Flags to the northeast connected by tunnel to its underground parking garage.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, April 16, 2009,
Photograph # IMG0666.jpg

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1953, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely and J. Covert
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 26, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-186619

State of California — The Resources Agency **Primary #**
DEPARTMENT OF PARKS AND RECREATION **HRI#**

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 23 **of** 39 ***NRHP Status Code** 3D, 3CD

***Resource Name or #** (Assigned by recorder) 301 West 1st Street building (No. 5-11)

B1. Historic Name: Los Angeles County Law Library

B2. Common Name: Mildred L. Lillie Building

B3. Original Use: government services building B4. Present Use: government services building

***B5. Architectural Style:** Modernist

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Built in 1953 (Los Angeles County Assessor).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architect: Austin, Field & Fry b. Builder: James J. Barnes Construction, Co.

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles

Period of Significance: 1925-1972 **Property Type:** building **Applicable Criteria:** A/1, C/3

The Los Angeles County Law Library building was built in 1953 by the architecture firm of Austin, Fields & Fry. Shortly before its completion, the Los Angeles Times reported that in design, size, and equipment it was anticipated to be one of the foremost such buildings in the nation. The building was also planned with a setback location on its large site in keeping with the maintenance and furtherance of the Los Angeles Civic Center design goals (*LA Times*).

The building was renamed as the Mildred L. Lillie Building on November 6, 2003. Lillie served as an assistant U.S. attorney and filled several judicial appointments, culminating with the Second District Court of Appeal and 44 years as an appellate judge. She gained fame as a potential candidate to the U.S. Supreme Court under Richard Nixon in 1971 (*Herald Examiner*).

The building was found eligible as a contributor to a California Register-eligible Civic Center historic district (2006). No evidence of SHPO concurrence with those findings was located. The Law Library is eligible for listing in the National and California registers under Criteria A/1 for its association with the historic planning and development of Civic Center in the 1950s and beyond, and Criterion C/3 for its architectural design as prominent example of a civic building with Modernist geometric details. The building contributes to the Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Grand Avenue Project. *Los Angeles Grand Avenue Project.* 2006: 274.

"The Most Powerful Women in Los Angeles." *Los Angeles Herald Examiner.* October 27, 1977, D8.

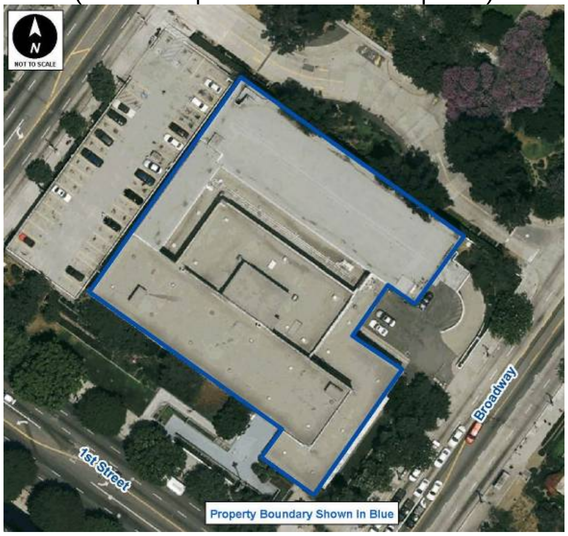
"Large Law Library Scheduled for Start." *Los Angeles Times*. July 6, 1952, E1.

B13. Remarks: see above

***B14. Evaluator:** J. Steely

***Date of Evaluation:** May 26, 2009

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # 19-186619
HRI #
Trinomial
NRHP Status Code 3D, 3CD

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 301 West 1st Street building (Los Angeles Law Library)

☐ Continuation ☒ Update

***P3a. Description:**

The Los Angeles Law Library located at 301 West First Street was constructed in 1953, with an addition built in 1969-1970. The Los Angeles Law Library is a Modernist style 1- and 3-story, split-level office building, inset into the northwesterly slope with concrete exterior walls with granite retaining wall accents (**Photographs 1 and 2**). The main building is of an architectural concrete construction with a streel-trussed roof over wide spans and concrete beam and joist construction over shorter spans. The entrance façade is clad with geometric masonry panels in relief, and is adorned the seals of the different courts of law. In 2012, the building underwent an extensive renovation project including repainting and applying an elastomeric coating to the exterior walls, replacing the roof, and adding new irrigation and drainage systems (SCALL 2012). In addition, he building's perimeter walkways were reoriented, and a new outdoor patio were added to the property in 2012.

***B10. Significance Evaluation**

The resource was originally recorded in 2000 and found eligible for listing in the NRHP; and in 2006 the building was found eligible as a contributor to a CRHR-eligible Civic Center historic district (Dolan 2000, SWCA 2009). Since the building's last recordation in 2009, the property has undergone some alteration. Despite these changes the Los Angeles Law Library appears to continue to be eligible for listing in the National and California registers under NRHP Criterion A or CRHR Criterion 1 for its association with the historic planning and development of Civic Center in the 1950s and beyond, and NRHP Criterion C or CRHR Criterion 3 for its architectural design as prominent example of a civic building with Modernist geometric details. In addition, the building remains a contributor to the Los Angeles Civic Center Historic District.

***P8. Recorded by:** M. Mello, AECOM, 401 West A Street, Suite 1200, San Diego, CA 92101

***P9. Date Recorded:** June 2018 ***P10. Survey Type:** Reconnaissance

***P11. Report Citation**: Cultural Resources Assessment for the First and Broadway Civic Center Park Project, Los Angeles, California, AECOM 2018

***B12. References**

Dolan, Christy,
2000 Cultural and Historical Research and Technical Report for the Proposed Los Angeles Federal Courthouse Los Angeles, California. Prepared for Burns and McDonnell by KEA Environmental, Inc., San Diego, California.

Southern California Association of Law Libraries (SCALL)
2012 "LA Law Library: Renovated, Reclassified, Reorganized, and…Radiant…" *SCALL Newsletter*, Nov./Dec. 2012, vol. 40, no. 2. Electronic document, http://www.lalawlibrary.org/pdfs/SCALL.newsletter.2012NovDec.pdf, accessed June 26, 2018.

SWCA Environmental Consultants (SWCA)
2009 Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
UPDATE SHEET

Primary # 19-186619
HRI #
Trinomial
NRHP Status Code 3D, 3CD

Page 2 **of** 2

***Resource Name or #:** (Assigned by recorder) 301 West 1st Street building (Los Angeles Law Library)

☐ Continuation ☒ Update

P5a. Photographs:

Photograph 1. Los Angeles Library, 301 West First Street, camera facing north, June 25, 2018.

Photograph 2. Los Angeles Law Library, 301 West First Street, camera facing southwest, June 25, 2018.

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

DISTRICT RECORD

Primary #
HRI #
Trinomial

Page 1 **of** 39

***NRHP Status Code:** 3B, 3CB

***Resource Name or #** (Assigned by recorder)**:** Los Angeles Civic Center Historic District (Nos. 5-1 to 5-13, 6-1 to 6-7, 6-12)

D1. Historic Name: Los Angeles Civic Center

D2. Common Name: Los Angeles Civic Center

*D3. Detailed Description

The Los Angles Civic Center is a closely built, informally organized complex of government buildings, structures, and landscapes (formal urban spaces integral to those buildings and structures) located downtown, between West 1st, Figueroa, Temple and San Pedro streets. Its organization is along the southeast-northwest (SE-NW) axis that extends through City Hall from the southeast to the Department of Water and Power Building (DWP) at the northwest. Early 20th century planners sited four Civic Center buildings prior to World War II—the Hall of Justice (1925), City Hall (1928), State Office Building (1932, razed), and the United States Courthouse and Federal Building (1940)— to anchor an unrealized axis,90 degrees to the east. Construction of the Hollywood Freeway (US 101) extension immediately after the war necessitated realignment of the Civic Center configuration to be southeast-northwest, extending northwest to meet the new Harbor Freeway (US-110). Construction of new civic buildings followed: City Health Building (1954), City Police Headquarters(1955), county Hall of Administration (1956-1961), Central Heating and Refrigeration Plant (1958), County Courthouse (1958), county Hall of Records (1962), Music Center (including tree buildings, 1964-69), and terminating the northwest end of the axis, the city DWP building (1964); with a new Federal Building (1966) extended Civic Center east along the Santa Ana Freeway (Interstate 5). The Criminal Justice Center (1972) largely finished the Civic Center, along with extensive landscape architecture of el Paseo de los Pobladores (1966) and its extensions, and Civic Center's labyrinth of parking garages, underground storage and utilities, and connecting tunnels. See associated Primary Records, BSO forms, and mapping for additional descriptions and significance of contributing elements in the district.

*D4. Boundary Description (Describe limits of district and attach map showing boundary and district elements.):

Bounded by West 1st Street on the southwest, Figueroa Street on the northwest, Temple Street on the northeast, San Pedro Street on the southeast. See attached Location Map for boundaries and keyed resources.

*D5. Boundary Justification:

The Los Angeles Civic Center Historic District includes the formal *partíi* of city, county, and federal governmental services planned just before and immediately following World War II. It was planned and built primarily along a formal SE-NW axis running from City Hall at the southeast to the DWP Building at the northwest. The district boundary includes all parcels holding those buildings, above and underground structures, and associated landscapes that encompass city, county and federal services in what is formally known as the Civic Center.

*D6. Significance:

Theme: Civic Center for City and County Governments

Area: Los Angeles

Period of Significance: 1925-1972

Applicable Criteria: A/1, C/3

State and county officials proposed a "Civic Center" for Los Angeles as early as 1911, and public commissions in the 1920s projected plans for a City Beautiful complex that sited today's City Hall, city/county Hall of Justice, and Federal Courthouse in a grouping intended to anchor an unrealized SW-NE axis toward and partly consuming the Old Plaza area. Interrupted by World War II, the new city and county Civic Center Authority resumed projections in 1945, but with construction of the Santa Ana Freeway to the northeast, the intended City Beautiful axis was irretrievably interrupted. In the mid 1950s with construction of the new City Health Building and Police Headquarters, city planners ignored the previous axial configuration, in favor of a City Hall cluster. By 1956, however, the county revived the axis-based development—now SE-NW centered on City Hall's alternate orientation—with its own dispersed services through separate courts and administration buildings. Fear of nuclear attack during the Cold War led the authority to build facilities with massive underground parking garages that would double as bomb and fallout shelters for the combined governments, dressed largely as the multi-level public landscape of Paseo de los Pobladores along the gentle northwesterly slope from City Hall. In 1969, the Civic Center was defined and largely complete, with the Music/Performing Arts Center along the axis, the city's Department of Water and Power Building terminating the axis at the northwest near Harbor Freeway, and the new Federal Building extending the complex two blocks east. Addition of the combined city/county Criminal Justice Center in 1972 and demolition of the earthquake-damaged State Office Building in 1976 resulted in the current appearance and configuration of the Los Angeles Civic Center Historic District. The district, with slightly different boundaries, was found eligible for California Register listing in 2006 ("Grand Avenue"), although no evidence was found regarding Office of Historic Preservation concurrence for that finding. Los Angeles Civic Center is eligible for listing in the California and National Registers under Criteria A/1 and C/3 at the local level of significance.

*D7. References (Give full citations including the names and addresses of any informants, where possible.):

Gebhard, David and Robert Winter, *Architecture in Los Angeles.* (Salt Lake City: Gibbs M. Smith, Inc., 2003): 256-261.

Los Angeles Grand Avenue Authority, "The Grand Avenue Project Draft Environmental Impact Report" 2006: 434-443.

Los Angeles Times. various articles 1939-1979.

Moore, Charles with Peter Becker, and Regula Campbell, *The City Observed: Los Angeles.* (New York: Vintage Books, 1984): 11-15.

***D8. Evaluator:** Jim Steely, Francesca Smith, and Kip Harper

Date: May 26, 2009

Affiliation and Address: SWCA Environmental Consultants, 625 Fair Oaks Avenue, Suite 190, South Pasadena, CA 91030

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 3B, 3CB

Other Listings
Review Code **Reviewer** **Date**

Page 2 **of** 39 ***Resource Name or #:** Los Angeles Civic Center Historic District (Nos. 5-1 to 5-13, 6-1 to 6-7, 6-12)

P1. Other Identifier: Civic Center

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: various City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
Bounded by West 1st Street on the southwest, Figueroa Street on the northwest, Temple Street on the northeast and San Pedro Street on the southeast.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The City and County of Los Angeles Civic Center is a closely built and somewhat organized complex of buildings, structures, and landscapes (formal urban spaces integral to those buildings and structures) on the north side of downtown Los Angeles and just west of the city's origins at the Old Plaza. The complex includes governmental service uses, with major Federal offices. Four Civic Center buildings were completed prior to World War II—Hall of Justice (1925, *Beaux-Arts* styling in stone veneer), City Hall (1928, Modernist Classicism in white *terra cotta* veneer), State Office Building (1932, demolished 1972), and U.S. Post Office and Courthouse (1940, "PWA Moderne" in limestone veneer). Those buildings anchor the southwest end of the SW-NE axis. Freeway construction immediately after the war necessitated realignment of the Civic Center axis SE-NW, extending through City Hall northwest to the new Harbor Freeway (US 110). Construction of new civic buildings followed: City Health Building (1954, International Style, clad in glass and *terra cotta* curtain walls), city Police Headquarters (1955, Modernist cube, in glass and paneled curtain walls), county Hall of Administration (1956-1961, International Style in limestone veneer), Central Heating and Refrigeration Plant (1958, limestone veneer), County Courthouse (1958, International Style in limestone veneer), county Hall of Records (1962, Modernist cubism of concrete, metal and glass curtain walls), Music Center (1964-69, three theater venues in Neo-Formalist geometry of columns and embellished panels), and—terminating the axis at the NW—the city's DWP (1964, International style with extended-slab "Mo-sai" floors and continuous windows). The Criminal Justice Center (1972, glass curtain walls with concrete-panel overlays) largely finished the Civic Center, along with the landscape architecture of Paseo de los Pobladores (1966, hardscape and landscaping) and its extensions, with the underground labyrinth of Civic Center parking garages, storage and utilities and interconnecting tunnels.

***P3b. Resource Attributes:** HP14. Government building, HP29. Landscape Architecture, HP31. Urban open space

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☒District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #) View southeast from Music Center to City Hall, April 16, 2009, Photograph # 0908

***P6. Date Constructed/Age and Sources:** ☒ Historic ☐Prehistoric ☐Both
c.1919 planned, completed 1972.

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, K. Harper, F. Smith, S. Murray, and S. Carmack.
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 26, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

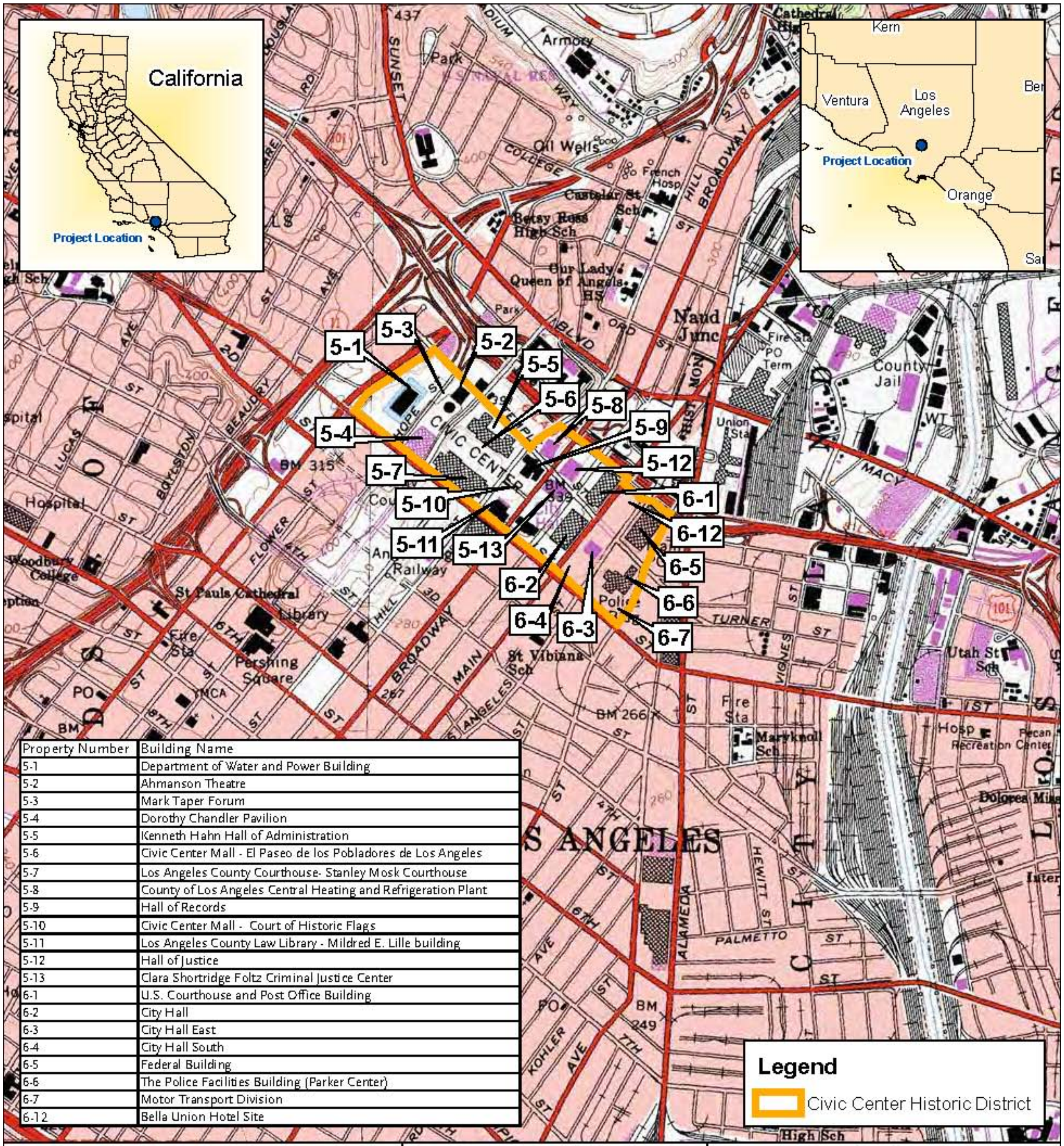
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 3 **of** 39 ***Resource Name or #:** Los Angeles Civic Center Historic District (Nos. 5-1 to 5-13, 6-1 to 6-7, 6-12)

***Map Name:** Los Angeles, CA ***Scale:** 1:24,000 ***Date of Map:** 1966 (Photorevised 1981, Minor revision 1994)



Property Number	Building Name
5-1	Department of Water and Power Building
5-2	Ahmanson Theatre
5-3	Mark Taper Forum
5-4	Dorothy Chandler Pavilion
5-5	Kenneth Hahn Hall of Administration
5-6	Civic Center Mall - El Paseo de los Pobladores de Los Angeles
5-7	Los Angeles County Courthouse- Stanley Mosk Courthouse
5-8	County of Los Angeles Central Heating and Refrigeration Plant
5-9	Hall of Records
5-10	Civic Center Mall - Court of Historic Flags
5-11	Los Angeles County Law Library - Mildred E. Lille building
5-12	Hall of Justice
5-13	Clara Shortridge Foltz Criminal Justice Center
6-1	U.S. Courthouse and Post Office Building
6-2	City Hall
6-3	City Hall East
6-4	City Hall South
6-5	Federal Building
6-6	The Police Facilities Building (Parker Center)
6-7	Motor Transport Division
6-12	Bella Union Hotel Site

USGS 7.5' Quadrangle:
Hollywood, CA 1966 (Photorevised 1981)
Township: 1S, Range: 13W, Unsectioned

USGS 7.5' Quadrangle:
Los Angeles, CA 1966
(Photorevised 1981, Minor revision 1994)
Township: 1S, Range: 13W, Unsectioned

*Required information

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-190553
HRI #
Trinomial
NRHP Status Code 3B, 3CB

Other Listings
Review Code **Reviewer** **Date**

Page 4 **of** 39 *__Resource Name or #:__ 111 North Hope Street building (No. 5-1)

P1. Other Identifier: Department of Water and Power Building; John Ferraro Office Building (2001)

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 111 North Hope Street Building City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-003-910

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The Los Angeles Department of Water and Power Building (popularly "DWP," now John Ferraro Building) is a 15-story, highrise government office building. Designed in a late 20th century derivation of the International Style, its signature features are lightly colored quartz aggregate "Mo-sai," cantilevered decks at each level. The decks result in a floating appearance and create shade for recessed, continuous windows, all beneath a flat roof with 16th-story, textured, mechanical screen installations. The building is a rectangle in plan on a large parcel with a cantilevered, reflective "forest of fountains around its base" (Gebhard & Winter). The site is otherwise divided into parking levels, service entries and screening vegetation, bounded by Hope, West 1st, Figueroa (the I-10 Harbor Freeway beyond) and Temple Streets. The main entrance faces southeast and is centered on the terminus of the Civic Center axis from City Hall. Major alterations to the exterior are not evident. Solar panels may have been added to the parking canopies (year unknown). The subject property is located on a large, terraced lot, with parking on the north and south sides. Its immediate Civic Center neighbors include the Music Center complex to the southeast, across Hope Street.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building, HP29. Landscape architecture.

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View northwest from Music Center's Lipschitz sculpture, April 16, 2009,
Photograph # IMG0911.jpg

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1965, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper, and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 22, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # 19-190545
HRI# 19-190553

Page 5 **of** 39

***NRHP Status Code** 3B, 3CB

***Resource Name or #** (Assigned by recorder) 111 North Hope Street building (No. 5-1)

B1. Historic Name: Department of Water and Power Building

B2. Common Name: DWP Building, John Ferraro Building

B3. Original Use: government office building B4. Present Use: government office building

***B5. Architectural Style:** International Style

***B6. Construction History:** (Construction date, alterations, and date of alterations) Built in 1965 (*Los Angeles Times*). Solar panels added in parking lot (date unknown).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architect: Albert C. Martin & Associates b. Builder:

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles

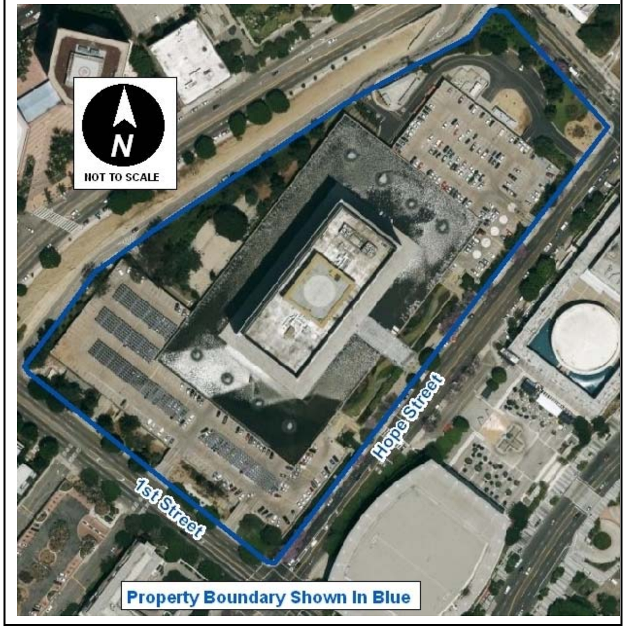
Period of Significance: 1925-1972 **Property Type:** institutional building **Applicable Criteria:** A/1, C/3

The Los Angeles Department of Water and Power Building, or DWP was constructed in 1965. It was renamed the John Ferraro Building in 2001 (see below). The building and grounds were designed by Albert C. Martin & Associates, in the years following the senior Mr. Martin's death. The building houses offices, records, and services associated with what is reputed to be the largest municipal utility service agency in the United States. Its position terminates the Civic Center axis northwesterly from City Hall, and its strongly horizontal orientation serves as a Modernist counterpoint to the very vertical City Hall (1928). Albert Martin (1879-1960) studied architecture and engineering in the Midwest and came to Los Angeles in 1904, forming his own firm by 1907. He designed numerous church, office and public buildings in Southern California, with innovative structural systems for seismic resistance. He joined the combined firms that designed Los Angeles City Hall completed in 1928. Martin's firm, now known as AC Martin Partners, continues to be active in the regional design community and is led, in part, by Martin's descendants.

Exterior alterations are minimal; it is recognizable to its original appearance and period of significance. The property is an excellent example of Civic Center's Modernist embrace through the 1960s, joining the International style (Hahn and Mosk county buildings) and updated Classicism (Music Center) themes nearby in Civic Center. The innovative mechanical design created a "balanced environment." The system notably cooled the building using the broad, decorative reflecting pools and three-story fountains, and was heated by leaving continuous T12 "troffer" lamps on overnight. Its unique exterior wall system features quartz Mosai overhangs at each floor to limit sunlight and heat gain, on all sides (*News Letter*). The design expressed DWP's early commitment to energy efficiency. In 2000, in honor of longtime councilman and local college football star, John Ferraro (1924-2001,"DWP"), the building was rechristened and now bears the politician's name.

The DWP Building is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1950s and beyond, and Criteria C/3 for its distinctive architectural design with Modernist details.The extraordinary and prescient "green" design meets Criteria Consideration G for exceptional significance. While the building represents a significant and distinguishable entity, it also contributes to the National and California Register-eligible Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county government complex.

(Sketch Map with north arrow required.)



B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Gebhard, David and Robert Winter, *Architecture in Los Angeles*. Salt Lake City: Gibbs M. Smith, Inc., 1985: 256-258.

"DWP Building Named for Councilman Ferraro" *Los Angeles Times* August 2, 2000: B4.

"Water, Power Moves to New Building" *The News Letter*, June 1965: 1, 2.

B13. Remarks:

***B14. Evaluator:** J. Steely, F. Smith

***Date of Evaluation:** May 21, 2009

(This space reserved for official comments.)

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-190554
HRI #
Trinomial 19-190555
NRHP Status Code 3B, 3CB
19-190556

Other Listings HABS CA-2780
Review Code **Reviewer** **Date**

Page 6 **of** 39 ***Resource Name or #:** 135 North Grand Avenue buildings, structures and landscape (No. 5-2)

P1. Other Identifier: Los Angeles Music Center for the Performing Arts, Music Center

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 135 North Grand Avenue City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-004-907

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Civic Center's Performing Arts Center, also collectively known as the Music Center, consists of three principal buildings with a large colonnade structure and major sculptures, atop a common underground parking garage. These resources are collected within a 7-acre, rectangular park that spans the Civic Center axis on the hilltop above, City Hall to the southeast and the DWP Building to the northwest. Welton Becket and Associates was responsible for the overall plan and designed each of the Music Center buildings as well as the connecting underground garage between 1964 and 1969. The design theme was a Roman Forum-inspired gathering of abstracted classical compositions. The Dorothy Chandler Pavilion, Mark Taper Forum and Ahmanson Theatre each offer different performance venues and architectural counterpoints across the park's hardscape designed by Cornell, Bridges and Troller (see separate DPRs regarding those buildings). The united composition is bordered by large trees, intermingled with large sculptural pieces and a performing fountain.

This elegant complex results in a surprisingly light ensemble of opposing geometries and textures. It is executed in compatible materials, including concrete, natural stone and bronze, has few alterations. Alterations include the addition of: the following sculptures: “Dance Door” by Robert Graham (1938-2008, sculpture 1978), “Peace on Earth” by Jacques Lipchitz (1891-1973, sculpture 1969). The multiple-configuration fountain at ground level (WET Design, c. 1984), centered on Civic Center's axis enlivens views southeast along the vast mall to City Hall, and is a later but very compatible addition, replacing the reflecting pool that originally surrounded the Lipchitz piece.

***P3b. Resource Attributes:** (List attributes and codes) HP10. Theater, HP12. Civic auditorium, HP29. Landscape Architecture

***P4. Resources Present:** ☒Building ☒ Structure☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #) View southeast of Lipchitz sculpture and performing fountain, April 16, 2009, Photograph # 0899

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1967, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper, and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 19, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency **Primary #**
DEPARTMENT OF PARKS AND RECREATION **HRI#** 19-190554

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3B, 3CB

***Resource Name or #** (Assigned by recorder) 135 North Grand Avenue, northeast building (No. 5-2)

B1. Historic Name: Ahmanson Theatre

B2. Common Name:

B3. Original Use: performing arts theater B4. Present Use: theater

***B5. Architectural Style:** Modernist with applied abstract sculpture

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1967 (*Los Angeles Times*).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:** Music Center complex and landscape, Dorothy Chandler Pavilion to southwest, Mark Taper Forum adjacent

B9a. Architect: Welton Becket and Associates b. Builder:

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1971 **Property Type:** performing arts center **Applicable Criteria:** A/1, C/3

The Ahmanson Theatre was built between 1962 and 1967. When completed, the building featured a medium-sized public performing arts space atop the highest ground in the Civic Center, ensuring its physical prominence and visual responsibility of carrying the Modernist theme of 1960s Civic Center development. The theater shares a common Classical columnar, Neo-Formalist theme, a substantial underground parking garage—another common but largely unseen theme of Civic Center—with the Dorothy Chandler Pavilion, Mark Taper Forum, and plaza that spans the Civic Center axis.

Robert H. Ahmanson (1927-2007) came to Los Angeles and UCLA in 1945 (his college work overlapped with Welton Becket's presence at UCLA, see below) and made his fortune in insurance and banking, before funding the subject building when *Los Angeles Times* matriarch, Dorothy "Buff" Chandler (1901-1997) used her considerable influence to raise funds and awareness for the Music Center in the late 1950s. Architect, D. Welton Becket (1902-1969) served as UCLA master planner from 1948-1968 and produced numerous Modernist campus buildings during the period, working with landscape architect Ralph Cornell. Cornell (1890-1972) formed Cornell, Bridgers, and Troller, and collaborated on this project and elsewhere in the Civic Center. Becket's firm designed the Capitol Records Building (1956), Federal Office Building (1966, in Civic Center), and numerous Modernist works throughout Los Angeles, for which some say he defined "the look of LA" for the era (Pitt)

Alterations are minimal; it is recognizable to its original appearance and period of significance. These resources are excellent examples of public performance facilities completing Civic Center services, with austere, elegant architectural styling that defines the Music Center's Modernist theme, overall setting and feeling.

The building was evaluated for historic significance as part of another EIR and found eligible as a district contributor to a Civic Center Historic District (2006); no record of SHPO concurrence was found for the finding. The Ahmanson Theatre is eligible for listing in the National and California registers under Criteria A/1 for its association with the historic planning and development of the Civic Center, and Criteria C/3 for its architectural design, Modernist details, and as the work of a master architect in collaboration with a master landscape architect. While the complex represents a significant and distinguishable entity, it also contributes to the Los Angeles Civic Center Historic District, as an integral part of its planning, design, development, and public services of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Gebhard, David and Robert Winter, *Architecture in Los Angeles.* (Salt Lake City: Gibbs M. Smith, Inc., 1985), 258-259.
"Obituaries, Robert H. Ahmanson," *Los Angeles Times,* Sept 4, 2007.
Pitt, Leonard and Dale Pitt. *Los Angeles from A to Z.* (Berkeley: University of California Press, 1997): 43.

B13. Remarks:

***B14. Evaluator:** J. Steely, F. Smith

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

***Date of Evaluation:** May 19, 2009

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary # 19-190555
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 8 **of** 39
***NRHP Status Code** 3B, 3CB
***Resource Name or #** (Assigned by recorder) 135 North Grand Avenue, north structure (No. 5-3)

B1. Historic Name: Mark Taper Forum
B2. Common Name:
B3. Original Use: performing arts center B4. Present Use: performing arts center
***B5. Architectural Style:** Modernist interpretation of Classical peristyle (open rectangle of columns)
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1967 (*Los Angeles Times*). Interior "renovations" 2008.
***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:**
B9a. Architect: Welton Becket and Associates b. Builder:
***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1971 **Property Type:** building **Applicable Criteria:** A/1, C/3

The Mark Taper Forum was built in 1967. When completed, the cylindrical building featured an intimate thrust stage (platform or open stage) public performing arts space atop the highest-elevation real estate in Civic Center, thus ensuring its physical prominence and visual responsibility of carrying the Modernist theme of the Civic Center in the 1960s. The Mark Taper Forum shares a substantial underground parking garage—another common but largely unseen theme of Civic Center—along with the Dorothy Chandler Pavilion, Ahmanson Theatre and plaza that straddles the Civic Center axis.

The theater's namesake, S. Mark Taper (1902-1994) was a Polish immigrant who became wealthy in postwar Los Angeles real estate development and helped fund the Music Center development in 1967. A 2008 Taper family gift for facility renovations resulted in the auditorium being renamed for his late wife, Amelia Taper (d. 1958).

Architect Welton Becket (1902-1969) served as UCLA master planner from 1948-1968 and produced numerous Modernist campus buildings during the period while working with landscape architect, Ralph Cornell (who formed Cornell, Bridgers, and Troller, collaborating here and elsewhere in Civic Center). Becket's firm produced the Capitol Records Building (1956), the Federal Office Building (1966, in Civic Center), and numerous Modernist works throughout Los Angeles, which credited him with "defining the look of LA" for the era (Pitt).

Exterior alterations are minimal, recent alterations (by Rios Clementi Hale Studios, 2008) were achieved within the existing building envelope. It is recognizable to its original appearance and period of significance. The resource is an excellent example of public performance facilities completing the Civic Center services, with architectural styling that helps define the Center's Modernist theme and overall setting and feeling. The Music Center was documented in the Historic American Buildings Survey (HABS) in 2002. It was evaluated for another EIR and found eligible as a district contributor to a Civic Center Historic District (2006), but no record of SHPO concurrence was found for the finding. The subject building is eligible for listing in the National and California registers under Criteria A/1 for its association with the historic planning and development of Civic Center in the 1960s and beyond, and Criteria C/3 for its design, Modernist details, and as work of a master architect and landscape architect. While the complex represents a significant and distinguishable entity, it also contributes to the Los Angeles Civic Center Historic District, as an integral part of its planning, design, development, and public services of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Gebhard, David and Robert Winter, *Architecture in Los Angeles* (Salt Lake City: Gibbs M. Smith, Inc., 1985): 258-259
Oliver, Myrna. "S. Mark Taper… Dies at 92," *Los Angeles Times*, December 16, 1994: A1.
Reynolds, Christopher. "LA's Invisible Builder," *Los Angeles Times*, March 6, 2003: E36.

B13. Remarks:
***B14. Evaluator:** J. Steely, F. Smith
***Date of Evaluation:** May 19, 2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # 19-190556
HRI#

Page 9 **of** 39

***NRHP Status Code** 3B, 3CB

***Resource Name or #** (Assigned by recorder) 135 North Grand Avenue, south building (No. 5-4)

B1. Historic Name: Dorothy Chandler Pavilion

B2. Common Name:

B3. Original Use: performing arts theater B4. Present Use: performing arts theater

***B5. Architectural Style:** Modernist interpretation of Classical temple

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1964 (*Los Angeles Times*).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:** Music

B9a. Architect: Welton Becket and Associates b. Builder:

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles

Period of Significance: 1925-1971 **Property Type:** building **Applicable Criteria:** A/1, C/3

The Dorothy Chandler Pavilion was built in 1964. When completed, the irregular rectangle-shaped building featured a large public performing arts space atop the highest-elevation real estate in Civic Center, thus ensuring its physical prominence and visual responsibility of carrying the Modernist theme of the Civic Center axial fulfillment of the 1960s. The building shares a substantial underground parking garage—another common but largely unseen theme of Civic Center—along with the Mark Taper Forum, Ahmanson Theatre, and the plaza that straddles the Civic Center axis. The eloquent, curve-sided rectangular shape and large volume is reduced in mass by a continuous floating roof overhang, supported by slim columns, with a wall of glass at the entrance.

Dorothy Buffum Chandler (1901-1997) was wife and mother of *Los Angeles Times* publishers, Norman and Otis Chandler. She used her considerable social and political influence to raise necessary funds used to build the Music Center, raising $20 million of its total $35 million cost. The competing local paper breathlessly described the new building on its completion "This is the jeweled setting of a Pavilion, that for all its height, has an aspect of lightness… carefully articulated by… Welton Becket. It comes from the slender, stemlike columns that surround the portico..." Significantly, Mrs. Chandler's name was not mentioned in their competitor's description (McDougal). Completion of the Music Center helped dispel the widely held belief that Los Angeles has no culture (various).

Exterior alterations appear to be minimal; it is recognizable to its original appearance and period of significance. The building is an excellent example of a public performance facility completing the Civic Center services, with architectural styling that helps define the Center's Modernist theme and overall setting and feeling. The Chandler Pavilion is eligible for listing in the National and California registers under Criterion A/1 for association with the historic planning and development of Civic Center in the 1960s and beyond, and Criterion C/3 for its architectural design with Modernist details as the work of a master architect in collaboration with a master landscape architect. While the complex represents a significant and distinguishable entity, it also contributes to the recommended-eligible Los Angeles Civic Center Historic District, as an integral part of its planning, design, development, and public services of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Gebhard, David and Robert Winter, *Architecture in Los Angeles* (Salt Lake City: Gibbs M. Smith, Inc., 1985): 258-259

McDougal, Dennis. *Privileged Son: Otis Chandler and the Rise and Fall Of The L.A. Times Dynasty.* (New York: Ad Capo Press, 2002): 263.

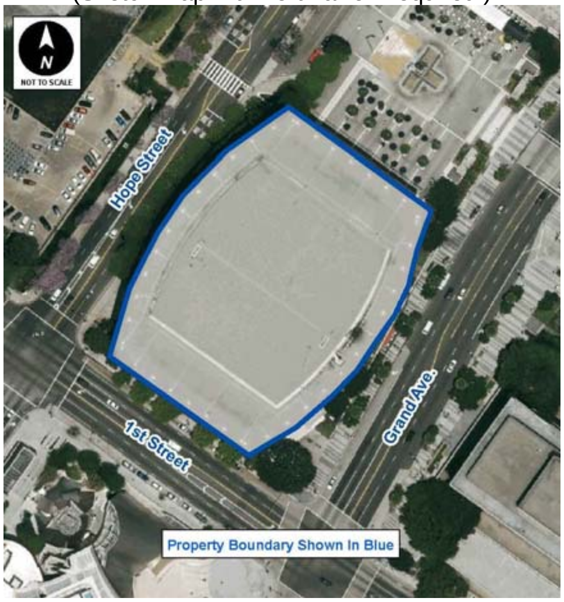
B13. Remarks: see above

***B14. Evaluator:** J. Steely, F. Smith

***Date of Evaluation:** May 20, 2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 19-190557
HRI # 134820
Trinomial
NRHP Status Code 3B, 3CB

Other Listings
Review Code **Reviewer** **Date**

Page 10 **of** 39 ***Resource Name or #:** 500 West Temple Street building (No. 5-5)

P1. Other Identifier: Kenneth Hahn Hall of Administration, County of Los Angeles, County Hall of Administration

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 500 West Temple Street, 222 North Grand Avenue City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-004-908

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Los Angeles County's Hahn Hall of Administration is a split-level, 5- and 8-story rectangular plan building that follows the northwesterly upslope of the Civic Center axis along the north flank. Planned in the 1940s and executed in late 1950s, it is a Modernist assembly of interconnected cubic blocks. The building fronts all compass directions with multiple public and employee entrances. It is clad in stone, and is topped by a series of flat roofs at differing heights, each articulated by a simple cap. A continuous, set back roof deck at the highest floor is finished in an overhanging canopy. Above the canopy, building systems are screened by enclosures of varying heights and volumes, animating the otherwise large roof plane. Limited, punched windows are inset and include ribbon-type windows of varying sizes, smaller grouping and individual windows. The restrained use of fenestration imparts a fortress-like appearance to the asymmetrical composition. The building is largely unaltered since its phase was completed in 1961. It borders Temple Street between Hill Street and Grand Avenue, with lush tropical-influenced landscaping along its foundations; its south elevation defines one side of the 1961 Paseo de los Pobladores, through various integrated planters, stairways, entrances, and retaining walls.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building, HP31. Urban open space

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View south, April 16, 2009,
Photograph # 0906

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1956-1961, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper, and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** March 16, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

DPR 523A (1/95) ***Required information**

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary # 19-190557
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3B, 3CB

***Resource Name or #** 500 West Temple Street, 222 North Grand Avenue building (No. 5-5)

B1. Historic Name: Los Angeles County Hall of Administration
B2. Common Name: Kenneth Hahn Hall of Administration, County of Los Angeles
B3. Original Use: government office building B4. Present Use: government office building

***B5. Architectural Style:** International Style

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Built between 1956 and 1961 (*Los Angeles Times*).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architects: J.E. Stanton; Paul R. Williams; Adrian Wilson; Austin, Field & Fry b. Builder: Gust K. Newberg

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles

Period of Significance: 1925-1972 **Property Type:** building **Applicable Criteria:** A/1, C/3

The Hall of Administration was built in phases between 1956 and 1961. When completed, the building featured offices for county administrators, as well as underground connections to parking, bomb and fallout shelter, and other Civic Center facilities. The building is one major part of the dispersed services of the "county courthouse," replacing the massive 1888 Richardsonian Style courthouse two blocks southeast, and its extensions, as part of local governments' response to development of Civic Center in the mid 20th century.

Lead architect Stanton worked on many other public commissions, including the nearby Parker Center, and the County Courthouse and Paseo de los Pobladores connected underground to the Hahn building. Kenneth Hahn (1920-1997) was a city council member before his election to the county board of supervisors in 1952, where he then served for 40 years; numerous facilities bear his name throughout the county.

Exterior alterations appear to be minimal, and it is recognizable to its original appearance and period of significance. The property is an excellent example of International Style, and the theme-setter for Civic Center along its SE-NW axis. With mature landscaping and a vastly changed city around it, the architects' work continues to uniquely fit the setting.

It was previously evaluated for historic significance and found not eligible for listing in the National or California registers (FHWA). No project was associated with the findings. The building was subsequently evaluated for another EIR and found eligible as a district contributor to a Civic Center Historic District (2006), but no record of SHPO concurrence was found for either finding. The subject building is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1960s and beyond, and Criteria C/3 for its design, Modernist details, and as work of a master architects. While the complex represents a significant and distinguishable entity, it also contributes to Los Angeles Civic Center Historic District, as an integral part of its planning, design, development, and public services of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

FHWA, Determination of Eligibility Reference No. DOE-19-02-1075-0000, 2002.

Gebhard, David and Robert Winter, *Architecture in Los Angeles* (Salt Lake City: Gibbs M. Smith, Inc., 2003); 535.

Los Angeles Grand Avenue Authority, "The Grand Avenue Project Draft Environmental Impact Report" 2006: 434-443.

Los Angeles Library, Board of Commissioners. "Kenneth Hahn" unpublished biographical sketch, n.d.

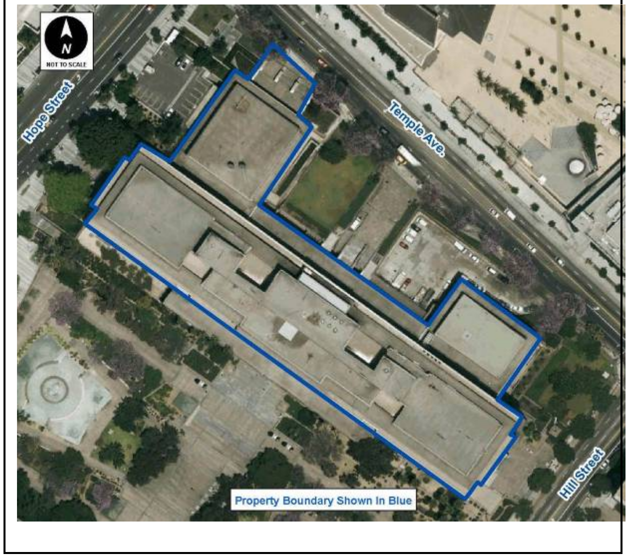
B13. Remarks: see above

***B14. Evaluator:** J. Steely

***Date of Evaluation:** May 16, 2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-190558
HRI #
Trinomial
NRHP Status Code 3D, 3CD

Other Listings
Review Code **Reviewer** **Date**

Page 12 **of** 39 ***Resource Name or #:** 224 Grand Avenue structure and landscape (No. 5-6)

P1. Other Identifier: El Paseo de los Pobladores de Los Angeles

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad: Date:** **T** **R ¼ of ¼ of Sec.** **B.M.**

c. Address: 224 Grand Avenue City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) bounded by Grand Ave., Hill St., Hahn Administration Building, and Mosk Courthouse. Elevation:
APN: 5161-004-908

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

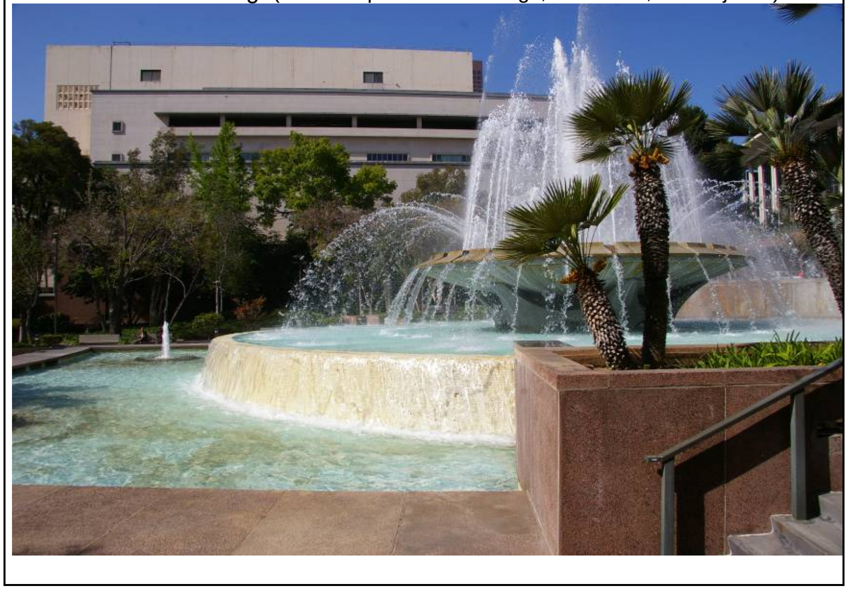
The Civic Center mall or park, El Paseo de los Pobladores de Los Angeles, is viewed by the public and center employees as a split-level, rectangular plan landscape that straddles the northwesterly upslope of the Civic Center axis. Executed in 1961 as a multi-terrace assembly of open spaces, tropical vegetation, fountains and memorials, the public surface has been slightly altered over time through landscape upgrades, placement of new monuments and addition of commercial kiosks. It apparently includes the Court of Historic Flags at the southeasterly continuation of the Civic Center mall and axis (Gebhard and Winter), but that specific landscape is recorded independently because it has distinct appearance and separate construction dates.

The Paseo de los Pobladores is one major part of the dispersed services of the “county courthouse” as part of local governments’ response to development of Civic Center in the mid 20th century. Its lush and extensive landscape cloak a multi-level, subterranean parking garage which was cleverly built to double as an air raid and fallout shelter. The Paseo was built at the height of the Cold War, and shelter necessity was based on fear of nuclear attack and expectations for survival. The park’s name and landscape commemorate the 1781 first Spanish settlement of the Los Angeles basin. One of its round, tiered memorial fountains (photo below) commemorates Arthur J. Will, county chief administrative officer 1951-1957, who facilitated the development of today’s Civic Center.

***P3b. Resource Attributes:** (List attributes and codes) HP29. Landscape architecture, HP11. Engineering structure

***P4. Resources Present:** ☐Building ☒ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) View southwest with Mosk Courthouse in background, April 16, 2009, Photograph # 0919

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1966, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 18, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency **Primary #** 19-190558
DEPARTMENT OF PARKS AND RECREATION **HRI#**

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 13 **of** 39 ***NRHP Status Code** 3D, 3CD

***Resource Name or #** 224 Grand Avenue structure/landscape (No. 5-6)

B1. Historic Name: El Paseo de los Pobladores de Los Angeles

B2. Common Name: Civic Center mall

B3. Original Use: park, parking garage, bomb and fallout shelter B4. Present Use: park, parking garage

***B5. Architectural Style:** Modernist features in a formal landscape

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Built in 1966 (*El Paseo de Los Pobladores de Los Angeles*).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architects: Cornell, Bridges & Troller; J.E. Stanton; W.F. Stockwell; Adrian Wilson; Austin, Field & Fry b. Builder:

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles

Period of Significance: 1925-1972 **Property Type:** structure **Applicable Criteria:** A/1, C/3

Paseo de los Pobladores—the main public mall along the axis of Civic Center was completed in 1961. When finished, the lush multi-level landscape with fountains and venues for memorials included at least four levels of underground parking, bomb and fallout shelters, and connections to other Civic Center facilities. The Paseo de los Pobladores is a major part of the dispersed services of the "county courthouse" as part of local governments' response to development of Civic Center in the mid 20th century. Its landscape is merely the public cover for the underground garage built to double as an air raid/fallout shelter during the height of the Cold War and fears of nuclear attack and survival.

Lead landscape architect Ralph D. Cornell (1890-1972) was one of the first professional landscape architects in Los Angeles. He oversaw development of the UCLA campus landscape from 1937-1972, and designed Torrey Pines and La Brea Tar Pits parks. The lead architects, J.E. Stanton and William F. Stockwell were also responsible for designs for Slichter (1965) and Boelter (1959) halls, the Planetraium (1957) at UCLA, and David X. Marks Tower (1963) at USC. The park's name and landscape commemorate the 1781 first Spanish settlement of the Los Angeles basin. One of its memorial fountains (photo on Primary Record) commemorates Arthur J. Will, county chief administrative officer 1951-1957, who played a major roll facilitating development of today's Civic Center. Its dedication program promised the plaza would be "unsurpassed in modern history in its beauty and usefulness…"

Exterior alterations appear to include landscape upgrades and periodic installation of memorial plaques and statuary. The public landscape is recognizable to its original appearance and period of significance. The property is an excellent example of formal landscape design with "Modernist tricks" (Gebhard & Winter) of walls, steps, fountains and other features that are part of the theme for Civic Center along its SE-NW axis.

Previously evaluated for historic significance in 2002, it was found not eligible for National or California Register listing (FHWA). The parking garage was evaluated concurrently resulting in the same findings. No record was found regarding a project associated with that evaluation. The subject property is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1960s and beyond, and Criteria C/3 for its design, Modernist details, and as work of master architects. While the complex represents a significant and distinguishable entity, it also contributes to Los Angeles Civic Center Historic District, as an integral part of its planning, design, development, and public services of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

City of Los Angeles. *El Paseo de los Pobladores de Los Angeles,* unpublished program, 18 May, 1966.

FHWA, Determination of Eligibility Reference No. DOE-19-02-1075-0000, 2002.

Gebhard, David and Robert Winter, *Architecture in Los Angeles.* (Salt Lake City: Gibbs M. Smith, Inc., 2003):145, 559.

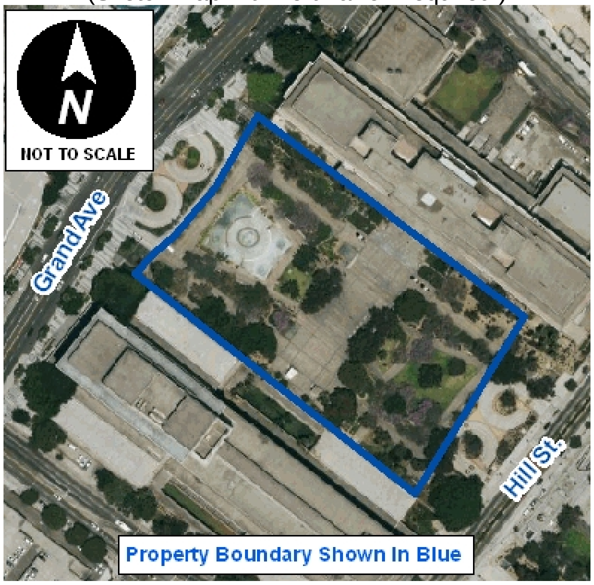
B13. Remarks:

***B14. Evaluator:** J. Steely

***Date of Evaluation:** May 16, 2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-186622
HRI # 134825
Trinomial
NRHP Status Code 3B, 3CB

Other Listings
Review Code **Reviewer** **Date**

Page 14 **of** 39 *__Resource Name or #:__ 111 North Hill Street building (No. 5-7)

P1. Other Identifier: Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 111 North Hill Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-004-906

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Los Angeles County Courthouse is a split-level, six- and eight-story, rectangular plan building that follows the northwesterly upslope of the Civic Center axis along the south flank. Planned in the 1940s and executed in 1950s Modernist simplicity, it is generally three bays wide at its two main public entrances on the southeast and northwest. The building is clad in stone with restrained *bas relief* sculpture, and is topped by a series of flat roofs. Simple punched, ribbon window, fenestration is grouped toward the center of the composition, which increases the visual mass of the large building. Lower levels are stepped out in separate boxed volumes from the main walls, are finished in a red stone and serve as the visual base for the composition. The east facing entrance is an enframed window wall, with a broad, horizontal, entrance canopy featuring the scales of justice in *bas relief* on the wall above. A large flagpole is set on the side in a walled planter which serves as a slim counterpoint to the overall horizontal building orientation. The building is largely unaltered since completion in 1958. It borders West 1st Street between Hill Street and Grand Avenue, with lush but minimal tropical landscaping along its southerly foundations; its northeast elevation defines one side of the 1966 Paseo de los Pobladores, through various integrated planters, stairways, and retaining walls.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building, HP31. Urban open space

P4. Resources Present: ☒Building ☐ Structure ☐Object ☐Site ☐* District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View north, April 16, 2009,
Photograph # 0993

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1958, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper, and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 18, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency **Primary #** 19-186622
DEPARTMENT OF PARKS AND RECREATION **HRI#**

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 15 **of** 39 ***NRHP Status Code** 3B, 3CB

***Resource Name or #** 111 North Hill Street building (No. 5-7)

B1. Historic Name: Los Angeles County Courthouse
B2. Common Name: Stanley Mosk Los Angeles County Courthouse
B3. Original Use: government/office building B4. Present Use: government/office building

***B5. Architectural Style:** International Style

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1958 (*Los Angeles Times*).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:** Civic Center with nearby Paseo de los Pobladores and Hahn Hall of Administration NE

B9a. Architect: J.E. Stanton; Paul R. Williams; Adrian Wilson; Austin, Field & Fry b. Builder:

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1972 **Property Type:** building **Applicable Criteria:** A/1, C/3

The Stanley Mosk County Courthouse was completed in 1958. When opened, the building featured courtrooms, judge's chambers, and judicial administration, as well as underground connections to parking, bomb and fallout shelters, and other Civic Center facilities. The building is a part of the dispersed services of the "county courthouse;" it replaced a handsome, nearby, Romanesque style courthouse (1888) and its extensions, as part of local government response to development of unified Civic Center in the mid 20th century.

Lead architect, J.E. Stanton had numerous public commissions, including the nearby Police Headquarters, Hall of Administration and Paseo de los Pobladores. Associate, Paul R. Williams (1894-1980), was notably the first licensed African American architect; whose lengthy and distinguished career spanned the 20th century and included elegant residences, commercial and institutional buildings of nearly every type (Hudson). The building's namesake, California Supreme Court Justice Stanley Mosk (1912-2001) served on the state court after serving as state attorney general and in other judicial positions ("Stanley Mosk").

Exterior alterations are minimal; it is recognizable to its original appearance and period of significance. The property is an excellent example of International Style, and one of the theme-setters for Civic Center along its SE-NW axis. With mature landscaping and a vastly changed city around it, the architects' work fits the overall setting.

It was previously evaluated for historic significance and was "determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing" (2002). It was evaluated for historic significance in a later EIR and found eligible as a district contributor to a Civic Center Historic District (2006), but no record of SHPO concurrence was found for either finding (2006). No record of that evaluation was found. The subject building is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1960s and beyond, and Criteria C/3 for its design, Modernist details, and as work of master architects. While the complex represents a significant and distinguishable entity, it also contributes to the Los Angeles Civic Center Historic District, as an integral part of its planning, design, development, and public services of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

FHWA, Determination of Eligibility Reference No. DOE-19-02-1075-0000, 2002.

Gebhard, David and Robert Winter, *Architecture in Los Angeles* (Salt Lake City: Gibbs M. Smith, Inc., 1985): 535.

Los Angeles Grand Avenue Authority, "The Grand Avenue Project Draft Environmental Impact Report" 2006: 434-443.

"Stanley Mosk, State's Senior Justice Dies" Los Angeles Times. June 20, 21001: A16

Hudson, Karen. *Paul R Williams: A Legacy of Style.* (NY, Rizzoli, 1993): various.

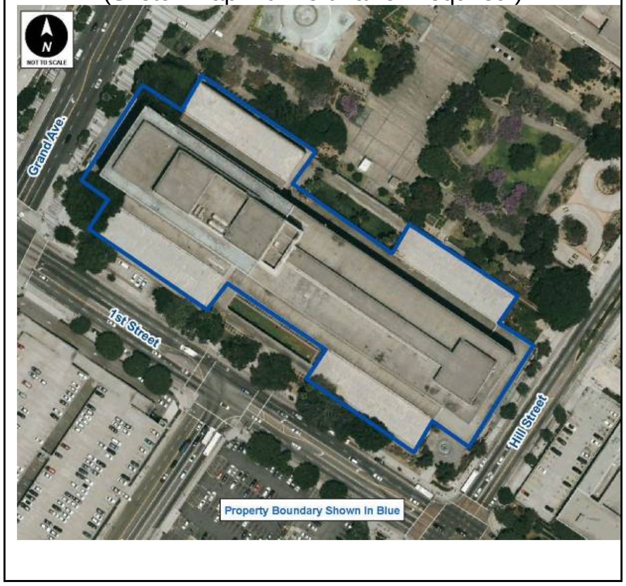
B13. Remarks:

***B14. Evaluator:** J. Steely

***Date of Evaluation:** May 16, 2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-190559
HRI #
Trinomial
NRHP Status Code 3D, 3CD

Other Listings
Review Code **Reviewer** **Date**

Page 16 **of** 39 *__Resource Name or #:__ 301 North Broadway building and structure (No. 5-8)

P1. Other Identifier: County of Los Angeles Central Heating and Refrigeration Plant

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 301 North Broadway City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-904

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The Civic Center Central Heating and Refrigeration Plant is a three-story complex of offices and mechanical systems both inside and outside, with decorative screening around machinery, for compatibility with surrounding buildings. Designed with Modernist styling to blend with Civic Center expansion through the 1950s and 1960s and appropriately to express the functions of the plant, the complex fills an irregularly-shaped block bounded by Temple, Hill, and Aliso streets and Broadway. The public face (notably an employee-only entrance) on the southeast elevation fronts Broadway and the Hall of Justice across the street. The mechanical plant is an integral part of Civic Center, designed in the late 1950s with capacity and underground piping to accommodate the governmental center's development underway, as well as additional buildings and facilities added through the coming two decades.

***P3b. Resource Attributes:** (List attributes and codes) HP9. Public utility building, HP14. Government building

***P4. Resources Present:** ☒Building ☒ Structure☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View northwest, April 16, 2009,
Photograph # 0930

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1958, Los Angeles County Office of the Assessor

***P7. Owner and Address:**
City and County of Los Angeles

***P8. Recorded by:** (Name, affiliation, and address)
J Steely, S. Murray, S. Carmack, K. Harper
and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 18, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary # 19-190559
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 17 **of** 39
***NRHP Status Code** 3D, 3CD

***Resource Name or #** (Assigned by recorder) 301 North Broadway building, structure (No. 5-8)

B1. Historic Name: County of Los Angeles Central Heating and Refrigeration Plant

B2. Common Name:

B3. Original Use: public utility complex B4. Present Use: public utility complex

***B5. Architectural Style:** Modernist

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Built in 1958 (*Los Angeles Times*).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:** Tropical landscaping compatible with the Civic Center landscape

B9a. Architect/Engineer: M.A. Nishkian & Co. b. Builder: Haas-Haynie-Frandsen, Inc.

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles

Period of Significance: 1925-1972 **Property Type:** building, structure **Applicable Criteria:** A/1, and C/3

The Civic Center's Central Heating and Refrigeration Plant was completed in 1958. When completed, the complex provided underground heating and cooling services for the large expansion of Civic Center then underway, as well as capacity for planned government buildings for some two decades hence. The Nishkian company, which oversaw the $3.5 million project, is likely related to the engineering firm founded in San Francisco in 1919, now Nishkian Chamberlain ("Nishkian-Menninger").

Exterior alterations are minimal; it is recognizable to its original appearance and period of significance. The property is an excellent example of a central public utility complex designed for "wet system" underground tunnels and piping for heating and cooling of several large buildings, with architectural styling to blend the facility into the overall setting. The Central Heating and Refrigeration Plant is eligible for listing in the National and California registers under Criterion A/1 for association with the historic planning and development of Civic Center in the 1950s and beyond, and Criterion C/3 for its architectural design with Modernist details as the work of a master architect in collaboration with a master mechanical engineer. While the complex represents a significant and distinguishable entity, it also contributes to the Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Gebhard, David and Robert Winter, *Architecture in Los Angeles* (Salt Lake City: Gibbs M. Smith, Inc., 1985), 255-261.
"Nishkian-Menninger…" electronic document: <http://www.nishkian.com>, accessed May 21, 2009.
"Official Opening…" *Los Angeles Times*, August 17, 1958: F18.

B13. Remarks: see above

***B14. Evaluator:** J. Steely

***Date of Evaluation:** May 18, 2009

(Sketch Map with north arrow required.)

(This space reserved for official comments.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-186620
HRI #
Trinomial
NRHP Status Code 3B, 3CB

Other Listings
Review Code **Reviewer** **Date**

Page 18 **of** 39 ***Resource Name or #:** 320 West Temple Street building (No. 5-9)

P1. Other Identifier: Hall of Records

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 320 West Temple Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-910

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Hall of Records is a 10-story, midrise office building. It was completed in 1962 with Modernist styling by an internationally known architect, it is as a series of cubic masses stemming from a central service core, and it presents multiple elevations in all directions under a series of flat roofs. The building is configured in a roughly **T** plan, and is not set on the lot at the typical 90 degree angles. It is variously clad in windowless masonry with glass-and-panel arrangements on other walls and integral vertical shades (NE and SW office elevations). The ground floor blends effectively with the landscaping of Civic Center with little attention to a formal public entry.

Few if any alterations are evident on the exterior. The building occupies a prominent place along the north side of the Civic Center mall, further defined by Hill and Temple Streets and Broadway. The Hall of Records is one major part of the dispersed services of the "county courthouse" replacing the massive 1888 Richardsonian-style courthouse and its extensions, as part of local governments' response to development of Civic Center in the mid 20th century.

***P3b. Resource Attributes:** (List attributes and codes) HP7. 3+ story commercial building, HP14. Government building

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, April 16, 2009,
Photograph # 0922

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1962, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 20, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary # 19-186620
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3B, 3CB

***Resource Name or #** (Assigned by recorder) 320 West Temple Street building (No. 5-9)

B1. Historic Name: Hall of Records

B2. Common Name:

B3. Original Use: government office building B4. Present Use: government office building

***B5. Architectural Style:** Modernist, cubist school

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Built in 1962 (*Los Angeles Times*).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architect: Richard Neutra with Robert Alexander b. Builder: unknown

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles

Period of Significance: 1925-1971 **Property Type:** building **Applicable Criteria:** A/1, C/3

The Hall of Records was built in 1961-1962. When completed, the building provided county records storage space and clerks' offices for the large expansion of Civic Center then underway. It was designed by iconic architect, Richard Neutra (1892-1970) with Robert Alexander. Neutra studied under Adolf Loos in Austria and Erich Mendolsohn in Germany before immigrating to the United States in 1923 and working with Frank Lloyd Wright. Rudolf Schindler hosted his move to California, and in 1928 he achieved fame with the Dr. P.M. Lovell House in Los Angeles and many other form/function commisions in the state including the 1946 Edgar Kaufmann House in Palm Springs. Neutra was a participant in the bold, Southern California-based *Arts & Architecture* Case Study House Program, completing one house (#20, 1947) and designing two others that were not completed. ("Case Study"). The Hall of Records is notably his only realized highrise office building. Local architect, Robert Alexander, was responsible for the designs of: Connecticult General Life building (now Union Bank), Bunker Hill Tower (with Welton Becket, 1967).

Exterior alterations are minimal; it is recognizable to its original appearance and period of significance. The property is an excellent example of Neutra's Modernist works with planes and cubes, not quite fitting the International Style (Hahn and Mosk county buildings) or updated Classicism (Music Center) themes elsewhere in Civic Center. But with mature landscaping and a vastly changed city around it, the building fits the overall setting. The building was found eligible for separate listing in the California Register, and as a contributor to a California Register-eligible Civic Center historic district (2006). No evidence of SHPO concurrence with those findings was located. The Hall of Records building is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1950s and beyond, and CriteriaC/3 for its architectural design with Modernist details as the work of a master architect. While the building represents a significant and distinguishable entity, it also contributes to the recommended-eligible Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

(Sketch Map with north arrow required.)

***B12. References:**

"Case Study #20" *Arts & Architecture.* December, 1948: 38-41.

Gebhard, David and Robert Winter, *Architecture in Los Angeles* (Salt Lake City: Gibbs M. Smith, Inc., 1985), 259.

Grand Avenue Project. *Los Angeles Grand Avenue Project.* 2006: 274.

Hines, Thomas S. *Richard Neutra and The Search For Modern Architecture: A Biography And History* (Oxford: Oxford University Press, 1982) 243.

B13. Remarks: see above

***B14. Evaluator:** J. Steely, F. Smith

***Date of Evaluation:** May 20, 2009

(This space reserved for official comments.)

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-170974 (Update)
HRI # 024957
Trinomial
NRHP Status Code 3D, 3CD, 5S2

Other Listings
Review Code **Reviewer** **Date**

Page 20 **of** 39 ***Resource Name or #:** 224 North Hill Street landscape, 100 Block Hill Street (No. 5-10)

P1. Other Identifier: Court of Historic American Flags, Court of Historic Flags, "Court of Flags, Civic Center Mall" (1982 DPR)

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 224 North Hill Street, 100 Block Hill Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-916

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Court of Historic Flags is viewed by the public and Civic Center employees as a multi-surface, rectangular-plan landscape that straddles the northwesterly upslope of the Civic Center axis from City Hall. Completed in 1971 as a terraced assembly of open space organized around 18 flagpoles and associated interpretive plaques for their masted flags from American history, the site appears largely unaltered other than the addition of a sculpture in 1973. The flag court is part of El Paso de los Pobladores de Los Angeles and its southeasterly continuation of the Civic Center mall and axis (Gebhard and Winter).

The Court of Flags is one major part of the dispersed services of the "county courthouse" as part of local governments' response to development of Civic Center in the mid 20th century. Its formal landscape is merely the public cover for a 4-level underground parking garage and records storage, probably built to double as an air raid/fallout shelter during the height of the Cold War, along with the extensive garages beneath older parts of the mall immediately northwest. The flag court's garage connects through pedestrian tunnels to adjacent county buildings and those across Hill Street and Broadway.

***P3b. Resource Attributes:** (List attributes and codes) HP29. Landscape architecture, HP11. Engineering structure

***P4. Resources Present:** ☐Building ☒ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, April 16, 2009,
Photograph # 0944

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1971, *Los Angeles Times*

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 18, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # 19-170974 (Update)
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3D, 3CD, 5S2

***Resource Name or #** (Assigned by recorder) 224 North Hill Street landscape, 100 Block Hill Street (No. 5-10)

B1. Historic Name: Court of Historic American Flags
B2. Common Name: Court of Historic Flags
B3. Original Use: commemorative hardscape B4. Present Use: commemorative hardscape

***B5. Architectural Style:**

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1971 (*Los Angeles Times*). Alterations: Vietnam Memorial added (1973).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architect: b. Builder:

***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1972 **Property Type:** objects **Applicable Criteria:** A/1, C/3

The Court of Historic Flags or Court of Historic American Flags is a rectangular, granite paved area, flanked on either side by 18 flagpoles, nine on each side. The flagpoles are evenly spaced, and each is anodized metal, of uniform height and terminates in a brass ball. The poles each fly American flags, dating in history from 1774 to 1960 (United States, incorporating 50 states). The flags are sponsored by different service and non-profit organizations. Each flagpole contains a plaque bearing an inscription describing the significance of the flag in American history and identifying the sponsors.

The rectangular, flat court is line by continuous wedge-shaped, low walls. Atop the walls, on broad, flat, continuous pathway, flagpoles and plaques containing descriptions and sponsoring organizations are set evenly spaced. At the one end of the court, continuous, open stairs with polished metal railings lead from another level of the large plaza. At the other end, an American Flag flies on the tallest flagpole in the assemblage. In front of the American flag, the Vietnam Memorial is set in the open plaza. It is a large granite cube with dressed sides, designed to include a bronze combat helmet at the top (no longer extant) with an incised commemorative tablet (Frank Ackerman, 1973). In 1994, the Confederate flag was removed from the display (*Sentinel*).

Known alterations include the addition of the Vietnam memorial (1973), and its later vandalism (date unknown); it is recognizable to its original appearance and to the period of significance. The Court was found to contribute to a California Register-eligible Civic Center historic District (2006). It was also found to be eligible for local listing or designation, in an unknown survey, Reference # 0053-2347-0000 (no date). The Court, while commemorative, fits the overall setting and is appropriate to the landscaped, terraced plazas. The Court of Flags is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1970s, at the end of its development, and under Criteria C/3 for its simple design. The Court contributes to the Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Bolden, James. "Confederate Flag is Removed from Display" *Los Angeles Sentinel.* June 9, 1994, n.p.

Grand Avenue Project. *Los Angeles Grand Avenue Project.* 2006: 275.

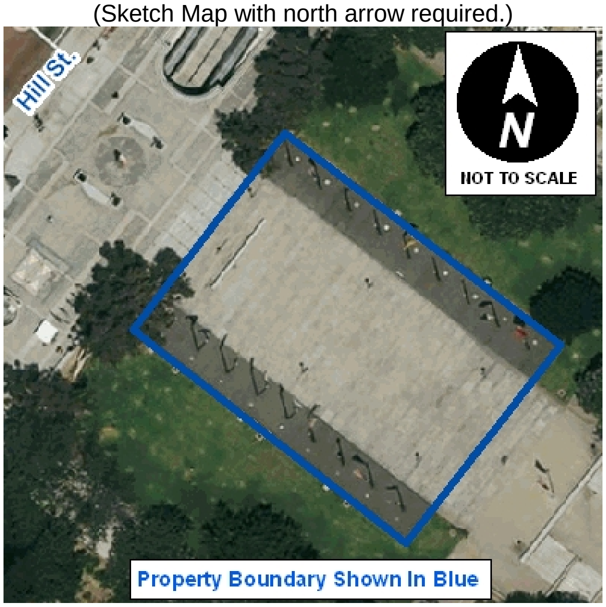
B13. Remarks:

***B14. Evaluator:** F. Smith

***Date of Evaluation:** 3/26/09

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-186619
HRI #
Trinomial
NRHP Status Code 3D, 3CD

Other Listings
Review Code **Reviewer** **Date**

Page 22 **of** 39 *__Resource Name or #:__ 301 West 1st Street building (No. 5-11)

P1. Other Identifier: Los Angeles County Law Library, Mildred L. Lillie Building

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad: Date:** **T** **R ¼ of ¼ of Sec.** **B.M.**

c. Address: 301 West 1st Street, 100 North Hill Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-912

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Los Angeles County Law Library is a 1- and 3-story, split-level office building, inset into the northwesterly slope of the Civic Center mall on its south side along West 1st Street. The main building is of an architectural concrete construction with a streel-trussed roof over wide spans and concrete beam and joist construction over shorter spans. Interior features of the original building include a foreign and rare book reading room, a public stenographer's room, pay lockers for use by patrons, air conditioning, and book lifts. A list of original interior materials includes acoustic tile insulation, steel and metal lath and plaster interior walls, mahogany and maple woodwork and doors. (LA Times)

Spacious entrance steps and planting spaces lead to the lower portion of the front façade of the building which is faced with granite. The main façade is clad with geometric masonry panels in relief, and is adorned the seals of the different courts of law. The building couples a drive-in entrance and small parking lot on its northwest side on Hill Street with the pedestrian entry facing southwest on West 1st Street. The building is rectangular in plan and is in the Civic Center complex, forming part of its south side along West 1st Street, adjacent the Mosk County Courthouse to the northwest, and the Court of Historic Flags to the northeast connected by tunnel to its underground parking garage.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, April 16, 2009,
Photograph # IMG0666.jpg

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1953, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely and J. Covert
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 26, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # 19-186619
HRI#

Page 23 **of** 39

***NRHP Status Code** 3D, 3CD

***Resource Name or #** (Assigned by recorder) 301 West 1st Street building (No. 5-11)

B1. Historic Name: Los Angeles County Law Library
B2. Common Name: Mildred L. Lillie Building
B3. Original Use: government services building B4. Present Use: government services building
***B5. Architectural Style:** Modernist
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1953 (Los Angeles County Assessor).
***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:**
B9a. Architect: Austin, Field & Fry b. Builder: James J. Barnes Construction, Co.
***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1972 **Property Type:** building **Applicable Criteria:** A/1, C/3

The Los Angeles County Law Library building was built in 1953 by the architecture firm of Austin, Fields & Fry. Shortly before its completion, the Los Angeles Times reported that in design, size, and equipment it was anticipated to be one of the foremost such buildings in the nation. The building was also planned with a setback location on its large site in keeping with the maintenance and furtherance of the Los Angeles Civic Center design goals (*LA Times*).

The building was renamed as the Mildred L. Lillie Building on November 6, 2003. Lillie served as an assistant U.S. attorney and filled several judicial appointments, culminating with the Second District Court of Appeal and 44 years as an appellate judge. She gained fame as a potential candidate to the U.S. Supreme Court under Richard Nixon in 1971 (*Herald Examiner*).

The building was found eligible as a contributor to a California Register-eligible Civic Center historic district (2006). No evidence of SHPO concurrence with those findings was located. The Law Library is eligible for listing in the National and California registers under Criteria A/1 for its association with the historic planning and development of Civic Center in the 1950s and beyond, and Criterion C/3 for its architectural design as prominent example of a civic building with Modernist geometric details. The building contributes to the Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Grand Avenue Project. *Los Angeles Grand Avenue Project.* 2006: 274.

"The Most Powerful Women in Los Angeles." *Los Angeles Herald Examiner.* October 27, 1977, D8.

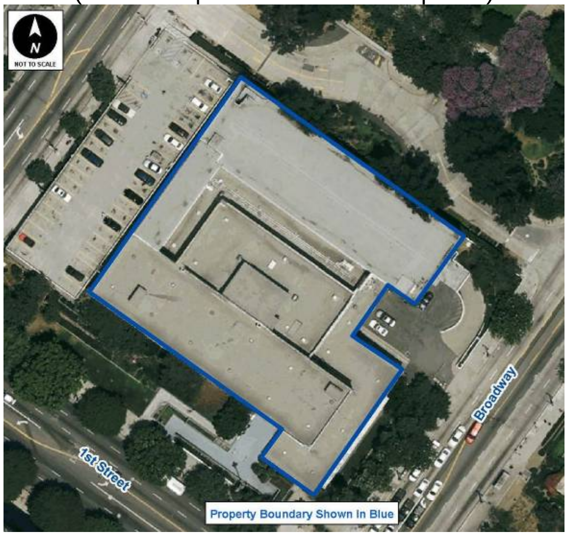
"Large Law Library Scheduled for Start." *Los Angeles Times.* July 6, 1952, E1.

B13. Remarks: see above

***B14. Evaluator:** J. Steely

***Date of Evaluation:** May 26, 2009

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-173174
HRI # 027242
Trinomial
NRHP Status Code 2S4, 3B, 3CB

Other Listings
Review Code **Reviewer** **Date**

Page 24 **of** 39 ***Resource Name or #:** 211 West Temple Street building (No. 5-12)

P1. Other Identifier: Hall of Justice, Los Angeles County Jail

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad: Date:** **T** **R** **¼ of ¼ of Sec.** **B.M.**

c. Address: 211 West Temple Street, 300 N Broadway City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-903

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Hall of Justice building is a 14-story [sic, Gebhard & Winter] government block designed to hold the county's jail (top stories), courts, sheriff, morgue, and many other combined justice and enforcement services when finished in 1925. Its Beaux-Arts Classical styling followed 1920s plans for a City Beautiful Civic Center of projected adjacent buildings; its base-shaft-capital composition also matched early 20th century skyscraper convention, within the 150-foot maximum under Los Angeles zoning of the time. The building occupies the block bounded by Temple, Broadway, Aliso, and Spring Streets, and is oriented to the old downtown street grid (NE-SW) that predicted the future orientation of Civic Center. It is a steel-frame building, clad in highly detailed light gray granite in Classical motifs, with a flat roof. Interior spaces have been gutted for seismic refit and hazardous material abatement, following the 1994 Northridge earthquake, with plans for conversion of the building to county offices and possibly the sheriff's department. Presumably the elaborately decorated barrel-vaulted entry foyer that bisects the building is still intact for future public use.

The Hall of Justice is the oldest building in Civic Center, planned in the 1920s, and is surrounded by a subsequent eclectic group of city and county offices, courts, records, mechanical, and garage buildings and formal landscapes.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View north, April 16, 2009.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1925, *Los Angeles Times*

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 26, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐ NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # 19-173174
HRI#

Page 25 **of** 39

***NRHP Status Code** 2S4, 3B, 3CB

***Resource Name or #** (Assigned by recorder) 211 West Temple Street building (No. 5-12)

B1. Historic Name: Hall of Justice, Los Angeles County Jail
B2. Common Name:
B3. Original Use: government services building B4. Present Use: empty, under prolonged rehabilitation
***B5. Architectural Style:** Beaux-Arts Classical
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1925 (*Los Angeles Times*). Alterations to structural system and interior after 1994 earthquake damage.
***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:**
B9a. Architect: Allied Architects Association of Los Angeles b. Builder:
***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1972 **Property Type:** building **Applicable Criteria:** A/1, C/3

The Hall of Justice buildingwas designed to accommodate the county's jail (top stories), courts, sheriff, morgue, and many other combined justice and enforcement services when finished in 1925. Its Beaux-Arts Classical styling followed 1920s plans for a City Beautiful Civic Center of projected adjacent buildings; its base-shaft-capital composition also matched early 20th century skyscraper convention, within the 150-foot building height maximum under Los Angeles zoning of the time.

The building occupies the block bounded by Temple, Broadway, Aliso, and Spring streets, and is oriented to the old downtown street grid (NE-SW) that predicted the future orientation of Civic Center. It was designed by Allied Architects—John C.W. Austin, John Parkinson, Donald B. Parkinson, and Austin Whittlesey. Allied Architects, founded in 1921, pledged to provide only public-client services, and excelled in this massive Classical temple derivation for what was expected to be a Federal Triangle (Washington, D.C.)-type of City Beautiful Civic Center redevelopment of a large area of downtown.

Alterations include gutting of interior spaces as part of seismic refit and hazardous material abatement efforts following the 1994 Northridge earthquake.

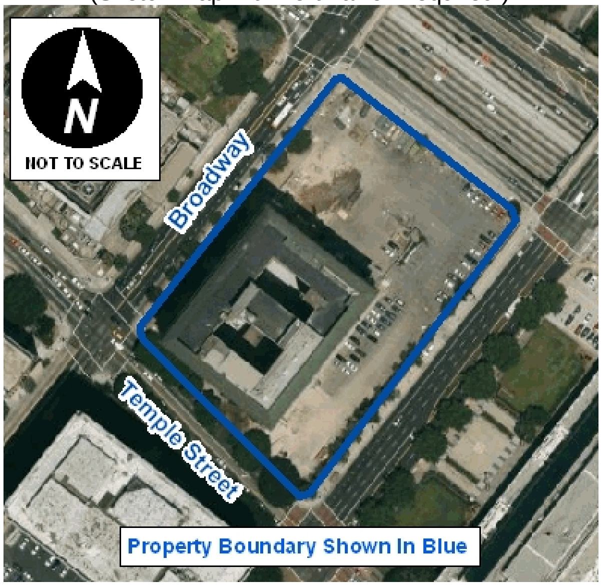
In 1994 it was evaluated for historic significance and judged to be an "Individual property determined eligible for NR pursuant to Section 106 without review by SHPO. Listed in the CR." Because the building was determined eligible for the National Register, it is also listed in the California Register. The building also contributes to the National and California Register eligible Los Angeles Civic Center historic district, as an integral early design component and part of the planning, design, development, and operations of the 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)
***B12. References:**
"Allied Architects," digital document: https://digital.lib.washington.edu/architect/partners/54/, reviewed May 26, 2009.
Sanborn Fire Insurance Co., Maps of Los Angeles, CA 1906-1951: various sheets.

B13. Remarks:
***B14. Evaluator:** J. Steely
***Date of Evaluation:** May 26, 2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-186621
HRI #
Trinomial
NRHP Status Code 3CB

Other Listings
Review Code **Reviewer** **Date**

Page 26 **of** 39 *__Resource Name or #:__ 210 West Temple Street building (No. 5-13)

P1. Other Identifier: Clara Shortridge Foltz Criminal Justice Center

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 210 West Temple Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-915

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Los Angeles County's Clara Shortridge Foltz Criminal Justice Center is a highrise 20-story rectangular plan building that follows the northwesterly upslope of the Civic Center axis along the north flank. Joining the mall's Modernist assembly of Classical and cubic blocks as Civic Center's last major addition, the building fronts four directions with identical curtain walls of glass overlaid with precast concrete framing and shading panels, and is topped by a flat roof. The building appears largely unaltered since completion in 1972. It occupies a full parcel bordered by the mall, Broadway, Temple and Spring Streets, with lush tropical landscaping along its foundations; its southeast elevation faces a parking lot that appears to be the site of future building or landscaping.

***P3b. Resource Attributes:** (List attributes and codes) HP7. 3+ story commercial building, HP14. Government building

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, May 16, 2009,
Photograph # 0940

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1972, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 21, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary # 19-186621
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3CB

***Resource Name or #** (Assigned by recorder) 210 West Temple Street building (No. 5-13)

B1. Historic Name: Criminal Justice Center

B2. Common Name: Clara Shortridge Foltz Criminal Justice Center

B3. Original Use: government office building B4. Present Use: government office building

***B5. Architectural Style:** Late Modernism

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Built in 1972 (*Los Angeles Times*).

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architect: Adrian Wilson & Associates b. Builder: unknown

***B10. Significance: Theme:** **Area:**

Period of Significance: **Property Type:** **Applicable Criteria:**

The $32.5 million Criminal Justice Center building replaced many of the functions (superior courts, municipal courts, sheriff, marshal, district attorney, public defender, county clerk) that were contained in the Hall of Justice building (1925) and Hall of Records (1911, demolished 1971) and is a major component of the dispersed services of the "county courthouse," as part of local government response to development of Civic Center in the mid 20th century.

The building's namesake, Clara Foltz (1849-1934) came to California from Iowa in 1872, studied law and became the first woman admitted to the California bar in 1878. She campaigned through the early 20th century for women's voting rights and along the way influenced public-defender and parole system reforms, and served Los Angeles as the first woman deputy district attorney in the U.S. after 1910 The county renamed this Criminal Courts Building in her honor in 2002.

Exterior alterations are minimal; it is recognizable to its original appearance and the adjoining Civic Center Historic District's period of significance. The property is a representative example of mature Modernism with wall elements affixed to a cubic structural frame, appropriately blending with the International Style (see Hahn and Mosk buildings) and updated Classicism (Music Center) subthemes elsewhere in Civic Center. With mature landscaping, this work fits the overall setting along the axis from City Hall.

The building was found eligible for listing in the California Register under as a contributor to a Civic Center historic district (2006); no SHPO concurrence with those finding was found. The building is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center through maturity in the 1970s, and Criteria C/3 for its architectural design with Modernist details as the work of a master architect. Due to its less-than-50-year-old construction date, the building best contributes to the recommended-eligible Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

"Clara Shortridge Foltz," electronic document: <http://womenslegalhistory.stanford.edu/csf03.html>, accessed May 21, 2009

Grand Avenue Project. *Los Angeles Grand Avenue Project.* 2006: 274.

"New Home for Criminal Courts," *Los Angeles Times,* August 6, 1972.

(Sketch Map with north arrow required.)

B13. Remarks:

***B14. Evaluator:** J. Steely

***Date of Evaluation:** 3/26/09

(This space reserved for official comments.)

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-173225 (Update)
HRI # 027293
Trinomial
NRHP Status Code 3B

Other Listings
Review Code **Reviewer** **Date**

Page 28 **of** 39 ***Resource Name or #:** 312 North Spring Street building (No. 6-1)

P1. Other Identifier: U.S. Post Office and Courthouse; Federal Building

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 312 North Spring Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-902

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The U.S. Post Office and Courthouse, also known as the Federal Building was listed in the National Register of Historic Places and California Register of Historical Resources in 2006.

Refer to National Register Registration Form for description, significance, and mapping.

The building also contributes to the National and California Register eligible Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the early 20th century city and county governmental complex.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building, HP31. Urban open space

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, March 16, 2009,
Photograph # 06066.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1940, cornerstone.

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 26, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐ NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☐ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-173078 (Update)
HRI #
Trinomial
NRHP Status Code 2S2; 3S, 3D, 3CB
Other Listings City of Los Angeles Historic-Cultural Monument #150
Review Code **Reviewer** **Date**

Page 29 **of** 39 *__Resource Name or #:__ 200 North Spring Street building (No. 6-2)

P1. Other Identifier: Los Angeles City Hall

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 200 North Spring Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-906

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Los Angeles City Hall is a 32-story, monumental government building, designed with academic Classical and climate-evoking Mediterranean influences, in four major masses including the base, central tower with pyramidal apex inspired by ancient mausoleums, and flanking low-rise office wings. The 1928 composition rises from a rectangular plan oriented to the downtown street grid (NE-SW), and is constructed with a reinforced concrete foundation and steel framing, clad in white glazed terra cotta with red barrel-tile roofs on the side wings. The interior public spaces, including a grand central rotunda, are highly decorated with terrazzo floors, walls of stone ashlar, pillars of marble, and ceilings of colorful images on plaster, in “Byzantine mood” (Gebhard and Winter), but perhaps intending Moorish or Spanish Renaissance references.

Original construction incorporated “flexible compression zones” at each tower floor for earthquake resistance, and recent historical rehabilitation and seismic retrofit of the foundation made City Hall the “tallest base isolated structure in the world" (L.A. Historic-Cultural Monuments). The building and landscape occupy the entire block bounded by Spring, Temple, Main, and West 1st Streets. City Hall is the anchor of Civic Center as planned before the 1920s and fulfilled with modifications primarily in the 1950s, surrounded by an eclectic group of city and county offices, courts, records, mechanical, and garage buildings and formal landscapes. The wooded lawn at City Hall's south is a rare informal landscape in Civic Center.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building, HP31. Urban open space

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
Photograph #0958

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1928, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper, and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 19, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☐ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-190560
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code **Reviewer** **Date**

Page 30 **of** 39 ***Resource Name or #:** 200 North Main Street building (No. 6-3)

P1. Other Identifier: Los Angeles City Hall East

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad: :** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino
c. Address: 200 North Main Street City: Los Angeles Zip: 90012
d. UTM: Zone: ; mE/ mN (G.P.S.)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-005-901

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Los Angeles City Hall East is a 16-story, monumental government building. The nearly square in plan building is set on four, concrete corner posts, beneath which an simple glazed entrance and recessed ground floor are tucked away. The symmetrical cast concrete exterior is a dimensioned frame, with repetitive punched windows that align vertically as well as by floor, behind the plain screen. A void at the top floor creates modest visual interest; it is capped by a thick, continuous block that serves as a reserved cornice to the otherwise unadorned building composition. The architectural vocabulary and design are unexpressive. It is set atop a paved courtyard and is joined to City Hall by way of a pedestrian overcrossing that shares its bland styling. The building is on a midblock parcel that is roughly level, surrounded by other government uses and open spaces. Because the building was constructed after the Civic Center period of significance, it does not contribute to the significance of the National or California Register historic district.

***P3b. Resource Attributes:** (List attributes and codes) HP7. 3+ story commercial building, HP14. Government building
***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☐ Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, Photograph #0955

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1973, Los Angeles County Office of the Assessor

***P7. Owner and Address:**
City of Los Angeles

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper, and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 19, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☐ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-190561
HRI #
Trinomial
NRHP Status Code 3D, 3CD

Other Listings
Review Code **Reviewer** **Date**

Page 31 **of** 39 *__Resource Name or #:__ 111 East 1st Street building (No. 6-4)

P1. Other Identifier: City Health Building, City Health Building

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 111 East 1st Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-014-902

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The City Hall South building is a 9-story, midrise government office building. It was designed by the architecture firm, Lunden, Hayward, & O'Connor, and was executed in the International Style. The building features continuous horizontal bands of windows on all four elevations, and has a flat roof supporting 10th-story mechanical services. The banded windows notably continue, or wrap around the 90-degree corners. The building is configured in a rectangular plan with a 3-story base extending southeast beyond the tower, all clad in glass and what were noted in 1954 as terra cotta panels. Few alterations are evident from its original exterior configuration, including its main public entry on to the southwest, away from the Civic Center axis. The building occupies the southwest third of the block bounded by Main, Temple, Los Angeles, and West 1st streets, at the southeastern extension of the Civic Center mall and axis, surrounded by government and commercial mid- and highrise buildings primarily from the mid to late 20th century.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, March 16, 2009,
Photograph # 0602

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1954, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, J. Covert, S. Murray, S. Carmack,
K. Harper, and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** May 21, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency **Primary #**19-190561
DEPARTMENT OF PARKS AND RECREATION **HRI#**

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3D, 3CD

***Resource Name or #** (Assigned by recorder) 111 East 1st Street building (No. 6-4)

B1. Historic Name: City Health Building
B2. Common Name: City Hall South
B3. Original Use: government clinic, office, and mechanical building B4. Present Use: government office building
***B5. Architectural Style:** International Style
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1954 (*Los Angeles Times*).
***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:**
B9a. Architect: Lunden, Hayward, & O'Connor b. Builder: Robert E. McKee Co.
***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1972 **Property Type:** building **Applicable Criteria:** A/1, C/3

The City Health Building, renamed City Hall South, was constructed between 1952 and 1954. The building originally featured health offices, clinics, and labs, and a central utility plant that heated City Hall north across Main Street and the new Parker Center police headquarters east across Los Angeles Street.

Exterior alterations are minimal; it is recognizable to its original appearance and period of significance. The property is an excellent example of Civic Center's Modernist embrace in the early 1950s, joining the International Style (Hahn and Mosk county buildings) and updated Classicism (Music Center) themes elsewhere in Civic Center. Later conversion of the building to City Hall South further incorporated its location and functions directly into the Civic Center mall and activities.

City Hall South is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1950s and beyond, and Criteria C/3 for its architectural design with Modernist details as the work of a master architect. While the building represents a significant and distinguishable entity, it also contributes to the recommended-eligible Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid 20th century city and county governmental complex.

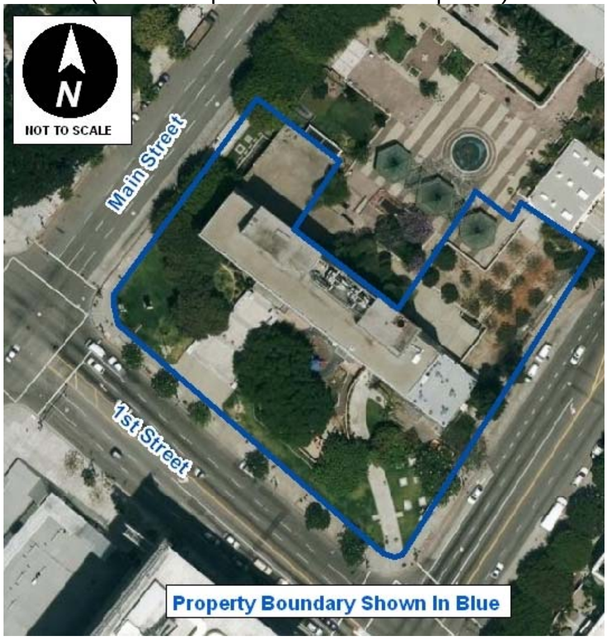
B11. Additional Resource Attributes: (List attributes and codes)
***B12. References:**
"New City Health Building Will Be Dedicated Today" *Los Angeles Times*, November 29, 1954: 13.
"'Glass Skyscraper' Here is Nearing Completion" *Los Angeles Times*, May 31, 1953, p. E.1.

B13. Remarks: see above

***B14. Evaluator:** J. Steely, F. Smith

***Date of Evaluation:** May 21, 2009

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-190562
HRI #
Trinomial
NRHP Status Code 3D, 3CD

Other Listings
Review Code **Reviewer** **Date**

Page 33 **of** 39 ***Resource Name or #:** 300 North Los Angeles Street building (No. 6-5)

P1. Other Identifier: Federal Building, North Los Angeles Field Office

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 300 North Los Angeles Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-011-906

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The subject property is an eight story, government office building. Constructed in a Brutalist interpretation of the International Style, the building is rectangular in plan and is roughly symmetrical. It has a white marble-clad frame, expressed in equal sized bays. The recessed darker core fills the volume, extending to just below the framed, flat roof in a recessed upper floor. The building core is a solid block, articulated by fixed, ribbon-type windows, and separated by bronze spandrels. Spandrel panels feature restrained interplay between vertical ribs. All sides repeat the straightforward theme and spandrel motif. The primary entrance, which faces northwest onto Los Angeles Street, is raised and is protected by a simple canopy supported on marble-faced columns. Two tile murals, typical of the period adorn the entrance. The building and its associated simple landscaping beds and street trees occupy two parcels along Los Angeles Street between Temple and Commercial streets. The subject property is the northeast anchor of the Civic Center. It is surrounded by other highrise office and government buildings.

***P3b. Resource Attributes:** (List attributes and codes) HP14. government building, HP7. 3+ story commercial building

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, March 16, 2009,
Photograph # 0620

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1965, *Los Angeles Times*

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
S. Murray, S. Carmack, K. Harper, F. Smith, and K. Corbett
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** March 16, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # 19-190562
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 3D, 3CD

***Resource Name or #** (Assigned by recorder) 300 North Los Angeles Street building (No. 6-5)

B1. Historic Name:
B2. Common Name: Federal Building
B3. Original Use: government building B4. Present Use: government building
***B5. Architectural Style:** International Style
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Built in 1965 (*Los Angeles Times*)
***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:**
B9a. Architect: Welton Becket and Associates, and J.E. Stanton b. Builder: Ford J. Twaits Co. and Morrison-Knudsen Co.
***B10. Significance: Theme:** **Area:**
Period of Significance: **Property Type:** **Applicable Criteria:** N/A

The subject property building was completed in 1965. It was designed by Welton Becket and Associates, a successful firm responsible for numerous civic and commercial buildings in the Los Angeles area. Architect Welton Becket (1902-1969) practiced in Los Angeles from the 1930s until his death in 1969. His noted designs include other buildings as well as the Music Center in the Los Angeles Civic Center: Dorothy Chandler Pavilion (1964) Mark Taper Forum (1967), Santa Monica Civic Auditorium (1959), and residential designs in the 1930s for Robert Montgomery and Cesar Romero. Becket's designs were notably modern in the 1930s when the style was controversial. At the time of his death in 1969, Welton Becket and Associates was one of the largest architecture firms in the world, providing clients with full-service planning Mr. Becket called "total design," which included master planning, engineering, interior work, and landscaping. It continues today as Ellerbe-Becket. The Federal Building was lauded in the *Los Angeles Times* as "beautiful" at its completion, although an editorial letter rhetorically asked, "Since when does one create beauty by taking a plain rectangular solid and drawing parallel lines on it?"

The building has undergone few alterations since it was built, and in general appears much as it did in 1965. Two murals, entitled "Celebration of our Homeland" and "Recognition of all Foreign Lands" were designed by artist Richard Haines and were commissioned by the architect, in recognition of the building's function as a symbol of the people.

The Federal Building is at the eastern end of the Civic Center and was one of the later buildings to be completed in the ensemble. The subject building is eligible for listing in the National and California registers under Criteria A/1 for association with the historic planning and development of Civic Center in the 1960s and beyond, and Criteria C/3 for its simple, practical design, and Modernist details. The building is eligible as a contributor to the Los Angeles Civic Center historic district, as an integral part of its planning, design, development, and public services of the mid 20th century city and county governmental complex.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

"Celebration of Our Homeland/Recognition of All Foreign Lands," Public Art, Downtown Los Angeles. http://www.publicartinla.com/CivicCenter/celebration/background.html. Accessed May 11, 2009.

"51 Million Dollars of Beauty Make Debut Friday" *Los Angeles Times*, May 13, 1965,. A1.

B13. Remarks:

***B14. Evaluator:** F. Smith, K. Corbett

***Date of Evaluation:** 3/26/09

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # 19-186882 / 19-186883 / 19-186888 (Update)
HRI #
Trinomial
NRHP Status Code 3D, 3CB

Other Listings
Review Code **Reviewer** **Date**

***Resource Name or #:** 150 North Los Angeles Street
151 North Judge John Aiso Street building (Nos. 6-6 and 6-7)

P1. Other Identifier: City Hall South, Parker Center, Motor Transport Division Building

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 150-156 North Los Angeles Street, 151 North Judge John Aiso Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-013-904 and 5161-013-905

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The City of Los Angeles Parker Center Police Department building group is anchored by the 1955, eight-story **T**-plan building. The main tower, is rectangular with windowless masonry-clad elevations on the east and west sides, topped by a flat roof. On north and south elevations, continuous ribbon windows alternate with solid spandrel panels at each floor. Inset ground-level public entrances face the east and west, shaded by tower "levitation" on lightweight *pilotes* or concrete columns. The building, its extensive exterior artwork and sumptuous interior finishes are unaltered since its completion in 1955. A newer building occupies the east corner of the block on former landscaped plaza and a recently finished building is to the northeast. The Motor Transport Building (1958) on the south corner is part of the Parker Center complex; it is the vehicle service facility that reflected the signature mobility of the Department. Parker Center is one major part of the dispersed services of "city hall," adjunct to nearby City Hall (1928) and part of local government response to development of Civic Center in the mid 20th century. William H. Parker (1902-1966) joined the force in 1927, became chief in 1950, and immediately oversaw planning and completion of this distinctive headquarters compound for his mobile and famously effective force. The building and grounds were found eligible for California Register-listing under Criteria B and C ("Proposition Q and F Civic Center Public Safety Facilities DEIR," 2005); no SHPO concurrence with those finding was found. The building also contributes to the National and California Register eligible Los Angeles Civic Center Historic District, as an integral part of the planning, design, development, and operations of the mid- 20th century city and county governmental complex.

***P3b. Resource Attributes:** (List attributes and codes) HP14. Government building

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☒Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View southwest, April 14, 2009, Photograph # 0819

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1955 and 1958, Los Angeles County Office of the Assessor

***P7. Owner and Address:**

***P8. Recorded by:** (Name, affiliation, and address)
J. Steely, S. Murray, S. Carmack, K. Harper
and F. Smith
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** March 16, 2009

***P10. Survey Type:** (Describe) Intensive

P11. Report Citation: (Cite survey report and other sources, or enter "none.")
Built Environmental Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☐ Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 19-167099 (Los Angeles Star; Update)
19-167104 (Bella Union; Update)
HRI #
Trinomial
NRHP Status Code 7L, 6Z

Other Listings CHL#656 (Bella Union), CHL#789 (*Los Angeles Star*)
Review Code **Reviewer** **Date**

Page 36 **of** 39 ***Resource Name or #:** 201-225 Los Angeles Street plaza (No. 6-12)

P1. Other Identifier: Fletcher Bowron Square, Los Angeles Mall, Triforium, Bella Union Hotel site

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Los Angeles, CA **Date:** 1966 (photorevised 1981, minor revision 1994) **T** 1S **R** 13W **Sec**. Unsectioned **B.M.** San Bernardino

c. Address: 111 East 1st Street City: Los Angeles Zip: 90012

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: Parcel (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
APN: 5161-014-901

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The subject property is a landscaped, concrete-walled plaza containing a large, musical sculpture. It is connected to the Los Angeles Mall, which was designed by Stanton & Stockwell (1975, Bridgers Trollet & Hazlett, landscape architects) and the east side of Main Street by way of an arched pedestrian walkway, Main Street Pedestrian Overcrossing (Bridge # 53-53C1242, completed 1970). The main feature in the plaza is the Triforium, a 60-foot high, concrete and glass prism sculpture, executed by Joseph Young (b. 1919) and completed in 1975. The plaza occupies the southern portion of a city block and is interconnected to subterranean Civic Center Plaza by escalators.

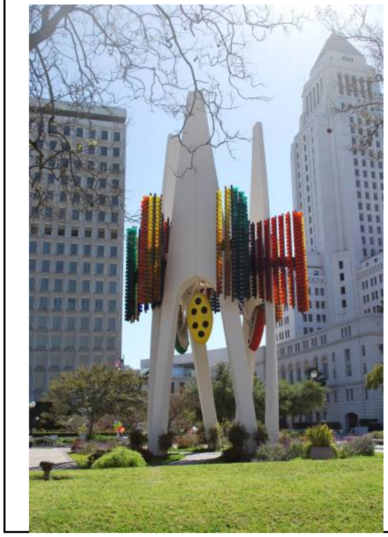
The property is the former site of the Bella Union Hotel from 1835, when it was completed, until its demolition in 1940. It is also the location of the first arrival of the Butterfield Stage in 1858. The area was also the site of a newspaper called the *Los Angeles Star,* originally a bilingual weekly, named *La Estrella de Los Angeles* from 1851 until 1864. The *Star* stopped publishing from '64-until 1868, when it published again and became a daily in 1870. The paper ceased publication in 1879 (Dawson, Muir. *History and Bibliography of Southern California Newspapers, 1851-1876.* Los Angeles: Dawson's Book Shop, 1950). The site is California Historic Landmark #656 for its associations with the hotel and #789 because of the *Los Angeles Star*.

Because the property is a California Historic Landmark numbered above 770, it is automatically listed in the California Register; however, it does not retain "substantial" integrity to its period of significance. Neither of the designated resources is extant, and the existing mall was constructed less than 50 years ago. Not enough time has passed to develop historical perspective and to evaluate the significance of the mall or its features. The property does not possess exceptional importance; it has no physical evidence of associations with important events or persons, and is not a remarkable example of any architectural style. The property is also not eligible as a contributor to a larger historic district.

***P3b. Resource Attributes:** (List attributes and codes) HP31. Urban open space, HP29. Landscape architecture

***P4. Resources Present:** ☒Building ☐ Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing



P5b. Description of Photo: (View, date, accession #)
View southwest, April 20, 2009, Photo IMG00626

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐Prehistoric ☐Both
1974, *Los Angeles Times*

***P7. Owner and Address:**

P8. Recorded by: (Name, affiliation, and address)
S. Murray, S. Carmack, K. Harper, F. Smith, and K. Corbett
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:** March 16, 2009

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Built Environment Resources Technical Report, Regional Connector Transit Corridor Project, Los Angeles County, California (SWCA Environmental Consultants 2009)

***Attachments:** ☐NONE ☒ Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☒ District Record ☐ Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

19-190545

State of California — The Resources Agency **Primary #** 19-190552
DEPARTMENT OF PARKS AND RECREATION **HRI#**

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 37 **of** 39 ***NRHP Status Code** 6Z, 3D, 3CD

***Resource Name or #** ornamental streetlight standards

B1. Historic Name:
B2. Common Name:
B3. Original Use: ornamental streetlight standards B4. Present Use: ornamental streetlight standards
***B5. Architectural Style:** Classical Revival-influenced
***B6. Construction History:** (Construction date, alterations, and date of alterations) See below.
***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:**
B9a. Architects: b. Builder:
***B10. Significance: Theme:** Civic Center for City and County Governments **Area:** Los Angeles
Period of Significance: 1925-1972 **Property Type:** objects **Applicable Criteria:** A/1, C/3

Street lighting in Los Angeles has been a part of the community since gas street lamps were first implemented in 1870. Prior to that, any house on a major street with more than two rooms was required “to hang a lighted lantern … from twilight to midnight” (*Historical*). In 1882, an enormous mast was installed at Main and Commercial streets that held a gas lamp at a height above a 6-story building. By 1905, Broadway has the city’s first example of an incandescent ornamental lighting system at the intersection with Main Street (Feldman). Soon after, Hill, Spring and Main streets were each illuminated with streetlights. When City Beautiful advocate, Charles Mulford Robinson made his review and report on the city, he noted that the streetlighting system was “the handsomest in the United States” (Feldman). A new ornamental system replaced the original one in 1920 on Broadway, between 1st and 10th streets, and the street was effusively entitled “The Radiant Way” (*Los Angeles Times*). The Bureau of Streetlighting, under the Department of Public Works was established in 1925, and retains the responsibility for all streetlighting in Los Angeles.

PHOTOGRAPH		DESCRIPTION	SIGNIFICANCE
	**Figure 1.** Union Station style, view northwest on 1st Street at Main, in Civic Center district. Photograph # 0400, March 17, 2009.	<u>Union Station style</u> This twin pendant, ornamental electrolier functioned as both a street light and trolley pole, as early as 1939, when Union Passenger Station was completed (Last of the Great Stations,” “Streetlights”). This style was used outside of Union Station, however, two were identified outside of the future police administration building, wrapped in plastic inside a fenced off construction area. They are assumed to be reproductions.	The streetlight standards of this type in the project are likely reproductions and do not warrant consideration as historical resources or historic properties for California or National Register consideration. NRHP Status Code 6Z.
	**Figure 2.** Olympic Special, Union Metal 40314, view northeast, on Los Angeles Street at Temple Street, in Civic Center district. Photograph # 0811, April 14, 2009.	<u>“Olympic Special” Union Metal 40314</u> This model was originally designed and installed to commemorate the 1932 Olympic Games in Los Angeles (“Streetlights”). The arm embellishment is known as dragon, because of its motif. Many original poles are still in use today, including single and double luminaire, suspended globe styles along Los Angeles Street nearby City Hall East, nearby Parker Center and the Federal building. Globes replaced with stylized “pawn shop” type luminaires, circa 1974. Reproduction editions were approved for installation at Staples Center area, 1999.	Despite alterations, these ornamental streetlight standards and arms contribute to the significance of Civic Center Historic District under National and California Register Criteria A/1 and C/1 for their associations with the development of the Civic Center and as representative examples of ornamental standards. They are integral parts of its planning, design, and development, and represent a significant component of public services in the city and county governmental complex. NRHP Status Code 3D, 3CD.

(This space reserved for official comments.)

***B12. References:**

Feldman, Eddy S. *The Art of Ornamental Street Lighting.* (Los Angeles: Dawson’s Book Shop, 1972) 31-37.

Historical and Biographical Record of Los Angles and Vicinity. (Chicago, 1901) 67.

“The Radiant Way” Los Angeles Times. January 17, 1920: II-1 and 9.

B13. Remarks: see above
***B14. Evaluator:** F. Smith
***Date of Evaluation:** May 16, 2009

***Resource Name or #** (Assigned by recorder) **ornamental streetlight standards**

***Recorded by:** S. Francisco, S. Murray and F. Smith ***Date:** June 6, 2009 ☑Continuation ☐Update

***B10. Significance:** (continued from page 37)

PHOTOGRAPHS	DESCRIPTIONS	SIGNIFICANCE
 **Figure 3.** Union Metal No. 1906, view northeast, on Main Street at 1st Street, in Civic Center District. Photograph # 0390, March 17, 2009.	Union Metal No. 1906 This model replaced many of the original Five-Globe Llewellyns in downtown Los Angeles. Hundreds of these standards, called UM 1906s, with twin lanterns were installed throughout the City circa 1925. A common streetlight configuration on Spring Street is the "dual system," in which 40-foot tall modern davits are interspersed between the UM 1906s (Eslinger Gallery). This model was identified on Wilshire Boulevard between Hope and Figueroa streets, on South Figueroa Street, between Wilshire Boulevard and West 5th Street and on South Spring Street, from 2nd to Temple street, on North Main Street, from 2nd to 3rd streets, and on 2nd Street from Hill Street to east of Main Street. Various globes have been replaced by opaque Plexiglas (date unknown).	The UM No. 1906 streetlights are significant under National Register and California register Criterion A/ 1 for their associations with the development of the Los Angeles Civic Center Historic District as representative examples of ornamental standards, and under Criteria C/3 for their high artistic value representative of design ca. 1925. NRHP Status Code 3D, 3CD.

19-190545

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # 19-190552
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 39 **of** 39

***NRHP Status Code** 3D, 3CD

***Resource Name or #** (Assigned by recorder) Siren Nos. 8 and 93

B1. Historic Name: Air-raid warning signals
B2. Common Name: Air-raid sirens
B3. Original Use: Air-raid warning sirens B4. Present Use: no longer in use

***B5. Architectural Style:**

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Circa 1956

***B7. Moved?** ☒ **No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:**

B9a. Architect: Manufactured by Federal Enterprises, Inc. b. Builder: Fischbach & Moore

***B10. Significance: Theme:** **Area:**
Period of Significance: **Property Type:** **Applicable Criteria:**
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject objects are two 1950s civil defense air-raid sirens located in downtown Los Angeles: Siren No. 8, located on the southeast corner of Temple and Spring streets; and Siren No. 93, located mid-block on South Olive Street between West 1st and West 2nd streets. Both sirens are Federal Signal SD-10 (Special Duty 10 Horsepower) models, also referred to as "Wire Spool" sirens. The SD-10 is an upgraded, dual-pitched or two-toned version of the earlier STL-10 model sirens (wirechief.com).

Air-raid sirens were first placed in downtown Los Angeles in the early 1940s as part of a civil defense warning system designed to alert citizens to potential Japanese air strikes during World War II. The sirens were primarily located on building roofs and traffic signals. These early warning systems were known to frequently short-circuit, creating false alarms and resulting in panic. After World War II, the sirens were silenced for several years.

Sirens came back in 1949 when Cold War-era fears of a nuclear attack were elevated after the Soviet Union successfully tested its first atomic bomb. In 1950, the State Director of Civil Defense, Walter M. Robertson, ordered that California's air raid warning system be activated. A *Los Angeles Times* article quoted Robertson: "Until the federal government perfects a uniform sounding device, individual cities are at liberty to use sirens, horns, or whistles for alarm purposes" ("Air Raid Warnings"). In 1951, mayor Fletcher Bowron declared that an adequate siren system in Los Angeles would cost $1MM, and that it was the responsibility of the federal government to provide such funding ("Adequate"). In 1956, a new half-million dollar siren system was unveiled and tested for the first time. The cost was borne by the federal government, city and state. A total of 216 sirens were installed throughout the City, including Siren Nos. 8 and 93. The new siren warning system was triggered through the telephone line, which allowed for twice the coverage of the older system, with sound covering approximately 95 percent of the city ("First Siren"). The two air-raid sirens, Siren Nos. 8 and 93, are contributors to the Los Angeles Civic Center District.

B11. Additional Resource Attributes: (List attributes and codes) N/A

***B12. References:**

"Air Raid Warnings Activated in State" *Los Angeles Times*, December 20, 1950.
"Adequate Siren System Cost Set at $1 Mil" *Los Angeles Times*, July 9, 1951.
"First Siren Installed for New System" *Los Angeles Times*, March 10, 1956.
"Air Raid Sirens Silenced" *Los Angeles Times*, January 30, 1985.
"Air Raid Sirens are Relics of a Jittery Past" *Los Angeles Times*, April 20, 2007.
"Air Raid Sirens in the Los Angeles Area" <*wirechief.com/sirens*>

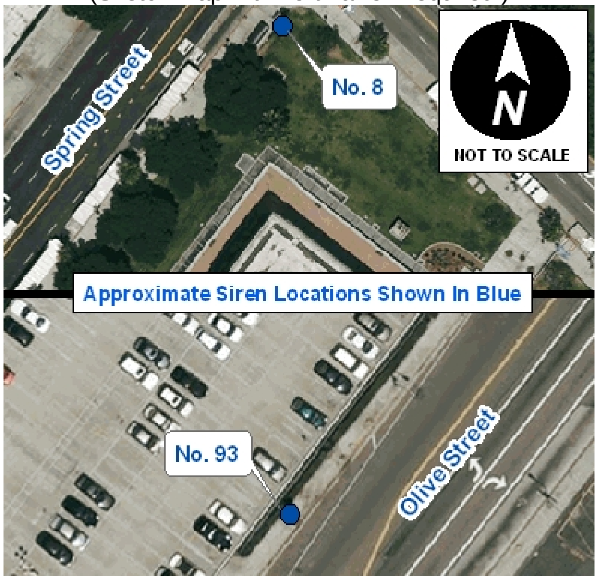
13. Remarks:

B14. Evaluator: S. Murray and F. Smith

***Date of Evaluation:** April 27, 2009

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



APPENDIX C

Resumes of Key Personnel

Marc A. Beherec, PhD, RPA
Archaeologist

Education
PhD, Anthropology, University of California, San Diego, La Jolla, CA, 2011
MA, Anthropology, University of California, San Diego, La Jolla, CA, 2004
BA, Anthropology (Geology minor), University of Texas, Austin, Austin, TX, 2000

Professional Registration and Certifications
Register of Professional Archaeologists (RPA)
County of Orange Certified Archaeologist
Hazardous Waste Operations and Emergency Response (HAZWOPER) 40-hour trained
HAZWOPER Supervisor trained

Professional Affiliations
Member, Society for American Archaeology
Member, Society for California Archaeology

Dr. Marc Beherec is an archaeologist who has been involved in the field of cultural resources management for more than fifteen years. He has worked throughout the southwest on projects within Federal and State regulatory framework, and has written cultural resources assessments for several agency clients, satisfying the requirements of both the California Environmental Quality Act and Section 106 of the National Historic Preservation Act. He is experienced in the identification and analysis of both prehistoric and historic era artifacts. Dr. Beherec also has extensive experience in Paleoindian and Archaic period sites in the western US and has taken part in large-scale excavations in Jordan. He has served as Lead Monitor for the NextEra Genesis Solar Energy Project and as Project Manager and Project Archaeologist for several Los Angeles World Airports improvement projects and for the Los Angeles Metropolitan Transportation Authority's large Regional Connector and Crenshaw rail projects. He manages a team of full-time archaeologists and numerous project-specific part-time employees and subcontractors conducting work across the Greater Los Angeles area.

Selected Project Experience

Los Angeles Metropolitan Transportation Authority Compliance Monitoring
Project Archaeologist and Project Manager for the cultural resources compliance monitoring of multiple multi-year projects within the greater Los Angeles area, including the 8.5-mile Crenshaw rail transit corridor and associated stations and the 1.9-mile Regional Connector subway corridor and associated stations. Tasks involve instructing construction team in cultural resources compliance; the scheduling and coordination of multiple concurrent Native American and archaeological monitors on diverse construction efforts throughout the metropolitan area; testing and evaluating finds; compilation, QA/QC, and delivery of daily monitoring logs and other documentation for all on-site monitors; serving as a liaison between archaeological monitors, construction crew, and client project team; preparing weekly and monthly reports of activities and findings; and ensuring overall cultural resources compliance within the permitted conditions of the project.

Los Angeles Metropolitan Transportation Authority Zanja Discovery Program
Conducted archival research and assembled historical data to determine the location and construction history of the Los Angeles Zanja System; the city's first irrigation system. Included research

within city archives and published records to determine the probable locations of underground portions of this miles-long system, which is treated as an eligible resource for the National Register of Historic Places. Information was used to guide cultural resources compliance during construction of the Regional Connector subway corridor.

Los Angeles Department of Water and Power; City of Los Angeles Bureau of Engineering; Water Replenishment District of Southern California; Los Angeles Metropolitan Transportation Authority; County of Orange; City of Santa Ana; Port of Los Angeles
Cultural Resources Assessments

Assessed sites for pumping stations, pipelines, and other infrastructure improvements in compliance with CEQA and CEQA Plus. Tasks included archival research including researching known sites at the South Central Coastal Information Center at California State University, Fullerton; conducting archaeological and built environment surveys; assessing finds for inclusion on the California Register of Historic Places; writing reports of findings.

Los Angeles World Airports
Cultural Resources Specialist
Archaeologist and monitoring coordinator on Qantas Hanger, Midfield Satellite, Gateway, and Baggage Handling construction projects. Tasks involve scheduling and coordination of archaeological/paleontological monitors and ensuring overall cultural resources compliance within the permitted conditions of the project.

Southern California Edison
Cultural Resources Specialist
Archaeologist on multiple infrastructure projects. Completed cultural resources sensitivity reports, advised clients on monitoring requirements, and oversaw archaeological monitoring.

County of Los Angeles Department of Public Works Topanga Underground Utilities District Archaeological Mitigation
Field director of archaeological mitigation at CA-LAN-8, a prehistoric site in the Santa Monica Mountains. Oversaw a team of 8 in hand-excavation and sieving of mechanically excavated soils. Tasks include coordinating archaeologists and Native American monitors; compilation and QA/QC of field documents; preparing reserving as a liason between the Most Likely Descendant and other Native American groups, construction crew, and client representatives; writing reports of findings.

Los Angeles Department of Water and Power; City of Los Angeles Bureau of Engineering; Water Replenishment District of Southern California; Los Angeles Metropolitan Transportation Authority; County of Orange; City of Santa Ana; Port of Los Angeles
Cultural Resources Assessments
Assessed sites for pumping stations, pipelines, and other infrastructure improvements in compliance with CEQA and CEQA Plus. Tasks included archival research including researching known sites at the South Central Coastal Information Center at California State University, Fullerton; conducting archaeological and built environment surveys; assessing finds for inclusion on the California Register of Historic Places; writing reports of findings.

NextEra Genesis Solar Energy Project Cultural Resources Compliance Monitoring
Lead Monitor for the cultural resources compliance monitoring of a 2000-acre solar power project under the jurisdiction of the California Energy Commission and Bureau of Land Management (BLM) on BLM land in the Colorado Desert of eastern Riverside County. Tasks involve the coordination of between 5 and 20 concurrent archaeological monitors on diverse construction efforts throughout the project site; compilation, QA/QC, and delivery of daily monitoring logs for all on-site monitors; attending project construction scheduling and Health and Safety meetings; conducting and documenting daily monitoring crew Health and Safety meetings; serving as liaison between archaeological monitors, construction crew and client project team; ensuring overall cultural resources compliance with the permitted conditions of the project.

San Bernardino National Forest San Jacinto District Contract Archaeologist, Idyllwild, CA
Archaeologist assigned to Idyllwild Ranger Station, San Jacinto District, San Bernardino National Forest, Riverside County, California. Over the course of one year, assisted District Archaeologist in cultural resources efforts, including supervision of crews conducting cultural resources inventories of mountainous terrain, GPS documentation of resources, preparation of DPR 523 forms, research of prehistoric and historic artifact parallels, including projectile point typologies, makers' marks, and tin can typologies, and authoring technical reports. Work was performed before joining this firm.

Border Field State Park, San Diego County, CA
Excavated coastal Early Archaic sites in and adjacent to Border Field State Park in conjunction with the construction of the Mexico-United States Border Barrier. Work was performed before joining this firm.

Lake Meredith National Recreational Area Cultural Resources Surveys, Amarillo, TX
Archaeologist for intensive pedestrian surveys of the Lake Meredith National Recreational Area, an area along the Canadian River with documented human occupation for over 12,000 years. Relocated previously documented archaeological sites and documented newly identified sites. Work was performed before joining this firm.

East Texas Pipeline Survey, Rural East Texas
Crew Chief for intensive pedestrian survey of a new east Texas pipeline corridor. Efforts included field survey, shovel testing, site recordation, and GPS operation. Work was performed before joining this firm.

Camp Swift Archaeological Project, Bastrop, TX
Archaeologist for test excavations at Camp Swift Army National Guard Base. Excavated test units at eighteen sites, documented excavations, and drilled rock cores for archaeomagnetic dating research. Work was performed before joining this firm.

Gault Site Archaeological Project, Bell County, TX
Excavated at the Gault Paleoindian site (41BL323), completed documents, conducted preliminary lithic analysis, measured lithic blades for statistical studies, and supervised student volunteers in washing lithics. Work was performed before joining this firm.

Trina Meiser
Senior Historic Preservation Planner

Education
MA, Historic Preservation Planning, Cornell University
BA, History, Kenyon College

Technical Specialties
Architectural History
Historic Architectural Assessment
Historic Preservation Planning
NHPA Section 106 Consultation
NEPA Compliance
CEQA Compliance

Trina Meiser is a historic preservation planner and meets the Secretary of Interior's qualifications (36 CFR Part 61) in architectural history and history. Ms. Meiser has more than 10 years of experience in identifying and planning for cultural resources, including historic structures, districts, and landscapes. She specializes in technical analysis to support regulatory compliance, specifically under the California Environmental Quality Act (CEQA), Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA). She conducts cultural resources studies, including inventory, survey, and evaluation reports; impacts analyses and findings of effect; National Register of Historic Places (NRHP) nominations; and Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) documents. She consults on a variety of rehabilitation, transportation, energy, military, and community projects with clients, designers, and agencies. Her experience in historic preservation provides a strong understanding of federal, state, and local regulations and a thorough knowledge of the Secretary of the Interior's Standards for the Treatment of Historic Properties and their function in architectural design and historic preservation planning.

Project Experience

California High Speed Rail Authority, California High Speed Train Project, Merced to Fresno Segment, Central CA
Inventoried and evaluated more than 400 properties in Merced, Madera, and Fresno Counties in compliance with CEQA and Section 106. Evaluations were conducted under a

Programmatic Agreement between the State Historic Preservation Office and the California High-Speed Train Authority.

Los Angeles County Metropolitan Transportation Authority (LACMTA) /FTA, Regional Connector Cultural Resources Mitigation Management Plan and HABS, Los Angeles, CA
Under on-call contract, prepared mitigation management plan to fulfill requirements set forth in an MOA and EIS/EIR in compliance with CEQA and Section 106 for the project to connect two light-rail transit lines in downtown Los Angeles. Prepared HABS CA-2907 documentation of the Atomic Café in Little Tokyo, Los Angeles.

LACMTA, Lankershim Depot Project, Los Angeles, CA
Under on-call contract, provided consultation services and review of architectural plans and construction to determine whether the project to rehabilitate a late 19th century railroad depot is in adherence with the Secretary of Interior's Standards, in compliance with CEQA. Consultation services under LACTMA master contract.

LACMTA, Los Angeles Union Station HVAC and Roofing Replacement Project, Los Angeles, CA
Provided consultation services and review of architectural plans and construction to determine whether the project to replace the roof and mechanical systems of the historic train station is in adherence with the Secretary of Interior's Standards, in compliance with CEQA. Consultation services under LACMTA master contract.

LACTMA, South Bay Metro Green Line Extension Project, Los Angeles County, CA
Conducted cultural resources technical studies for transportation project through metropolitan LA to meet Section 106 requirements. Prepared technical report and the cultural resources portion of the EIS/EIR in compliance with NEPA and CEQA, including mitigation measures for the treatment of evaluated historical resources.

Expo Authority, Exposition Corridor Transit Project Phase 2, Los Angeles County, CA
Prepared technical report for the evaluation of historical resources and the cultural resources portion of environmental impact statement/report under NEPA and CEQA. Elements for Section 106 consultation included the requesting determination of cultural resources and proposing mitigation measures for the treatment of historic properties.

National Aeronautics and Space Administration (NASA), NASA Ames Research Center Integrated Cultural Resources Management Plan (ICRMP) and Center-wide Programmatic Agreement, Moffett Field, CA
For NASA, preparing an ICRMP for the Ames Research Center, including the NAS Sunnyvale Historic District. Coordinating with NASA staff to develop best practices for the management of cultural resources. Also drafting the Programmatic Agreement between NASA, CA SHPO, and consulting parties for the streamlined treatment of historic properties.

NASA, NRHP Nominations for Various Properties at Ames Research Center, Moffett Field, CA
Preparing NRHP nominations for several properties at the Ames Research Center, including the new Ames Wind Tunnel Historic District, the Administration Building, and the Arc Jet Laboratory.

Lowe Enterprises, LLC, Town and Country Redevelopment Project, San Diego, CA
Preparing Historical Resources Technical Report according to the City of San Diego's guidelines for the evaluation of historical resources. This task includes evaluating several buildings with varying architectural styles and periods of significance, and the assessment of impacts to historical resources for an environmental impact report in compliance with CEQA.

City of San Diego, World Trade Center Rehabilitation Project, San Diego, CA
Evaluated the condition and integrity of the 1928 Art Deco-style San Diego Athletic Club. Prepared documentation in support of CEQA and Section 106 consultation on behalf of the City of San Diego under requirements of the Department of House and Urban Development.

City of San Marcos General Plan Update, San Marcos, CA
Assisted with the comprehensive update of the San Marcos General Plan for cultural resources. Assisted with the preparation of land use alternatives that preserve the City's character while allowing new pedestrian-friendly, mixed-use development in key focus areas of the City, and analyzed potential impacts to historic resources.

California Department of Transportation (Caltrans), State Route 94 Express Lanes Project, San Diego, CA
As project manager for cultural resources studies, conducted historic and archaeological surveys and evaluations of resources within the Area of Potential Effects for a segment of State Route 94 widening in a highly urbanized area of San Diego. Prepared Historic Property Survey Report and Historical Resources Evaluation Report to Caltrans standards, in compliance with CEQA and Section 106.

Caltrans, State Route 76 Mission to Interstate 15 Historical Resources Evaluation Report, San Diego County, CA
Conducted fieldwork to record and evaluate ranching buildings and residences. Prepared the Historical Resources Evaluation Report per Caltrans standards for the evaluation of historical resources for eligibility to the National Register and California Register, in compliance with CEQA and Section 106.

Caltrans, Interstate 5/State Route 56 Project, San Diego, CA
Conducted supplemental cultural resources studies for the project located in San Diego County. Surveyed resources within the Area of Potential Effects to analyze potential impacts to historical resources. Summarized findings in the Historical Resources Evaluation Report and Historic Property Survey Report per Caltrans standards, in compliance with CEQA and Section 106.

Caltrans, Orangethorpe Avenue Grade Separation Project, Orange County, CA
Conducted cultural resources studies for the project located in an urbanized area in the cities of Placentia and Anaheim in northeastern Orange County. Evaluated resources within an Area of Potential Effects to recommend eligibility to the National Register and California Register, and completed the Historical Resources Evaluation Report per Caltrans standards, in compliance with CEQA and Section 106.

Caltrans, Raymond Avenue Grade Separation Project, Orange County, CA
Conducted fieldwork to evaluate historic resources within the project's Area of Potential Effects located along a primary arterial highway in Fullerton. Completed the Cultural Resources Survey Report with recommendations on eligibility to the National Register and California Register, in compliance with CEQA and Section 106.

County of San Diego, South Santa Fe Avenue Reconstruction Project – South Segment, San Diego County, CA
Completed the Historic Property Survey Report and Historical Resources Evaluation Report per Caltrans standards to analyze resources and recommend eligibility to the National Register and California Register, in compliance with CEQA and Section 106.

County of San Bernardino, Shadow Mountain Grade Separation Project, San Bernardino County, CA
Prepared technical report for the evaluation of historical resources along a portion of Historic Route 66 in San Bernardino County. Evaluated more than 10 resources and assessed impacts to historical resources under CEQA.

County of San Diego, Rancho Santa Fe Roundabouts Project, Rancho Santa Fe, CA
Assessed significant impacts to the significant resource, the community of Rancho Santa Fe, in a Historical Resources Evaluation Report Addendum and Historic Property Survey Report. Established the historic character-defining features to be preserved in compliance with the Secretary of Interior's Standards, in compliance with CEQA.

County of San Diego, West Mission Bay Drive Bridge Project, San Diego, CA
Conducted supplemental cultural resources studies for the bridge improvement project located in San Diego County. Surveyed resources within the Area of Potential Effects to analyze potential impacts to historical resources. Summarized findings in the Historical Resources Evaluation Report and Historic Property Survey Report per Caltrans standards.

GSA, San Ysidro Land Port of Entry Historic Customs House Rehabilitation Project, San Diego, CA
Consulted with architects to ensure environmental compliance with the Secretary of Interior's Standards in rehabilitation project design of NRHP-listed Historic Customs House. Prepared documentation for Section 106 consultation.

US Navy, Naval Base Point Loma Integrated Cultural Resources Management Plan (ICRMP), San Diego, CA
For NAVFAC, Southwest Division, prepared ICRMP for facilities at Naval Base Point Loma and evaluating World War II- and Cold War-era buildings. Coordinated with NAVFAC staff to develop best practices for the management of cultural resources on the naval base.

US Navy, National Register Eligibility Assessment for Naval Base China Lake, China Lake, CA
For Naval Facilities Engineering Command (NAVFAC) Southwest, recorded and evaluated various unrecorded buildings in the NRHP-eligible China Lake Pilot Plant Historic District at Naval Weapons Station China Lake for eligibility to the NRHP. Completed inventory forms and a technical report.

US Veterans Administration, Veterans Affairs Medical Center (SFVAMC) Seismic Upgrade Project, San Francisco, CA
Consulted with architects and designers for the rehabilitation and seismic retrofit of the 1930s-era Art Deco SFVAMC buildings. Evaluated design of new additions and alterations to contributing buildings to a National Register-listed historic district. Engaged in Section 106 consultation with the SHPO.

US Coast Guard, Los Angeles Harbor Light Station Rehabilitation Project, San Pedro, CA
Under IDIQ contract, evaluated potential adverse effects to NRHP-listed "Angel's Gate" lighthouse. Conducted historical research to determine historically significant and character-defining features. As consultant to US Coast Guard, prepared Finding of No Adverse Effect for Section 106 consultation.

US Coast Guard, Cape Arago Lighthouse Mothballing Project, Chief's Island, OR
Under IDIQ contract, prepared a Conditions Assessment with management recommendations for the Cape Arago Lighthouse as part of a mothballing plan. After assessing building materials of the lighthouse, applied technical guidance to identify appropriate treatments for preliminary maintenance prior to mothballing.

Monica Mello
Architectural Historian

Professional History

07/2015 - Present, AECOM Planner

Education

MA, Public History, California State University , Sacramento, 2015
BA, American History, California State University , Sacramento, 2012

Years of Experience

With AECOM: 1
With Other Firms: 0

Professional Affiliations

National Council on Public History
California Council for the Promotion of History

Professional History

July 2015– Present
Design + Planning at AECOM
Architectural Historian
2013–June 2015
California State Parks, Photographic Archives
Graduate Student Assistant
2012-2014
California Department of Water Resources
Digital Collections Analyst

Monica Mello is a Secretary of Interior qualified Architectural Historian and Historian for AECOM. Ms. Mello has five years of experience in the fields of history and archives. She has served on a variety of historic projects in California. Ms. Mello also has experience conducting historical research, writing reports, and conducting oral history interviews. At AECOM, Ms. Mello has completed technical reports for a variety of buildings and structures such as historical theaters, lighthouses, aircraft hangars, hotels, commercial and residential buildings, transmission lines, substations, ranches and rural properties.

Experience

Caltrans, LADOT, and LABOE. Dolores Huerta Elementary School Safe Routes to School Project, Los Angeles, CA. Co-lead author that created historic context, and documented present conditions and architectural descriptions for the technical reports. Project involves assessment of historic school properties. Conducted archival research, co-authored the HPSR, ASR, and HRER. (2015-2016)

Caltrans, LADOT, and LABOE. Hollywood High School Safe Routes to School Project, Los Angeles, CA. Co-lead author that created historic context, and documented present conditions and architectural descriptions for the technical reports. Project involves assessment of historic school properties. Conducted archival research, co-authored the HPSR, ASR, and HRER. (2015-2016)

Caltrans, LADOT, and LABOE. Sheridan and Breed Street Elementary Schools Safe Routes to School Project, Los Angeles, CA. Co-lead author that created historic context, and documented present conditions and architectural descriptions for the technical reports. Project involves assessment of historic school properties. Conducted archival research, co-authored the HPSR, ASR, and HRER. (2015-2016)

San Diego Gas & Electric – Coastal Reliability Project – TL674A Del Mar Reconfigure and TL666D Removal Project. Conducted architectural field survey and generated DPR523 forms. Developed the historic context and evaluations for the Del Mar Substation and the TL666 Del Mar transmission line. (2016)

US National Railroad Passenger Corporation, Amtrak Program Management Oversight Services, Various Locations. Generated preliminary historic evaluations for Amtrak owned rail stations located throughout the United States. Reports generated include architectural descriptions, historic contexts, and eligibility evaluations. (2015-2016)

Lowe Enterprises, Town and Country Resort and Convention Center - Master Planning, San Diego, California. Conducted historical research using primary sources and unpublished internal documents. Conducted interviews with knowledgeable constituents. Assisted staff with generating technical reports for the City of San Diego. (2015-2016)

PALEONTOLOGICAL INVENTORY REPORT

1ST AND BROADWAY CIVIC CENTER PARK PROJECT

City of Los Angeles Bureau of Engineering
&
City of Los Angeles Department of Recreation and Parks

Prepared for: **AECOM**
300 S. Grand S., 8th Floor
Los Angeles, CA 90071

Prepared by: **Paleo Solutions, Inc.**
911 S. Primrose Ave., Unit N
Monrovia, CA 91016

Geraldine Aron, M.S. – Project Manager
Courtney Richards, M.S. – Principal Investigator, Report Author

PSI Report: CA18Los AngelesAEC01R

July 5, 2018

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CERTIFICATIONS
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Table of Contents

Figures

Tables

1.0 EXECUTIVE SUMMARY

This report presents the results of the paleontological technical study conducted by Paleo Solutions, Inc. (Paleo Solutions) in support of the 1st and Broadway Civic Center Park Project (Project) located in the City of Los Angeles, Los Angeles County, California. This inventory report will be incorporated into the Project's Initial Study (IS)/Mitigated Negative Declaration (MND). All paleontological work was completed in compliance with the California Environmental Quality Act (CEQA), local regulations, and best practices in mitigation paleontology (Murphey et al., 2014).

The City of Los Angeles Department of Recreation and Parks (RAP) and City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) are proposing the Project, which would construct a 1.96-acre park at the northeast corner of West 1st Street and Broadway in downtown Los Angeles. The Project would also include a new two-story, 19,200-square-foot building for restaurant uses. The Project site is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles (see Figures 1 and 2). The Project area is located on a vacant dirt lot in an urban area that has been previously graded and has no native sediment exposures at the surface.

The Project area was evaluated based on an analysis of existing paleontological data. The four components of the analysis included a geologic map review, a literature search, a review of the Project's geotechnical report and proposed construction activities, and an institutional record search. Geologic mapping by T.W. Dibblee and H.E. Ehrenspeck (1989) indicates that the Project area is underlain by Pliocene Fernando Formation and Holocene alluvium (Dibblee and Ehrenspeck, 1989; see Figure 3). Additionally, although not mapped within the Project area, Pleistocene older surficial sediments may be present at various depths beneath Holocene alluvium. Furthermore, although artificial fill is not mapped in the Project area, it was encountered during geotechnical boring activities (Fugro, 2018). According to the record searches, there are no previously recorded fossil localities within the Project area; however, there are numerous other fossil localities recorded in the Project vicinity and other areas of California from Pliocene- and Pleistocene-aged sediments similar to those within the Project area.

The Potential Fossil Yield Classification (PFYC) system was applied to the results of the analysis of existing data. Pliocene Fernando Formation has a high paleontological potential (PFYC 4). Pleistocene older surficial sediments have a moderate paleontological potential (PFYC 3). Holocene alluvium is estimated to be less than 11,700 years old and has a low paleontological potential (PFYC 2), because it is typically too young to contain *in situ* fossils. However, these younger deposits often overlie older geologic units with higher paleontological potential. Artificial fill is also considered to have a low paleontological potential (PFYC 2).

Based on the geologic mapping, geotechnical boring logs, and proposed locations and maximum proposed depths of excavation, it is anticipated that Project excavations will be entirely within low paleontological potential artificial fill and Holocene alluvium. Prior to the start of construction, it is recommended that a Qualified Paleontologist be retained to prepare and present a paleontological worker's environmental awareness program to all earth-moving personnel and their supervisors. In the event of unanticipated fossil discoveries by construction personnel, work should be halted within 50 feet of the discovery until the Qualified Paleontologist can evaluate the discovery. If the discovery is determined to be significant, the Qualified Paleontologist should develop appropriate mitigation (e.g., documentation, salvage, fossil preparation and identification, curation, and monitoring) in consultation with the City of Los Angeles RAP and BOE.

2.0 INTRODUCTION

This report presents the results of the paleontological technical study conducted by Paleo Solutions in support of the 1st and Broadway Civic Center Park Project located in the City of Los Angeles, Los Angeles County, California. All paleontological work was completed in compliance with CEQA, local regulations, and best practices in mitigation paleontology (Murphey et al., 2014). See Table 1 for a Project summary.

2.1 Project Description

The Project would include the development of a 1.96-acre vacant lot into an open space public park located in the Civic Center area of downtown Los Angeles. The proposed project would incorporate a two-story, approximately 19,200-square-foot restaurant building complex with rooftop access within the northwest corner of the park, trees and green spaces for public enjoyment, numerous seating areas, 16 decorative canopies to provide shade and lighting throughout the park, new hardscaping and landscaped areas, and a bioswale system. The Project would also include a bicycle parking area, planting of a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting. No new parking spaces would be provided with the Project

The construction of the proposed project would last for approximately two years from Summer 2019 to Summer 2021. Construction would occur over four phases including mobilization, grading, building construction, and installation of hardscape and landscape components.

Phase 1 would occur for approximately 2 weeks and would include all mobilization efforts necessary to begin project construction. This includes obtaining any necessary permits, permissions, and entitlements necessary for park construction; as well as performing any necessary pre-construction surveys.

Phase 2 would occur for approximately 2 months and would include site grading activities and excavation work with a maximum depth of 12 feet. Excavation would be required for the area where foundations and footings would be located. An estimated 1,500 cubic yards of soil would be excavated. Construction workers would operate a bulldozer, hydraulic excavator, compactors, and up to five dump trucks or more per day as a part of the grading activities. The Project site was previously graded as part of the abatement and remediation activities; therefore, grading activities under the proposed Project construction would be limited to areas necessary for landscape, hardscape and restaurant construction.

Phase 3 would occur for approximately 14 months and would include restaurant building construction and associated components. Construction workers would operate a crane and 2 forklifts during this phase. It is anticipated that the completion of Phase 3 would overlap for approximately 5 months with the completion of Phase 4 described below.

Phase 4 would occur for approximately 10 months and would include the installation of the hardscape and landscape components, including the 16 decorative lighted canopies that would exist throughout the park, as well as associated utilities work and a creek that serves as a bioswale system.

The construction lay down area would be entirely on-site, and would be coordinated with any other construction activities occurring in the project area. An appropriate combination of monitoring and resource avoidance would be employed during all construction activities.

2.2 Project Location

The Project site is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles and is identified as Assessor Parcel Number (APN) 5161-005-925. The Project site is generally bound by Los Angeles County's Grand Park adjacent on the north, Spring Street on the east, 1st Street on the south, and Broadway on the west. Figure 1 shows the regional vicinity of the Project site and Figure 2 shows the Project location.

The Project area is situated within the Los Angeles Basin, which is a northwest-trending alluviated lowland in the northwestern portion of the Peninsular Ranges Geomorphic Province. The Project area is located on a vacant dirt lot in an urban area that has been previously graded and has no native sediment exposures at the surface. Geologic mapping by T.W. Dibblee and H.E. Ehrenspeck (1989) indicates that the Project area is underlain by Pliocene Fernando Formation and Holocene alluvium (Figure 3). Miocene unnamed marine strata are mapped within a half mile of Project area (Dibblee and Ehrenspeck, 1989; Figure 3); however, it is not anticipated that this geologic unit will be encountered during construction. Therefore, it is not discussed in this report.

Table 1. 1st and Broadway Civic Center Park Project Summary

<table>
<tr><td>Project Name</td><td>1st and Broadway Civic Center Park Project Summary</td></tr>
<tr><td>Project Description</td><td>The Project would include the development of a 1.96-acre vacant lot into an open space public park located in the Civic Center area of downtown Los Angeles. The proposed project would incorporate a two-story restaurant building complex within the northwest corner of the park, trees and green spaces, seating areas, decorative canopies, new hardscaping and landscaped areas, and a bioswale system. The Project would also include a bicycle parking area, planting of a variety of plants and trees, walking pathways and passive recreational uses, and new lighting. No new parking spaces would be provided with the Project</td></tr>
<tr><td>Project Area</td><td>The Project site is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles and is generally bound by Los Angeles County's Grand Park adjacent on the north, Spring Street on the east, 1st Street on the south, and Broadway on the west.</td></tr>
<tr><td>Total Acreage</td><td>1.96 acres</td></tr>
<tr><td>Location (PLSS) and Land Ownership</td><td><table>
<tr><th>Quarter-Quarter</th><th>Section</th><th>Township</th><th>Range</th><th>Land Ownership</th></tr>
<tr><td colspan="4">Unsectioned</td><td>City of Los Angeles</td></tr>
</table></td></tr>
<tr><td>Topographic Map(s)</td><td>USGS Los Angeles (2015) California 7.5’ quadrangle</td></tr>
<tr><td>Geologic Map(s)</td><td>Geologic Map of the Los Angeles Quadrangle, Los Angeles, California (Dibblee and Ehrenspeck, 1989)</td></tr>
<tr><td>Mapped Geologic Units and Age</td><td><table>
<tr><th>Geologic Units</th><th>Age</th><th>Paleontological Potential (PFYC [BLM, 2016])</th></tr>
<tr><td>*Artificial fill</td><td>Recent</td><td>2 (Low)</td></tr>
<tr><td>Alluvium</td><td>Holocene</td><td>2 (Low)</td></tr>
<tr><td>Older surficial sediments</td><td>Pleistocene</td><td>3 (Moderate)</td></tr>
<tr><td>Fernando Formation</td><td>Pliocene</td><td>4 (High)</td></tr>
<tr><td>**Unnamed marine strata</td><td>Miocene</td><td>4 (High)</td></tr>
</table></td></tr>
<tr><td>Permits</td><td>No permits were required for the paleontological work conducted for this Project.</td></tr>
<tr><td>Previously Documented Fossil Localities within the Project area</td><td>The Natural History Museum of Los Angeles County record search yielded no fossil localities recorded within the Project area, although there are several localities recorded within the Project vicinity from sedimentary units similar to those mapped in the Project area (Appendix A).</td></tr>
</table>

Recommendations	Based on the geologic mapping, geotechnical boring logs, and proposed locations and maximum proposed depths of excavation, it is anticipated that Project excavations will be entirely within low paleontological potential artificial fill and Holocene alluvium. Prior to the start of construction, it is recommended that a Qualified Paleontologist be retained to prepare and present a paleontological worker's environmental awareness program to all earth-moving personnel and their supervisors. In the event of unanticipated fossil discoveries by construction personnel, work should be halted within 50 feet of the discovery until the Qualified Paleontologist can evaluate the discovery. If the discovery is determined to be significant, the Qualified Paleontologist should develop appropriate mitigation (e.g., documentation, salvage, fossil preparation and identification, curation, and monitoring) in consultation with the City of Los Angeles RAP and BOE.

*Artificial fill is not mapped in the Project area, but was encountered during geotechnical boring within the Project area.

**Miocene unnamed marine strata are mapped within a half-mile of the Project site, but are not expected to be impacted by Project construction.

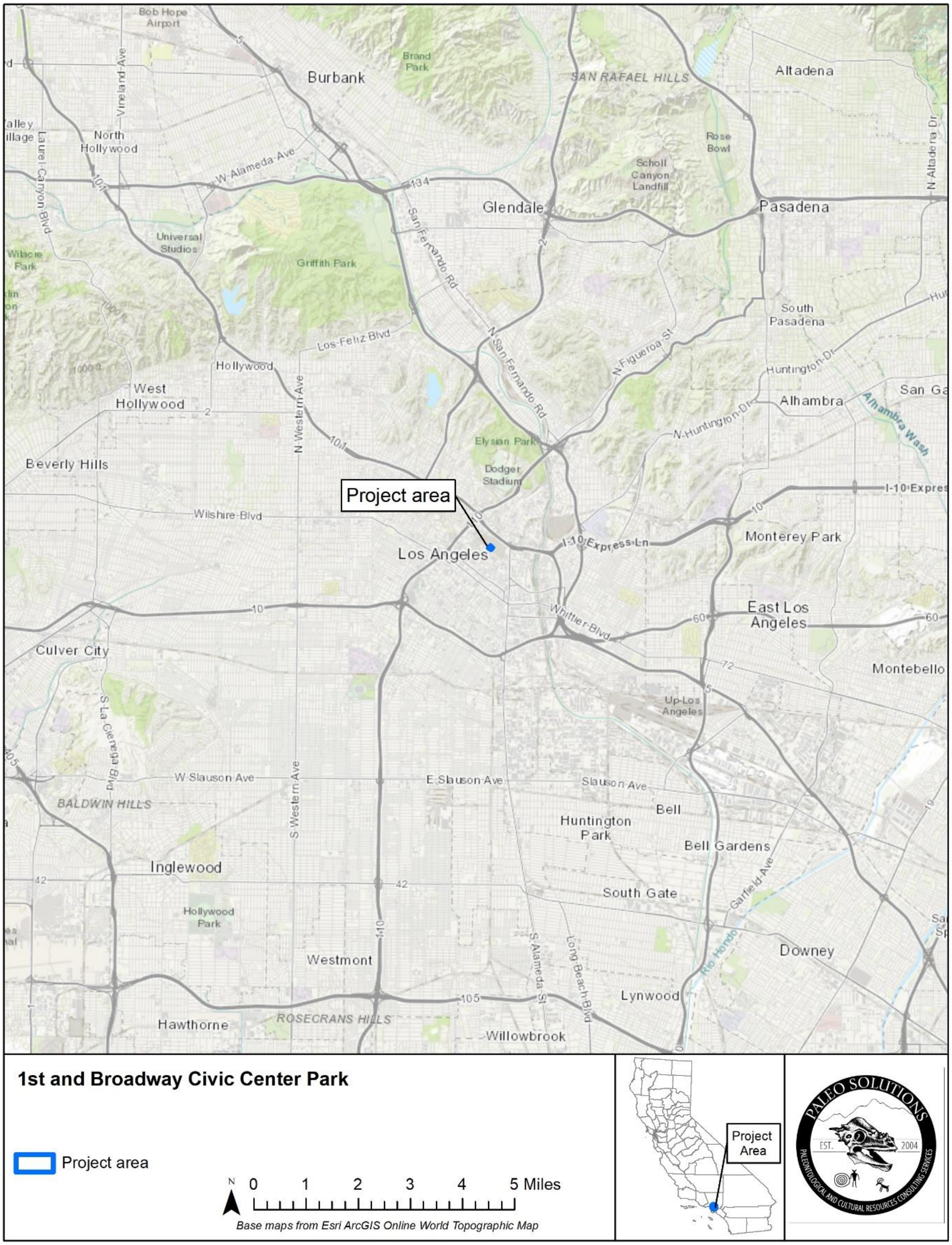


Figure 1. Project Location Map.

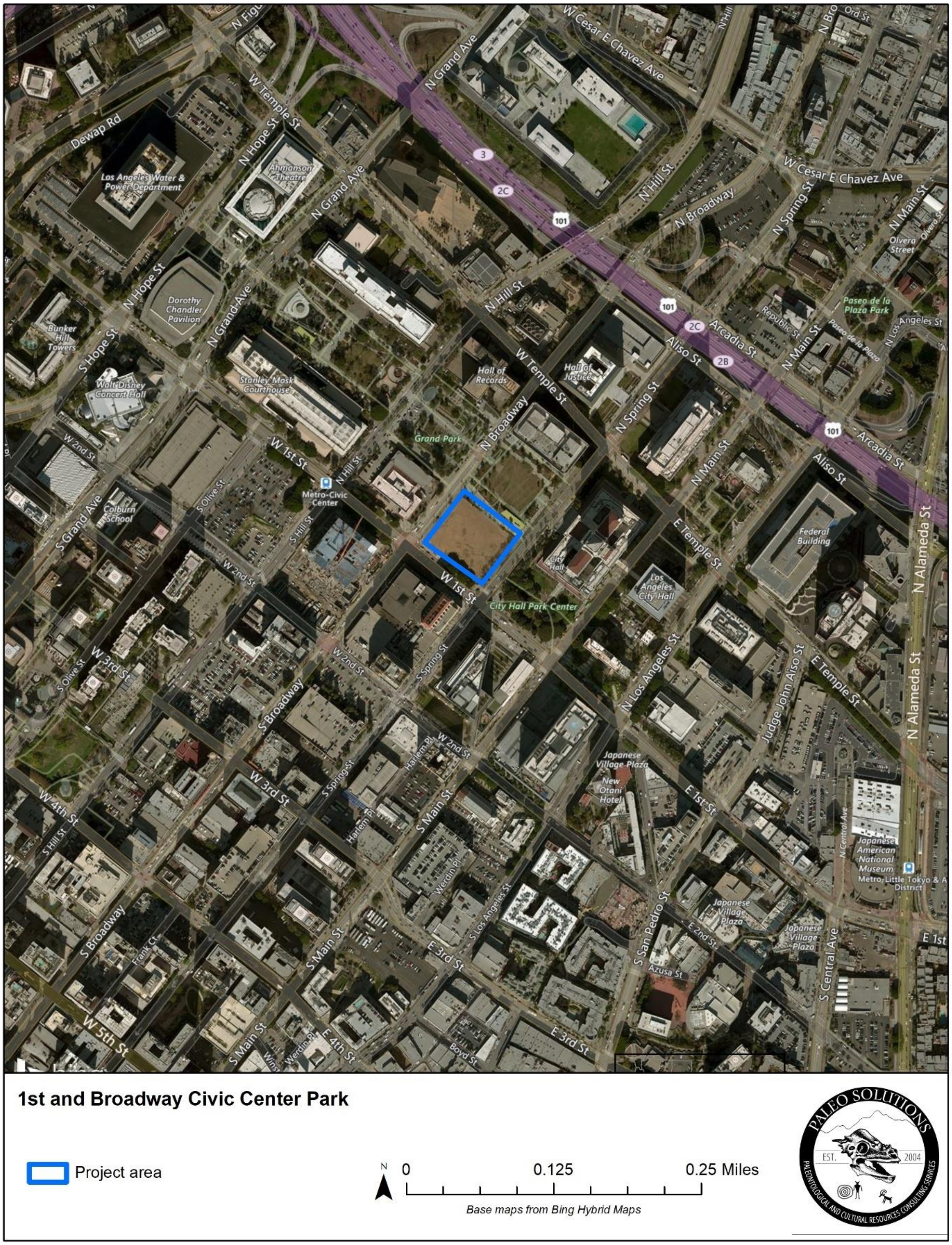


Figure 2. Project Overview Map.

3.0 DEFINITION AND SIGNIFICANCE OF PALEONTOLOGICAL RESOURCES

As defined by Murphey and Daitch (2007): "Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. Paleontological resources include not only fossils themselves, but also the associated rocks or organic matter and the physical characteristics of the fossils' associated sedimentary matrix.

The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered non-renewable resources because the organisms they represent no longer exist. Thus, once destroyed, a fossil can never be replaced. Fossils are important scientific and educational resources because they are used to:

- Study the phylogenetic relationships amongst extinct organisms, as well as their relationships to modern groups;
- Elucidate the taphonomic, behavioral, temporal, and diagenetic pathways responsible for fossil preservation, including the biases inherent in the fossil record;
- Reconstruct ancient environments, climate change, and paleoecological relationships;
- Provide a measure of relative geologic dating that forms the basis for biochronology and biostratigraphy, and which is an independent and corroborating line of evidence for isotopic dating;
- Study the geographic distribution of organisms and tectonic movements of land masses and ocean basins through time;
- Study patterns and processes of evolution, extinction, and speciation; and
- Identify past and potential future human-caused effects to global environments and climates."

Fossil resources vary widely in their relative abundance and distribution and not all are regarded as significant. According to the Bureau of Land Management (BLM) Instructional Memorandum (IM) 2009-011, a "Significant Paleontological Resource" is defined as:

> "Any paleontological resource that is considered to be of scientific interest, including most vertebrate fossil remains and traces, and certain rare or unusual invertebrate and plant fossils. A significant paleontological resource is considered to be of scientific interest if it is a rare or previously unknown species, it is of high quality and well-preserved, it preserves a previously unknown anatomical or other characteristic, provides new information about the history of life on earth, or has an identified educational or recreational value. Paleontological resources that may be considered not to have scientific significance include those that lack provenience or context, lack physical integrity due to decay or natural erosion, or that are overly redundant or are otherwise not useful for research. Vertebrate fossil remains and traces include bone, scales, scutes, skin impressions, burrows, tracks, tail drag marks, vertebrate coprolites (feces), gastroliths (stomach stones), or other physical evidence of past vertebrate life or activities" (BLM, 2008).

Vertebrate fossils, whether preserved remains or track ways, are classified as significant by most state and federal agencies and professional groups (and are specifically protected under the California Public Resources Code). In some cases, fossils of plants or invertebrate animals are also considered significant and can provide important information about ancient local environments.

The full significance of fossil specimens or fossil assemblages cannot be accurately predicted before they are collected, and in many cases, before they are prepared in the laboratory and compared with previously collected fossils. Pre-construction assessment of significance associated with an area or formation must be made based on previous finds, characteristics of the sediments, and other methods that can be used to determine paleoenvironmental and taphonomic conditions.

4.0 LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

This section of the report presents the state and local regulatory requirements pertaining to paleontological resources that will apply to this Project.

4.1 State Regulatory Setting

4.1.1 California Environmental Quality Act (CEQA)

The procedures, types of activities, persons, and public agencies required to comply with CEQA are defined in the Guidelines for Implementation of CEQA (State CEQA Guidelines), as amended on March 18, 2010 (Title 14, Section 15000 et seq. of the California Code of Regulations) and further amended January 4th, 2013. One of the questions listed in the CEQA Environmental Checklist is: "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (State CEQA Guidelines Section 15064.5 and Appendix G, Section V, Part C).

4.1.2 State of California Public Resources Code

The State of California Public Resources Code (Chapter 1.7), Sections 5097 and 30244, includes additional state level requirements for the assessment and management of paleontological resources. These statutes require reasonable mitigation of adverse impacts to paleontological resources resulting from development on state lands, and define the excavation, destruction, or removal of paleontological "sites" or "features" from public lands without the express permission of the jurisdictional agency as a misdemeanor. As used in Section 5097, "state lands" refers to lands owned by, or under the jurisdiction of, the state or any state agency. "Public lands" is defined as lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

4.2 Local Regulatory Setting

4.2.1 Los Angeles County

The Conservation and Natural Resources Element of the County of Los Angeles General Plan (County of Los Angeles, 2015) recognizes paleontological resources as non-renewable and irreplaceable resources that are an important part of the County's identity. The general plan includes four policies to protect paleontological resources (Goal C/NR 14):

- **Policy C/NR 14.1:** Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible;

- **Policy C/NR 14.2:** Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources;

- **Policy C/NR 14.5:** Promote public awareness of historic, cultural, and paleontological resources; and

- **Policy C/NR 14.6:** Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

4.2.2 City of Los Angeles

The City of Los Angeles (City of Los Angeles, 2001) in Section 3 of the Conservation Element of the General Plan requires that measures be taken to protect the city's archaeological and paleontological resources for historical, cultural, research and/or educational purposes. One policy and one program support this requirement. This policy requires that the City continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition or property modification activities.

5.0 METHODS

The scope of paleontological work included a geologic map review, a literature search, a review of the Project's geotechnical report and proposed construction activities, institutional record search, and paleontological sensitivity and impact analyses. The goal of this report is to identify the level of paleontological potential of the Project area and make recommendations for the mitigation of adverse impacts on paleontological resources that may occur as a result of Project construction. Courtney Richards, M.S., performed the background research and prepared this report. Geraldine Aron, M.S., oversaw all aspects of the Project as the Program Manager, and performed a technical review of this report. GIS maps were prepared by Barbara Webster, M.S.

Copies of this report will be submitted to AECOM and the City of Los Angeles. This report will be incorporated into the Project's IS/MND. Paleo Solutions will retain an archival copy of all Project information including record searches, maps, and other data.

5.1 Analysis of Existing Data

Paleo Solutions reviewed geologic mapping by T.W. Dibblee and H.E. Ehrenspeck (1989). The literature reviewed included published and unpublished scientific papers. Paleo Solutions also reviewed geotechnical boring logs from within the Project area (Fugro, 2018) and proposed construction details. A paleontological record search was conducted at the LACM by Samuel A. McLeod, Ph.D. The results of the record search (dated June 14, 2018) are attached as Appendix A. Additional record searches of online databases were completed by Paleo Solutions staff.

5.2 Criteria for Evaluating Paleontological Potential

The PFYC system was developed by the BLM (BLM, 2016). Because of its demonstrated usefulness as a resource management tool, the PFYC has been utilized for many years for projects across the country, regardless of land ownership. It is a predictive resource management tool that classifies geologic units on their likelihood to contain paleontological resources on a scale of 1 (very low potential) to 5 (very high potential). This system is intended to aid in predicting, assessing, and mitigating paleontological resources. The PFYC ranking system is summarized in Table 2.

Table 2. Potential Fossil Yield Classification (BLM, 2016)

BLM PFYC Designation	Assignment Criteria Guidelines and Management Summary (PFYC System)
1 = Very Low Potential	Geologic units are not likely to contain recognizable paleontological resources.
	Units are igneous or metamorphic, excluding air-fall and reworked volcanic ash units.
	Units are Precambrian in age.
	Management concern is usually negligible, and impact mitigation is unnecessary except in rare or isolated circumstances.
2 = Low	Geologic units are not likely to contain paleontological resources.
	Field surveys have verified that significant paleontological resources are not present or are very rare.
	Units are generally younger than 10,000 years before present.
	Recent eolian deposits
	Sediments exhibit significant physical and chemical changes (i.e., diagenetic alteration) that make fossil preservation unlikely
	Management concern is generally low, and impact mitigation is usually unnecessary except in occasional or isolated circumstances.
3 = Moderate Potential	Sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence.
	Marine in origin with sporadic known occurrences of paleontological resources.
	Paleontological resources may occur intermittently, but these occurrences are widely scattered
	The potential for authorized land use to impact a significant paleontological resource is known to be low-to-moderate.
	Management concerns are moderate. Management options could include record searches, pre-disturbance surveys, monitoring, mitigation, or avoidance. Opportunities may exist for hobby collecting. Surface-disturbing activities may require sufficient assessment to determine whether significant paleontological resources occur in the area of a proposed action and whether the action could affect the paleontological resources.
4 = High Potential	Geologic units that are known to contain a high occurrence of paleontological resources.
	Significant paleontological resources have been documented but may vary in occurrence and predictability.
	Surface-disturbing activities may adversely affect paleontological resources.
	Rare or uncommon fossils, including nonvertebrate (such as soft body preservation) or unusual plant fossils, may be present.
	Illegal collecting activities may impact some areas.
	Management concern is moderate to high depending on the proposed action. A field survey by a qualified paleontologist is often needed to assess local conditions. On-site monitoring or spot-checking may be necessary during land disturbing activities. Avoidance of known paleontological resources may be necessary.
5 = Very High Potential	Highly fossiliferous geologic units that consistently and predictably produce significant paleontological resources.
	Significant paleontological resources have been documented and occur consistently
	Paleontological resources are highly susceptible to adverse impacts from surface disturbing activities.
	Unit is frequently the focus of illegal collecting activities.
	Management concern is high to very high. A field survey by a qualified paleontologist is almost always needed and on-site monitoring may be necessary during land use activities. Avoidance or resource preservation through controlled access, designation of areas of avoidance, or special management designations should be considered.
U = Unknown	Geologic units that cannot receive an informed PFYC assignment

BLM PFYC Designation	**Assignment Criteria Guidelines and Management Summary (PFYC System)**
	Geological units may exhibit features or preservational conditions that suggest significant paleontological resources could be present, but little information about the actual paleontological resources of the unit or area is unknown.
	Geologic units represented on a map are based on lithologic character or basis of origin, but have not been studied in detail.
	Scientific literature does not exist or does not reveal the nature of paleontological resources.
	Reports of paleontological resources are anecdotal or have not been verified.
	Area or geologic unit is poorly or under-studied.
	BLM staff has not yet been able to assess the nature of the geologic unit.
	Until a provisional assignment is made, geologic units with unknown potential have medium to high management concerns. Field surveys are normally necessary, especially prior to authorizing a ground-disturbing activity.

6.0 ANALYSIS OF EXISTING DATA

The Project area is located within the Peninsular Ranges Geomorphic Province, a region characterized by northwest-trending fault-bounded mountain ranges, broad intervening valleys, and low-lying coastal plains (Yerkes et al., 1965). The Peninsular Ranges extend approximately 920 miles from the Los Angeles Basin to the southern tip of Baja California and vary in width from approximately 30 to 100 miles. Bedrock units include pre-Cretaceous igneous rocks of the Southern California Batholith and Tertiary sedimentary units (Yerkes et al., 1965). The Project area is specifically located in the Los Angeles Basin, which is a northwest-trending alluviated lowland bounded on the north by the Santa Monica Mountains and the Elysian, Repetto, and Puente Hills and on the east and southeast by the Santa Ana Mountains and San Joaquin Hills (Yerkes et al., 1965). The basin is underlain by a structural depression with basement bedrock overlain by an accumulation of Tertiary sediments as thick as 4.5 miles (Yerkes et al., 1965).

6.1 Literature Search

T.W. Dibblee and H.E. Ehrenspeck (1989) mapped the surface of the Project area as Pliocene Fernando Formation and Holocene alluvium. However, Pleistocene older surficial sediments and artificial fill may also be encountered during construction. The paleontological potential of each geologic unit potentially impacted by ground-disturbing actives are discussed below. The geographic distribution of the geologic units in the Project area, as mapped by Dibblee and Ehrenspeck (1989), are shown in Figure 3.

6.1.1 Fernando Formation – Pliocene

The Pliocene Fernando Formation is composed of gray, bedded claystone (Dibblee and Ehrenspeck, 1989). This formation was first described in detail by G.H. Eldridge and R. Arnold (1907) for exposures in San Fernando Valley, Los Angeles County. The formation has an unknown maximum thickness and a complex nomenclatural history. The unit may be referred to in literature either by the Fernando Formation, or by the individual members of the formation including, from oldest to youngest, the Repetto Claystone, the Pico Member, and the Saugus Member, as well as specific facies that have not been formally named. The Fernando Formation is mapped within the Project area boundaries, within the northwest corner of the Project site (Dibblee and Ehrenspeck, 1989; Figure 3). Geotechnical borings logs encountered this formation starting at depths between 20 and 28 feet, and extending to the maximum depth explored (60.5 feet) (Fugro, 2018).

Marine vertebrate fossils recovered from the Fernando Formation include fossil fish (e.g., great white shark, herring, hake, lanternfish, swordfish, mackerel, flounder) and whale specimens (Gust and Scott, 2009; Table

3). Additional marine specimens of pinnipeds and dolphins, as well as mollusks and brachiopods have also been published from the Fernando Formation (Kellogg, 1925; Koch et al., 2004; Uhen, 2014; Table 3). The Fernando Formation has high paleontological potential (PFYC 4).

6.1.2 Older Surficial Sediments – Pleistocene

Older surficial sediments were deposited during the Pleistocene (approximately 2.6 million to 11.7 thousand years ago) (Dibblee and Ehrenspeck, 1989). These sediments consist of weakly consolidated silt, sand, and gravel deposits (Dibblee and Ehrenspeck, 1989). While not mapped within the Project boundaries or differentiated from the Holocene alluvium in the Project's geotechnical report (Fugro, 2018), these sediments are present in close proximity of the Project and may underlie Holocene alluvium at depth.

Taxonomically diverse and locally abundant Pleistocene animals and plants have been collected from older alluvial deposits throughout the Los Angeles Basin and southern California and include mammoth (*Mammuthus*), mastodon (*Mammut*), camel (Camelidae), horse (Equidae), bison (*Bison*), giant ground sloth (*Megatherium*), peccary (Tayassuidae), cheetah (*Acinonyx*), lion (*Panthera*), saber-tooth cat (*Smilodon*), capybara (*Hydrochoerus*), dire wolf (*Canis dirus*), and numerous taxa of smaller mammals (Rodentia) (Blake, 1991; Jahns, 1954; Jefferson, 1991; Table 3). Pleistocene older surficial sediments are designated as having a moderate paleontological potential (PFYC 3).

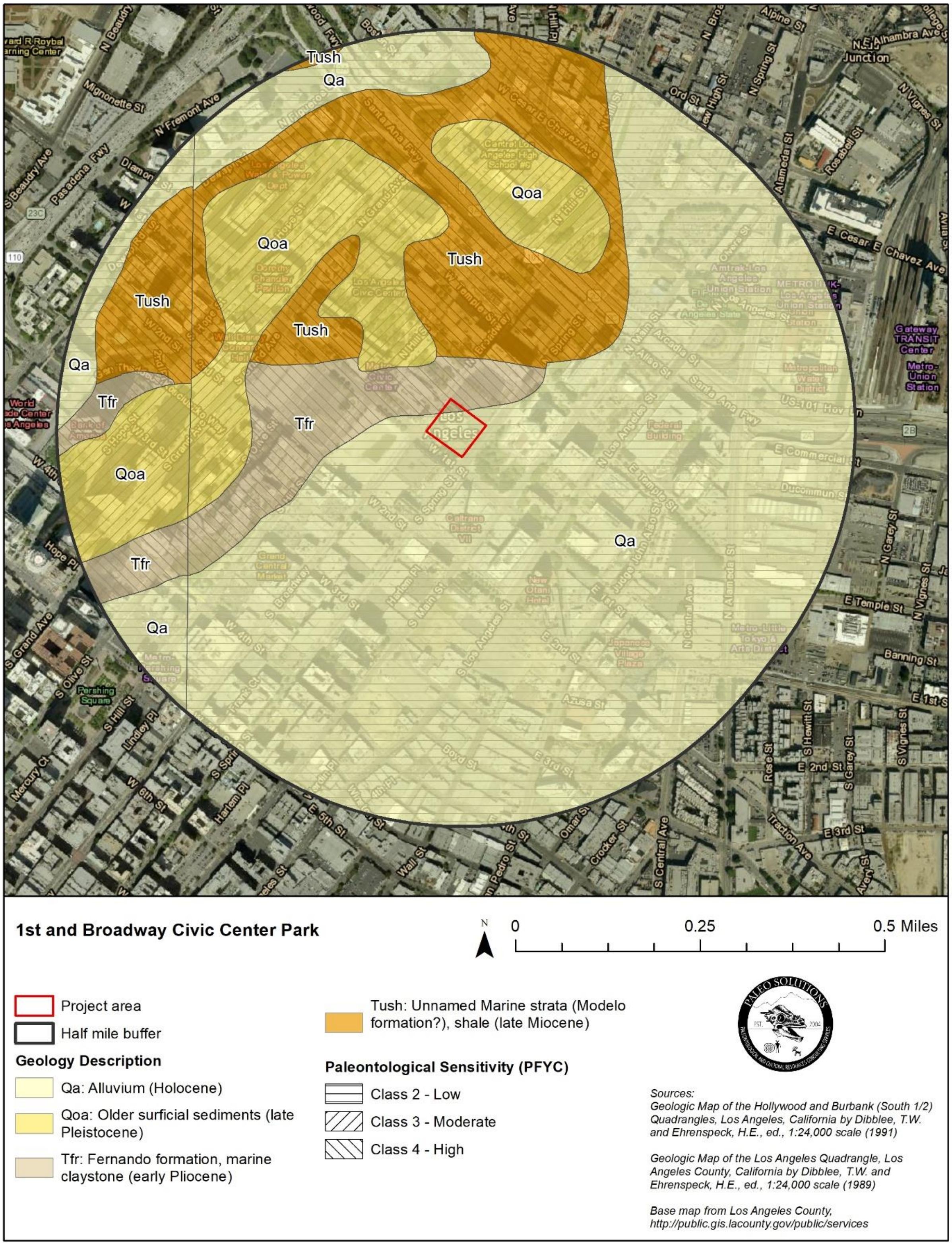
6.1.3 Alluvium – Holocene

These alluvial sediments were deposited during the Holocene (approximately 11.7 thousand years ago to present), and are comprised of unconsolidated silt, sand, and gravel that was deposited in modern floodplains. Holocene alluvium is mapped at the surface within the Project boundaries and covers a majority of the site (Dibblee and Ehrenspeck, 1989; Figure 3). Alluvial deposits were reported in geotechnical boring logs of the Project site starting at depths of 2 to 15 feet below the surface and extending to depths of 20 to 28 feet (Fugro, 2018); however, this may also include undifferentiated older (Pleistocene-aged) surficial sediments near the base of the alluvial layer.

Deposits of Holocene age are generally too young to contain *in-situ* paleontological resources. However, while these deposits typically do not contain significant vertebrate fossils at the surface, they often overlie older potentially fossil-bearing sedimentary deposits at depth. Holocene alluvium is designated as having a low paleontological potential (PFYC 2).

6.1.4 Artificial Fill (Not Mapped) – Recent

Artificial fill comprises recent deposits of previously disturbed sediments emplaced by construction operations and are found in areas where recent construction has taken place. Color is highly variable and sediments are mottled in appearance. These sediments are not mapped within the Project area (Dibblee and Ehrenspeck, 1989) but were documented in the Project's geotechnical boring logs (Fugro, 2018). Artificial fill ranges in thickness from 2 to 15 feet within the Project area, and is between 13 and 15 feet thick in the proposed restaurant building area (Fugro, 2018). Although artificial fill may contain fossil resources, they have been removed from their original locations and, therefore, lack significance. Artificial fill is designated as having a low paleontological potential (PFYC 2).



1st and Broadway Civic Center Park

Sources:
Geologic Map of the Hollywood and Burbank (South 1/2) Quadrangles, Los Angeles, California by Dibblee, T.W. and Ehrenspeck, H.E., ed., 1:24,000 scale (1991)

Geologic Map of the Los Angeles Quadrangle, Los Angeles County, California by Dibblee, T.W. and Ehrenspeck, H.E., ed., 1:24,000 scale (1989)

Base map from Los Angeles County, http://public.gis.lacounty.gov/public/services

Figure 3. Project Geology Map.

6.2 Paleontological Record Search

Paleo Solutions requested a paleontological search of records maintained by LACM. The museum responded on June 14, 2018 that there were no localities documented from within the Project area. However, numerous fossil localities are recorded nearby from sediments similar to those mapped within the Project area. Localities LACM 1755, LACM 2032, and LACM 1023 are recorded within the Project vicinity from Pleistocene older surficial sediments, which may underlie Holocene alluvium within the Project area. Locality LACM 1755, which is located southwest of the Project area, produced fossil horse (*Equus*) from a depth of 43 feet (McLeod, 2018; Table 3). Locality LACM 2032, which is located east northeast of the Project area, produced specimens of pond turtle (*Clemmys marmorata*), ground sloth (*Paramylodon harlani*), mastodon (*Mammut americanum*), mammoth (*Mammuthus imperator*), horse (*Equus*), and camel (*Camelops*) from depths of 20-30 feet (McLeod, 2018; Table 3). Locality 1023, also located east-northeast of the Project area, produced fossil turkey (*Meleagris californicus*), saber-tooth cat (*Smilodon fatalis*), horse (*Equus*), and deer (*Odocoileus*) from an unspecified depth (McLeod, 2018; Table 3).

Localities recorded from the Pliocene Fernando Formation include LACM 7730, immediately south of the Project area; LACM 4726 and LACM 6971, to the southwest of the Project area; and LACM 3868 due west of the Project area. In combination, these four localities produced a diverse marine fossil fauna, including stingray (*Dasyatis*), eagle ray (*Myliobatis*), skate (*Raja*), chimaerid (Chimaeriformes), bull shark (*Carcharhinus leucas*), dusky shark (*Carcharhinus obscurus*), hammerhead shark (*Sphyrna*), sixgill shark (Hexanchiformes), bonito shark (*Isurus oxyrinchus*) salmon shark (*Lamna ditropis*), white sharks (*Carcharodon sulcidens* and *Carcharodon carcharias*), herring (Clupeidae), hake (*Merluccius*), sheepshead (*Semicossyphus*), mackerel (*Scomber*), bird (Aves), rorqual baleen whale (Balaenopteridae), and toothed whale (Odontoceti) (McLeod, 2018; Table 3).

No fossils were reported from the Holocene alluvium (McLeod, 2018).

Table 3. Paleontological Literature and Record Search Results

Locality Number	Geologic Unit	Common Name	Scientific Name	Location	Source
Not Reported	Fernando Formation (Pliocene)	great white shark	--	southern California	Gust and Scott, 2009; Kellogg, 1925; Koch et al., 2004; Uhen, 2014
		herring	--		
		hake	--		
		lanternfish	--		
		swordfish	--		
		mackerel	--		
		flounder	--		
		whale	--		
		pinniped	--		
		dolphin	--		
		mollusk	--		
		brachiopod	--		
LACM 7730, LACM 4726, LACM 6971, LACM 3868	Fernando Formation (Pliocene)	stingray	*Dasyatis*	south, southwest, and west of Project area	McLeod, 2018
		eagle ray	*Myliobatis*		
		skate	*Raja*		
		chimaerid	Chimaeriformes		
		bull shark	*Carcharhinus leucas*		
		dusky shark	*Carcharhinus obscurus*		
		hammerhead shark	*Sphyrna*		
		sixgill shark	Hexanchiformes		
		bonito shark	*Isurus oxyrinchus*		
		salmon shark	*Lamna ditropis*		
		white shark	*Carcharodon sulcidens*		
		white shark	*Carcharodon carcharias*		

Locality Number	Geologic Unit	Common Name	Scientific Name	Location	Source
		herring hake sheepshead mackerel bird baleen whale toothed whale	Clupeidae *Merluccius* *Semicossyphus* *Scomber* Aves Balaenopteridae Odontoceti		
Not Reported	Older surficial sediments (Pleistocene)	mammoth mastodon camel horse bison giant ground sloth peccary cheetah lion saber-tooth cat capybara dire wolf rodent	*Mammuthus* *Mammut* Camelidae Equidae *Bison* *Megatherium* Tayassuidae *Acinonyx* *Panthera* *Smilodon* *Hydrochoerus* *Canis dirus* Rodentia	southern California	Blake, 1991; Jahns, 1954; Jefferson, 1991
LACM 1755	Older surficial sediments (Pleistocene)	horse	*Equus*	southwest of Project area	McLeod, 2018
LACM 2032	Older surficial sediments (Pleistocene)	pond turtle ground sloth mastodon mammoth horse camel	Clemmys mamorata *Paramylodon harlani* *Mammut americanum* *Mammuthus imperator* *Equus* *Camelops*	east-northeast of Project area	McLeod, 2018
LACM 1023	Older surficial sediments (Pleistocene)	turkey saber-tooth cat horse deer	*Meleagris californicus* *Smilodon fatalis* *Equus* *Odocoileus*	east-northeast of Project area	McLeod, 2018

7.0 IMPACTS ON PALEONTOLOGICAL RESOURCES

Impacts on paleontological resources can generally be classified as either direct, indirect or cumulative. Direct adverse impacts on surface or subsurface paleontological resources are the result of destruction by breakage and crushing as the result of surface disturbing actions including construction excavations. In areas that contain paleontologically sensitive geologic units, ground disturbance has the potential to adversely impact surface and subsurface paleontological resources of scientific importance. Without mitigation, these fossils and the paleontological data they could provide if properly recovered and documented, could be adversely impacted (damaged or destroyed), rendering them permanently unavailable to science and society.

Indirect impacts typically include those effects which result from the continuing implementation of management decisions and resulting activities, including normal ongoing operations of facilities constructed within a given project area. They also occur as the result of the construction of new roads and trails in areas that were previously less accessible. This increases public access and therefore increases the likelihood of the loss of paleontological resources through vandalism and unlawful collecting. Human activities that increase erosion also cause indirect impacts to surface and subsurface fossils as the result of exposure, transport, weathering, and reburial.

Cumulative impacts can result from incrementally minor but collectively significant actions taking place over a period of time. The incremental loss of paleontological resources over time as a result construction-related surface disturbance or vandalism and unlawful collection would represent a significant cumulative adverse impact because it would result in the destruction of non-renewable paleontological resources and the associated irretrievable loss of scientific information.

Project excavation activities are restricted to Phase 2 and Phase 4 of the Project and include deep excavations for foundations and footings (12-foot-depth); and shallow excavation and grading for hardscaping, landscaping, and utilities. The proposed 12-foot-deep foundations and footings are in an area of the site that is documented as being covered by a 13- to 15-foot-thick layer of low paleontological potential artificial fill (Fugro, 2018). Generally, ground-disturbance for hardscaping, landscaping, and utilities is shallow (less than 10 feet deep) and is therefore expected to be entirely within low paleontological potential artificial fill and Holocene alluvium. Therefore, Project excavations are unlikely to uncover significant fossil vertebrate remains, or result in an adverse impact on paleontological resources.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the geologic mapping, geotechnical boring logs, and proposed locations and maximum proposed depths of excavation, it is anticipated that Project excavations will be entirely within low paleontological potential artificial fill and Holocene alluvium. Prior to the start of construction, it is recommended that a Qualified Paleontologist be retained to prepare and present a paleontological worker's environmental awareness program to all earth-moving personnel and their supervisors. The training should inform construction personnel of the potential for fossil discoveries, types of fossils that may be encountered, and procedures to follow if potential fossils are unearthed at the Project site.

In the event of unanticipated fossil discoveries by construction personnel, work should be halted within 50 feet of the discovery until the Qualified Paleontologist can evaluate the discovery. If the discovery is determined to be significant, the Qualified Paleontologist should develop appropriate mitigation (e.g., documentation, salvage, fossil preparation and identification, curation, and monitoring) in consultation with the City of Los Angeles RAP and BOE.

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APPENDIX A

Natural History Museum of Los Angeles County Record Search

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Vertebrate Paleontology Section
Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

14 June 2018

Paleo Solutions, Inc.
911 South Primrose Avenue, Unit N
Monrovia, CA 91016

Attn: Barbara Webster, GIS Specialist & Archaeologist

re: Paleontological resources for the proposed LA Bureau of Engineering 1st and Broadway Civic Center Park Project, in the City of Los Angeles, Los Angeles County, project area

Dear Barbara:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed LA Bureau of Engineering 1st and Broadway Civic Center Park Project, in the City of Los Angeles, Los Angeles County, project area as outlined on the portion of the Los Angeles USGS topographic quadrangle map that you sent to me via e-mail on 31 May 2018. We do not have any vertebrate fossil localities that lie directly within the proposed project area, but we do have localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

Almost all of the proposed project site area has surface deposits of younger Quaternary Alluvium, derived as fluvial deposits from the flood plain of the Los Angeles River that currently flows in a concrete channel just to the east. These younger Quaternary deposits usually do not contain significant fossil vertebrates in the uppermost layers, but the underlying older sedimentary deposits found at varying depths may well contain significant vertebrate fossils.

Our closest vertebrate fossil locality from the older Quaternary deposits is LACM 1755, southwest of the proposed project area near the intersection of Hill Street and 12th Street, that produced a fossil specimen of horse, *Equus*, at a depth of 43 feet below the street. Our next closest vertebrate fossil locality from older Quaternary deposits beneath the younger Quaternary

Alluvium is LACM 2032, east-northeast of the of the proposed project area near the intersection of Mission Road and Daly Street around the Golden State Freeway (I-5), that produced fossil specimens of pond turtle, *Clemmys mamorata*, ground sloth, *Paramylodon harlani*, mastodon, *Mammut americanum*, mammoth, *Mammuthus imperator*, horse, *Equus*, and camel, *Camelops*, at a depth of 20-35 feet below the surface. The pond turtle specimens from locality LACM 2032 were figured in the scientific literature by B.H. Brattstrom and A. Sturn (1959. A new species of fossil turtle from the Pliocene of Oregon, with notes on other fossil *Clemmys* from western North America. Bulletin of the Southern California Academy of Sciences, 58(2):65-71). At our locality LACM 1023, just north of locality LACM 2032 near the intersection of Workman Street and Alhambra Avenue, excavations for a storm drain recovered fossil specimens of turkey, *Meleagris californicus*, sabre-toothed cat, *Smilodon fatalis*, horse, *Equus*, and deer, *Odocoileus*, at unstated depth. A specimen of the turkey, *Meleagris*, from this locality was published in the scientific literatus by D. W. Steadman (1980. A Review of the Osteology and Paleontology of Turkeys (Aves: Meleagridinae). Contributions in Science, Natural History Museum of Los Angeles County, 330:131-207).

In the very northwest corner of the proposed project area there are exposures of the marine Pliocene Fernando Formation and just to the north, south of Temple Street, there are exposures of the marine late Miocene Yorba Member of the Puente Formation (also referred to as an Unnamed Shale in this area), that also may occur at depth in the proposed project area.

We have a series of vertebrate fossil localities from the Fernando Formation nearby including LACM 7730, immediately south of the proposed project area near the intersection of Main Street and 2nd Street; LACM 4726, southwest of the proposed project area near the corner of 4th and Hill Streets; LACM 6971, further to the west of loclaity LACM 4726 west of Pershing Square near the corner of 6th and Flower Streets; and LACM 3868, due west of the proposed project area north of 6th Street between Lucas Avenue and South Bixel Street. These nearby Fernando Formation localities have produced a composite fauna including fossil specimens of stingray, *Dasyatis*, eagle ray, *Myliobatis*, skate, *Raja*, chimaerid, Chimaeriformes, bull shark, *Carcharhinus leucas*, dusky shark, *Carcharhinus obscurus*, hammerhead shark, *Sphyrna*, sixgill shark, Hexanchiformes, bonito shark, *Isurus oxyrinchus*, salmon shark, *Lamna ditropis*, white sharks, *Carcharodon sulcidens* and *Carcharodon carcharias*, herring, Clupeidae, hake, *Merluccius*, sheepshead, *Semicossyphus*, mackerel, *Scomber*, bird, Aves, rorqual baleen whale, Balaenopteridae, and toothed whale, Odontoceti.

Our Puente Formation locality LACM 5961 occurs just west of the northern-most portion of the proposed project area just north of the intersection of Hill Street and 1st Street. Locality LACM 5961, discovered during excavation for the Metrorail station at unknown depth, produced a specimen of the fossil bristlemouth fish, *Cyclothone*. Our next closest vertebrate fossil locality from the Puente Formation is LACM 7990, north-northeast of the proposed project area north of Temple Street between Broadway and Spring Street, that produced fossil fish including slickheads, Alepocephalidae, argentinas, Argentinidae, deep sea smelts, Bathylagidae, viperfish, *Chauliodus*, herring, Clupeidae, cod, Gadiformes, bristlemouths, Gonostomidae, mackerel, Scombridae, and dragonfish, Stomiatidae.

Shallow excavations in the younger Quaternary Alluvium exposed throughout almost all of the proposed project area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations there that extend down into the older sedimentary deposits, and any excavations in the Fernando Formation exposures in the very northwestern corner of the proposed project area, however, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be closely monitored to quickly and professionally recover any potential vertebrate fossils without impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice

APPENDIX D

Geotechnical Investigation Report and Final Compaction Report

FUGRO

Geotechnical Investigation Report
First and Broadway Park
Los Angeles, California

February 2018
Fugro Project No. 04.61170028
Document No. 04.61170028-PR-001(Rev.00)

Studio-MLA

STUDIO-MLA

Final

FUGRO

Geotechnical Investigation Report
First and Broadway Park
Los Angeles, California

February 2018
Fugro Project No. 04.61170028
Document No. 04.61170028-PR-001(Rev.00)

Final

Prepared for:

Studio-MLA
185 South Myers Street
Los Angeles, California 90033

00	Final	DMT	MQP	MQP	March 5, 2018
B	Revised Draft	DMT	MQP	MQP	February 26, 2018
A	Draft	DMT	MQP	MQP	January 30, 2018
Rev.	**Status**	**Prepared**	**Reviewed**	**Approved**	**Date**

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Fugro Project No. 04.61170028
Document No. 04.61170028-PR-001(Rev.00)
March 5, 2018

Studio-MLA
185 South Myers Street
Los Angeles, California 90033

Attention: Ms. Dawn Dyer, ASLA, LEED, AP; Senior Associate

Geotechnical Investigation Report, First and Broadway Park Project,
Los Angeles, California

Dear Ms. Dyer,

Fugro is pleased to present this geotechnical investigation report for the First and Broadway Park project in Los Angeles, California. Work was performed in accordance with the contract dated October 31, 2017.

This report presents the findings of our subsurface exploration and laboratory testing programs and provides seismic data and geotechnical recommendations for site development and grading, foundation and retaining wall design, pavements, and construction considerations. Field and laboratory data collected for the project are included in this report.

We appreciate the opportunity to work on this interesting project and to continue our professional relationship with Studio-MLA. Please call our office if you have any questions regarding the findings, conclusions, or recommendations provided in this report.

Sincerely,
Fugro USA Land, Inc.

David M. Thornhill, PE
Senior Staff Engineer

Matthew Q. Pollard, PE, GE
Associate Engineer

REGISTERED PROFESSIONAL ENGINEER
MATTHEW Q. POLLARD
No. 2987
Exp. 06-30-18
GEOTECHNICAL
STATE OF CALIFORNIA

Distribution: Four electronic copies to Ms. Dawn Dyer, ASLA, LEED, AP

CONTENTS

TABLES

PLATES

APPENDICES

APPENDIX A FIELD EXPLORATION

APPENDIX B LABORATORY TEST RESULTS

APPENDIX C LIQUEFACTION TRIGGERING CALCULATIONS

1. PROPOSED PROJECT

1.1 Project Description

We understand the City of Los Angeles is planning to construct a new two-acre park in the Los Angeles Civic Center located on West 1st Street between North Spring Street and North Broadway in the downtown area. The new park will feature native landscape, hardscape, seat walls and “arroyos” that collect and convey storm water runoff. The new park will also feature a two-story restaurant building with rooftop access. The building, which will be in the northwest portion of the property and near Broadway, will occupy a footprint of approximately 6,400 square feet and will be constructed at grade without a basement. In addition to the two-story building, there will also be approximately 18 freestanding shade canopies as part of the design. A pedestrian bridge is planned to span an arroyo at the western end of the site. We also assume the project will also include miscellaneous low-height retaining structures for landscaping purposes.

1.2 Site Description

The site is bounded by North Broadway to the northwest, Grand Park to the northeast, North Spring Street to the southeast and West 1st Street to the southwest. The location of the site is shown on Plate 1 – Vicinity and Geology Map. The existing site is approximately two acres in size and is currently undeveloped. Topographically, the site is gently sloping with ground surface elevations ranging from about 290 to 310 feet MSL. As described in a geotechnical report prepared by Geocon dated January 14, 2014, the existing site was previously occupied by a parking structure with subterranean levels and a separate building structure assumed to extend two stories below grade. These structures were removed and the area was subsequently backfilled with primary structural fill. Geocon prepared a final compaction report dated December 12, 2014, that documented the removal and backfill operations. The grading reportedly resulted in excavations up to approximately 36 feet deep. However, data in the December 12, 2014, Geocon report indicates the excavation in the area of the proposed two-story restaurant building extended to a depth of about 13 feet and the thickness of fill in this area ranges from about 13 to 15 feet. The excavation was reportedly backfilled with primary structural fill comprised of locally-derived soils (locally mixed with crushed concrete) and imported fill and placed to final grade elevation ranging between about 290 feet in the south to 310 feet in the north.

The Geocon reports dated January 14 and December 12, 2014, were reviewed and approved by the Los Angeles Department of Building and Safety (LADBS), Grading Division on March 11 and December 26, 2014, under log 83404, respectively.

2. WORK PERFORMED

2.1 Purpose

The purpose of our services was to evaluate the subsurface conditions at the site and to provide geotechnical recommendations for design and construction of the park and restaurant building. The main geotechnical considerations that were evaluated for this study consist of:

- Characterization of the subsurface conditions;
- Potential for seismic hazards to impact the site; and
- Geotechnical recommendations and seismic data for the design of structure foundations, site preparation and grading, utilities, retaining walls, and pavements.

2.2 Scope of Work

Our services for this project were performed in general accordance with our proposal for geotechnical services dated October 2, 2017. A summary of the work performed is provided below:

- Reviewed conceptual plans for the current project, selected published geologic maps, and previous geotechnical data provided in Geocon (2014a and 2014b);
- Prepared a health and safety plan for our work and coordinate site access with the City of Los Angeles (City);
- Visited the site to observe the general site conditions, coordinated the field exploration program, marked exploration locations and cleared the locations for utilities through Underground Services Alert;
- Explored the subsurface conditions at the site by drilling four hollow-stem-auger drill holes to depths ranging from approximately 20 to 50 feet below the existing ground surface (bgs);
- Installed and tested two borehole percolation tests with test intervals of 8 to 10 feet and 13 to 15 feet bgs;
- Assigned laboratory testing on selected samples obtained from the field exploration to help classify the materials encountered and characterize their geotechnical properties;
- Evaluated data collected from field explorations and laboratory tests; and
- Prepared this report summarizing the findings of the study and providing our conclusions and recommendations regarding:
  - Soil and groundwater conditions encountered at the site;
  - Geologic setting and the potential need to consider active faults;
  - Seismic setting, geotechnical parameters and ground motion for seismic design in accordance with the 2017 Los Angeles Building Code (LABC);
  - Liquefaction potential and estimated seismic settlement;
  - Site preparation and grading, subgrade stabilization, and soil material and compaction requirements for on-site and imported soil materials;
  - Suitable foundation recommendations for the building and canopy structures;
  - Shallow foundation design: bearing pressures, foundation embedment depths, and anticipated settlement;
  - Passive pressure and friction coefficient for shallow foundations resisting lateral loads;

- ☐ Cast-in-drilled-hole pile foundation recommendations: minimum pile depth and diameter, minimum pile spacing, axial capacity in compression, tensile capacity, lateral load behavior;
- ☐ Lateral earth pressures and sliding resistance for the design of retaining walls, and recommended backfill, compaction, and drainage of those walls;
- ☐ Design of concrete slabs-on-grade and pavements;
- ☐ Considerations for the design of site drainage in building and pavement areas;
- ☐ Corrosion and swell potential of on-site soils;
- ☐ Need for dewatering and groundwater considerations for temporary excavations and foundation construction; and
- ☐ Considerations for the contractor to design temporary slopes and shoring systems for excavations, adjacent structures, and adjacent utilities.

2.3 Field Exploration

The field exploration program consisted of excavating four drill holes at the site to depths ranging from approximately 20 to 50 feet below the ground surface (bgs) on November 30, 2017. The drilling subcontractor for the project was Martini Drilling Corporation of Huntington Beach, California. Martini excavated the drill holes using a truck-mounted CME 75 drill rig equipped with 8-inch diameter hollow stem augers.

The drill holes were sampled using a two-inch outside diameter standard penetration test (SPT) split-spoon sampler and a three-inch outside diameter modified California split-spoon sampler. The modified California sampler was equipped with one-inch high brass rings. The SPT sampler was used without liners, although the sampler was design to accommodate them. The samplers were driven into the materials at the bottom of the drill hole using a 140-pound automatic trip hammer with a 30-inch drop. The blow count (N-value) shown on the drill hole logs is the number of blows from the hammer that were needed to drive the sampler one foot, after the sampler had been seated at least six inches into the material at the bottom of the hole. One bulk sample was collected from cuttings retrieved from the upper five feet. The drill holes were backfilled with a bentonite-cement grout to the surface after drilling.

The approximate locations of the drill holes are shown on Plate 2 – Exploration Location Map. The sample intervals, N-values, a description of the subsurface conditions encountered and other field and laboratory data are presented on the logs of the drill holes in Appendix A.

2.4 Percolation Testing

Fugro conducted borehole infiltration testing at the two locations following the Boring Percolation Test procedures described in the County of Los Angeles, Department of Public Works, Geotechnical and Materials Engineering Division “Administrative Manual” GS200.1 dated June 30, 2014. Testing at each location was performed under the supervision of a Fugro Engineer and consisted of pre-soak and measurement periods. The approximate locations of the percolation tests are shown on Plate 2 – Exploration Location Map.

Two drill holes were excavated to 10 and 15 feet bgs on the southern corner of the site for the purpose of performing the borehole percolation tests. The two drill holes were located in the southern portion of the site and were spaced approximately ten feet apart. Upon drilling to the bottom of the infiltration interval at each location, we installed a two-inch-diameter perforated polyvinyl-chloride (PVC) casing and backfilled the annular space within the test interval with pea gravel to prevent caving of the sidewalls. The perforated casing and gravel fill allowed water in the test interval to percolate through the borehole side walls within the testing interval.

After constructing the borehole infiltration test elements, water was added through the casing to saturate the proposed test intervals before initiating testing. After the pre-soak period, we set the water level to the top of the test interval and initiated data collection. Once the initial water level was established, we took water level readings at approximately 30 minute intervals. The water surface was measured inside the casing using an electric water level sounder until a stabilized rate was obtained. A stabilized rate consisted of three consecutive infiltration rate measurements which did not vary more than ten percent. The reported water level measurements can be considered accurate to within 2 hundredths (0.02) of a foot.

At the conclusion of the infiltration testing, the PVC pipe was removed from the ground, and the boreholes were backfilled with hydrated bentonite chips. Boring percolation test measurements must be reduced to correct for flow in multiple directions (discharge of water from both the sides and bottom of excavation) as follows.

Infiltration Rate = (Preadjusted Percolation Rate)/(Reduction Factor)
The Reduction Factor for boring percolation tests (R_f) is given by:

$$R_f = \left(\frac{2d_1 - \Delta d}{DIA}\right) + 1$$

Where:
d_1 = Initial Water Depth (in.)
Δd = Water Level Drop of Final Period or Stabilized Rate (in.)
DIA. = Diameter of the boring (in.)

Table 1. Percolation Test Results

Percolation Test #	Testing Interval (ft)	Soil Classification	Pre-adjusted Percolation Rate (in/hr)	Adjusted Percolation Rate (in/hr)
1	8-10	Sandy lean CLAY (CL)	4.5	0.8
2	13-15	Clayey SAND (SC)	0.7	0.1

2.5 Laboratory Testing

Laboratory tests were performed at Fugro's Ventura laboratory. The laboratory testing program for this project included grain size analyses, Atterberg limits, direct shear, compaction, R-value, corrosion, and expansion index tests. The tests were performed in general accordance with the applicable standards of ASTM. The results of the tests are presented in Appendix B and selected data are shown on the drill hole logs in Appendix A.

2.6 General Conditions

Fugro prepared the conclusions and professional opinions presented in this report in accordance with generally accepted geotechnical engineering principles and practices at the time and location this report was prepared. This statement is in lieu of all warranties, expressed or implied. Geotechnical support for the new two-story restaurant and other project components will primarily be provided by the existing artificial fill placed under the observation and testing of Geocon. Our assessment of the existing fill is based on our review of the data in Geocon (2014b) and the limited sampler blow count and soil unit weight data acquired from the four drill holes excavated for this study. In general, the limited data we acquired appear to support the information provided in Geocon (2014b).

This report has been prepared for Mia Lehrer and Associates and their authorized agents only. It may not contain sufficient information for the purposes of other parties or other uses. If any changes are made in the project or site conditions as described in this report, the conclusions and recommendations contained in this report should not be considered valid unless Fugro reviews the changes, approves them in writing or provides revised recommendations as necessary. The report and drawings contained in this report are not intended to act as construction drawings or specifications.

Soil and rock deposits will vary in type, strength, and other geotechnical properties between points of observation and exploration. Additionally, groundwater and soil moisture conditions can also vary seasonally or for other reasons. Therefore, we do not and cannot have complete knowledge of the subsurface conditions underlying the site. The conclusions and recommendations presented in this report are based upon the findings at the points of exploration, and interpolation and extrapolation of information between and beyond the points of observation, and are subject to confirmation based on the conditions revealed during construction.

3. SUBSURFACE CONDITIONS

3.1 Geologic Setting

The project is in the City of Los Angeles in the Los Angeles Basin. The Los Angeles Basin is predominantly an urbanized landscape situated on gently sloping Late Quaternary and Holocene alluvial deposits from the Los Angeles, San Gabriel, and Santa Ana Rivers and Ballona Creek. These stream systems drain the eastern Transverse Ranges and northern Peninsular Ranges. The Los Angeles Basin stretches 50 miles from the San Gabriel Mountains south to the Pacific Ocean and 35 miles from the Santa Monica Bay to the Santa Ana Mountains and San Joaquin hills. The geologic conditions in project area have been mapped by Dibblee (1991). Dibblee (1991) maps Alluvium (Qa) consisting of silt, sand, and gravel at site and indicates that the alluvium is underlain by marine claystone of the Fernando Formation (Tfr) at depth. The location of the site in relation to mapped geologic formations is presented in Plate 1 - Vicinity and Geology Map.

3.2 Geologic Units

Our description of soil and rock conditions beneath the site is based on the results of our field exploration and laboratory testing programs, visual classification of samples, and information from previous geotechnical studies for adjacent sites prepared by Fugro and others. The consistency of the soils encountered was estimated from sampler blow counts recorded in the drill holes and from laboratory test results. A description of the predominant soil and bedrock units encountered in our explorations is presented below.

Primary Structural Fill (Af). We encountered approximately 13 to 15 feet of primary structural fill material composed of medium dense to dense and locally very dense clayey sand and very stiff to hard sandy lean clay. According to Geocon (2014b), the structural fill is comprised of locally derived soils consisting of clayey sand, sandy clay, sandy silt, and silty sand as well as imported materials comprised of silty sand and silty to clayey sand. Onsite concrete reportedly crushed to three inches or less was locally mixed with the onsite soils and incorporated into the fill. Brick fragments were locally encountered in our drill holes. Field-measured SPT N-values in the coarse-grained fill materials ranged from 19 to 65 blows per foot with a typical range of about 25 to 40 blows per foot suggesting the fill soils are generally medium dense to dense.

Plate 2 - Exploration Location Plan shows the depths of fill as reported by Geocon (2014b). Relative compaction values of the fill as reported in Geocon (2014b) range from about 92 to 98 percent. The engineered fill encountered during our exploration was generally consistent with those described in the approved final compaction report. Structural fill across the site is expected to be consistent with the fill materials encountered during our exploration.

Artificial fill soils were generally derived from onsite granular soils. Therefore, it can be difficult to differentiate the fill from in-place alluvium from visual classification of small samples and the contact between the fill and alluvium provided on the drill hole logs should be considered approximate.

Alluvium (Qa). Alluvial materials were encountered below the artificial fill in our four drill holes at depths of about 13 to 15 feet below the ground surface and extended to depths of 28 feet (about El. 278 to 275 feet) in drill holes BH-1 and BH-3 where the contact with the underlying Fernando Formation was encountered. In general, the alluvial soils encountered in our drill holes consisted of very dense poorly graded sand with trace to little amounts of clay, silt, and gravel consistent with previous findings at other explorations performed at the site Geocon (2014a).

Fernando Formation (Tf). Soft, gray claystone materials of the Fernando Formation dating to the early Pliocene period were encountered in our explorations from approximately 28 feet bgs to the maximum depth explored of 51.5 feet. Characterization from results of three boreholes performed for a previous study (Geocon, 2014a) describes the unit as olive brown to dark brownish gray siltstone.

3.3 Groundwater Conditions

Groundwater was encountered at approximately 23 to 25 feet in each of the borings excavated at the site. Depth to groundwater was measured at the completion of drilling after the drilling augers were removed from the ground, and the recorded values may not represent stabilized water levels. The California Division of Mines and Geology seismic hazard report for the Los Angeles quadrangle (CDMG 1998) reports historic high groundwater depths of around 20 feet bgs at the site. Geocon (2014a) reports encountering groundwater seepage just above bedrock contact.

Soil moisture conditions will vary seasonally depending on rainfall, irrigation, storm runoff and other factors. There is also the possibility of localized zones of locally perched water not encountered during our exploration.

3.4 Laboratory Results

3.4.1 Moisture and Density

In-situ moisture contents within the artificial fill and alluvial materials ranged from 4 to 19 percent. Moisture contents within the Fernando claystone were higher, ranging from 33 to 35 percent

3.4.2 Plasticity

Atterberg limits were determined for select fine-grained samples of artificial fill and alluvium. Liquid limits ranged from 31 to 35 percent. Plastic Limits ranged from 12 to 13 percent.

3.4.3 Expansion Index

Laboratory test results for samples of onsite materials suggest that the fill deposits encountered near the ground level have a very low potential for expansion based on changes in water content.

3.4.4 Direct Shear

One direct shear test was performed for this study within the artificial fill, resulting in an ultimate friction angle of 43° and an apparent cohesion of 0.7 ksf. Direct shear tests as reported on figures B1 through B3 in the Geocon (2014a) resulted in calculated friction angles ranging from 29° to 49° within artificial fill and alluvium. A friction angle of 35° was used for design calculations within the structural fill and alluvium for this report.

3.4.5 Compaction

One modified proctor compaction test was performed on a bulk sample of the upper 5 feet in accordance with ASTM D 1557 and resulted in a maximum dry density of about 130 pcf with an optimum moisture content of 9 percent.

3.4.6 R-Value

One R-Value test was performed on a bulk sample of the upper 5 feet in accordance with ASTM D2844 and resulted in an R-value of 18.

3.4.7 Corrosion

Chemical analysis for corrosivity was performed by Capco Analytical Services, Inc. on two select samples from the upper five feet. Results of these analyses are discussed in section 5.11.

4. SEISMIC CONDITIONS

4.1 Strong Ground Motion

We performed a probabilistic seismic hazard analysis for the site location using the USGS Unified Hazard Tool web application (USGS, 2008). California Geological Survey (CGS, 2008), Special Publication 117A defers to the USGS website to determine a uniform hazard spectrum for a specified location in terms of latitude and longitude. Table 2 summarizes the probabilistically estimated strong ground motion accelerations for return period events of 475, 975, and 2,475 years (10, 5 and 2 percent probability of exceedance in 50 years, respectively) at a location defined by coordinates N34.05393, W118.24474, using a shear wave velocity of 360 m/s (the C/D site class boundary).

Table 2. Summary of USGS Probabilistic Seismic Hazard Deaggregation Results

Return Period (years)	Mean Magnitude (Mw)	Mean Source Distance (km)	Peak Horizontal Ground Acceleration
475	6.6	8.47	0.52 g
975	6.6	6.57	0.69 g
2,475	6.7	5.38	0.94 g

4.2 Seismic Design Parameters

The proposed structure should be designed to resist the lateral forces generated by earthquake shaking in accordance with local design practice. Seismic design procedures are outlined in Section 1613 of the Los Angeles Building Code (LABC) and are designed to meet the intent and requirements of ASCE 7-10. Data collected during the exploration indicate that the subsurface profile is consistent with the criteria for site class D. Table 3 provides seismic design parameters for use with the LABC (2017). These parameters were generated using the Seismic Design Maps application available on the USGS website accessed on December 06, 2017.

Table 3. Summary of 2017 LABC Seismic Design Parameters

2017 LABC or ASCE 7-10 Code Section	Seismic Parameter	Value
---	Latitude	N 34.05393°
---	Longitude	W 118.24474°
LABC 2017 Section 1613.3.1 and Figure 1613.3.1(1)	Mapped Acceleration Response Parameter (S_s) Site Class B	2.447g
LABC 2017 Section 1613.3.1 and Figure 1613.3.1(2)	Mapped Acceleration Response Parameter (S_1) Site Class B	0.859g
ASCE 7-10 Chapter 20 Table 20.3-1	Soil Profile Type	D
LABC 2017 Section 1613.3.3 and Table 1613.3.3(1)	Site Coefficient (Fa)	1.00
LABC 2017 Section 1613.3.3 and Table 1613.3.3(2)	Site Coefficient (Fv)	1.5
LABC 2017 Section 1613.3.3	Adjusted Acceleration Response Parameter for Site Class B (S_{ms})	2.447g
LABC 2017 Section 1613.3.3	Adjusted Acceleration Response Parameter for Site Class B (S_{m1})	1.288g
LABC 2017 Section 1613.3.4	Design Spectral Response Acceleration Parameter (S_{DS})	1.631g
LABC 2017 Section 1613.3.4	Design Spectral Response Acceleration Parameter (S_{D1})	0.859g
ASCE 7-10 Section 11.8.3	Mapped MCE Geometric Mean (MCE_G) Peak Ground Acceleration (PGA)	0.926g
ASCE 7-10 Section 11.8.3	Site Coefficient (F_{PGA})	1.00
ASCE 7-10 Section 11.8.3	Adjusted MCE_G Peak Ground Acceleration for Site Class C (PGA_M)	0.926g

These parameters can be used to construct the risk-targeted acceleration response spectrum as described in ASCE 7-10.

4.3 Fault Rupture Hazards

We consider the potential for surface fault rupture at the site to be low. Dibblee (1991) does not show faults trending towards or transversing the First and Broadway Park site. Furthermore, the site does not lie within an Alquist-Priolo fault rupture hazard zone as defined by the State of California Geologic Survey (CGS). The location of the site in relation to mapped faults is presented in Plate 1 - Vicinity and Geology Map.

4.4 Liquefaction

Liquefaction is described as the sudden loss of soil strength because of a rapid increase in soil pore water pressures due to cyclic loading during a seismic event. For liquefaction to occur, the following three general geotechnical characteristics must be present:

1. Groundwater must be present within the potentially liquefiable zone;
2. Potentially liquefiable soil must meet certain grain size, plasticity, and moisture content characteristics; and
3. Potentially liquefiable soil must be of low to moderate relative density.

If those criteria are met and strong ground motion occurs, then those soils may liquefy, depending upon the intensity and cyclic nature of the strong ground motion.

The project site is located within a mapped zone of liquefaction by the California Geological Survey. We used the procedures described by Seed et al. (2003) using SPT blow counts to evaluate the potential for the soil encountered to experience liquefaction or seismic settlement in response to the design earthquake. Results of this analysis is presented in Appendix C. On the basis of this analysis, we do not expect liquefaction to occur at the site.

4.5 Dry Seismic Settlement

Settlement from earthquake ground shaking can also occur in uncemented, granular soils above the groundwater. Descriptions of the settlement caused by the densification of granular soils and procedures to evaluate the potential magnitude of settlement that could occur are provided in Tokimatsu and Seed (1978), Pradel (1998), and others. On the basis of evaluations using Pradel (1998), we estimate dry seismic settlement from the upper 20 feet of the site should be less than 1/2 inch.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

A summary of the main findings of our geotechnical evaluation follows.

- The site is underlain by approximately 6-1/2 to 36 feet of engineered fill overlying alluvial deposits of dense to very dense sand, and clayey sand and hard lean clay. Groundwater was encountered at about 23 to 25 feet bgs, although historical data suggests that groundwater may reach as high as 20 feet bgs.
- The site is located within a seismically active area. Seismic data for design of the proposed structures are provided in this report. The risk of liquefaction in response to the design earthquake is considered to be low.
- Dewatering and control of groundwater will likely not be needed, unless deep foundations are selected for support of the proposed structures or if deep excavations are required.
- Structures can likely be supported on shallow foundations. We are providing deep foundation design recommendations as requested. Foundation design and grading recommendations are provided in this report.
- Laboratory testing indicates that on-site materials have a low corrosive potential and low to moderate expansion potential.

5.2 Grading and Earthwork Recommendations

All grading work shall be observed and tested by the geotechnical engineer or their representative to confirm proper site preparation, excavation, scarification, compaction of on-site soil, selection of satisfactory fill materials, and placement and compaction of fill. All areas or soil removal or overexcavation and footing excavations shall be observed by the geotechnical engineer before any fill or steel reinforcement is placed. The following sections provide specific recommendations for grading and earthwork activities during construction.

5.2.1 Site Preparation

All organic material and vegetation, hazardous materials, old foundations and slabs, miscellaneous debris, or any other deleterious materials should be stripped and removed from construction areas. Depressions or disturbed areas left from clearing and grubbing should be replaced with compacted fill.

5.2.2 Overexcavation

Overexcavation should be performed below all foundations, slabs, pavements and areas to receive compacted fill for the project according to recommendations provided in Table 4 below. The zones of overexcavation should extend at a uniform elevation throughout each improvement footprint and laterally beyond the structural perimeter a distance of at least equal to the vertical thickness of the fill blanket. The excavations may need to be locally deepened as-needed.

Table 4. Recommended Overexcavation Depths

Site Improvement	Recommended Overexcavation
Structural Foundations	At least 1 foot below the bottom of the lowest footing elevation or 3 feet below existing grade, whichever is deeper, and at a relatively uniform elevation.
Pavement Areas	At least 1 foot below the existing grade or to the bottom of the proposed structural section, whichever is deeper.

5.2.3 Subgrade Preparation

The exposed bottom of overexcavated areas should be proof-rolled with heavy rubber-tired equipment in order to expose any zones of soft or loose material. The proof-rolling should be performed under the observation of a representative of the geotechnical engineer who should also perform a careful inspection of the exposed subgrade surface. If soft, loose, or porous soils, or other unsuitable materials are present within the excavation subgrade, they should be removed to competent materials.

Following observation and approval of the bottom by the GED and the LADBS Grading Inspector, the exposed bottom of removal areas should be scarified at least 8 inches, moisture conditioned to within 3 points of optimum, and compacted to a minimum of 90 percent as determined from ASTM D1557.

5.2.4 Fill Placement and Compaction

All fill materials should be placed in controlled, horizontal layers not exceeding six to eight inches in un-compacted thickness and moisture conditioned to within two percent of optimum as determined according to ASTM D1557. Fill materials beneath structures or pavements should be compacted to a minimum of 95 percent of the laboratory maximum dry density determined from ASTM D1557. This may be reduced to 90 percent if the results of a hydrometer test indicate the fill material contains at least 15 percent finer than 0.005 mm sieve. Fill in non-structural zones and backfill adjacent to retaining walls should be compacted to a minimum of 90 percent maximum dry density per ASTM D1557.

Fill slopes should be designed at an inclination of 2h:1v or flatter.

The grading contractor has the ultimate responsibility to achieve uniform compaction in accordance with the geotechnical report and grading specifications. If either the moisture content or relative compaction does not meet these criteria, the contractor should rework the fill until the specified conditions are satisfied.

If construction delays or the weather result in the surface of the fill drying, the surface should be scarified, and moisture conditioned before the next layer of fill is added. Each new layer of fill should be placed on a rough surface so planes of weakness are not created in the fill.

During periods of wet weather and before stopping work, all loose material should be spread and compacted, surfaces should be sloped to drain to areas where water can be removed, and erosion protection or drainage provisions should be provided in accordance with plans provided by the civil engineer. After the rainy period, the geotechnical engineer should inspect the site for authorization to resume grading and to provide any specific recommendations that may be required. Surface materials previously compacted before the wet weather shall be scarified, brought to the proper moisture content, and recompacted prior to placing additional fill.

5.2.5 Fill Selection

Select fill should be used as backfill in overexcavation areas beneath slabs and footings and behind retaining structures. General fill may be used in other areas of the project site unless noted otherwise in this report. Recommendations for various types of fill are presented below.

General Fill. General fill should be free from organic material, hazardous materials, unsuitable fill debris, and any other deleterious materials. Fill materials should not contain rocks, blocky material, debris, or lumps over 3 inches in maximum dimension, nor more than 15 percent material larger than 2 inches. General fill materials should have an Expansion Index less than 50.

Select Fill. Select fill should satisfy requirements for general fill and consist of granular materials with less than 30 percent passing the No. 200 sieve and an expansion index of less than 20.

Use of Onsite Materials. Materials generated during excavation and grading at the site are anticipated to consist primarily of clayey sand. Granular onsite materials may be suitable as select fill and should be tested during construction to verify it meets the recommended specifications. Onsite materials that don’t meet the recommended parameters for select fill may be used as general fill as long as those materials satisfy requirements presented above for general fill.

Imported Fill. If required, imported fill materials should comply with recommendations for either general or select fill as appropriate for its intended use. Any material being considered as imported fill should be reviewed and approved by the geotechnical engineer prior to being brought to the site.

5.3 Construction Considerations

5.3.1 Excavation Conditions

We expect the planned excavations will encounter artificial fill consisting of clayey sand to sandy clay. The near-surface materials are anticipated to be medium dense to very dense and very stiff to hard. We did not encounter oversize materials in the explorations performed at the site; but such particles could be present between and beyond points of exploration. Based on the conditions observed at the exploration points, the materials should be readily excavated with conventional construction equipment.

5.3.2 Temporary Excavations

Temporary slopes, excavations, and support should conform to federal Occupational Safety and Health Administration (OSHA) regulations, California Occupational Safety and Health Administration (CAL/OSHA) and any other local ordinances and building codes, as required. The Contractor should be responsible for all safety issues affecting open excavations.

If temporary slopes are used, excavations in soil materials up to 20 feet deep may be cut with side slopes at inclinations that are no steeper than 1h:1v, provided that the subsurface is in a dry and stable condition. 1h:1v slopes are suitable for Type B soil per OSHA guidelines. Slopes should be monitored periodically by the contractor. Slopes should not be considered stable if seepage daylights on the slope face. Stockpiled material or equipment should not be placed closer than five feet from any slope crest.

Unless the excavation is properly sloped or shored, surcharge loads (e.g., vehicles, equipment, materials, etc.) should not be allowed within a horizontal distance from the top of the excavation equal to the vertical height of the excavation.

Temporary shoring may be used to support temporary excavations, where needed. Temporary shoring may consist of soldier piles with lagging and/or tiebacks or other suitable methods. Although not anticipated based on observations made during our investigation, if groundwater is encountered it could affect the type, design, installation, and performance of temporary shoring. The contractor's engineer should be responsible for selecting and designing the appropriate type of temporary shoring and developing the geotechnical parameters needed for design.

5.3.3 Construction Dewatering

Groundwater was observed approximately 23 to 25 feet bgs and is not anticipated to impact the project, unless deep excavations are needed or the design team chooses to use deep foundations; however, the presence of groundwater could vary seasonally and perched, seeping zones could be encountered during construction. The contractor should be responsible for controlling groundwater or seepage if encountered during construction.

5.4 Foundation Support Considerations

We anticipate that the proposed restaurant building can be supported by shallow foundations, consisting of spread footings or a mat foundation. If the design team decides to use deep foundations, we have included recommendations for cast-in-drilled-hole (CIDH) piles in Section 5.6 of this report.

As described herein, the foundation elements for the structure should be supported on compacted fill placed for this work underlain by competent materials. The various structural components will impose a range of foundation loads across the site. The range of loading conditions will result in a range of differential settlements under the proposed structure unless foundation elements are sized such that the foundations apply a consistent bearing pressure across the site. The effect of differential settlement on the performance of the proposed structure must be given careful consideration during the design process.

5.5 Shallow Foundation Design

5.5.1 Allowable Bearing Pressure

Foundation elements for the building and retaining walls may be designed for an allowable bearing pressure of 3,000 psf. A one-third increase in the allowable bearing pressure may be used for transient loads such as seismic or wind forces.

5.5.2 Minimum Footing Dimensions

As required by the 2017 LABC, the minimum depth of footings below the undisturbed ground surface is 12 inches. The minimum footing width is also 12 inches.

5.5.3 Subgrade Modulus

Mat foundations and structural slabs can be designed using a Winkler model (beam on elastic foundation) using a modulus of subgrade reaction (Kv1) of 62 tons per cubic foot. The modulus of subgrade reaction value (Kv1) represents a presumptive value based on soil classification data and is for a 1-foot-square plate assuming the bearing pressure below the mat or slab will not exceed 7,500 psf. Depending on how the subgrade modulus value is used in design, the value may need to be scaled for size effects.

The equations below can be used as to estimate the modulus of subgrade reaction for a mat foundation or structural slab.

$$K_{\mathrm{b}} = \mathrm{K}_{\mathrm{v1}}[(\mathrm{B}+1)/2\mathrm{B}]^2$$

$$K_{\mathrm{bxl}} = \frac{\mathrm{K}_{\mathrm{b}}(1+0.5B/L)}{1.5}$$

where:

K_b is the subgrade modulus for a square shallow footing of width “B”

K_{bxl} is the subgrade modulus for a shallow footing of width “B” and length “L”

K_{v1} is the subgrade modulus for a 1-foot x 1-foot square plate

5.5.4 Sliding and Passive Resistance

Ultimate sliding resistance (friction) generated at the interface of concrete foundations and compacted soils or gravel mats can be computed by multiplying the total dead weight structural load by a coefficient of 0.35. using a factor of safety of 2, the allowable net passive resistance developed from lateral bearing of on foundations bearing against compacted backfill or undisturbed native soil can be estimated using an equivalent fluid weight of 250 pcf above the groundwater table and 150 pcf below the groundwater table. The passive resistance for the upper one foot of soil should be neglected unless the soils are confined at the ground surface by slab-on-grade or pavement. Sliding resistance and passive pressure may be used together without reduction, when used with the recommended minimum factors of safety. For static conditions, minimum factors of safety of 1.5 and 2.0 are recommended for foundation overturning and sliding, respectively. The factor of safety for sliding can be reduced to 1.5, if passive resistance is neglected. The factor of safety for transient (seismic, wind) conditions should be at least 1.1.

5.5.5 Settlements

Static Settlements. Static settlements will generally occur in response to foundation loads on the foundation support material. Based on the assumed foundation loads and the subgrade preparation recommendations provided herein, total static settlement (comprised of both immediate settlement and long-term consolidation) of the shallow foundations should be approximately 1-inch total. Foundations should be designed to accommodate differential settlement of at least half the total settlement.

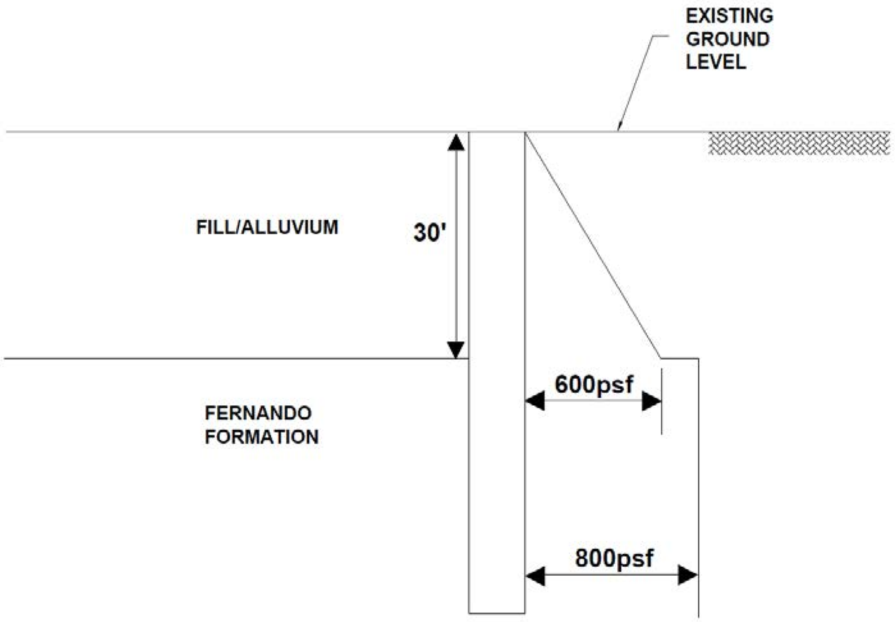
Seismic Settlements. Seismically induced settlements are discussed in Sections 4.4 and 4.5 of this report. The total amount of seismic settlement resulting from liquefaction and dry settlement is anticipated to be less than 1/2-inch.

5.6 CIDH Pile Design

In our opinion, the proposed structures can be supported on drilled pier foundations. The drilled piers would be expected to consist of straight-shaft friction piers. We recommend that piers be designed with a center-to-center spacing of at least three pier diameters. If needed, we can provide additional recommendations for piers spaced closer than three diameters.

5.6.1 Friction Piles

For design, we recommend that friction piers have a minimum diameter of two feet. Allowable frictional resistance within the fill/alluvium increases linearly from 0 at the ground surface to 600 psf at a depth of 30 feet bgs. Allowable frictional resistance of 800 psf may be used within the Fernando Formation.



A one-third increase in the frictional resistance can be used when considering short-term wind or seismic loads. The uplift capacity of drilled CIDH piles can be estimated as equal to the frictional resistance plus the dead weight of the pier. The structural engineer shall determine the ultimate embedment depth of piles.

Groundwater seepage and localized caving may be encountered in drilled pier excavations and casing may be required to control groundwater and minimize caving of the shaft. Drilling fluids, if used, should be approved by the design engineer.

5.6.2 Resistance to Lateral Loads

We evaluated the lateral load carrying capacity of drilled piers using the computer program LPILE Plus v9.03 (Ensoft, 2016) which uses a soil resistance-pile deflection model (p-y analysis) to estimate pile deflections and moment and shear forces in the pile. LPILE was used to estimate lateral load deflection, maximum shear, and maximum moment for for both fixed- and free-head conditions. Loading input was based on the preliminary load information provided by the structural engineer.

Table 5 below provides the soil properties input parameters used for the LPILE analyses. Groundwater was modeled at 20 feet bgs.

Table 5. LPILE Soil Properties Input Parameters

Geologic Unit	Depth Range (ft)	p-y curve type	Unit Weight	Friction Angle (degrees)	Undrained Cohesion (psf)
Artificial Fill/Alluvium	0-28	Sand (Reese)	130	35	--
Fernando Formation	28-50	Stiff Clay with Free Water (Reese)	120	--	4,500

Table 6 below provides the axial loading inputs used for analysis. These values were taken from the preliminary load information provided by the structural engineer.

Table 6. LPILE Pile Loading Input Parameters without group effects

Structure	Loading Case	Horizontal (kips)	Vertical Compression (kips)	Resolved Moment (kip-ft)
Restaurant- BRB Frame with Max Compression	Service (D+L)	30	800	--
	Seismic (D+L+E)	230	1,200	--
Restaurant- Special Moment Frame	Service (D+L)	30	225	60
	Seismic (D+L+E)	230	265	710
Shade Canopies	Service (D+L)	5	50	70
	Seismic (D+L+E)	35	130	620
Pedestrian Bridge	Service (D+L)	2	185	--
	Seismic (D+L+E)	62	205	--

Based on the preliminary load information provided to us, we anticipate that multiple piles will be required to support column loads for the proposed restaurant. As a result, we have applied a group efficiency factor to account for group effects. A group efficiency factor of 0.63 was used as recommended by Brown et al. (1988) for sands with pile spacing greater than or equal to three pile diameters.

Table 7. LPILE Pile Loading Input Parameters with group effects

Structure	Loading Case	Group Efficiency Factor	Horizontal (kips)	Vertical Compression[1] (kips)	Resolved Moment (kip-ft)
Restaurant- BRB Frame with Max Compression	Service (D+L)	0.63	48	1270	--
	Seismic (D+L+E)	0.63	365	1905	--
Restaurant- Special Moment Frame	Service (D+L)	0.63	48	357	95
	Seismic (D+L+E)	0.63	365	421	1127
Shade Canopies	Service (D+L)	1	5	50	70
	Seismic (D+L+E)	1	35	130	620
Pedestrian Bridge	Service (D+L)	1	2	185	--
	Seismic (D+L+E)	1	62	205	--

1. These values of vertical compression have been divided by the group efficiency factor to account for secondary lateral loading resulting from p-delta effects. Calculations involving axial capacity need not apply this factor.

Our estimates are based on total column loads divided by the number of piles and no factor of safety has been applied to the estimated loads. Our preliminary estimated lateral deflections, shear, and moments for drilled cast-in-place piles for the selected number of piles per group, pile diameter, and embedment depth are provided on Tables 8 through 11 below. Pile deflection, shear, and moment data as a function of depth as well as moment vs curvature graphs are provided in Appendix C.

Table 8. Summary of Deflections, Maximum Shear and Bending Moments – Restaurant Building BRB Frame

Number of piles	Controlled by	Pile Diameter (in)	Embedment (ft)	Pile Head Condition	% Steel	Loading Condition	Deflection (in)	Max Shear (kips)	Max Bending Moment (in-kips)
6	Axial	48	39	Fixed	1	Service	0.006	8	700
						Seismic	0.043	61	5,500
				Free	1	Service	0.015	8	700
						Seismic	0.111	61	4,700

Table 9. Summary of Deflections, Maximum Shear and Bending Moments – Restaurant Building Special Moment Frame

Number of piles	Controlled by	Pile Diameter (in)	Embedment (ft)	Pile Head Condition	% Steel	Loading Condition	Deflection (in)	Max Shear (kips)	Max Bending Moment (in-kips)
4	Axial	48	29	Fixed	1	Service	0.01	12	1,100
						Seismic	0.08	92	7,000
				Free	1	Service	0.03	12	1,100
						Seismic	0.44	92	8,800

Table 10. Summary of Deflections, Maximum Shear and Bending Moments – Shade Canopies

Number of piles	Controlled by	Pile Diameter (in)	Embedment (ft)	Pile Head Condition	% Steel	Loading Condition	Deflection (in)	Max Shear (kips)	Max Bending Moment (in-kips)
1	Axial	48	32	Fixed	1	Service	0.004	5	450
						Seismic	0.024	35	3,150
				Free	1	Service	0.020	5	1,200
						Seismic	0.321	48	8,900

Table 11. Summary of Deflections, Maximum Shear and Bending Moments – Pedestrian Bridge

Number of piles	Controlled by	Pile Diameter (in)	Embedment (ft)	Pile Head Condition	% Steel	Loading Condition	Deflection (in)	Max Shear (kips)	Max Bending Moment (in-kips)
1	Axial	48	40	Fixed	1	Service	0.002	2	200
						Seismic	0.044	62	5,600
				Free	1	Service	0.004	2	200
						Seismic	0.113	62	4,700

Resistance to lateral loads can also be provided by passive pressure acting on the sides of piers caps or grade beams if the existing soils within five feet of the pier caps and grade beams are replaced with compacted fill. Passive resistance can be provided according to our recommendations presented in this report.

5.6.3 Drilled Pier Construction Considerations

Unsupported drilled pier excavations could encounter caving conditions due to sandy soil conditions and/or impacts from groundwater at lower elevations. Therefore, lateral support may need to be provided during the excavation of drilled piers using temporary casing if caving conditions are encountered. Casing inside diameter should be at least equal to or greater than the design diameter of the drilled pier.

Concrete placement for drilled piers should be performed as soon as practical after excavation and should not be left open overnight. Casing should be appropriately withdrawn upon concreting, maintaining the concrete level well above the casing bottom during casing withdrawal. For drilled shafts constructed above groundwater level, if water accumulates in the excavation bottom, the excavation should be pumped dry prior to concreting or a tremie should be used to place concrete underwater (also to maintain side resistance). For friction piers constructed below the groundwater table, pumping of the water may be possible due to significant thickness of fine grained soil which have lower permeability and will therefore allow slower inflow of water in the excavated hole. However, this should not be relied upon, and construction considerations should take into account presence of water in the drilled shaft hole and adjust construction methods appropriately.

For underwater concrete placement, a high-slump (i.e., about seven or eight inches) or "flowable" concrete should be used; however, reinforcement and concrete placement should preferably be performed "in the dry" if possible.

In general, drilled pier construction should conform to the standards and specifications of the International Association of Foundation Drilling, latest edition, and/or Section 49-3 of Caltrans (2015). Applicable safety requirements, including the use of casing if necessary, is the contractor’s sole responsibility.

5.7 Retaining Wall Design Recommendations

5.7.1 Static Conditions

Retaining structures that are free to rotate or translate laterally (e.g., cantilevered retaining walls) through a horizontal-distance-to-wall-height ratio of no less than 0.004 are referred to as unrestrained or yielding retaining structures. Such walls can generally move sufficiently to allow active earth pressure conditions to develop, if backfill materials behind the walls consist of cohesionless soils, and therefore can usually be designed for active earth pressure conditions. Retaining structures that are unable to rotate or deflect laterally (e.g., restrained or basement walls) are referred to as restrained or non-yielding walls and are designed using at-rest earth pressures.

5.7.2 Lateral Earth Pressures

For static conditions, Table 10 presents recommended equivalent fluid weights for backfill materials behind retaining walls. Drained conditions are predicated on the assumption that no build-up of hydrostatic pressures can occur (i.e., drainage is provided), while undrained conditions include hydrostatic pressures to be used for depths below the groundwater level or where proper drainage design is not incorporated.

Table 12. Equivalent Fluid Weights for Retaining Walls

Backfill Slope Inclination Behind Wall	Equivalent Fluid Weight (pcf[1])			
	Active Conditions or Unrestrained Walls (free to rotate or translate)		At-Rest Conditions or Restrained Walls (braced against rotation/translation)	
	Drained	Undrained	Drained	Undrained
Level Backfill	35	80	55	90
[1]pcf = pounds per cubic foot				

The recommended equivalent fluid weights should be applied to a vertical plane passing through the back-most part of the heel of the retaining wall. The vertical plane should extend upward to the point of intersection with the ground surface and down to the elevation of the lowest retaining wall foundation element (e.g., bottom of footing, shear key or passive pressure resisting element).

5.7.3 Surcharge Pressures

Surcharge loads on the wall (e.g., traffic, footings) should be included in the wall design. Walls that are free to deflect should include at least 30 percent of the surcharge load; restrained walls should include at least 50 percent of the surcharge load.

The surcharging effect of adjacent loads may be neglected if the point of load application is located outside of a line projected at 1h:1v up and outward from the outside edge (heel) of the base of the wall footing. A rectangular pressure distribution should be assumed and added to the triangular pressure distribution used to model lateral earth pressures. The resultant load of the surcharge loading should be assumed to act horizontally at a distance of 0.5H above the base of the wall, where H is the wall height.

Lateral pressures for other surcharge loading conditions, such as line or point sources, can be provided if required.

5.7.4 Drainage Measures

Free-Draining Backfill. To effect drained conditions and help prevent the build-up of hydrostatic pressures behind retaining walls, a granular, free-draining backfill, at least two feet in thickness (measured horizontally), should be placed behind the walls. Free-draining backfill should consist of clean, coarse-grained material with no more than 2 percent passing the No. 200 sieve. Acceptable backfill would be:

- "Pervious Backfill" conforming to Item 300-3.5.2, Standard Specifications for Public Works Construction ("Greenbook");
- "Class 2 Permeable Material" conforming to Item 68-2.02F(3), Caltrans Standard Specifications; or
- Crushed rock, sized between one-quarter and one-half inch.

The free draining material should be placed in layers (no thicker than six inches) along with and by the same methods recommended for "Compacted Fill," and lightly vibrated with four to five passes of a small, hand-operated vibratory compactor.

Filter Fabric. A non-woven filter fabric should be placed between the free-draining backfill and the soil or rock behind the free-draining backfill to protect against soil migration into the drain material. The filter fabric should conform to Section 213-4 of the "Greenbook," and consist of at least Type 180N material. The filter fabric should be placed in general conformance with Section 300-9 for the "Greenbook."

Discharge. Drainage materials behind retaining walls slabs should be hydraulically connected to a perforated drainpipe system. The perforated drainpipe should be protected against soil particles migrating through the perforations.

Water Stops. Water stops should be installed in both expansion and/or construction joints along below-grade walls, membrane slabs, and footings.

Runoff. The site should be sufficiently graded to prevent ponding of surface runoff that could collect behind the backs of the retaining walls at the ground surface and infiltrate into the free draining backfill.

5.7.5 Compaction Adjacent to Walls

Backfill within five feet, measured horizontally, behind retaining structures should be compacted with lightweight, hand-operated compaction equipment to reduce the potential for creation of large compaction-induced stresses. If large or heavy compaction equipment is used, compaction-induced stresses can result in increased lateral earth pressures on the retaining walls in addition to those presented in Tables 7 through 9. If anything but lightweight, hand-operated compaction equipment is to be used, further evaluation of the potential for compaction-induced stresses is recommended.

Backfill material should be brought up uniformly around the below-grade or retaining walls, i.e., the elevation difference of the backfill surface along the wall should not be greater than about two feet, unless the wall is designed for those differences.

5.7.6 Dynamic Earth Pressures

According to the LABC (2017), retaining walls exceeding six feet in height of retained soil need to be designed to resist dynamic earth pressures. For unrestrained walls, the increase in lateral earth pressure acting on the wall resulting from earthquake loading can be estimated using the Mononobe-Okabe (M-O) theory, as described by Seed and Whitman (1970). That theory is based on the assumption that sufficient wall movement occurs during seismic shaking to allow active earth pressure conditions to develop.

We applied the Seed and Whitman method and assumed a horizontal seismic coefficient k_h of 0.46g, taken as about 50 percent of the design peak horizontal ground acceleration (0.926g). The total dynamic force on the wall from earthquake loading is estimated to be about $60H^2$ (pounds per lateral foot of wall) where H is the wall height in feet. The distribution of seismic pressure can be assumed uniform (or rectangular) with a magnitude of 60H and the resultant can be assumed to act at 1/3H measured from the base of the wall.

5.8 General Slab-on-Grade Requirements

5.8.1 Background

Recommendations for slab-on-grade or slab-on-ground construction are presented below, and are based on ACI 302.2R-06, Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials, published in 2006. The architect and design engineer should review that reference for background on moisture vapor penetration through concrete slabs and issues regarding protection from delamination of flooring, blistering, staining, mold growth and other problems related to performance of moisture-sensitive flooring. Since 1999, water-based flooring adhesives have replaced solvent-based adhesives because of restrictions by EPA, which has led to an increase in moisture-related problems.

The performance of flooring is complicated as described in ACI 302.2R-06 and depends on many factors including sub-slab relative humidity, concrete materials and water-cement ratio, internal relative humidity, and construction aspects, such as curing, length of drying, environmental conditions, pH, etc. As noted above, the architect and design engineer should review pertinent background materials and decide what measures are needed depending on the type of flooring will be used. Recommendations presented below are not intended to resolve every issue regarding moisture vapor penetration through on-grade concrete slabs. If additional concerns need to be addressed, then additional information needs to be provided and reviewed by the geotechnical engineer and probably by an expert in vapor moisture transmission through concrete slabs.

5.8.2 Slab Design Considerations

Concrete slabs-on-grade should be supported on compacted fill material prepared in accordance with the grading recommendations of this report. For walkways and other minor flat work that will not be subject to vehicle traffic, we recommend that the upper 12 inches of the subgrade be compacted to at least 90 percent relative compaction.

Slab thickness and reinforcement should be designed by a structural engineer to resist structural loading and to satisfy pertinent code, temperature, and shrinkage requirements. On the basis of the soil conditions encountered, we recommend that concrete floor slabs and flat work without vehicular traffic be at least 4 inches thick and be reinforced with at least No. 3 reinforcing placed at not more than 18 inches on center both ways. Reinforcement should be placed at mid-thickness of the slab and be supported such that the reinforcement will remain in place during construction and concrete placement. Expansion joints, control joints and/or reinforcement of slabs should be provided according to Portland Cement Association guidelines or other applicable design standards to control cracking.

At-grade floor slab thickness should be designed by the structural engineer, but should not be less than four inches. Control joints should be spaced at a maximum spacing of ten feet in both directions. The structural engineer should determine reinforcement requirements, but, at a minimum, reinforcement of on-grade floor slabs should consist of No. 4 bars at 18 inches each way, placed above slab mid-height with preferably about 1-1/2 to 2 inches of clear cover. Means should be provided to maintain reinforcement location during construction and concrete placement.

Proper concrete placement in accordance with applicable specifications and curing of concrete slabs inhibits moisture migration. The concrete slab water-cement ratio should be maintained during concrete mixing and placement. ACI 302.2R-306 (2006, pg. 37) indicates that water-cement ratios in the range of 0.4 to 0.5 with a compressive strength not less than 4,000 psi may provide a reasonable drying time; however, the architect and design engineer should select the desired concrete properties based on the concrete slab-on-grade performance requirements.

5.8.3 Vapor Barrier

A vapor barrier should be provided directly beneath slabs, especially those with floor coverings, to reduce the potential for vapor moisture migration from the subgrade up through the slab. Preferably, the vapor barrier should extend beneath footings and grade beams; however, because of design and construction difficulties, placement of the vapor barrier beneath footings and grade beams is left to the discretion of the design engineer. The vapor barrier should conform to a Class A per Table 1 of ASTM E 1745 with the following modifications:

- The perm rating per ASTM E 96 should be no greater than 0.01 perms.
- The puncture resistance per ASTM 1709 should be no less than 2400 grams.

The recommended vapor barrier characteristics and the associated puncture resistance and tensile strength should allow placement of the vapor barrier material directly on the capillary break, described below. Vapor barrier installation procedures, including over-laps, seams, and sealing at penetrations or service openings, should conform to ASTM E 1643, modified as appropriate based on written recommendations from the vapor barrier manufacturer.

A sample specification is available from http://www.stegoindustries.com/specifications, for the Option 3 Vapor Barrier (non-proprietary) case. Stego Industry products or equivalent can be used as vapor barriers.

5.8.4 Capillary Break Below Vapor Barrier

The capillary break, beneath the vapor barrier, should consist of three inches of clean, angular, crushed gravel conforming to ASTM C33, Grade 67, placed on the select fill subgrade. The gravel should be lightly vibrated with three to four passes of a base-plate compactor or smooth-wheel vibratory roller.

5.9 Pavement Design

Structural sections were estimated for asphalt concrete pavements for a range of traffic indices (TI) from five to seven.

Structural sections for asphalt concrete pavements were estimated based on methods presented in the Caltrans Highway Design Manual. Structural section recommendations for flexible two-layer pavements, asphalt concrete (AC) over aggregate base (AB), are provided in Table 11 below. One R-value test was performed as part of this study on materials within the upper 5 feet and resulted in an R-value of 18. Additional R-value testing should be performed prior to construction to confirm subgrade durability and revise the pavement structural section appropriately, if needed.

Table 13. Asphalt Concrete Pavement Recommendations for R-value of 18

Traffic Index	Structural Section Thickness (inches)
5	3” AC over 7.5” AB
6	3.5” AC over 10.0” AB
7	4” AC over 12.5” AB

Compacted fill should be placed to the proposed subgrade level as described herein. Pavement materials should conform to Sections 26 and 39 of the Caltrans Standard Specifications (or equivalent) for aggregate base (AB) and asphalt concrete (AC), respectively. Base materials placed in the pavement areas should be compacted to at least 95 percent relative compaction.

Maintenance of asphalt concrete pavements should consist of periodic fog or slurry seals to reduce the potential for weathering.

5.10 Corrosion Considerations

Corrosivity testing was performed on two selected samples obtained from the field exploration program by Capco Analytical Services of Ventura, California. The results of the testing are presented in Appendix B. The corrosion tests were performed in accordance with Caltrans test methods.

Minimum resistivity values ranged between 5,400 and 7,900 ohm-cm. pH values ranged between 7.9 to 8.6. Chloride content tests ranged from 11 to 29 parts per million (ppm). Soluble sulfate ranged from 82 to 100 ppm. The results of the corrosion testing should be considered in the design of concrete substructures and utilities. According to the Caltrans Corrosion Guidelines, a corrosive area is defined where the soil and/or water contains more than 500 ppm of chlorides, more than 2,000 ppm of sulfates, has a minimum resistivity of less than 1,000 ohm-cm, or has a pH less than 5.5. The resistivity test results indicate that the materials tested have low corrosive potential.

6. CONTINUATION OF SERVICES

The geotechnical evaluation consists of an ongoing process involving the planning, design, and construction phases of the project. To provide this continued service, we recommend that the geotechnical engineer be provided the opportunity to review the project plans and specifications, and observe portions of the construction.

6.1 Review of Plans and Specifications

The geotechnical engineer should review the foundation and grading plans for the project. The purpose of the review is to evaluate if the plans and specifications were prepared in general accordance with the recommendations of this report.

6.2 Geotechnical Observation and Testing

Field exploration and site reconnaissance provides only a limited view of the geotechnical conditions of the site. Substantially more information will be revealed during the excavation and grading phases of the construction. Subsurface conditions, excavations and fill placement should be observed by the geotechnical professional during construction to evaluate if the materials encountered during construction are consistent with those assumed for this report.

7. REFERENCES

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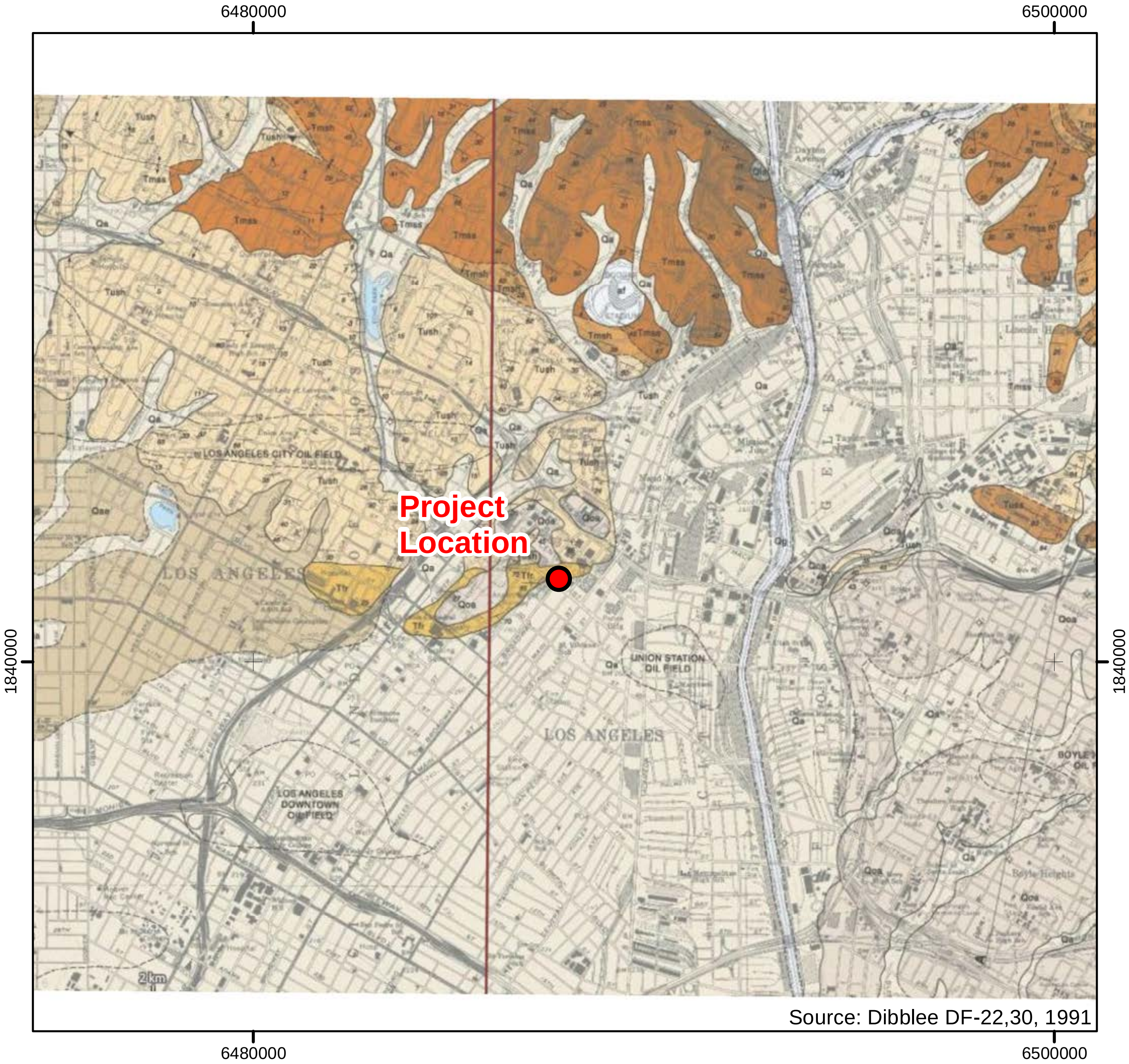
PLATES

Studio-MLA
Project No. 04.61170028



Source: Dibblee DF-22,30, 1991

Legend

▨ Qa = Surficial Sediments, Holocene

▨ Qae = Older Surficial Sediments, late Pleistocene

▨ Tush = Unnamed Shale, late Miocene

▨ Tfr = Fernando Formation, early Pliocene

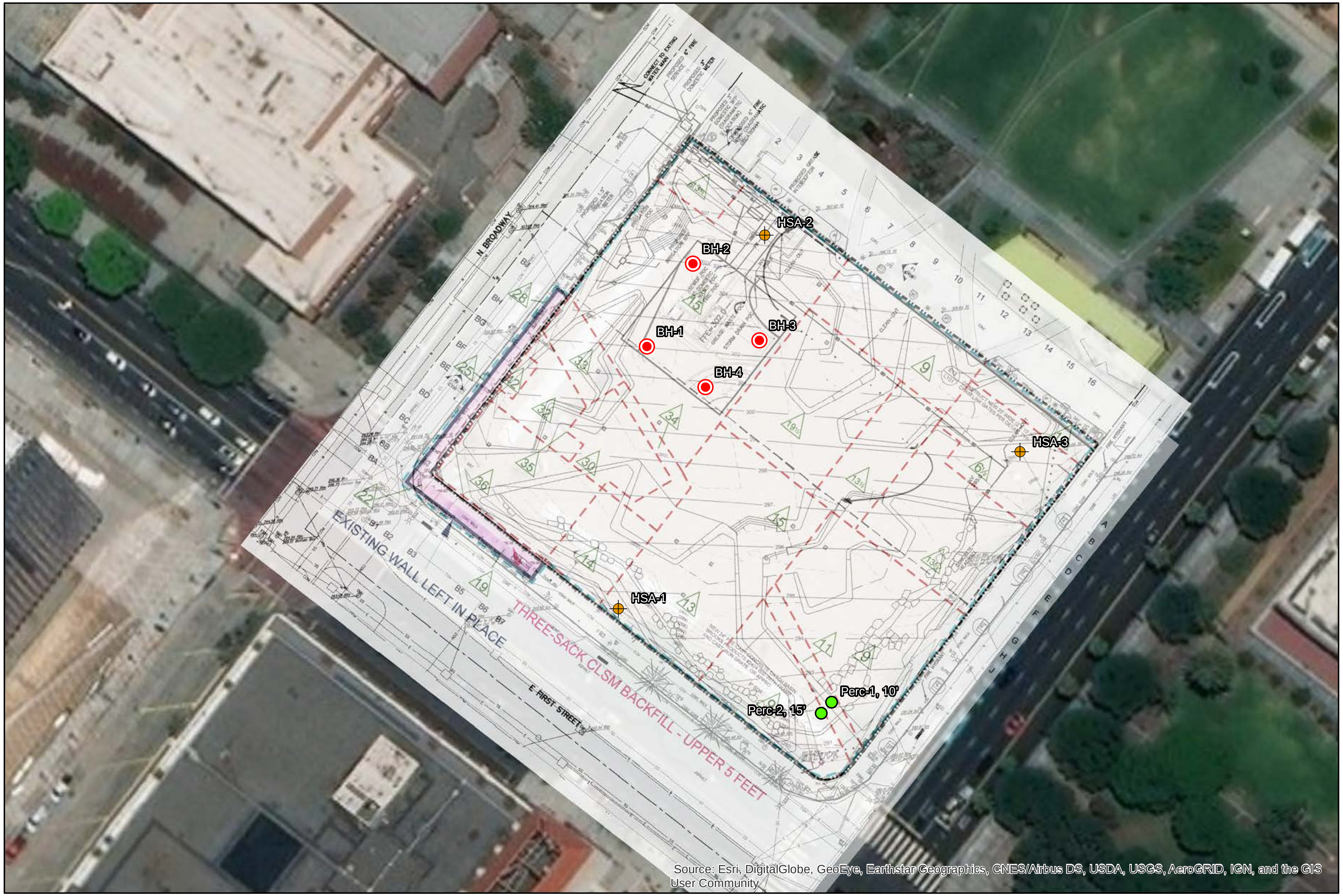
▨ Tmss= Monterey Formation, late Miocene

VICINITY AND GEOLOGY MAP

First and Broadway Park
Los Angeles, California

PLATE 1

N:\Projects\04_2017\04_6117_0028_First_and_Broadway\Outputs\Working\mxd\Plate1_VicinityGeologyMap.mxd, 2/14/2018, d.thornhill



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- ◉ Approximate Exploration Locations, this study
- ● Approximate Percolation Test Locations, this study
- ⊕ Approximate Exploration Locations, Geocon (2014a)
- △ Approximate Structural Fill Depths (ft), Geocon (2014b)

N

1:800

0 40 80 Feet

Exploration Location Map
First and Broadway Park
Los Angeles, California

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APPENDIX A
SUBSURFACE EXPLORATION LOGS

LOCATION: N 34.05392 W 118.24485
lat/long

SURFACE EL: 302 ft +/- (rel. WGS84 datum)

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
						ARTIFICIAL FILL (af) Clayey SAND (SC): medium dense to dense, reddish brown, moist, fine to coarse sand, little fines							
300	2												
			S1		37				9				
298	4												
			R2		(70)		135	130	4				
296	6												
						- dark brown, some fines, little gravel to 1", brick fragments							
			S3		27				11	45			
294	8												
						- reddish brown, little fines, no gravel or brick fragments observed at 10' bgs							
292	10												
			S4		34				9				
290	12					Sandy lean CLAY (CL): hard, dark brown, moist, little fine to coarse sand, little gravel to 3/4"							
			S5		13				17				p 4.5+
288	14												
						ALLUVIUM (Qa) Lean CLAY with sand (CL): hard, dark brown, moist, little fine to coarse sand							
			R6		(32)		136	115	18	82	35	23	p 4.5
286	16												
284	18					Poorly graded SAND with silt (SP-SM): very dense, gray, moist, fine to coarse sand, few fines, few rounded gravel to 3/4"							
282	20												
			S7		73				6				
280	22												
					▼	Poorly graded SAND with silt and gravel (SP-SM): very dense, gray, wet, fine to coarse sand, little rounded to subangular gravel to 1", few fines							
278	24												
			S8		92 ▽				6				
276	26												

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 51.5 ft
DEPTH TO WATER: 23.7 ft
BACKFILLED WITH: Cement grout
DRILLING DATE: November 30, 2017

DRILLING METHOD: 8-inch-dia. Hollow Stem Auger
HAMMER TYPE: Automatic Trip
DRILLED BY: Martini Drilling
LOGGED BY: J. Hogendorn
CHECKED BY: M Pollard

LOG OF DRILL HOLE NO. BH-1

First and Broadway Park
Los Angeles, California

PLATE A-1a

LOCATION: N 34.05392 W 118.24485
lat/long

SURFACE EL: 302 ft +/- (rel. WGS84 datum)

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
		▨				**FERNANDO FORMATION (Tfr)** CLAYSTONE (Rx): soft, gray, wet							
272	30	▨	S9	☒	35				33				p 4.5+
270	32	▨											
268	34	▨											
		▨	R10	▨	(70)		120	90	33				p 4.5+
266	36	▨											
264	38	▨											
262	40	▨	S11	☒	42				33				p 4.5+
260	42	▨											
258	44	▨											
		▨	S12	☒	40				35				p 4.5+
256	46	▨											
254	48	▨											
252	50	▨	R13	▨	(50/4")		116	86	35				
250	52												
248	54												

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 51.5 ft
DEPTH TO WATER: 23.7 ft
BACKFILLED WITH: Cement grout
DRILLING DATE: November 30, 2017

DRILLING METHOD: 8-inch-dia. Hollow Stem Auger
HAMMER TYPE: Automatic Trip
DRILLED BY: Martini Drilling
LOGGED BY: J. Hogendorn
CHECKED BY: M Pollard

LOG OF DRILL HOLE NO. BH-1
First and Broadway Park
Los Angeles, California

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	LOCATION: N 34.05406 W 118.24476 lat/long SURFACE EL: 305 ft +/- (rel. WGS84 datum) MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
						ARTIFICIAL FILL (af) Clayey SAND (SC): dense, reddish brown, moist, fine to coarse sand, little fines, few angular gravel to 1.25"							
304													
	2												
302													
	4												
300			S1	☒	37				9	25			
	6												
298													
	8					- dark brown, few gravel to 3/4"							
296													
	10		S2	☒	30				12	48			
294													
	12												
292						**ALLUVIUM (Qa)** Clayey SAND (SC): dense, brown, some fines							
	14												
290			S3	☒	40				9				
	16												
288													
	18					Poorly graded SAND (SP): dense to very dense, gray, moist, mostly medium sand, trace gravel to 1/2", trace fines							
286													
	20		S4	☒	49				6				
284													
	22												
282													
	24												
280			S5	☒	56	- few angular gravel to 3/4"			8				
	26												
278													

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 26.5 ft
DEPTH TO WATER: Not Encountered
BACKFILLED WITH: Cement grout
DRILLING DATE: November 30, 2017

DRILLING METHOD: 8-inch-dia. Hollow Stem Auger
HAMMER TYPE: Automatic Trip
DRILLED BY: Martini Drilling
LOGGED BY: J. Hogendorn
CHECKED BY: M Pollard

LOG OF DRILL HOLE NO. BH-2

First and Broadway Park
Los Angeles, California

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	LOCATION: N 34.05393 W 118.24462 lat/long SURFACE EL: 303 ft +/- (rel. WGS84 datum) MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
302	2					**ARTIFICIAL FILL (af)** Clayey SAND (SC): medium dense, reddish brown, moist, fine to coarse sand, little fines, trace gravel to 1/2"							
300	4		S1	☒	27				9				
298	6		S2	☒	19				9				
296	8		R3	▨	(29)		132	111	19				p 3.5
294						Sandy Lean CLAY (CL): very stiff, dark brown, moist, some fine to coarse sand, few gravel to 3/4"							
292	10 12		S4	☒	65	Clayey SAND (SC): very dense, dark brown, moist, coarse to fine sand, some fines, few angular gravel to 3/4"			11				
290	14		R5	▨	(29)	Sandy Lean CLAY (CL): very stiff, dark brown, moist, some fine to coarse sand, few gravel to 3/4"	128	113	13				
288 286	16 18		S6	☒	18	**ALLUVIUM (Qa)** Lean CLAY (CL): very stiff, dark brown, moist, few fine sand, trace gravel			16		31	18	p 3.0
284 282	20 22		S7	☒	50	Poorly graded SAND with clay and gravel (SP-SC): very dense, brown, moist, coarse to fine sand, little angular gravel to 1", few to little fines			6	13			
280 278 276	24 26		S8	☒	▽ 50/4"	Poorly graded SAND (SP): very dense, gray, moist to wet, mostly medium sand, few gravel to 3/4"			8				

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 31.5 ft
DEPTH TO WATER: 24.7 ft
BACKFILLED WITH: Cement grout
DRILLING DATE: November 30, 2017

DRILLING METHOD: 8-inch-dia. Hollow Stem Auger
HAMMER TYPE: Automatic Trip
DRILLED BY: Martini Drilling
LOGGED BY: J. Hogendorn
CHECKED BY: M Pollard

LOG OF DRILL HOLE NO. BH-3

First and Broadway Park
Los Angeles, California

LOCATION: N 34.05393   W 118.24462
lat/long

SURFACE EL: 303 ft +/- (rel. WGS84 datum)

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
		▨				**FERNANDO FORMATION (Tfr)** CLAYSTONE (Rx): soft, gray, wet							
274		▨											
	30	▨	S9	☒	19				34				p 4.5+
272													
	32												
270													
	34												
268													
	36												
266													
	38												
264													
	40												
262													
	42												
260													
	44												
258													
	46												
256													
	48												
254													
	50												
252													
	52												
250													
	54												
248													

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 31.5 ft
DEPTH TO WATER: 24.7 ft
BACKFILLED WITH: Cement grout
DRILLING DATE: November 30, 2017

DRILLING METHOD: 8-inch-dia. Hollow Stem Auger
HAMMER TYPE: Automatic Trip
DRILLED BY: Martini Drilling
LOGGED BY: J. Hogendorn
CHECKED BY: M Pollard

LOG OF DRILL HOLE NO. BH-3

First and Broadway Park
Los Angeles, California

LOCATION: N 34.05385 W 118.24473
lat/long

SURFACE EL: 301 ft +/- (rel. WGS84 datum)

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
			Bulk			**ARTIFICIAL FILL (af)** Clayey SAND (SC): medium dense to dense, dark brown, moist, fine to coarse sand, little fines, few rounded gravel to 3/4"							
			S1		24				12				
			S2		38	- reddish brown			13				
						ALLUVIUM (Qa) Poorly graded SAND with clay and gravel (SP-SC): very dense, light brown, moist, coarse to fine sand, little subrounded gravel to 1", few to little fines							
			S3		67				4	12			
			S4		77	- brown with light gray gravel			5				

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 21.5 ft
DEPTH TO WATER: Not Encountered
BACKFILLED WITH: Cement grout
DRILLING DATE: November 30, 2017

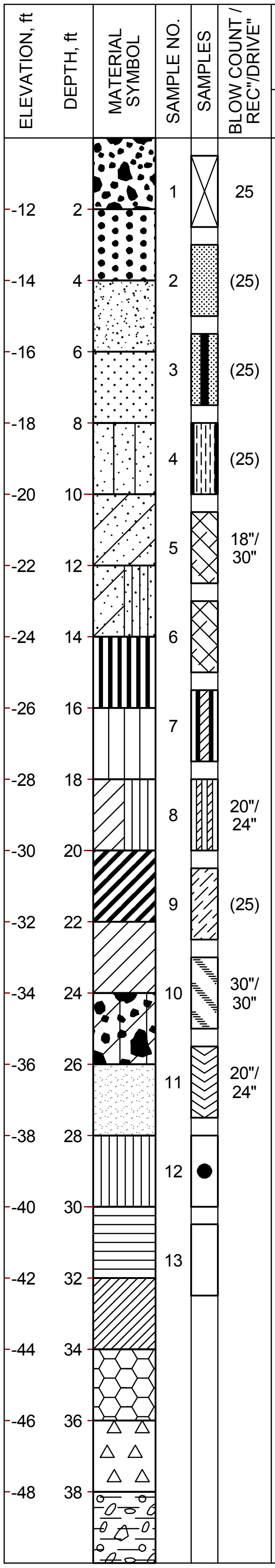
DRILLING METHOD: 8-inch-dia. Hollow Stem Auger
HAMMER TYPE: Automatic Trip
DRILLED BY: Martini Drilling
LOGGED BY: J. Hogendorn
CHECKED BY: M Pollard

LOG OF DRILL HOLE NO. BH-4

First and Broadway Park
Los Angeles, California

LOCATION: The drill hole location referencing local landmarks or coordinates

SURFACE EL: Using local, MSL, MLLW or other datum



MATERIAL DESCRIPTION	
Well graded GRAVEL (GW)	COARSE GRAINED
Poorly graded GRAVEL (GP)	
Well graded SAND (SW)	
Poorly graded SAND (SP)	
Silty SAND (SM)	
Clayey SAND (SC)	
Silty, Clayey SAND (SC-SM)	
Elastic SILT (MH)	FINE GRAINED
SILT (ML)	
Silty CLAY (CL-ML)	
Fat CLAY (CH)	
Lean CLAY (CL)	
CONGLOMERATE	ROCK
SANDSTONE	
SILTSTONE	
MUDSTONE	
CLAYSTONE	
BASALT	
ANDESITE BRECCIA	
Paving and/or Base Materials	

General Notes

Soil Texture Symbol

Sloped line in symbol column indicates transitional boundary

Samplers and sampler dimensions
(unless otherwise noted in report text) are as follows:

Symbol for:	
1	SPT Sampler, driven 1-3/8" ID, 2" OD
2	CA Liner Sampler, driven 2-3/8" ID, 3" OD
3	CA Liner Sampler, disturbed 2-3/8" ID, 3" OD
4	Thin-walled Tube, pushed 2-7/8" ID, 3" OD
5	Bulk Bag Sample (from cuttings)
6	CA Liner Sampler, Bagged
7	Hand Auger Sample
8	CME Core Sample
9	Pitcher Sample
10	Lexan Sample
11	Vibracore Sample
12	No Sample Recovered
13	Sonic Soil Core Sample

Sampler Driving Resistance

Number of blows with 140 lb. hammer, falling 30" to drive sampler 1 ft. after seating sampler 6"; for example,

Blows/ft	Description
25	25 blows drove sampler 12" after initial 6" of seating
86/11"	After driving sampler the initial 6" of seating, 36 blows drove sampler through the second 6" interval, and 50 blows drove the sampler 5" into the third interval
50/6"	50 blows drove sampler 6" after initial 6" of seating
Ref/3"	50 blows drove sampler 3" during initial 6" seating interval

Blow counts for California Liner Sampler shown in ( )

Length of sample symbol approximates recovery length

Classification of Soils per ASTM D2487 or D2488

Geologic Formation noted in bold font at the top of interpreted interval

Strength Legend

Q = Unconfined Compression
u = Unconsolidated Undrained Triaxial
t = Torvane
p = Pocket Penetrometer
m = Miniature Vane

Water Level Symbols

▽	Initial or perched water level
▼	Final ground water level
∿	Seepages encountered

Rock Quality Designation (RQD) is the sum of recovered core pieces greater than 4 inches divided by the length of the cored interval.

KEY TO TERMS & SYMBOLS USED ON LOGS

PLATE A-5

PROJECT NO. A8950-06-01

HSA - 1

ELEV. (MSL.) 294.5 DATE COMPLETED 10/03/13

EQUIPMENT HOLLOW STEM AUGER BY: CHL

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	Bulk 0-2				**Latitude: 34.0535, Longitude: -118.2449** **ARTIFICIAL FILL** Sandy Silt and Silty Sand, soft to loose, dry, brown, fine-grained with trace medium- to coarse-grained, trace fine gravel			
2	@2.5 0.0 ppm 0.0% LEL					21	76.9	5.4
4					Sandy Silt, soft, moist, mottled olive brown and yellowish brown, fine-grained, trace fine gravel			
6	@5 155 ppm 0.0% LEL					7	- -	11.6
					Sandy Silt and Silty Sand, firm to loose, slightly moist, mottled brown to dark brown to yellowish brown, fine- to coarse-grained, trace fine gravel, some concrete and asphalt fragments			
8	@7.5 320 ppm 0.0% LEL					12	105.9	6.7
					-Some brick fragments			
10	@10 98 ppm 0.0% LEL					6	- -	19.3
12	@12.5 12 ppm 0.0% LEL					19	105.7	12.2
14				SP-SM	**ALLUVIUM** Sand with Silt, poorly graded, medium dense, slightly moist, yellowish brown, fine- to medium-grained, trace fine gravel			
16	@15 15 ppm 0.0% LEL					24	- -	5.4
18	@17.5 3.0 ppm 0.0% LEL					88	- -	1.2
					-Abundant fine gravel, cobble			
20	@20 14 ppm 0.0% LEL					79	- -	14.9
22					**FERNANDO FORMATION** Siltstone, poorly bedded, massive, highly weathered, slightly to moderately fractured, soft, moist, dark brownish gray to black, unoxidized, trace shell fragments			
24	@22.5 0.0 ppm 0.0% LEL					42	75.6	40.2
26	@25 1.1 ppm 0.0% LEL					28		33.2
28	@27.5 0.0 ppm 0.0% LEL					53	80.5	33.8

A8950-06-01 A1-A3 BORING LOGS.GPJ

Figure A1,
Log of HSA - 1, Page 1 of 3

SAMPLE SYMBOLS			
	☐ ... SAMPLING UNSUCCESSFUL	◧ ... STANDARD PENETRATION TEST	■ ... DRIVE SAMPLE (UNDISTURBED)
	☒ ... DISTURBED OR BAG SAMPLE	◪ ... CHUNK SAMPLE	▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

PROJECT NO. A8950-06-01

HSA - 1

ELEV. (MSL.) **294.5** DATE COMPLETED **10/03/13**

EQUIPMENT **HOLLOW STEM AUGER** BY: **CHL**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	@30 10.0 ppm 0.0% LEL					29	- -	35.5
32								
	@32.5 8.0 ppm 0.0% LEL					79	80.9	33.7
34								
	@35 60 ppm 0.0% LEL					36	- -	34.9
36								
38								
40	@40 0.0 ppm 0.0%					31	82.1	32.4
42								
44								
	@45 0.0 ppm 0.0%					42	- -	35.8
46								
48								
50	@50 61 ppm 0.0%					45	80.5	33.3
52								
54					-Highly fractured			
	@55 41 ppm 0.0%					13	- -	35.0
56								
58								

Figure A1,
Log of HSA - 1, Page 2 of 3

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL
◧ ... STANDARD PENETRATION TEST
■ ... DRIVE SAMPLE (UNDISTURBED)
☒ ... DISTURBED OR BAG SAMPLE
◩ ... CHUNK SAMPLE
▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

PROJECT NO. A8950-06-01

HSA - 1

ELEV. (MSL.) **294.5** DATE COMPLETED **10/03/13**

EQUIPMENT **HOLLOW STEM AUGER** BY: **CHL**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
60	@60 25 ppm 0.0%	■ ▥				53	78.6	35.9
					End boring at 60.5 feet. Artificial fill to 14 feet. No groundwater encountered. Backfilled with soil cuttings and tamped. Ground surface restored. *Penetration resistance for 140 pound hammer falling 30 inches by auto-hammer.			

Figure A1,
Log of HSA - 1, Page 3 of 3

A8950-06-01 A1-A3 BORING LOGS.GPJ

SAMPLE SYMBOLS

- ☐ ... SAMPLING UNSUCCESSFUL
- ⊠ ... DISTURBED OR BAG SAMPLE
- ◧ ... STANDARD PENETRATION TEST
- ◣ ... CHUNK SAMPLE
- ■ ... DRIVE SAMPLE (UNDISTURBED)
- ▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

PROJECT NO. A8950-06-01

HSA - 2

ELEV. (MSL.) **297.5** DATE COMPLETED **10/04/13**

EQUIPMENT **HOLLOW STEM AUGER** BY: **CHL**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	Bulk 0-2				**Latitude: 34.0540, Longitude: -118.2446** **Concrete: 4 inches No Base**			
2	@2.5 0.0 ppm 0.0% LEL			CL	**ARTIFICIAL FILL** Sandy Silt and Clay with Sand, firm, moist, mottled dark brown to olive brown, fine- to medium-grained, trace fine gravel	18	- -	14.4
4					**ALLUVIUM** Clay with Sand, firm, moist, olive brown with dark yellow oxidation staining, fine-grained			
6	@5 0.0 ppm 0.0% LEL				Silt with Sand, stiff, moist, olive brown, fine-grained, slightly porous, trace fine-gravel, high plasticity -Trace calcium carbonate deposits, some dark yellowish brown oxidation staining, moderate plasticity	35	95.9	15.7
8	@7.5 0.0 ppm 0.0% LEL			ML		30	- -	17.1
					-Yellowish brown			
10	@10 0.0 ppm 0.0% LEL				-Sandy Silt, stiff, moist, dark yellowish brown, fine-grained, low to moderate plasticity	28	109.9	16.3
12	@12.5 0.0 ppm 0.0% LEL			SM	Silty Sand, medium dense, moist, yellowish brown, fine- to medium-grained with trace coarse-grained, trace fine gravel	27	- -	8.2
14				SP-SM	Sand with Silt, poorly graded, medium dense, slightly moist, light yellowish brown, fine- to medium-grained, trace fine gravel -Dark yellowish brown to yellow			
16	@15 0.0 ppm 0.0% LEL					40	114.3	4.1
18	@17.5 0.0 ppm 0.0% LEL			SW-SM	Sand with Silt and Gravel, well graded, dense, moist, brown to yellowish brown, fine gravel -Cobble -Minor seepage encountered at 19.7 to 20.0 feet along the bedrock contact	73	- -	4.4
20	@20 0.0ppm 0.0% LEL				**FERNANDO FORMATION** Siltstone, poorly bedded, massive, highly weathered, slightly fractured, soft, moist, yellowish brown to olive brown -Dark brownish gray to black, unoxidized -Trace shell fragments	33	85.3	33.0
22	@22.5 0.0 ppm 0.0% LEL					21	- -	33.0
24								
26	@25 0.0 ppm 0.0% LEL					52	87.0	30.0
28	@27.5 0.0 PPM 0.0% LEL					25	- -	32.0

A8950-06-01 A1-A3 BORING LOGS.GPJ

Figure A2,
Log of HSA - 2, Page 1 of 3

SAMPLE SYMBOLS			
	☐ ... SAMPLING UNSUCCESSFUL	◧ ... STANDARD PENETRATION TEST	■ ... DRIVE SAMPLE (UNDISTURBED)
	☒ ... DISTURBED OR BAG SAMPLE	◪ ... CHUNK SAMPLE	▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

HSA - 2

ELEV. (MSL.) **297.5** DATE COMPLETED **10/04/13**

EQUIPMENT **HOLLOW STEM AUGER** BY: **CHL**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	■ @30 0.0 PPM 0.0% LEL					63	85.8	31.1
32	◧ @32.5 0.0 ppm 0.0% LEL					22	- -	31.2
34								
36	■ @35 0.0 ppm 0.0% LEL 0.0% LEL					40	88.1	29.5
38					-Dark olive gray			
40	◧ @40 0.0 ppm 0.0% LEL					25	- -	28.8
42								
44								
46	■ @45 0.0 ppm 0.0% LEL					52	92.0	26.6
48								
50	◧ @50 0.0 ppm 0.0% LEL					29	- -	29.1
52								
54								
56	■ @55 0.0 ppm 0.0% LEL					61	88.8	30.5
58								
	■							

A8950-06-01 A1-A3 BORING LOGS.GPJ

Figure A2,
Log of HSA - 2, Page 2 of 3

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL
◧ ... STANDARD PENETRATION TEST
■ ... DRIVE SAMPLE (UNDISTURBED)
☒ ... DISTURBED OR BAG SAMPLE
◩ ... CHUNK SAMPLE
▼ ... WATER TABLE OR SEEPAGE

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PROJECT NO. A8950-06-01

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	**HSA - 2** ELEV. (MSL.) **297.5** DATE COMPLETED **10/04/13** EQUIPMENT **HOLLOW STEM AUGER** BY: **CHL**	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					MATERIAL DESCRIPTION			
60	@60 ■ 0.0 ppm 0.0% LEL	▥			End boring at 60.5 feet. Artificial fill to 2 feet. Minor seepage encountered at 19.7 to 20.0 feet along the bedrock contact. Backfilled with soil cuttings and tamped. Ground surface restored with concrete patch. *Penetration resistance for 140 pound hammer falling 30 inches by auto-hammer.	31	- -	30.7

Figure A2,
Log of HSA - 2, Page 3 of 3

A8950-06-01 A1-A3 BORING LOGS.GPJ

SAMPLE SYMBOLS			
	☐ ... SAMPLING UNSUCCESSFUL	◧ ... STANDARD PENETRATION TEST	■ ... DRIVE SAMPLE (UNDISTURBED)
	⊠ ... DISTURBED OR BAG SAMPLE	◣ ... CHUNK SAMPLE	▼ ... WATER TABLE OR SEEPAGE

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GEOCON

PROJECT NO. A8950-06-01

HSA - 3

ELEV. (MSL.) **300.0** DATE COMPLETED **10/04/13**

EQUIPMENT **HOLLOW STEM AUGER** BY: **CHL**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	Bulk 0-2				**Latitude: 34.0537, Longitude: -118.2440** **Asphalt 3.5 inches No Base**			
2					**ARTIFICIAL FILL** Silty Sand, loose, dry, light brown, fine-grained			
4	@2.5 3.9 ppm 0.0% LEL				Sandy Clay, firm, moist, dark brown to olive brown, fine- to medium-grained, some roots, some concrete and asphalt fragments	20	109.8	15.9
6	@5 1.9 ppm 0.0% LEL			ML	**ALLUVIUM** Silt with Sand, firm, moist, olive brown with yellowish brown oxidation staining, fine- to medium-grained, slightly porous, high plasticity	13	- -	12.4
8	@7.5 1.3 ppm 0.0% LEL			CL	Sandy Clay, stiff, moist, dark brown, fine- to coarse-grained	36	112.2	14.4
					-Fine- to medium-grained			
10	@10 3.0 ppm 0.0% LEL					15	- -	15.3
12 14	@12.5 1.0 ppm 0.0% LEL			ML	Sandy Silt, firm, moist, yellowish brown, fine-grained, moderate plasticity	13	109.7	13.8
16	@15 0.9 ppm 0.0% LEL			SM	Silty Sand, dense, moist, yellowish brown, fine-grained	22	- -	11.1
				ML	Sandy Silt, stiff, moist, yellowish brown, fine-grained			
18	@17.5 0.0 ppm 0.0% LEL			SW-SM	Sand with Silt and Gravel, dense, yellowish brown, fine-gravel	63	112.8	4.8
20	@20 14 ppm 0.0% LEL					70	- -	5.5
22					-Moderate seepage encountered at 21.0 to 23.0 feet along the bedrock contact			
	@22.5 9.0 ppm 0.0% LEL					58	120.6	11.7
24					**FERNANDO FORMATION** Siltstone, poorly bedded, massive, highly weathered, slightly fractured, soft, moist, yellowish brown to olive brown			
26	@25 41 ppm 0.0% LEL					17	- -	28.1
28	@27.5 10.0 ppm 0.0% LEL					24	89.0	30.1

Figure A3,
Log of HSA - 3, Page 1 of 3

A8950-06-01 A1-A3 BORING LOGS.GPJ

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL
◧ ... STANDARD PENETRATION TEST
■ ... DRIVE SAMPLE (UNDISTURBED)
☒ ... DISTURBED OR BAG SAMPLE
◪ ... CHUNK SAMPLE
▼ ... WATER TABLE OR SEEPAGE

PROJECT NO. A8950-06-01

HSA - 3

ELEV. (MSL.) **300.0** DATE COMPLETED **10/04/13**

EQUIPMENT **HOLLOW STEM AUGER** BY: **CHL**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	◧ @30 0.0 ppm 0.0% LEL					25	- -	29.3
32								
	■ @32.5 0.0 ppm 0.0% LEL					11	88.1	29.8
34					-Dark brownish gray to black, unoxidized, trace shell fragments			
	◧ @35 0.0 ppm 0.0% LEL					31	- -	29.8
36								
38								
40	■ @40 0.0 ppm 0.0%					43	87.4	30.6
42								
44								
	◧ @45 0.9 ppm 0.0%					36	- -	31.0
46								
48								
50	■ @50 0.0 ppm 0.0%					43	81.8	33.8
52								
54								
	◧ @55 0.0 ppm 0.0%					36	- -	31.2
56								
58								

A8950-06-01 A1-A3 BORING LOGS.GPJ

Figure A3,
Log of HSA - 3, Page 2 of 3

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL
◧ ... STANDARD PENETRATION TEST
■ ... DRIVE SAMPLE (UNDISTURBED)
▨ ... DISTURBED OR BAG SAMPLE
◪ ... CHUNK SAMPLE
▼ ... WATER TABLE OR SEEPAGE

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GEOCON

PROJECT NO. A8950-06-01

HSA - 3

ELEV. (MSL.) **300.0** DATE COMPLETED **10/04/13**

EQUIPMENT **HOLLOW STEM AUGER** BY: **CHL**

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT)*	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
60	■ @60 0.0 ppm 0.0%					62	88.6	30.8

End boring at 60.5 feet.
Artificial fill to 4.5 feet.
Moderate seepage encountered at 21.0 to 23.0 feet along the bedrock contact.
Backfilled with soil cuttings and tamped.
Ground surface restored with concrete patch.

*Penetration resistance for 140 pound hammer falling 30 inches by auto-hammer.

Figure A3,
Log of HSA - 3, Page 3 of 3

A8950-06-01 A1-A3 BORING LOGS.GPJ

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL
◧ ... STANDARD PENETRATION TEST
■ ... DRIVE SAMPLE (UNDISTURBED)
⊠ ... DISTURBED OR BAG SAMPLE
◪ ... CHUNK SAMPLE
▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

GEOCON

APPENDIX B
LABORATORY TEST RESULTS

DRILL HOLE	DEPTH, ft	SAMPLE NUMBER	MATERIAL DESCRIPTION	UWW pcf	UDW pcf	MC %	FINES %	ATTERBERG LIMITS		COMPACTION TEST		DIRECT SHEAR		COMPRESSIVE STRENGTH TESTS		CORROSIVITY TESTS				R-VALUE	EXPANSION INDEX	SAND EQUIVALENT (SE)	Specific Gravity
								LL	PI	MAX DD pcf	OPT MC %	C ksf	PHI deg	Qu, ksf	S_u (Cell Prs.) ksf	R	pH	Cl	So_4 (ppm)				
BH-1	2.5	S1	Clayey SAND (SC)			9																	
BH-1	5.0	R2	Clayey SAND (SC)	135	130	4										7900	8.00	11	82.0		0.0		
BH-1	7.5	S3	Clayey SAND (SC)			11	45																
BH-1	10.0	S4	Clayey SAND (SC)			9																	
BH-1	12.5	S5	Sandy lean CLAY (CL)			17																	
BH-1	15.0	R6	Lean CLAY with sand (CL)	136	115	18	82	35	23														
BH-1	20.0	S7	Poorly graded SAND with silt (SP-SM)			6																	
BH-1	25.0	S8	Poorly graded SAND with silt and gravel (SP-SM)			6																	
BH-1	30.0	S9	CLAYSTONE (Rx)			33																	
BH-1	35.0	R10	CLAYSTONE (Rx)	120	90	33																	
BH-1	40.0	S11	CLAYSTONE (Rx)			33																	
BH-1	45.0	S12	CLAYSTONE (Rx)			35																	
BH-1	50.0	R13	CLAYSTONE (Rx)	116	86	35																	
BH-2	5.0	S1	Clayey SAND (SC)			9	25																
BH-2	10.0	S2	Clayey SAND (SC)			12	48																
BH-2	15.0	S3	Clayey SAND (SC)			9																	
BH-2	20.0	S4	Poorly graded SAND (SP)			6																	
BH-2	25.0	S5	Poorly graded SAND (SP)			8																	
BH-3	2.5	S1	Clayey SAND (SC)			9																	
BH-3	5.0	S2	Clayey SAND (SC)			9																	
BH-3	7.5	R3	Sandy lean CLAY (CL)	132	111	19						0.7	43										
BH-3	10.0	S4	Clayey SAND (SC)			11																	
BH-3	12.5	R5	Sandy lean CLAY (CL)	128	113	13																	
BH-3	15.0	S6	Lean CLAY (CL)			16		31	18														
BH-3	20.0	S7	Poorly graded SAND with clay and gravel (SP-SC)			6	13																
BH-3	25.0	S8	Poorly graded SAND (SP)			8																	
BH-3	30.0	S9	CLAYSTONE (Rx)			34																	
BH-4	0.0	Bulk	Clayey SAND (SC)							130.4	8.7					5400	7.90	29	100.0				
BH-4	5.0	S1	Clayey SAND (SC)			12																	
BH-4	10.0	S2	Clayey SAND (SC)			13																	

SUMMARY OF LABORATORY TEST RESULTS

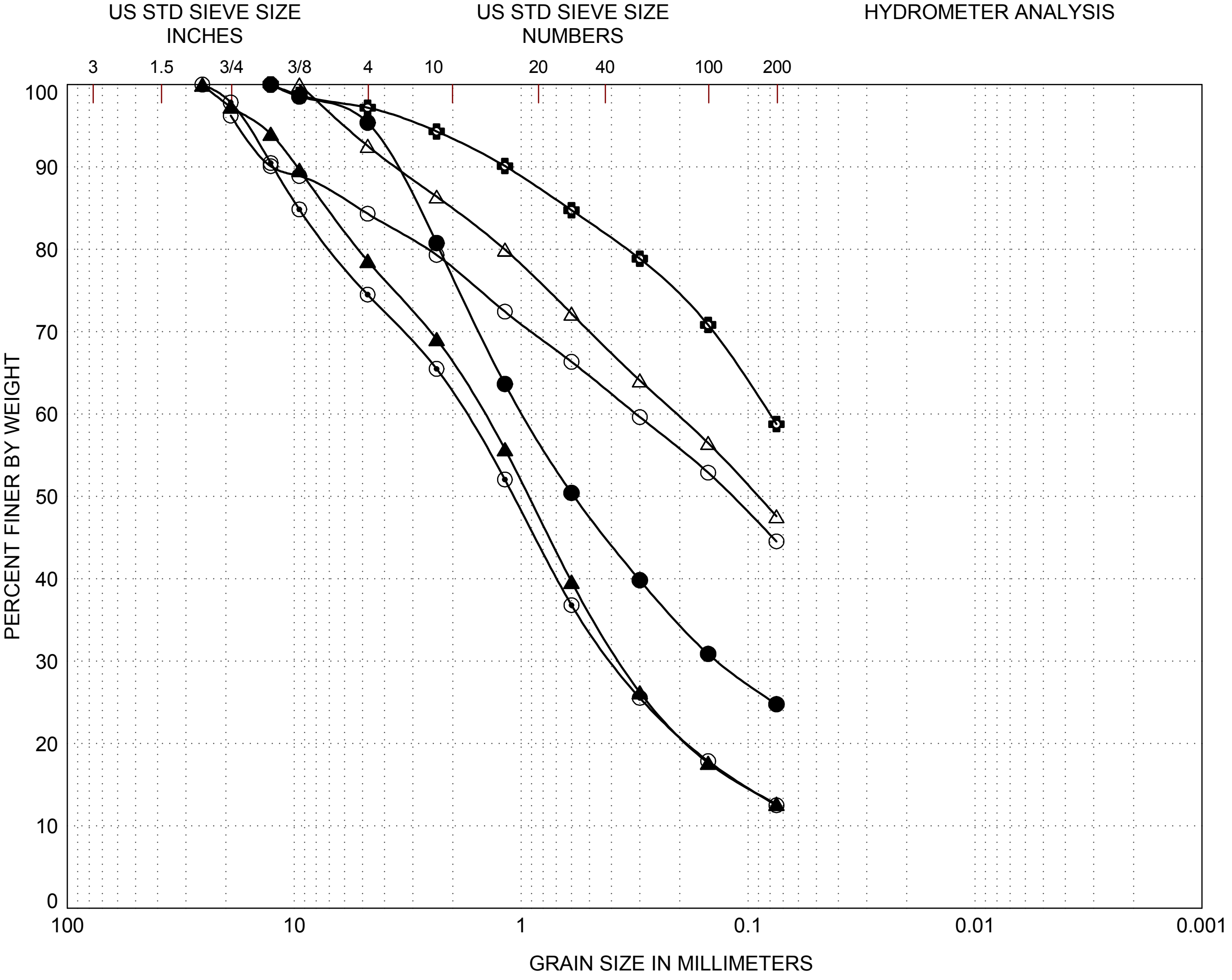
First and Broadway Park
Los Angeles, California

PLATE B-1a

DRILL HOLE	DEPTH, ft	SAMPLE NUMBER	MATERIAL DESCRIPTION	UWW pcf	UDW pcf	MC %	FINES %	ATTERBERG LIMITS		COMPACTION TEST		DIRECT SHEAR		COMPRESSIVE STRENGTH TESTS		CORROSIVITY TESTS				R-VALUE	EXPANSION INDEX	SAND EQUIVALENT (SE)	Specific Gravity
								LL	PI	MAX DD pcf	OPT MC %	C ksf	PHI deg	Qu, ksf	S_u (Cell Prs.) ksf	R	pH	Cl	So_4 (ppm)				
BH-4	15.0	S3	Poorly graded SAND with clay and gravel (SP-SC)			4	12																
BH-4	20.0	S4	Poorly graded SAND with clay and gravel (SP-SC)			5																	
Perc-1	8.5		Sandy lean CLAY (CL)			15	59																
Perc-2	13.5		Clayey SAND (SC)			7	14																

SUMMARY OF LABORATORY TEST RESULTS

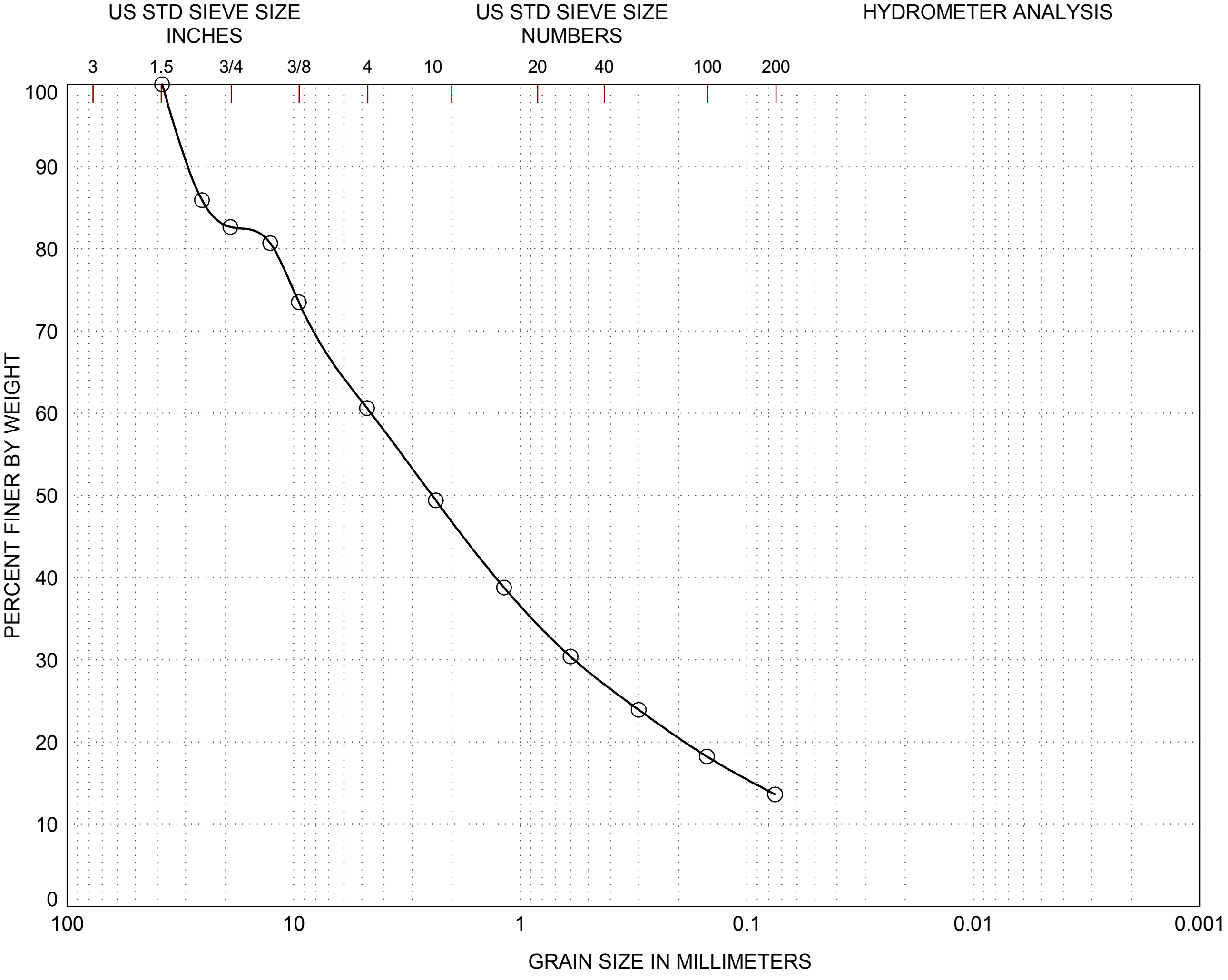
First and Broadway Park
Los Angeles, California



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

LEGEND	(location)	(depth,ft)	CLASSIFICATION	Cc	Cu
○	BH-1	7.5	Clayey SAND (SC)		
●	BH-2	5.0	Clayey SAND (SC)		
△	BH-2	10.0	Clayey SAND (SC)		
▲	BH-3	20.0	Poorly graded SAND with clay and gravel (SP-SC)		
⊙	BH-4	15.0	Poorly graded SAND with clay and gravel (SP-SC)	1.6	32.7
✿	Perc-1	8.5	Sandy lean CLAY (CL)		

GRAIN SIZE CURVES
First and Broadway Park
Los Angeles, California

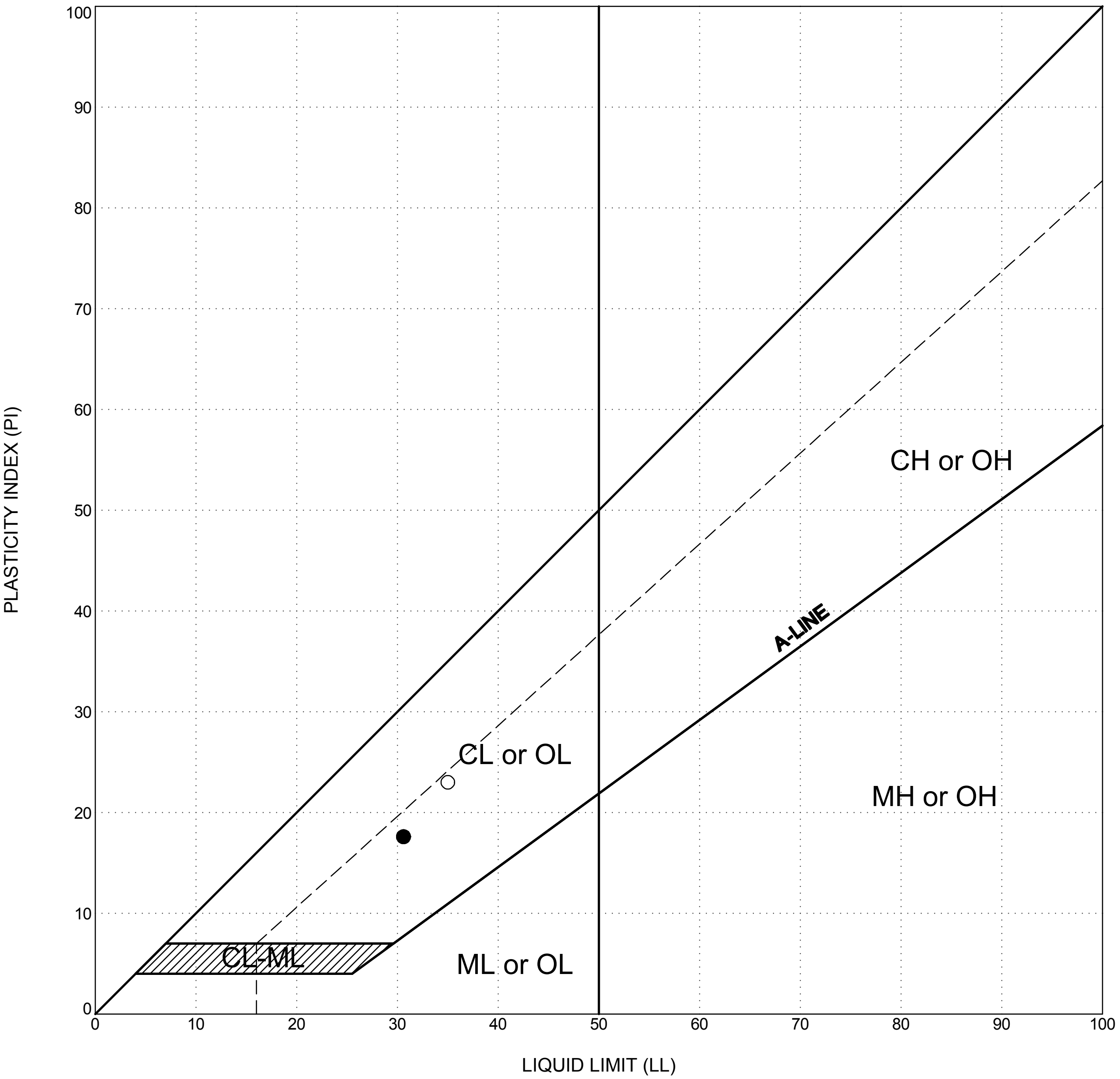


GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

LEGEND			CLASSIFICATION	Cc	Cu
	(location)	(depth,ft)			
○	Perc-2	13.5	Clayey SAND (SC)		

GRAIN SIZE CURVES
First and Broadway Park
Los Angeles, California

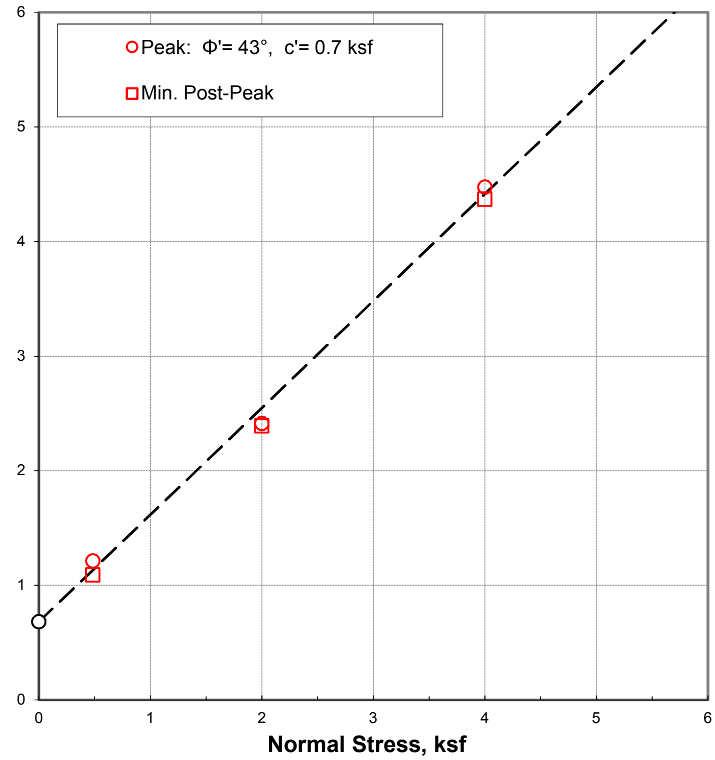
PLATE B-2b

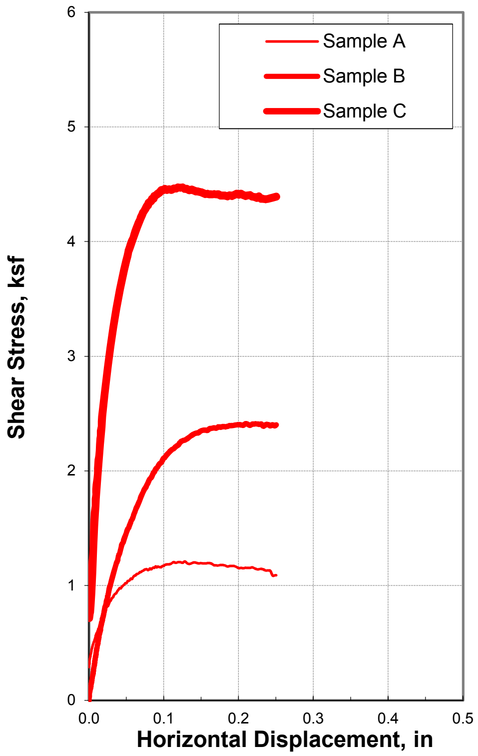


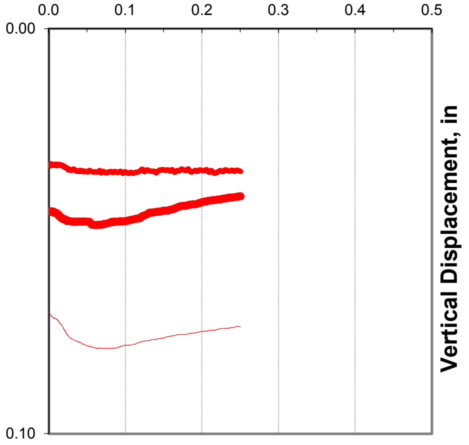
LEGEND			CLASSIFICATION	ATTERBERG LIMITS TEST RESULTS		
	location	depth, ft		LIQUID LIMIT(LL)	PLASTIC LIMIT(PL)	PLASTICITY INDEX (PI)
○	BH-1	15.0	Lean CLAY with sand (CL)	35	12	23
●	BH-3	15.0	Lean CLAY (CL)	31	13	18

PLASTICITY CHART
First and Broadway Park
Los Angeles, California

PLATE B-3





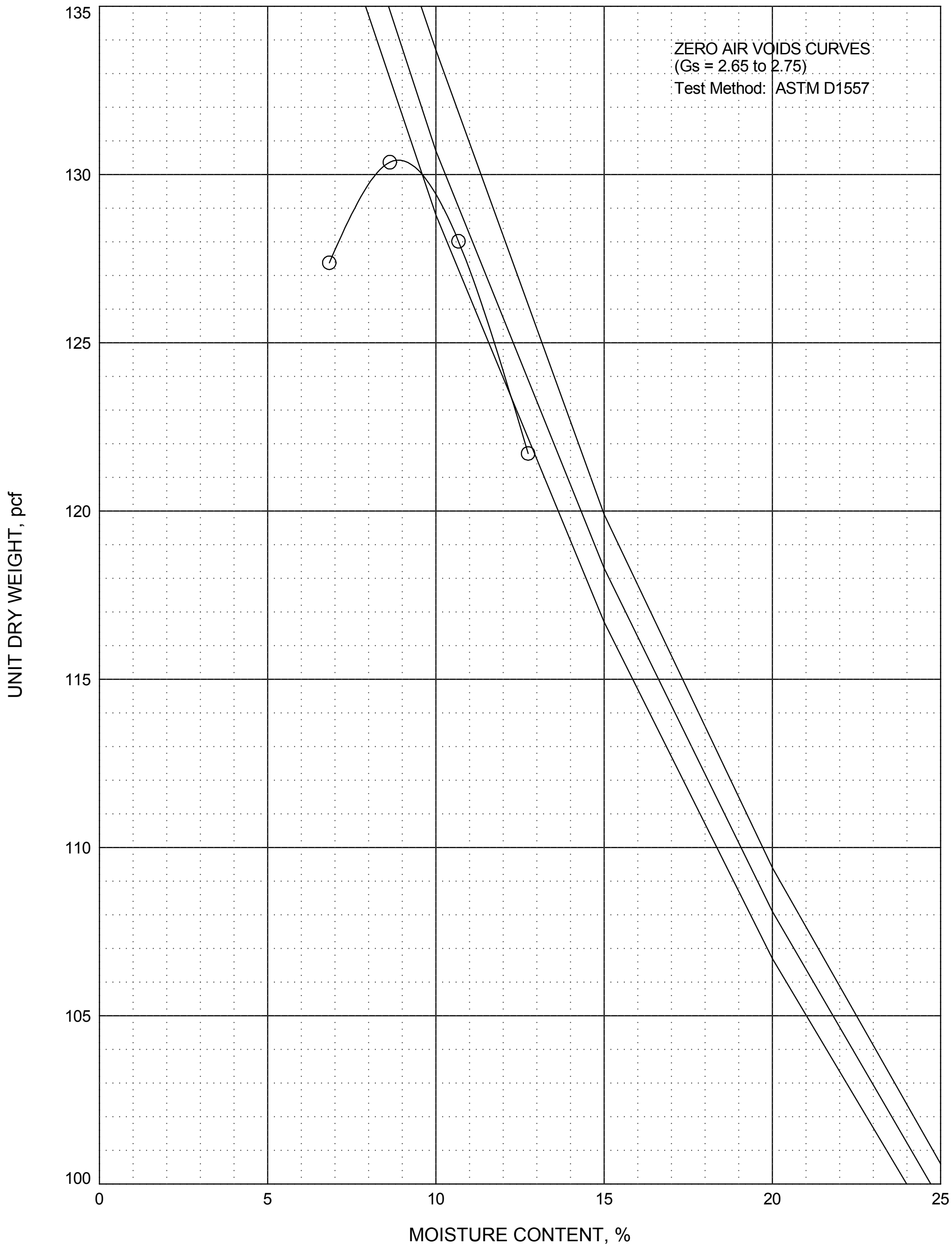


SAMPLE ID	Boring Number:	BH-3			
	Sample Number:	R3			
	Sample Depth:	7.5 ft			
	USCS Classification:	Lean CLAY with Sand(CL); dark brown, few fine to medium gravel			
INITIAL	Specimen	A	B	C	D
	Water Content, %	9.0%	9.0%	9.0%	
	Dry Unit Weight, pcf	115.7	115.6	118.0	
	Saturation, %	53%	53%	57%	
	Void Ratio	0.46	0.46	0.43	
	Diameter, in	2.42	2.42	2.42	
	Height, in	1.00	1.00	1.00	
FINAL	Water Content, %	21.0%	17.7%	18.8%	
	Dry Unit Weight, pcf	107.4	113.8	111.6	
	Void Ratio	0.57	0.48	0.51	
TEST SUMMARY	Displacement at Peak, in	0.13	0.21	0.12	
	Displacement Rate, in/min	0.004	0.004	0.004	
	Normal Stress, ksf	0.5	2.0	4.0	
	Peak Shear Stress, ksf	1.21	2.41	4.47	
	Min. Post-Peak Stress, ksf	1.09	2.39	4.37	
REMARKS	Test Method: ASTM D3080				

CLASSIFICATION	Sieve Size	% Passing
	3/8-in. (9.5mm)	---
	#4 (4.75mm)	---
	#16 (1.18mm)	---
	#30 (0.6mm)	---
	#100 (0.150mm)	---
	#200 (0.075mm)	---
	Atterberg Limits	
	Liquid Limit, %	---
	Plastic Limit, %	---
	Plasticity Index, %	---
	Estimated Gs	2.7
	k_{avg} 20ºC, cm/sec	---

DIRECT SHEAR TEST RESULTS

First and Broadway Park
Los Angeles, California



LEGEND (location)	depth, ft	CLASSIFICATION	MAXIMUM UNIT DRY WEIGHT, pcf	OPTIMUM WATER CONTENT, %
○ BH-4	0-5	Clayey SAND (SC)	130.4	8.7

COMPACTION TEST RESULTS

First and Broadway Park
Los Angeles, California

PLATE B-5

APPENDIX C
LIQUEFACTION TRIGGERING CALCULATIONS

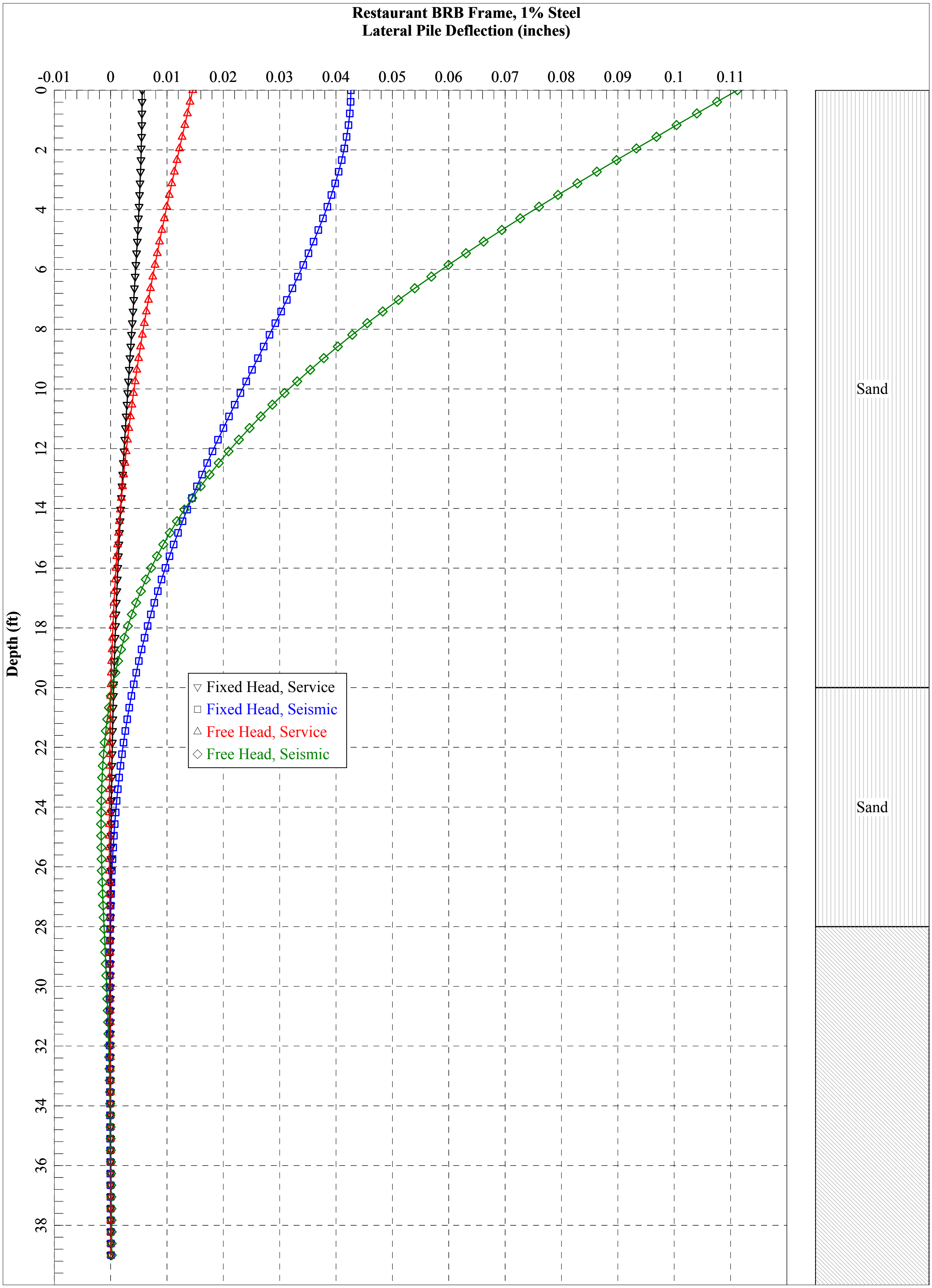
Input Parameters

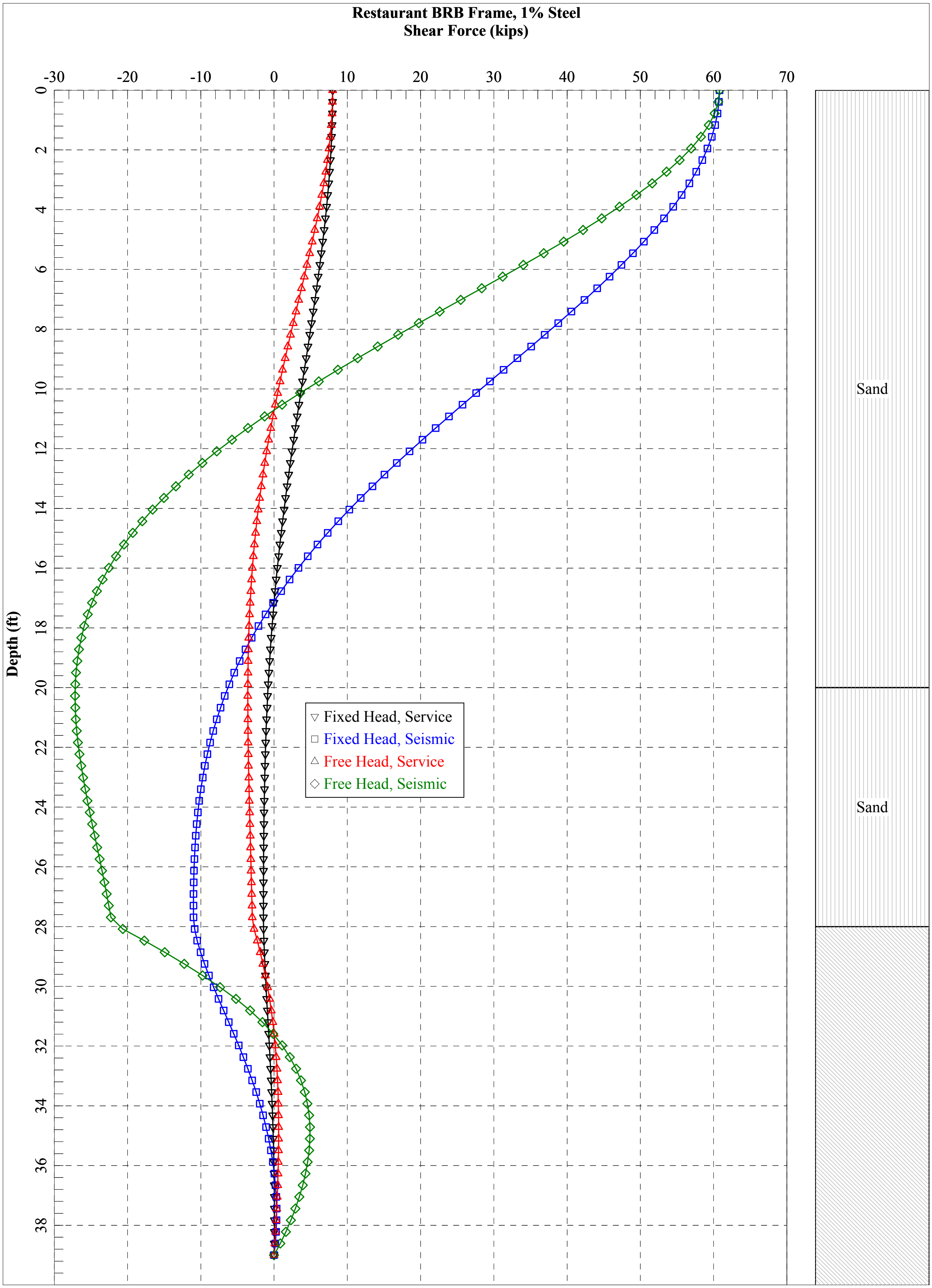
Peak Ground Acceleration (g) =	0.926
Earthquake Magnitude, M =	6.7
Water Table Depth (m) =	6.096
Borehole Diameter (mm) =	203.2
Requires correction for sampler liners (Yes/No)	YES

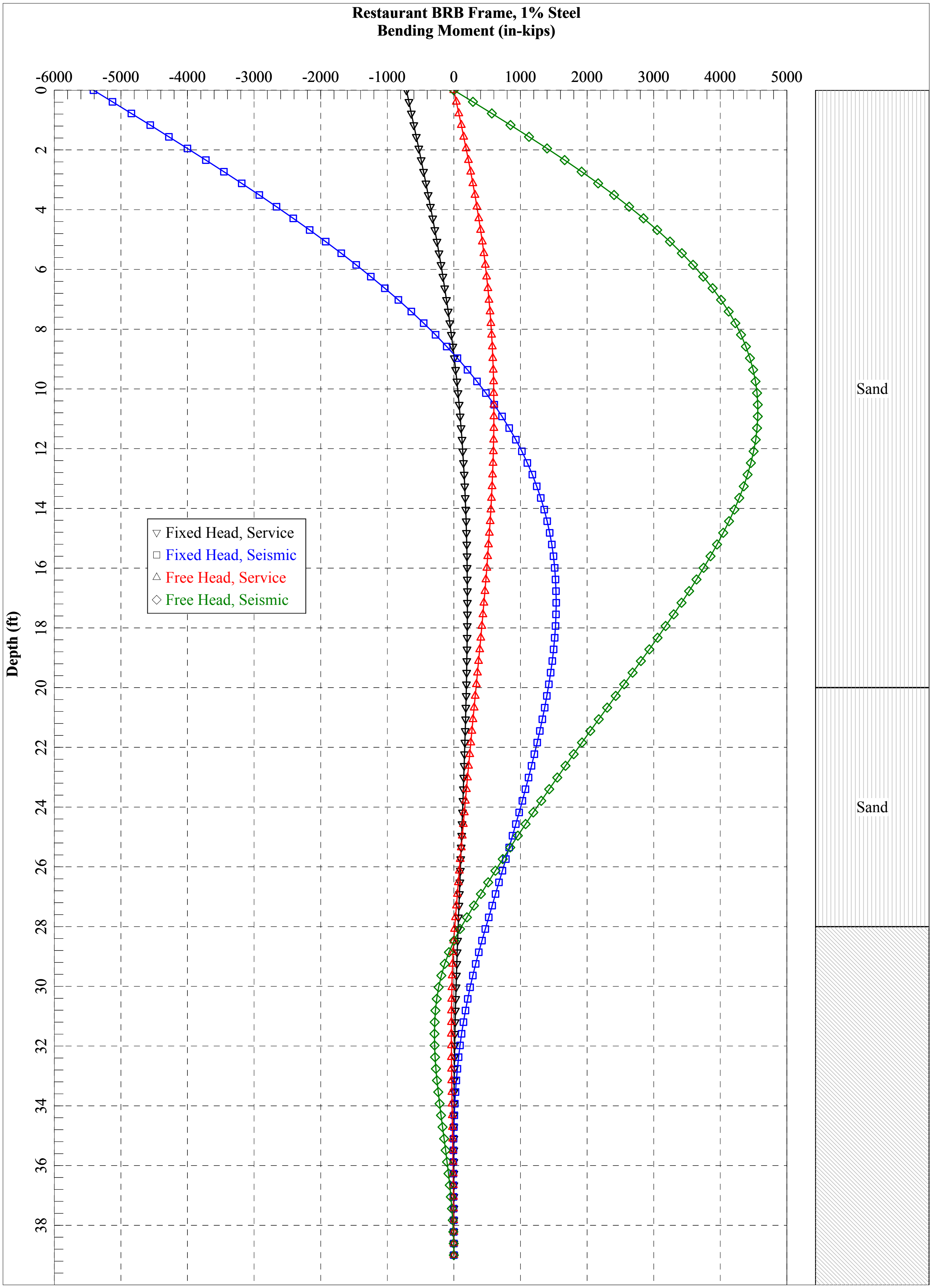
Rod lengths assumed equal to the depth plus 1.5m (for the above ground extension)

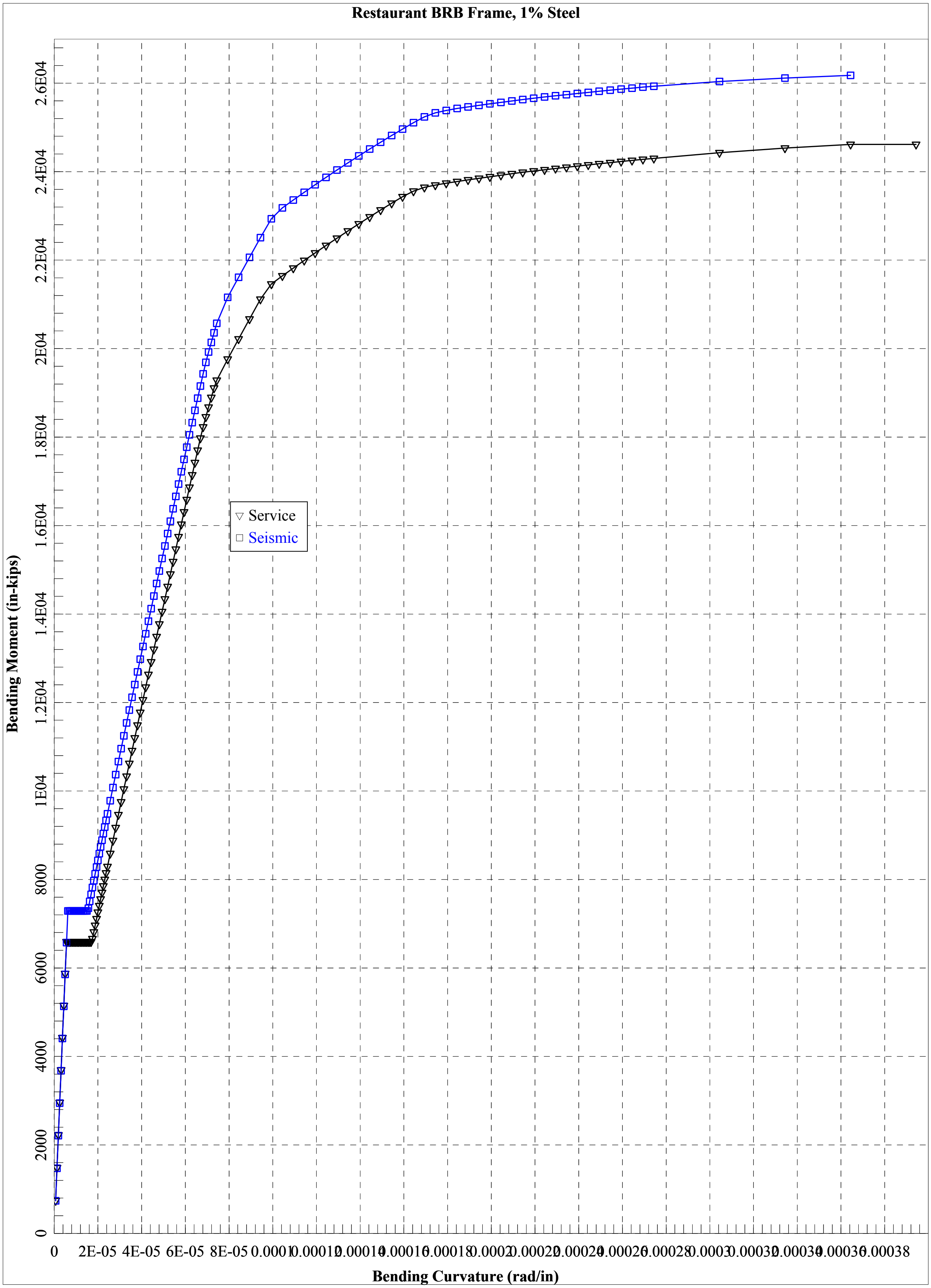
SPT sample number	Depth (m)	Measured N	Sampler Type	Soil Type (USCS)	Flag "Clay" "Unsaturated" "Unreliable"	Fines Content (%)	Energy ratio, ER (%)	Sampler Correction	C_E	C_B	C_R	C_S	N_{60}	σ_{vc} (kPa)	σ_{vc}' (kPa)	C_N	$(N1)_{60}$
BH-1 S7	6.096	73	SPT	SPSM	0	13	83	1	1.383333	1.15	0.95	1.3	143.4	115	115	0.94	135.2
BH-1 S8	7.62	92	SPT	SPSM	0	13	83	1	1.383333	1.15	0.95	1.3	180.8	144	129	0.89	161.0
BH-2 S4	6.096	49	SPT	SP	0	0	83	1	1.383333	1.15	0.95	1.3	96.3	115	115	0.94	90.7
BH-2 S5	7.62	56	SPT	SP	0	0	83	1	1.383333	1.15	0.95	1.3	110.0	144	129	0.89	98.0
BH-3 S7	6.096	50	SPT	SPSC	0	13	83	1	1.383333	1.15	0.95	1.3	98.2	115	115	0.94	92.6
BH-4 S4	6.096	77	SPT	SPSC	0	15	83	1	1.383333	1.15	0.95	1.3	151.3	115	115	0.94	142.6

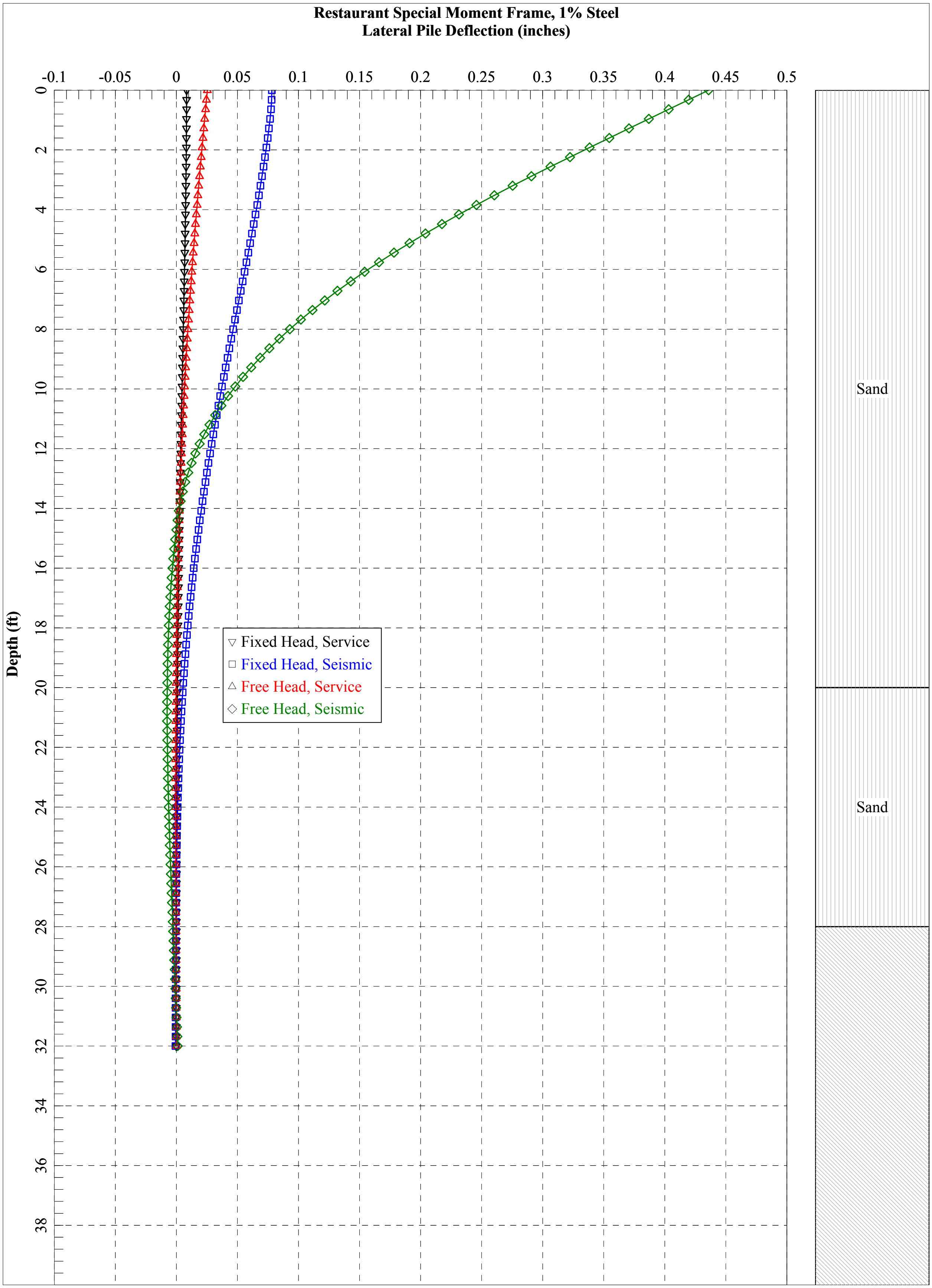
SPT sample number	α	β	$(N1)_{60-cs}$	Stress reduct. Coeff. r_d	CSR	MSF for Sand	Dr (%)	f	Kσ for sand	CRR for M=7.5 & svc' = 1atm	CRR	Factor of Safety	Depth (ft)	Elevation (ft)
BH-1 S7	1.9	1.0	142.0	0.96	0.576	1.33	171.36	0.60	0.95		999.000	2.50	20	-20
BH-1 S8	1.9	1.0	168.8	0.94	0.633	1.33	187.00	0.60	0.91		999.000	2.50	25	-25
BH-2 S4	0.0	1.0	90.7	0.96	0.576	1.33	140.40	0.60	0.95		999.000	2.50	20	-20
BH-2 S5	0.0	1.0	98.0	0.94	0.633	1.33	145.90	0.60	0.91		999.000	2.50	25	-25
BH-3 S7	1.9	1.0	97.9	0.96	0.576	1.33	141.82	0.60	0.95		999.000	2.50	20	-20
BH-4 S4	2.5	1.0	151.9	0.96	0.576	1.33	176.00	0.60	0.95		999.000	2.50	20	-20

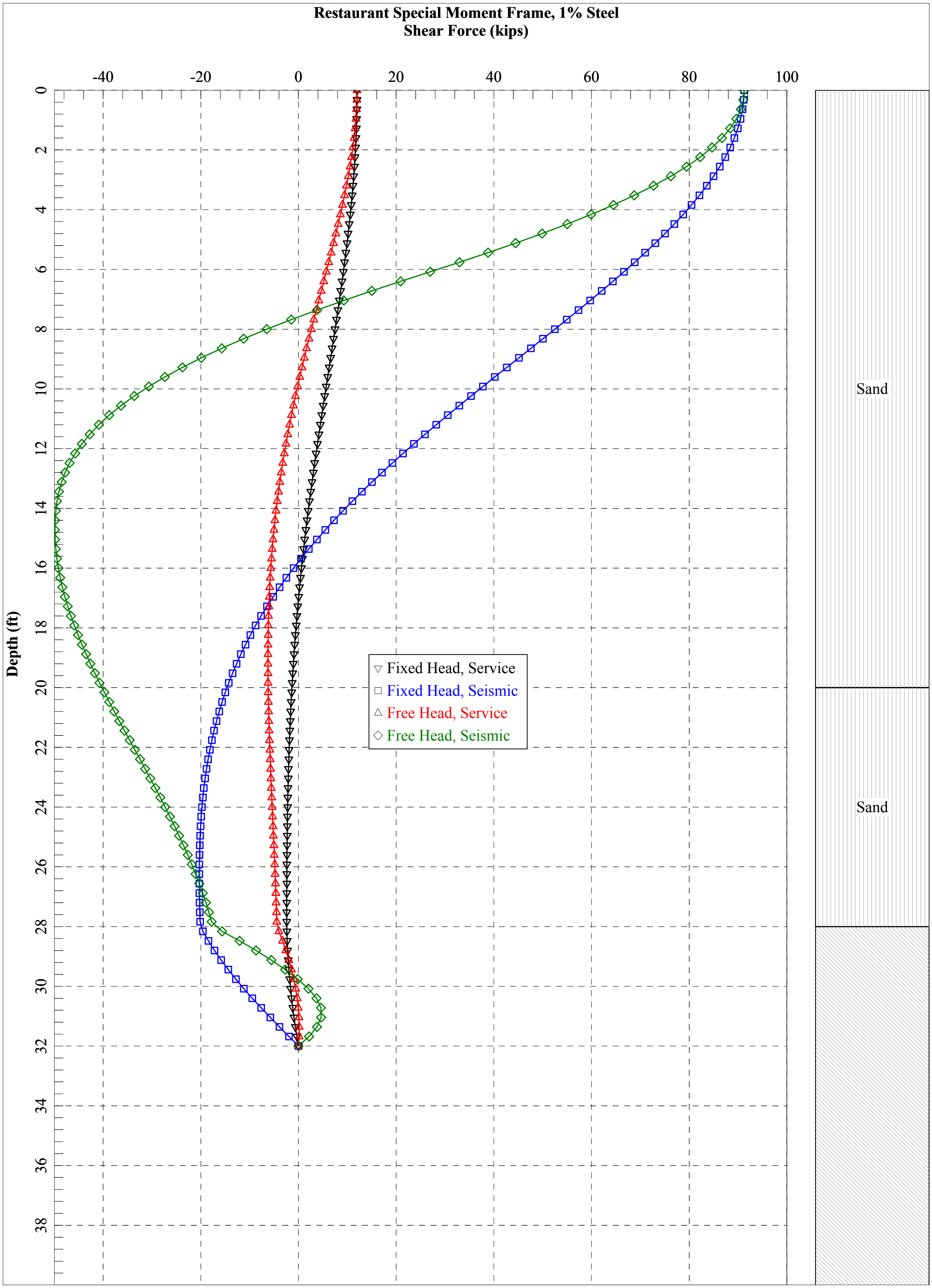

Restaurant BRB Frame, 1% Steel
Lateral Pile Deflection (inches)
-0.01
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
0.11
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand

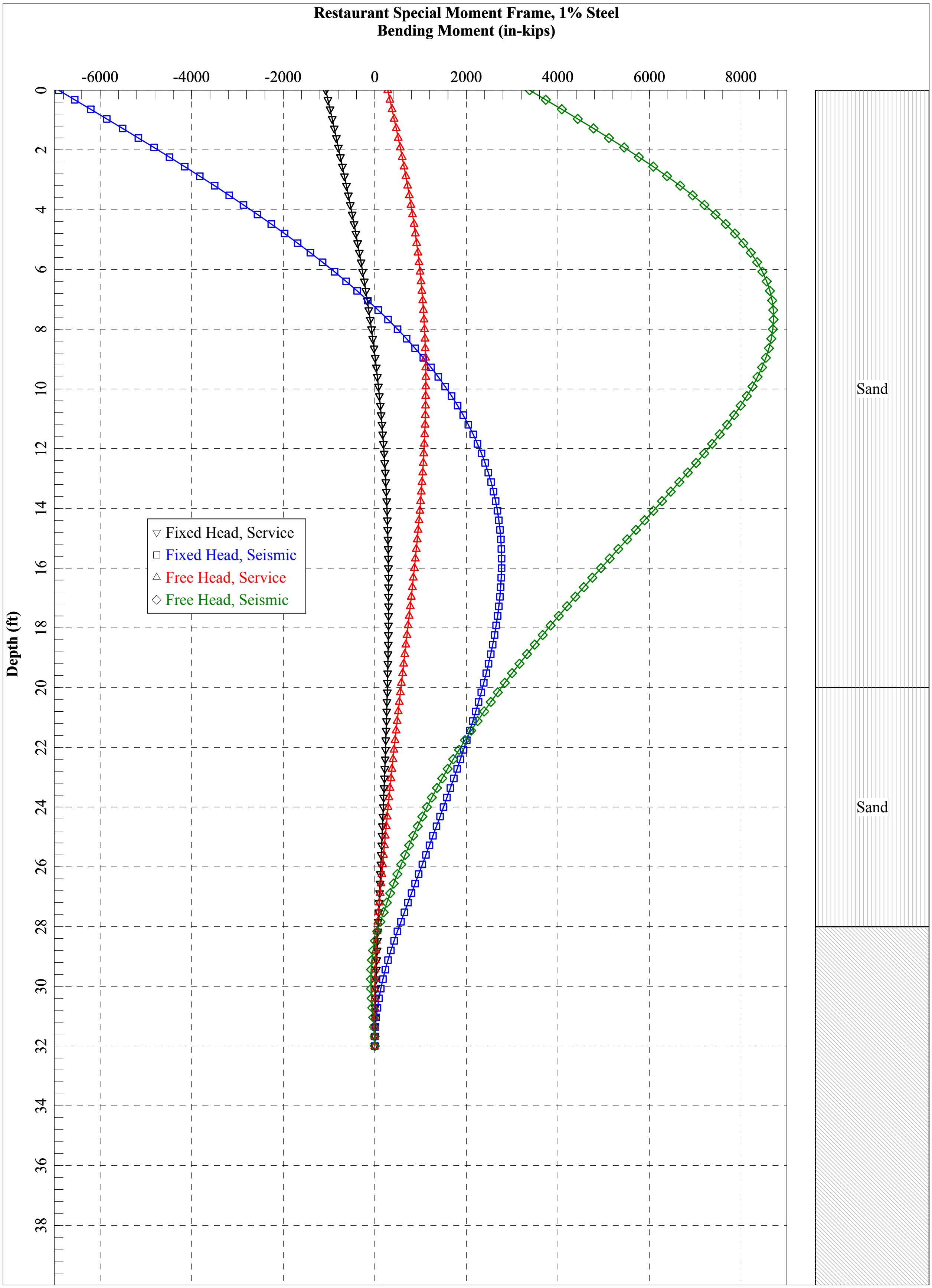

Restaurant BRB Frame, 1% Steel
Shear Force (kips)
-30
-20
-10
0
10
20
30
40
50
60
70
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand

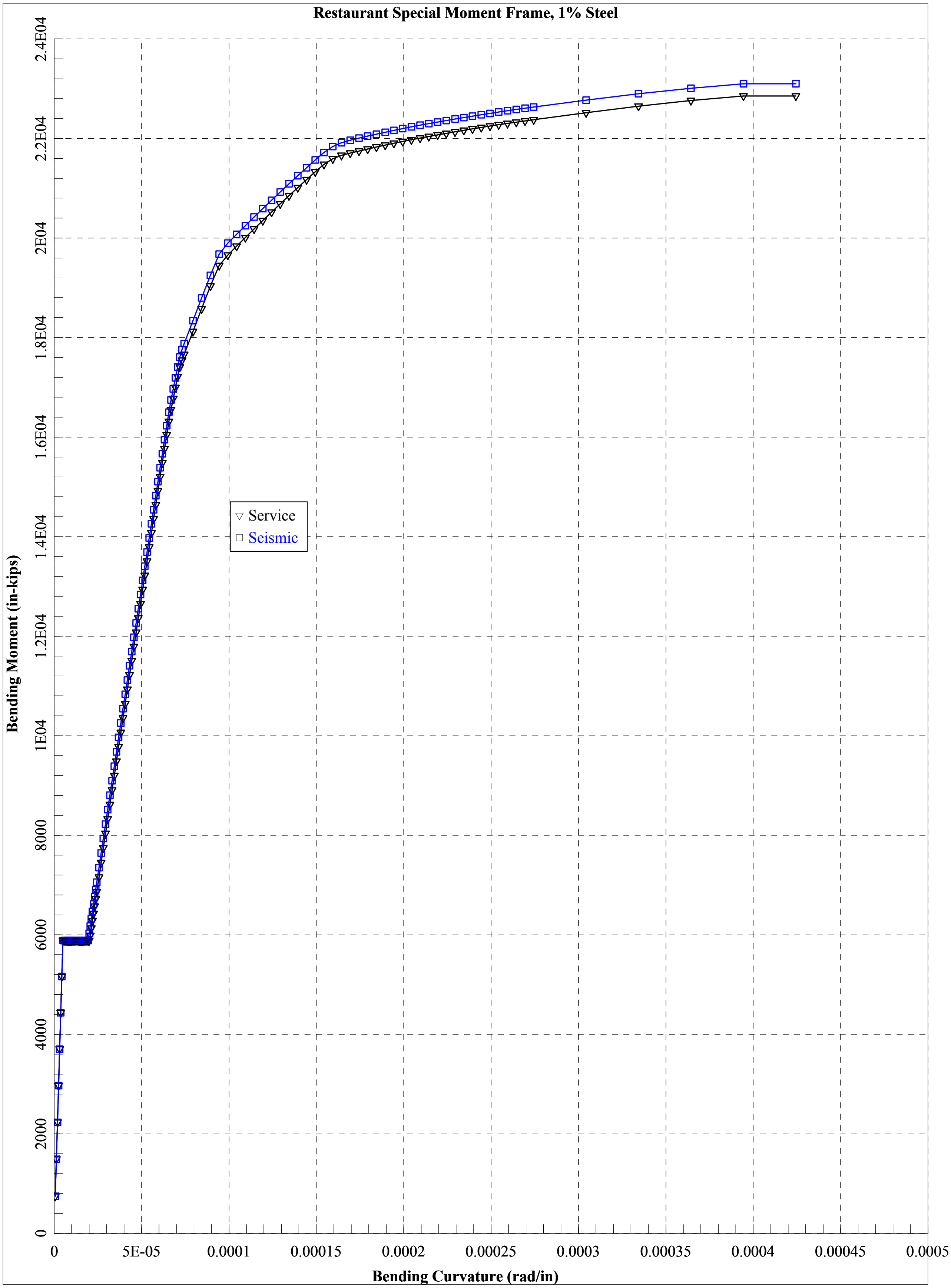

Restaurant BRB Frame, 1% Steel
Bending Moment (in-kips)
-6000
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000
5000
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand

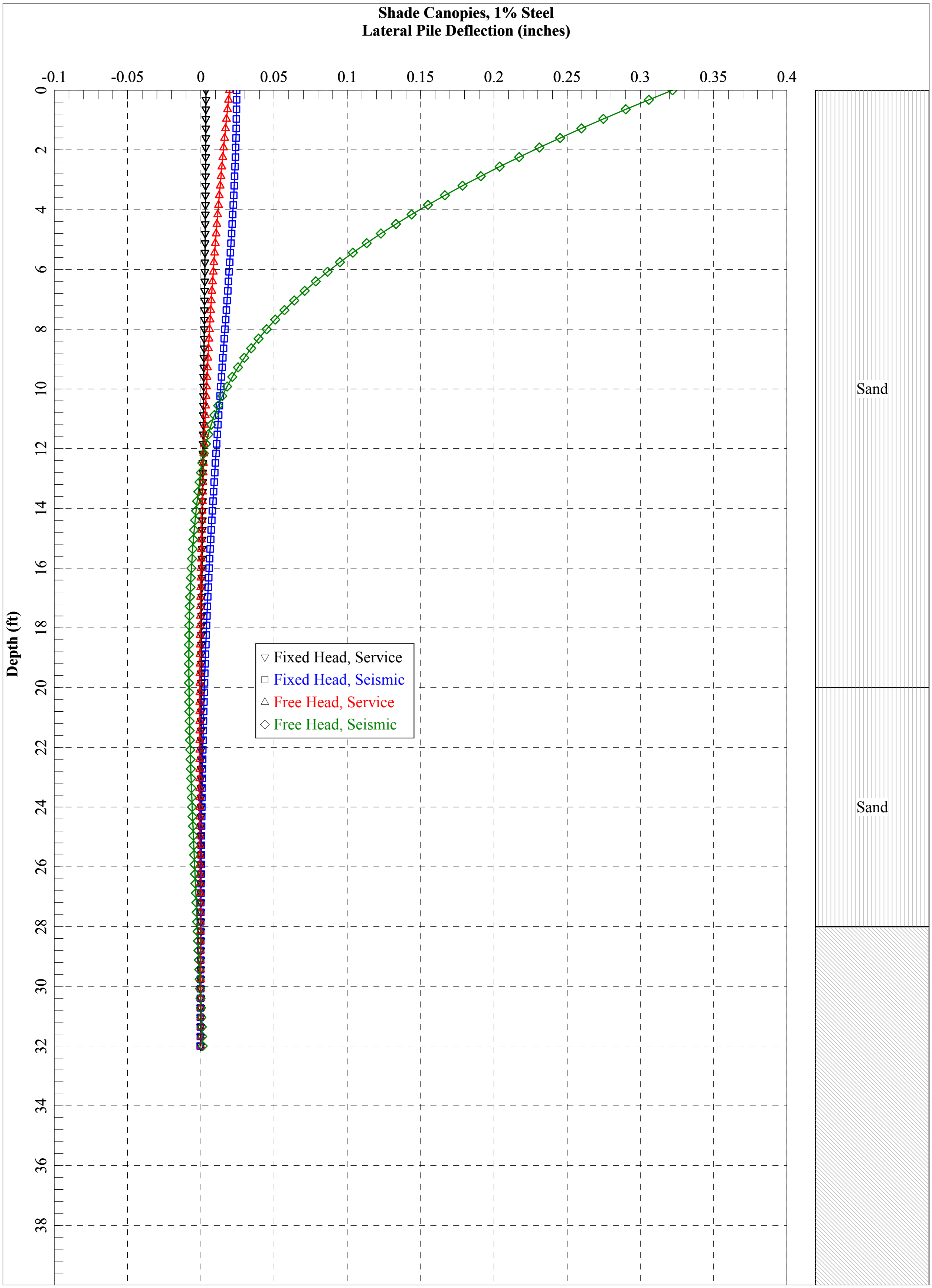

Restaurant BRB Frame, 1% Steel
Bending Moment (in-kips)
0
2000
4000
6000
8000
1E04
1.2E04
1.4E04
1.6E04
1.8E04
2E04
2.2E04
2.4E04
2.6E04
Bending Curvature (rad/in)
0
2E-05
4E-05
6E-05
8E-05
0.0001
0.00012
0.00014
0.00016
0.00018
0.0002
0.00022
0.00024
0.00026
0.00028
0.0003
0.00032
0.00034
0.00036
0.00038
▽ Service
□ Seismic

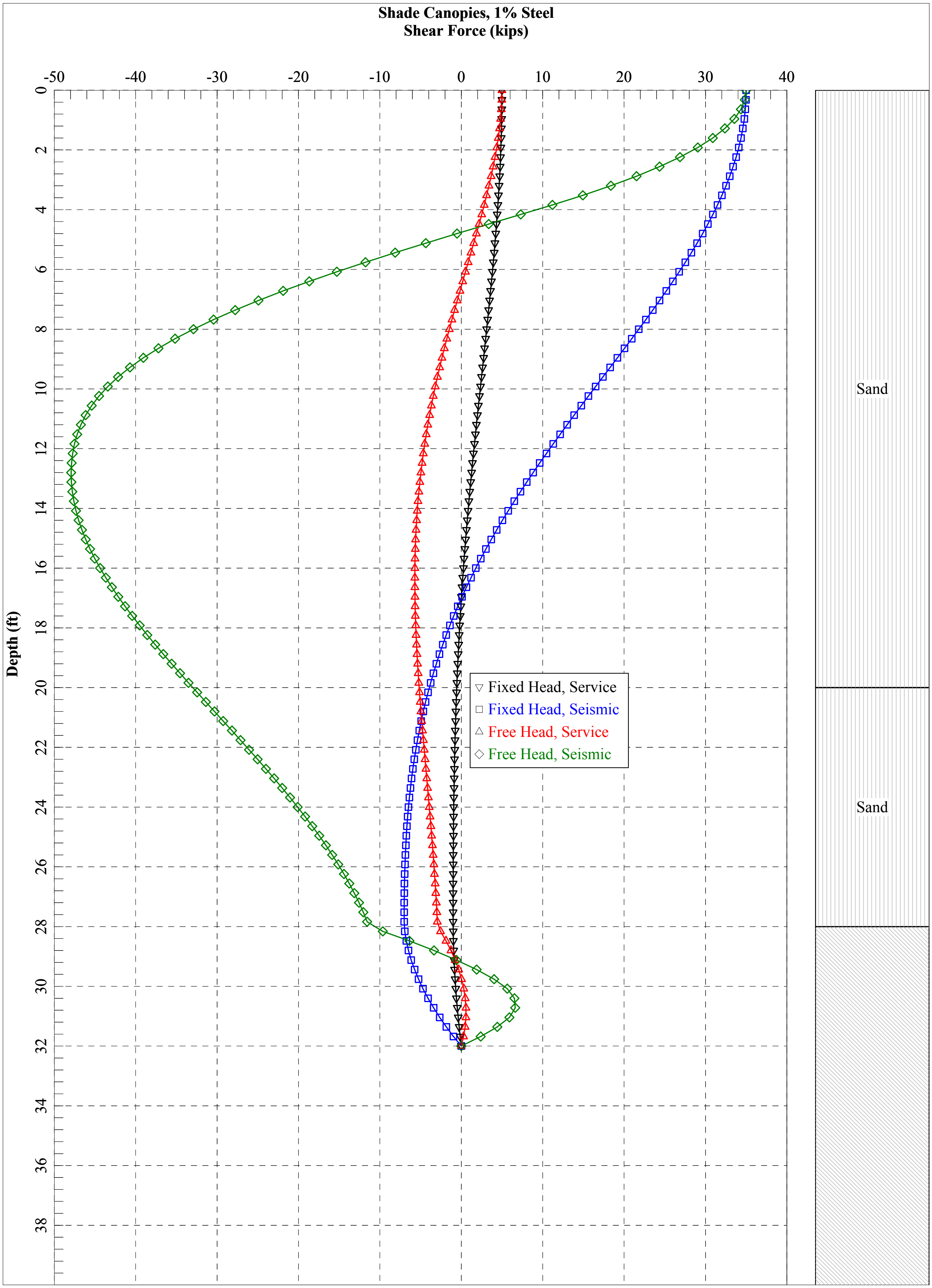

Restaurant Special Moment Frame, 1% Steel
Lateral Pile Deflection (inches)
-0.1
-0.05
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0.45
0.5
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand

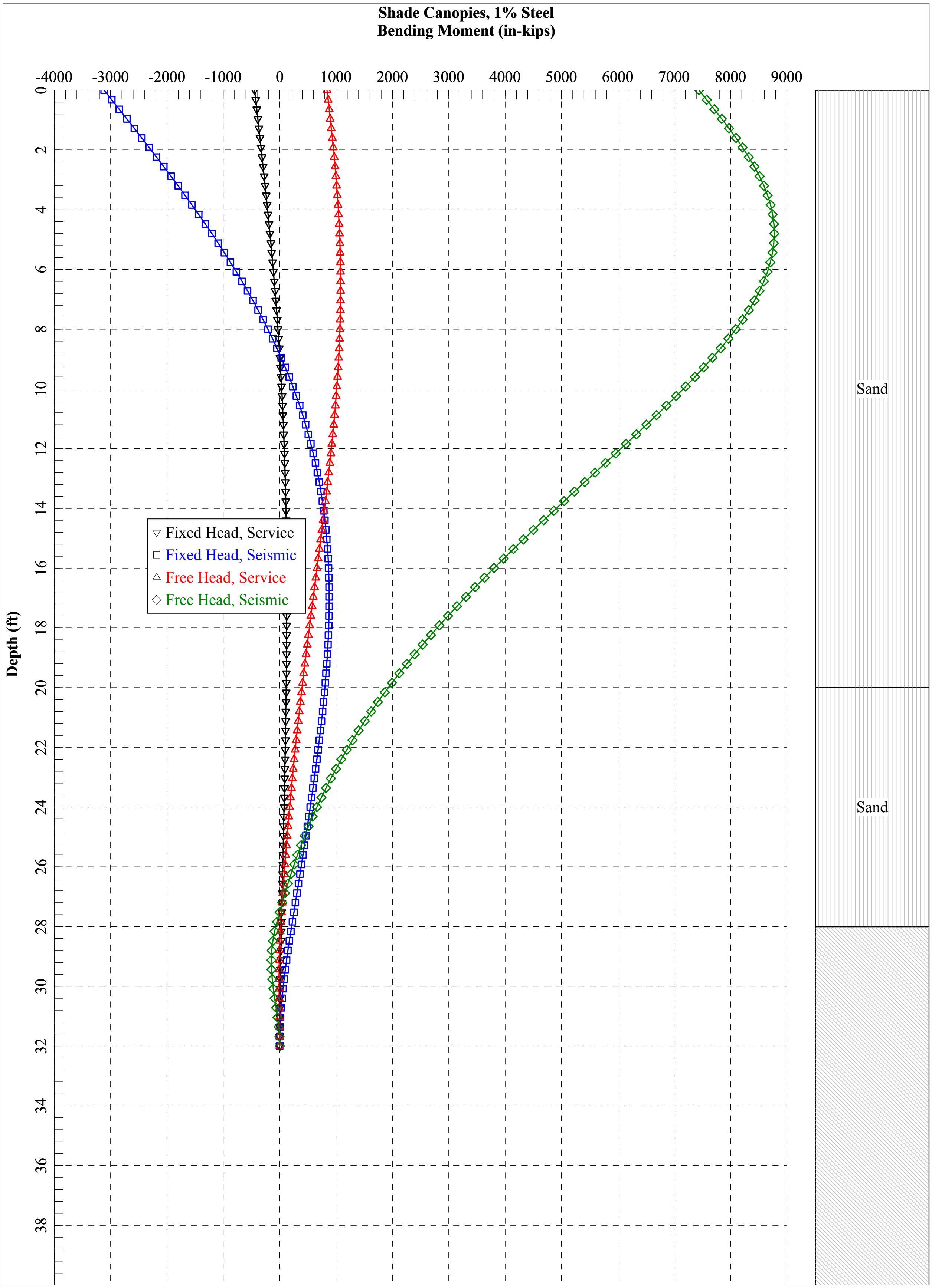

Restaurant Special Moment Frame, 1% Steel
Shear Force (kips)
-40
-20
0
20
40
60
80
100
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand

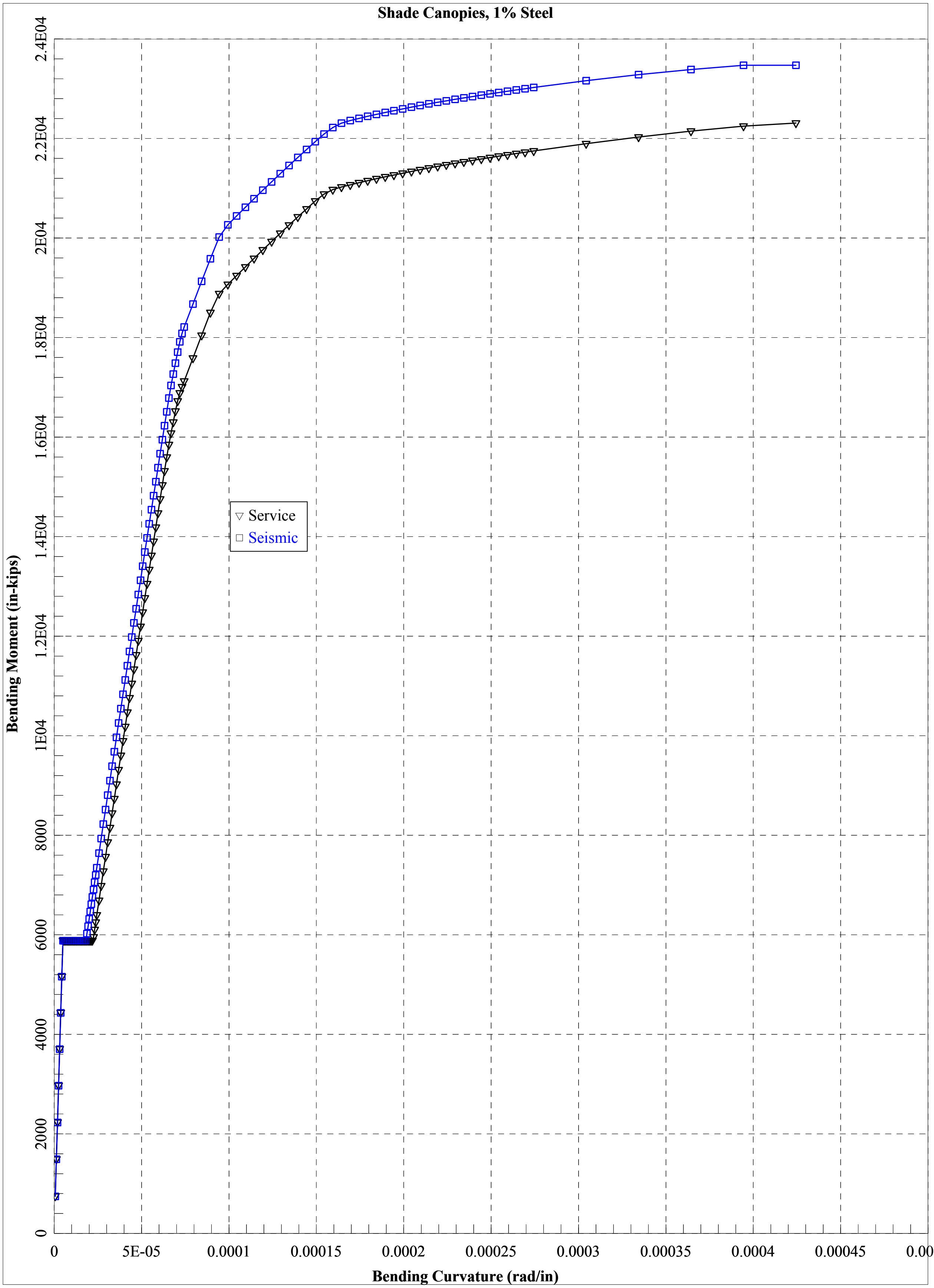

Restaurant Special Moment Frame, 1% Steel
Bending Moment (in-kips)
-6000
-4000
-2000
0
2000
4000
6000
8000
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand

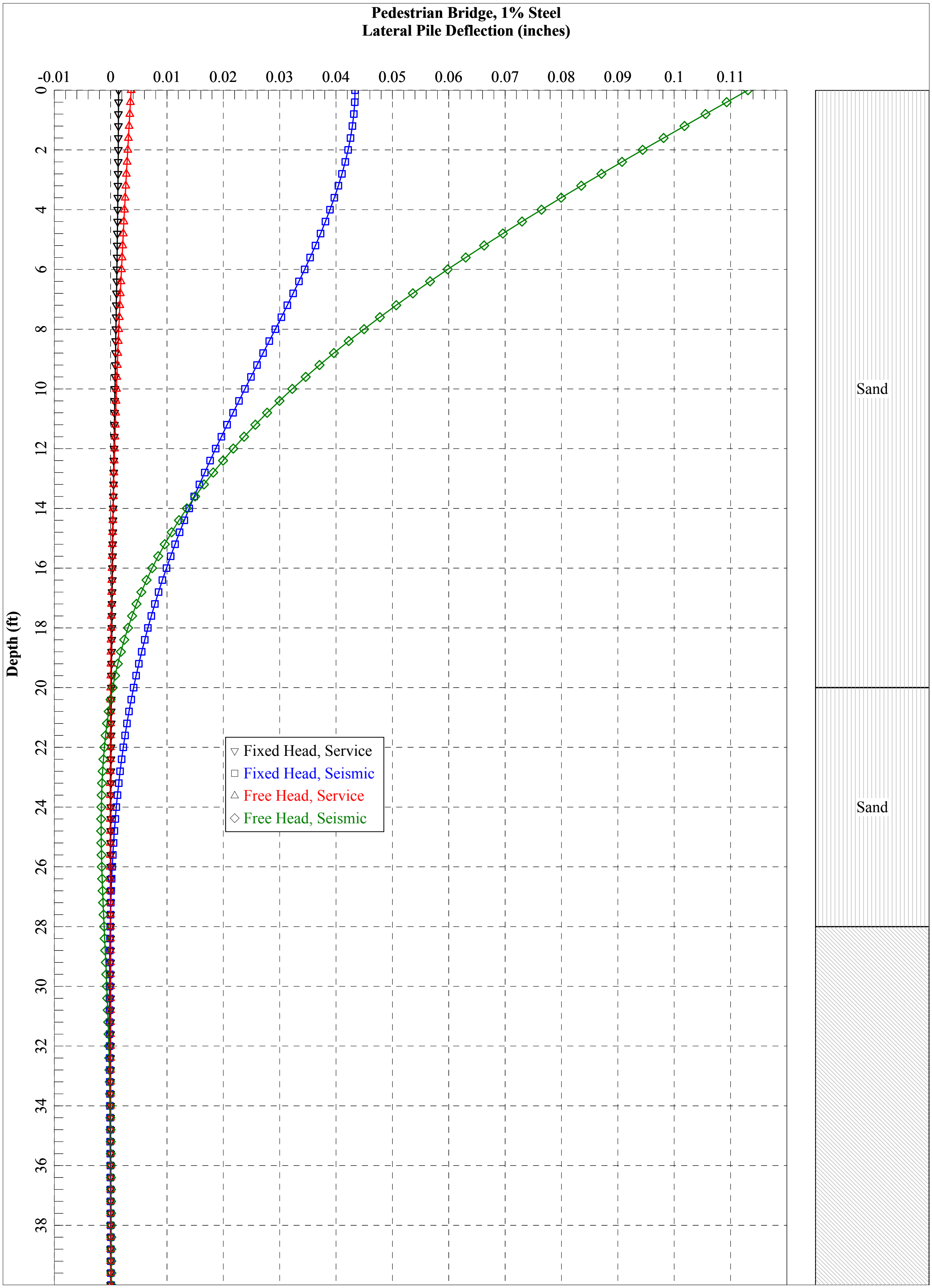

Restaurant Special Moment Frame, 1% Steel
Bending Moment (in-kips)
Bending Curvature (rad/in)
0
2000
4000
6000
8000
1E04
1.2E04
1.4E04
1.6E04
1.8E04
2E04
2.2E04
2.4E04
0
5E-05
0.0001
0.00015
0.0002
0.00025
0.0003
0.00035
0.0004
0.00045
0.0005
▽ Service
□ Seismic

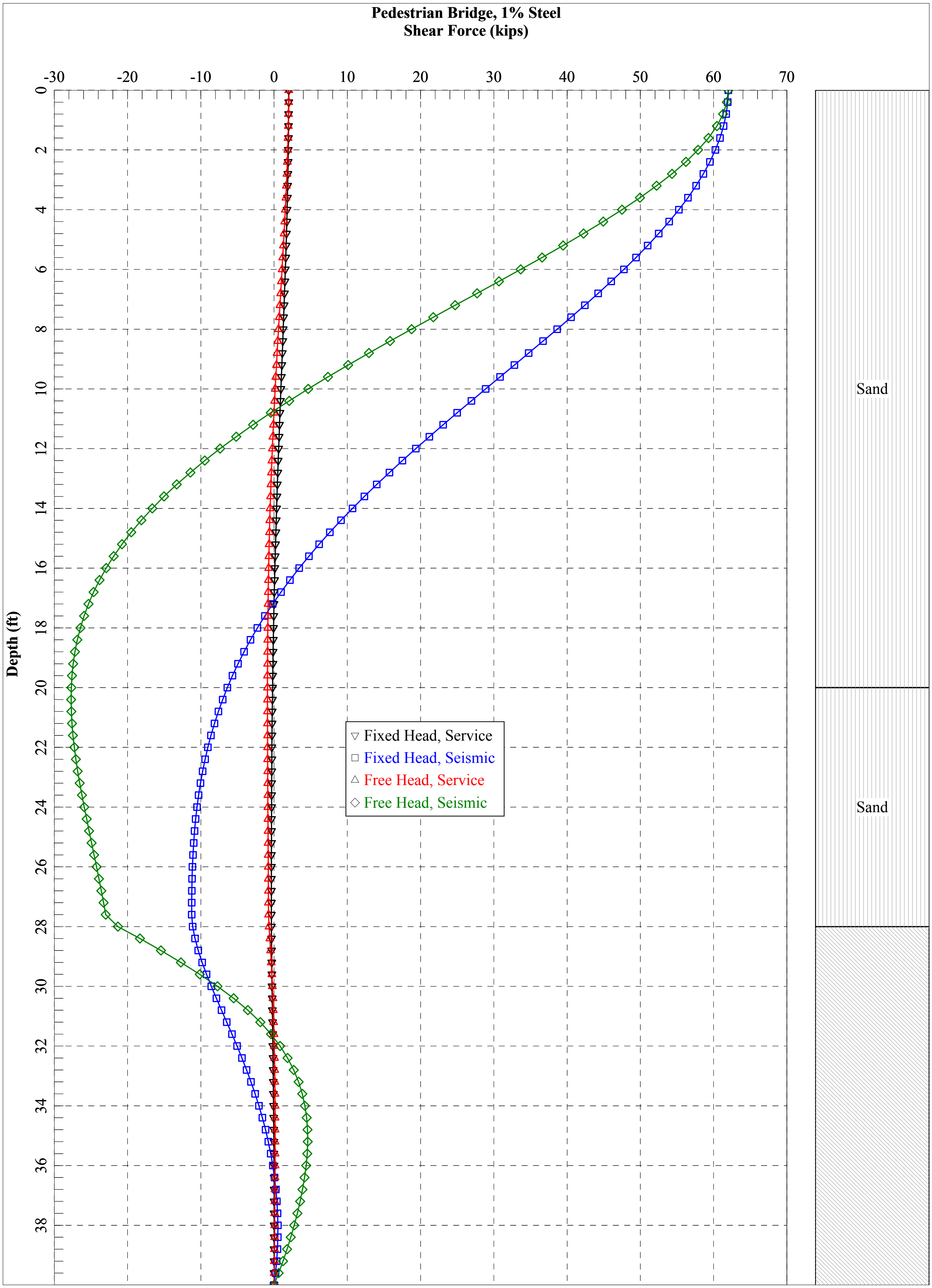

Shade Canopies, 1% Steel
Lateral Pile Deflection (inches)
-0.1
-0.05
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand

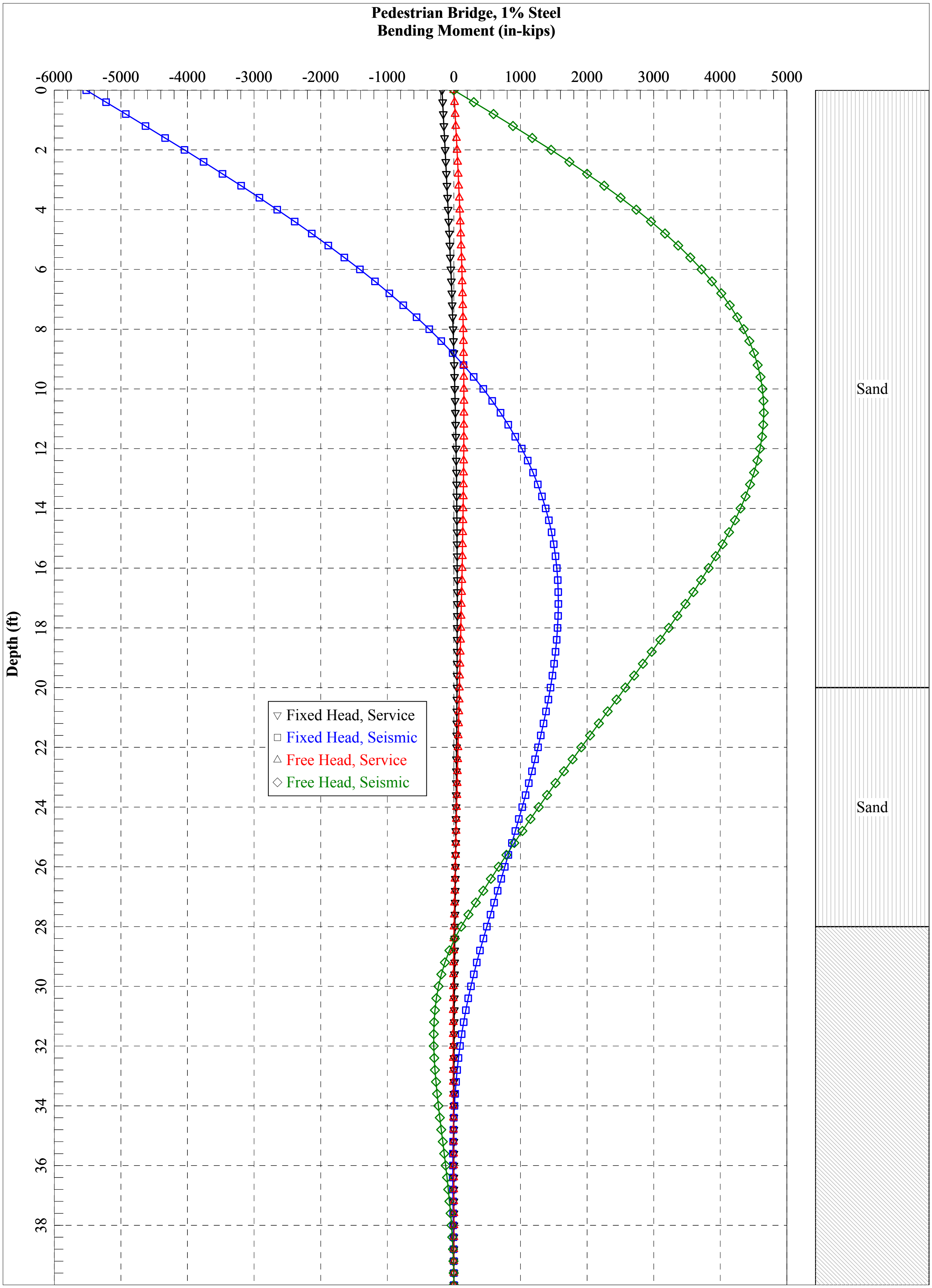

Shade Canopies, 1% Steel
Shear Force (kips)
-50
-40
-30
-20
-10
0
10
20
30
40
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand

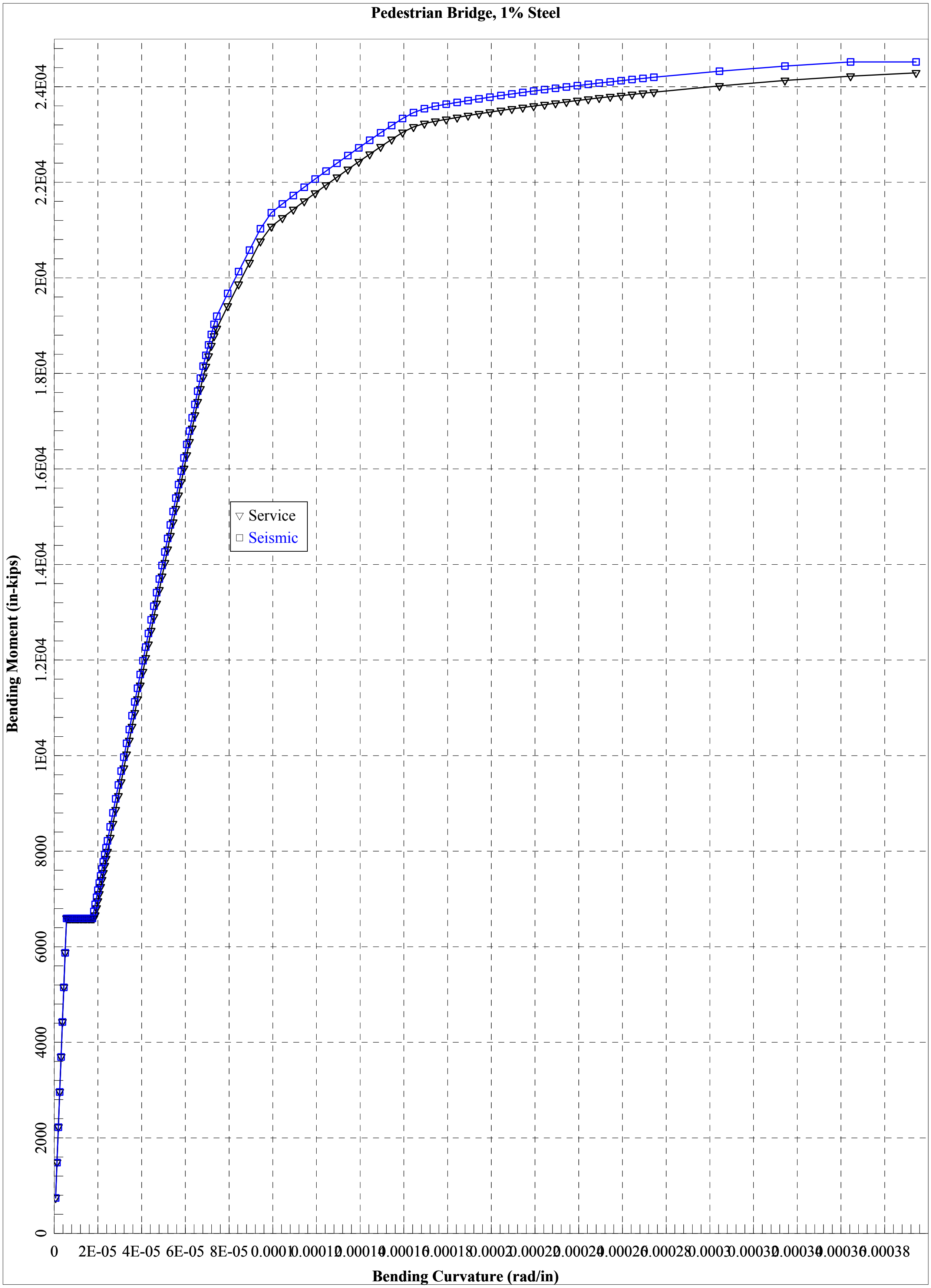

Shade Canopies, 1% Steel
Bending Moment (in-kips)
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand


Shade Canopies, 1% Steel
Bending Moment (in-kips)
0
2000
4000
6000
8000
1E04
1.2E04
1.4E04
1.6E04
1.8E04
2E04
2.2E04
2.4E04
Bending Curvature (rad/in)
0
5E-05
0.0001
0.00015
0.0002
0.00025
0.0003
0.00035
0.0004
0.00045
0.0005
▽ Service
□ Seismic


Pedestrian Bridge, 1% Steel
Lateral Pile Deflection (inches)
-0.01
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1
0.11
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand


Pedestrian Bridge, 1% Steel
Shear Force (kips)
-30
-20
-10
0
10
20
30
40
50
60
70
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand


Pedestrian Bridge, 1% Steel
Bending Moment (in-kips)
-6000
-5000
-4000
-3000
-2000
-1000
0
1000
2000
3000
4000
5000
Depth (ft)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
▽ Fixed Head, Service
□ Fixed Head, Seismic
△ Free Head, Service
◇ Free Head, Seismic
Sand
Sand


Pedestrian Bridge, 1% Steel
Bending Moment (in-kips)
Bending Curvature (rad/in)
▽ Service
□ Seismic
0
2000
4000
6000
8000
1E04
1.2E04
1.4E04
1.6E04
1.8E04
2E04
2.2E04
2.4E04
0
2E-05
4E-05
6E-05
8E-05
0.0001
0.00012
0.00014
0.00016
0.00018
0.0002
0.00022
0.00024
0.00026
0.00028
0.0003
0.00032
0.00034
0.00036
0.00038

CITY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Bureau of Engineering
GEOTECHNICAL ENGINEERING GROUP

December 12, 2014
File No. 13-066

ENGINEER OF RECORD – FINAL COMPACTION REPORT – 1ST AND BROADWAY CIVIC CENTER PARK – 217 WEST 1ST STREET, LOS ANGELES, CA 90012 – TRACT: LACA MAP NO. 94, BLOCK: NONE, LOT: PCL 10, ARB: 2
W.O. E1907670 GEO FILE NO. 13-066

Reference: Geocon West, Inc., "Report of Observation and Testing Services During Placement of Backfill Subsequent to the Demolition of Site Structures, 1st and Broadway Civic Center Park, 217 West 1st Street, Los Angeles, California, Tract: LACA Map No. 94, Lot: PCL 10, ARB: 2" dated December 10, 2014.

The Los Angeles Department of Public Works, Bureau of Engineering, Geotechnical Engineering Group (GEO) has reviewed the referenced compaction report prepared by Geocon West, Inc. (Geocon). GEO takes full responsibility for the use of the contents of the report and accepts the role of Geotechnical Engineer of Record for the project.

This report documents the placement of primary structural fill for the fill placed within the property lines of the subject property; and secondary structural fill to support the sidewalks that are within the public right of way. The grading was done under the Los Angeles Department of Building and Safety (LADBS) Grading Permit Number 14030-10000-03001 and 14030-10000-03294.

During fill placement and compaction, Geocon performed testing of fill soils under the supervision of the GEO. Grading was performed under the inspection of Geocon to confirm that the fill was placed and compacted according to the recommendations provided in the geotechnical report for this project, File No. 13-066 dated January 14, 2014. Supplemental geotechnical reports for this project were issued on April 28, 2014, June 17, 2014, and July 17, 2014. These reports were approved by LADBS through letters dated March 11, 2014 with Log # 83404, April 29, 2014 with Log # 84048, June 26, 2014 with Log # 84678, and August 1, 2014 with Log # 84986.

Attached are the reference report and the Engineer's Certificate of Compliance for Compacted Earth Fills.

Any questions or clarification of the contents of the report shall be directed to GEO.

If you have any questions, please contact Curtis Gee at (213) 847-0485.

REGISTERED PROFESSIONAL
CURTIS J. GEE
GE 2991
EXP. 6/30/15
GEOTECHNICAL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
EASTON RENE FORCIER
No. GE 2948
Exp. 9-30-16
GEOTECHNICAL
STATE OF CALIFORNIA

Curtis J Gee 12/12/14

Curtis J. Gee, GE 2991
Civil Engineering Associate III

Easton 12-12-14

Easton R. Forcier, GE 2948
Geotechnical Engineer I

Attachment 1 – Engineer's Certificate of Compliance for Compacted Earth Fills.
Attachment 2 – Geocon West, Inc., "Report of Observation and Testing Services During Placement of Backfill Subseqent to the Demolition of Site Structures, 1st and Broadway Civic Center Park, 217 West 1st Street, Los Angeles, California, Tract: LACA Map No. 94, Lot : PCL 10, ARB: 2" dated December 10, 2014.

Q:\PROJECTS\2013\13-066 1st and Broadway Project E1907670\Construction\Compaction Report\AssumeResponsibility.doc

CITY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Bureau of Engineering

ENGINEER'S CERTIFICATE OF COMPLIANCE FOR COMPACTED EARTH FILLS

Final Compacted Fill Certification – 217 West 1st Street - Tract: LACA Map No. 94, Lot: PCL 10, ARB: 2

FILE NO. 13-066 WO NO. E1907670

JOB ADDRESS: 217 West 1st Street, Los Angeles, California
LADBS GRADING PERMIT: 14030-10000-03001 and 14030-10000-03294
SOIL TESTING AGENCY: Geocon West, Inc.

PROPERTY OWNER: City of Los Angeles
Department of Recreation and Parks

SEND CORRESPONDENCE TO: Geotechnical Engineering Group, City of Los Angeles
1149 South Broadway, Suite 120
Los Angeles, CA 90015-2213

PER REPORTS ON OUR PROJECT NO. 13-066

DATE WORK STARTED ON PROJECT: May 21, 2014
DATE FILL WAS COMPLETED: November 17, 2014
DATE OF THIS CERTIFICATE: December 12, 2014

TO THE SUPERINTENDENT OF BUILDING:
I hereby certify that I have personally inspected and tested the placing of compacted earth fill on the above described property, and on the basis of these inspections and tests it is my opinion that the same was placed in conformity with the requirements of the Los Angeles City Building Code.*

REGISTERED PROFESSIONAL ENGINEER
EASTON RENE FORCIER
No. GE 2948
Exp. 9-30-16
GEOTECHNICAL
STATE OF CALIFORNIA

Easton 12-12-14

Easton R. Forcier, GE 2948
Geotechnical Engineer I

* For the purpose of this Certificate, to "have personally inspected and tested" shall include inspection and testing performed by any person responsible to the licensed engineer signing this certificate. Where the inspection and testing of all or part of the work above is delegated, full responsibility shall be assumed by the licensed engineer whose signature is affixed thereon.

Q:\PROJECTS\2013\13-066 1st and Broadway Project E1907670\Construction\Compaction Report\Final CC.doc

GEOCON
WEST, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. A8950-06-01
December 10, 2014

Mr. Christopher F. Johnson
City of Los Angeles, Geotechnical Engineering Group
1149 South Broadway, Suite 120
Los Angeles, California 90015-2213

Subject: REPORT OF OBSERVATION AND TESTING SERVICES DURING PLACEMENT OF BACKFILL SUBSEQUENT TO THE DEMOLITION OF SITE STRUCTURES
1ST AND BROADWAY CIVIC CENTER PARK
217 WEST 1ST STREET, LOS ANGELES, CALIFORNIA
TRACT: L A C A MAP NO. 94
LOT: PCL 10 ARB: 2
GRADING PERMIT NOS.: 14030-10000-03001 and 14030-10000-03294
W.O. E1907670 TOS NO. 13-066 File No. 13-066

References: Soils Report by Geocon West, Inc., dated January 9, 2014;
Engineer of Record by City of LA – Geo, dated January 14, 2014;
City of Los Angeles Soils Report Approval, Log No. 83404, dated March 11, 2014;
Soils Report by City of LA – Geo, dated April 28, 2014;
City of Los Angeles Soils Report Approval, Log No. 84048, dated April 29, 2014;
Soils Report by City of LA – Geo, dated June 17, 2014;
City of Los Angeles Soils Report Approval, Log No. 84678, dated June 26, 2014;
Soils Report by City of LA – Geo, dated July 17, 2014;
City of Los Angeles Soils Report Approval, Log No. 84986, dated August 1, 2014.

Dear Mr. Johnson:

In accordance with your request we have provided testing and observation services during the placement and compaction of backfill in excavations that resulted from the demolition of site structures at the subject property. Our services were performed during the period of May 21, 2014, through November 17, 2014. The scope of our services included the following:

- Observing the geotechnical and earthwork operations, including slot cutting procedures (adjacent to the north, east, and south property lines), excavation of existing fill and unsuitable alluvial soils, and placement and compaction of backfill.
- Observing the placement of three-sack Controlled Low Strength Material backfill (CLSM), utilized in lieu of soil backfill.
- Performing inspection and approval of all excavation bottoms prior to placing fill.

- Performing in-place density tests on the earth materials placed and compacted.
- Performing laboratory tests to aid in evaluating the soil properties and compaction characteristics of soil types used for fill.
- Verification of the suitability of import soil types used for fill.
- Preparing Site Plans and this final report of observation and testing services.

GENERAL

The purpose of the testing and observations was to determine that the specifications required by the City of Los Angeles Building Code and the recommendations of the referenced reports were followed. Grading was performed under City of Los Angeles Grading Permit Nos. 14030-10000-03001(Phase I) and 14030-10000-03294(Phase II). This work was requested by Curtis Gee of City of Los Angeles Public Works, Bureau of Engineering. The excavation bottoms were observed and approved by Deputy Grading Inspector Barney R. Tury with Geocon West, Inc. and further approved by Inspectors Barton Holmes, Elmer Bland, and Johnny Kazarian with the City of Los Angeles on May 29, June 9 and 17, July 9, 14, 15, 21, and 23, August 5, 6, 11, and 15, October 6, 9, 17, and 22, and November 12, 2014.

The fill materials placed for this project consist of onsite and import earth materials, as well as three-sack CLSM. The three-sack CLSM was utilized to backfill the upper 5 feet of excavation situated beyond the property line and within the public right-of-way along the west and southwest sides of the property (see Site Plan, Figure 3). The three-sack CLSM placed within the public right-of-way will be utilized as **secondary structural fill** for support of street/sidewalk, within the public right-of-way. Onsite and import earth materials placed and compacted within the project property lines are under Los Angeles Department of Building and Safety jurisdiction and will be utilized as **primary structural fill** for support of future improvements.

GRADING

Grading consisted of the placement and compaction of earth materials to backfill excavations that resulted from the demolition of site structures at the subject property.

Prior to placing any fill, the existing surface soils and/or existing fill were removed to firm alluvial soil, and stockpiled for later placement as compacted fill. The clean bottom of excavated plane was observed and approved by a representative of this firm, as well as by Inspectors Barton Holmes, Elmer Bland, and Johnny Kazarian with the City of Los Angeles.

Subsequently, the exposed excavation bottom was moistened and/or air-dried as required to achieve optimum moisture content, and compacted to a minimum of 90 percent of the maximum density in accordance with ASTM test method D1557-12 (Laboratory Compaction Test). In very limited areas where the excavation bottom was found to be wet, a mix of crushed concrete and soil was blended, placed and compacted as the first lift in order to create a firm surface prior to placing any additional engineered fill.

Slot-cutting procedures were employed along the north, east, and south property line (see Site Plan, Figure 1). The initial excavation was made at a slope of 1:1. Alternate "A" slots were excavated and backfilled, followed by the "B" slots and "C" slots. The slot cutting procedures and placement of backfill were observed on a full time basis by a Geocon representative.

Fill was placed by means of CAT excavators, a 973 Track Loader, and 980 K Loaders, in loose lifts of about 6 to 8 inches, moistened and/or air dried as required to achieve optimum moisture content by means of a water truck, and compacted by rolling with heavy equipment, a CAT single-drum sheepsfoots roller, a vibratory plate, and Rammax dual-drum compactor. Where fill did not meet minimum compaction requirements and failing tests were obtained, additional compaction effort was performed utilizing the above mentioned compaction equipment until passing tests were achieved.

In-place density tests were performed in conformance with ASTM Test Method D1556-07 (Sand Cone), and ASTM Test Method D6938-10 (Nuclear Density Gauge) in conformance with P/BC 2014-28. The results of the in-place dry density and moisture content tests are summarized on Table 1. In general, the in-place density test results indicate that the fill soils placed have achieved a relative compaction of at least 90, as required, in accordance with ASTM test method D1557-12. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters was used for fill, it was compacted to a minimum of 95 percent relative compaction, as determined by ASTM test method D1557-12. The approximate locations of all in-place density tests are indicated on the Site Plan, Figure 1. Limits and depths of fill are indicated on the enclosed Site Plans, Figures 2 and 3.

Fill soils were derived from onsite excavations and consist primarily of clayey sand, sandy clay, sandy silt, and silty sand with various amounts of gravel and crushed concrete. Import consisting of silty sand and silty to clayey sand was also utilized as engineered fill. Concrete rubble generated during demolition was crushed to 3 inches or finer, and was blended into earth materials that were utilized as engineered fill. Laboratory tests were performed on the earth materials used as engineered fill to evaluate moisture-density relationships, optimum moisture content and maximum dry density. The results of the laboratory tests are summarized in Table 2 and Figures B1 through B4.

CONCLUSIONS AND RECOMMENDATIONS

1.0 General

1.1 Based on observations and test results, it is the opinion of Geocon West, Inc. that the grading and placement of engineered materials has been performed in substantial conformance with the requirements of the City of Los Angeles Building Code and the intent of the recommendations provided in the referenced reports.

1.2 All recommendations in the referenced project geotechnical report still remain applicable to the project.

2.0 Expansive Soils

2.1 The soils used for backfill vary between the "very low and "medium" expansion range. Special considerations for expansive soils have been provided in the referenced reports and should be incorporated into the design.

3.0 Foundation Design – Conventional Foundation

3.1 A conventional shallow foundation system may be utilized for support of future improvements provided foundations derive support in the newly placed engineered fill.

3.2 Continuous footings may be designed for an allowable bearing capacity of 2,000 pounds per square foot, and should be a minimum of 18 inches in width, 18 inches in depth below the lowest adjacent grade.

3.3 Isolated spread foundations may be designed for an allowable bearing capacity of 2,300 pounds per square foot, and should be a minimum of 24 inches in width, 18 inches in depth below the lowest adjacent grade.

3.4 The allowable soil bearing pressure above may be increased by 300 psf and 600 psf for each additional foot of foundation width and depth, respectively, up to a maximum allowable soil bearing pressure of 4,000 psf.

3.5 A coefficient of frictional resistance of 0.35 may be utilized between the concrete foundation and engineered fill.

3.6 Based on a factor of safety of 2, the passive earth pressure for the sides of foundations and slabs poured against undisturbed alluvial soils or newly compacted engineered fill may be computed as an equivalent fluid having a density of 200 pcf with a maximum earth pressure of 2,000 pcf. When combining passive and friction for lateral resistance, the passive component should be reduced by one-third.

4.0 Deepened Foundations

4.1 A deepened foundation system consisting of drilled cast-in-place concrete friction piles or end bearing piers deriving support in undisturbed alluvial soils or newly placed engineered fill may be utilized for support of proposed light poles or monument signs. Piles should be a minimum of 18 inches in diameter, should be embedded a minimum of six feet in depth below the ground surface. If the excavation bottom is cleaned of all loose soils the end bearing properties of the soils may be utilized and foundation may be designed for an allowable bearing capacity of 3,000 psf. The allowable soil bearing pressure above may be increased 600 psf for each additional foot of foundation depth, up to a maximum allowable soil bearing pressure of 5,000 psf. A one-third increase in the capacity may be used for wind or seismic loads.

4.2 Light poles may be supported on drilled cast-in-place friction piles deriving support in undisturbed alluvial soils or newly placed engineered fill. For drilled cast-in-place friction piles, the coefficient of friction may be taken as 0.35 based on uniform contact between the concrete and undisturbed alluvium and engineered fill. The piles may be designed based on a skin friction capacity of 250 pounds per square foot, and do not require the complete removal of all loose earth materials from the bottom of the excavation, since end-bearing capacity is not being considered. However, a cleanout of the excavation bottom will be required. Piles may be assumed fixed at an embedment depth of 5 feet below the ground surface. A one-third increase in the capacity may be used for wind or seismic loads.

4.3 For design purposes, an allowable passive value in the undisturbed alluvium and engineered fill may be assumed to be 200 pounds per square foot per foot with a maximum allowable passive earth pressure is 2,000 pcf. The allowable passive value may be doubled for isolated piles placed at least three times the pile diameter. To develop the full lateral value, provisions should be implemented to assure firm contact between the piles and the undisturbed soils.

5.0 Miscellaneous Foundations

5.1 Foundations for small outlying structures, such as block walls up to 6 feet high, planter walls or trash enclosures, which will not be tied-in to the proposed structure, may be supported on conventional foundations bearing on a minimum of 12 inches of newly placed engineered fill. Miscellaneous foundations may be designed for a bearing value of 1,500 pounds per square foot, and should be a minimum of 12 inches in width, 24 inches in depth below the lowest adjacent grade and 12 inches into the recommended bearing material. The allowable bearing pressure may be increased by up to one-third for transient loads due to wind or seismic forces.

6.0 Foundation Settlement

6.1 The maximum expected total settlement for a structure supported on a conventional foundation system designed with the maximum allowable bearing value of 4,000 psf and deriving support in newly placed engineered fill is estimated to be approximately ¾ inch and occur below the heaviest loaded structural element. Settlement of the foundation system is expected to occur on initial application of loading. Differential settlement is expected to be less than ½ inch over a distance of twenty feet.

6.2 Once the design and foundation loading configurations for the proposed structures proceeds to a more finalized plan, the estimated settlements presented in this report should be reviewed and revised, if necessary.

6.3 The approximate settlement for the 34 feet of backfill, compacted to 95 percent relative compaction, as determined by ASTM Test Method D 1557, is anticipated to be approximately 1 to 3 inches based on typical primary consolidation characteristics of engineered fill.

7.0 Concrete Slabs-on-Grade

7.1 Exterior non-building slabs, not subject to traffic loads, should be at least 4 inches thick and reinforced with No. 3 steel reinforcing bars placed 18 inches on center in both horizontal directions, positioned near the slab midpoint. Prior to construction of slabs, the upper 12 inches of subgrade should be moistened to 2 percent above optimum moisture content and properly compacted to at least 95 percent relative compaction, as determined by ASTM Test Method D 1557 (latest edition).

7.2 Slabs-on-grade at the ground surface that may receive moisture-sensitive floor coverings or may be used to store moisture-sensitive materials should be underlain by a vapor retarder placed directly beneath the slab. The vapor retarder and acceptable permeance should be specified by the project architect or developer based on the type of floor covering that will be installed.

7.3 For seismic design purposes, a coefficient of friction of 0.35 may be utilized between concrete slabs and subgrade soils.

8.0 Future Grading

8.1 Any additional grading performed at the site should be accomplished in conjunction with our observation and compaction testing services. This office should be notified at least 24 hours prior to commencing additional grading or fill placement operations.

9.0 Drainage

9.1 Proper surface drainage is critical to the future performance of the project. Uncontrolled infiltration of irrigation excess and storm runoff into the supporting soils can adversely affect the performance of the planned improvements. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change in the original designed engineering properties. Proper drainage should be maintained at all times.

9.2 Drainage should not be allowed to pond anywhere on the site, and especially not against any foundation or retaining wall. Sealing planters which are located adjacent to foundations should be considered to minimize moisture intrusion into the engineered fill.

9.3 Positive site drainage should be provided away from structures, pavement, and the tops of slopes to swales or other controlled drainage structures. The building pad and pavement areas should be fine graded such that water is not allowed to pond.

10.0 Closure

10.1 Fill which is placed beyond the limits shown on the Site Plans should be compacted with suitable equipment and observed by our representative. Geocon West, Inc. assumes no responsibility for compacted fill or earth materials placed beyond the limits shown by test elevations on the Site Plans. Any additional fill which is placed is the responsibility of the contractor to place in accordance with the approved plans and specifications.

10.2 A 24-hour notice is requested for a site visit.

LIMITATIONS

The conclusions and recommendations contained herein apply only to our work with respect to grading, and represent conditions at the date of our final observation, November 17, 2014. Any subsequent grading should be done in conjunction with our observation and testing services. As used herein, the term "observation" implies only that we observed the progress of the work with which we agreed to be involved. Our services did not include the evaluation or identification of the potential presence of hazardous or corrosive materials. Our conclusions and opinions as to whether the work essentially complies with the job specifications are based on our observations, experience, and test results. Subsurface conditions, and the accuracy of tests used to measure such conditions, can vary greatly at any time. We make no warranty, express or implied, except that our services were performed in accordance with engineering principles generally accepted at this time and location.

We will accept no responsibility for any subsequent changes made to the site by others, by the uncontrolled action of water, or by the failure of others to properly repair damages caused by the uncontrolled action of water. The findings and recommendations of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of one year.

If you have any questions regarding this report, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON WEST, INC.

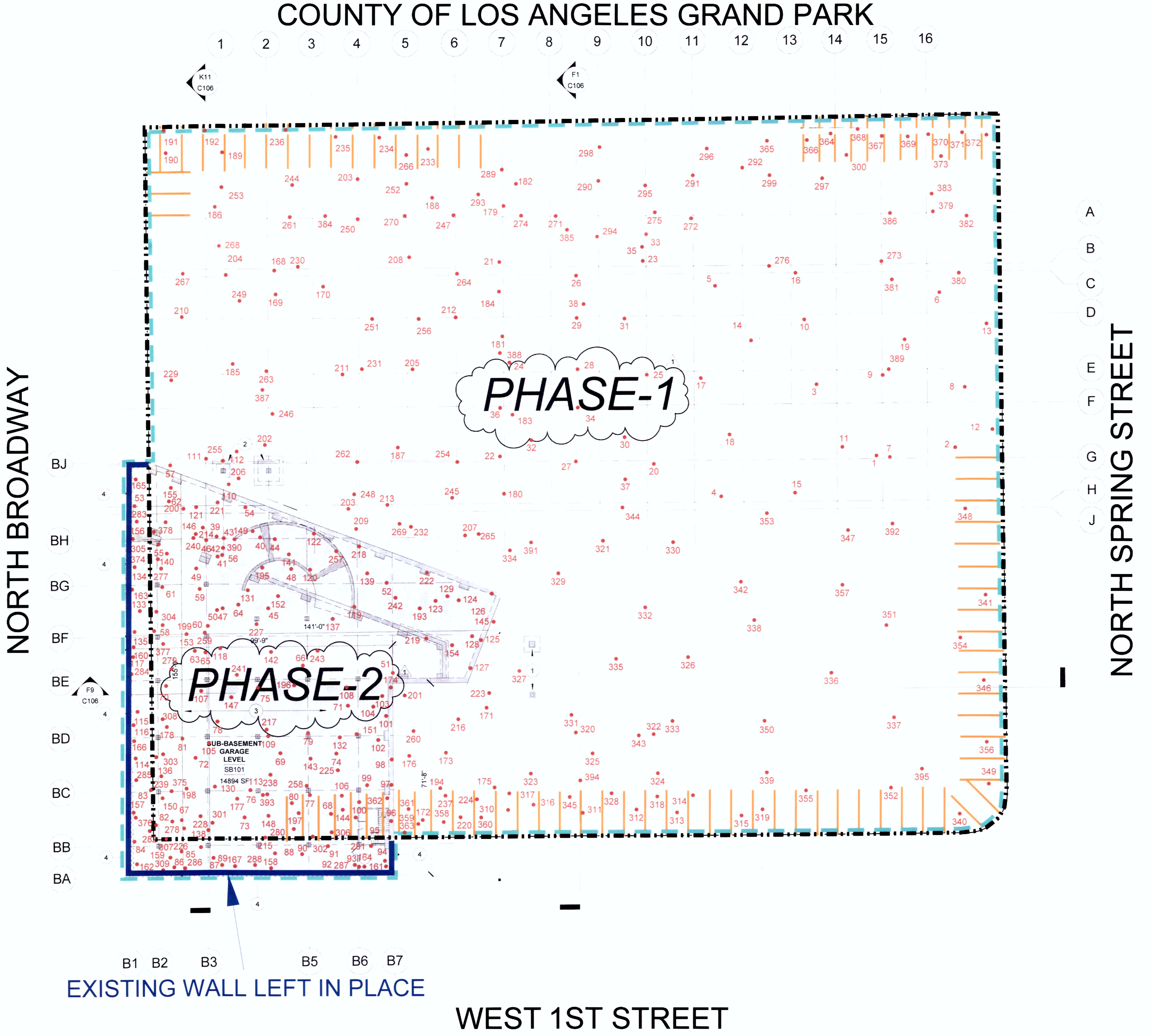
Ramon D. Gamez
Staff Engineer

Neal Berliner
GE 2576

REGISTERED PROFESSIONAL ENGINEER
NEAL D. BERLINER
2576
GEOTECHNICAL
STATE OF CALIFORNIA

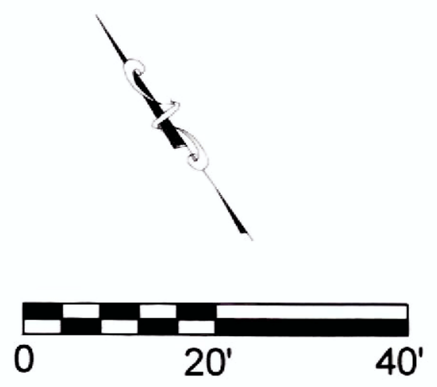
Enclosures:
- Figure 1 - Site Plan
- Figure 2 - Site Plan - Excavation Bottom
- Figure 3 - Site Plan - Finished Grade
- Explanation of Coded Terms
- Tables 1 and 2 - Summary of Test Results
- Figure B1 - Direct Shear Test Results
- Figure B2 - Consolidation Test Results
- Figures B3 and B4 - Grain Size Distribution
- Certification

(4+EMAIL) Addressee



LEGEND

● 395	Approximate Location of Density Test
▬ ▬	Approximate Limits of Engineered Fill
──	Approximate Location of A-B-C Slot-Cut
▬ · ▬ ·	Approximate Limits of Property Line
▬▬	Approximate Location of Existing Wall Left in Place



GEOCON
WEST, INC.

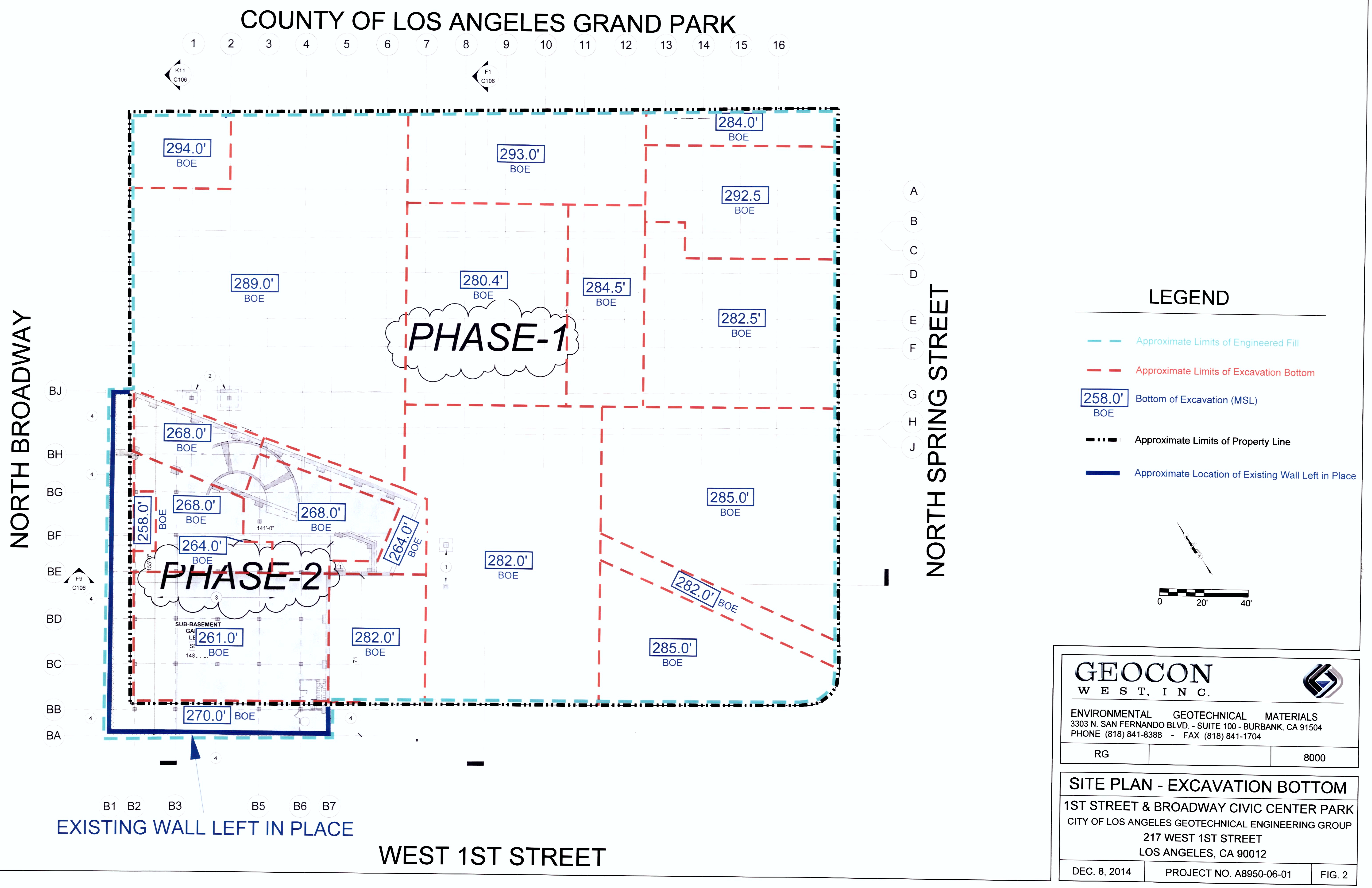
ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

RG		8000

SITE PLAN

1ST STREET & BROADWAY CIVIC CENTER PARK
CITY OF LOS ANGELES GEOTECHNICAL ENGINEERING GROUP
217 WEST 1ST STREET
LOS ANGELES, CA 90012

DEC. 8, 2014	PROJECT NO. A8950-06-01	FIG. 1



GEOCON
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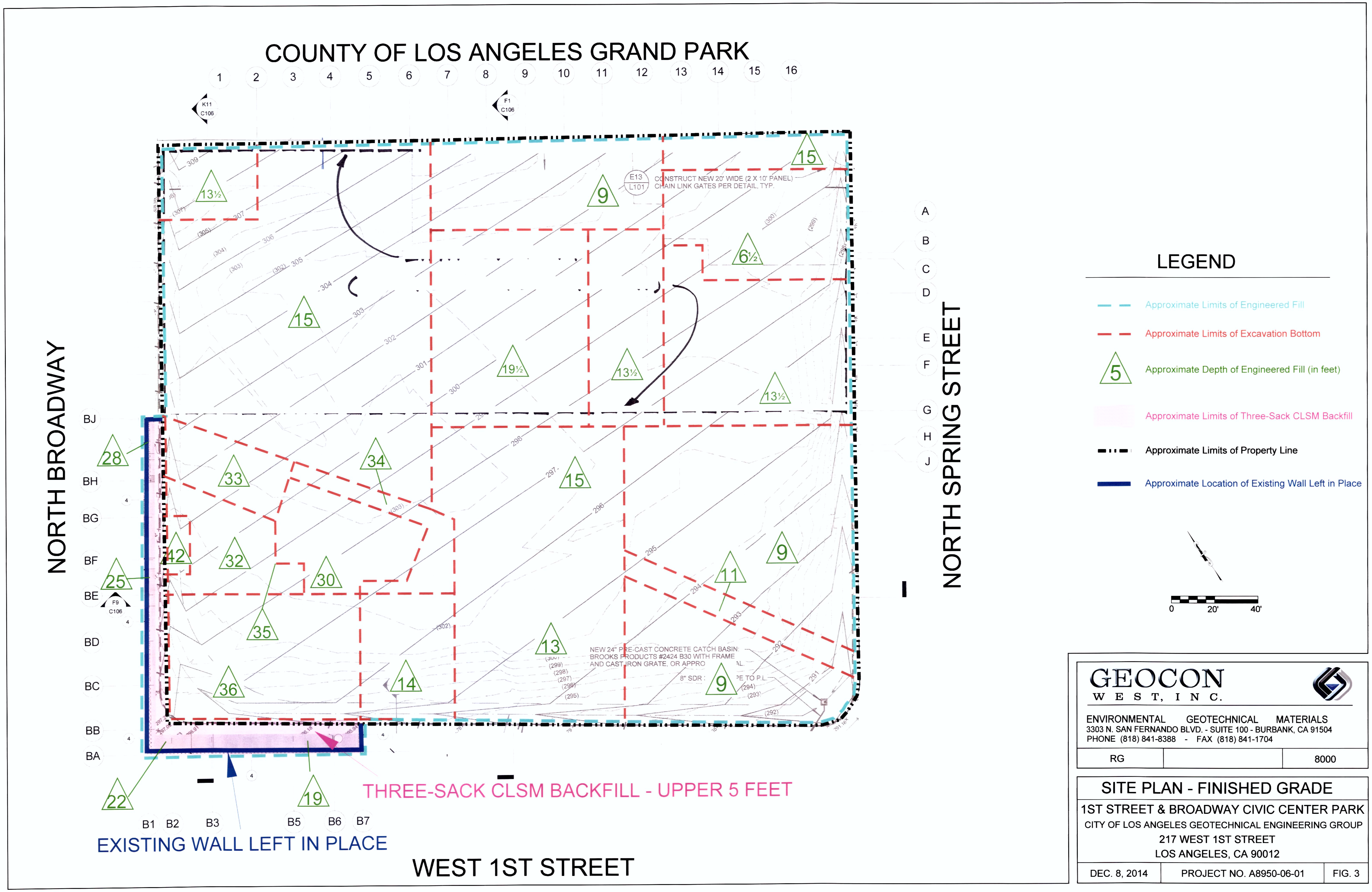
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

RG		8000

SITE PLAN - EXCAVATION BOTTOM

1ST STREET & BROADWAY CIVIC CENTER PARK
CITY OF LOS ANGELES GEOTECHNICAL ENGINEERING GROUP
217 WEST 1ST STREET
LOS ANGELES, CA 90012

DEC. 8, 2014	PROJECT NO. A8950-06-01	FIG. 2



GEOCON
W E S T, I N C.

ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

RG		8000

SITE PLAN - FINISHED GRADE
1ST STREET & BROADWAY CIVIC CENTER PARK
CITY OF LOS ANGELES GEOTECHNICAL ENGINEERING GROUP
217 WEST 1ST STREET
LOS ANGELES, CA 90012

DEC. 8, 2014	PROJECT NO. A8950-06-01	FIG. 3

EXPLANATION OF CODED TERMS

- PREFIX CODE DESIGNATION FOR TEST NUMBERS

AC - Asphalt Concrete
BF - Backfill
BP - Building Pad
CG - Curb & Gutter
DW - Driveway
FG - Finish Grade
ET - Electrical Trench
PL - Parking Lot
PT - Plumbing Trench
RW - Retaining Wall
SD - Storm Drain
SG - Subgrade
SL - Sewer Lateral
SM - Sewer Main
ST - Slope Test
SW - Sidewalk
SZ - Slope Zone
WB - Wall Backfill
WL - Water Lateral
WM - Water Main

- SUFFIX CODE DESIGNATION FOR TEST NUMBERS

A, B, C, . . . : Retest of previous density test failure, following moisture conditioning and/or recompaction.
R : Fill in area of density test failure was removed and replaced with properly compacted fill soil.

- TEST LOCATION ABBREVIATIONS[†]

M - Adjacent to, or in, Median Strip
V - Joint or Electrical Trench Vault
X - Joint or Electrical Trench Crossing
N - North Side of Street
S - South Side of Street
E - East Side of Street
W - West Side of Street

[†] For Example: "M-E" would describe a density test taken on the East Side of the Median Strip at the specified street and station number (i.e., MILLER RD 10+00 M-E)

- CURVE NO.

Corresponds to curve numbers listed in Table II, representing the laboratory maximum dry density/optimum moisture content data for selected fill soil samples encountered during testing and observations.

- ROCK CORRECTION

For density tests with rock percentage greater than zero, laboratory maximum dry density and optimum moisture content were adjusted for rock content. For tests with rock content equal to zero, laboratory maximum dry density and optimum moisture content values are then unadjusted values.

- ELEVATION/DEPTH

Test elevations/depths have been rounded to the nearest whole foot.
BOE: Bottom of Excavation

- TYPE OF TEST

SC: Sand Cone Test
NU: Nuclear Density Test
DC: Drive Cylinder Test

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GEOCON
WEST, INC.

PROJECT NO. A8950-06-01

TABLE 1
SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field		Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
						Dry Unit Weight (pcf)	Moisture Content (%)					
BF	1	6/2/2014	G-15	284.0	1	116.5	14.0	121.0	13.5	96	NU	Pass
BF	2	6/2/2014	G-16.2	284.0	1	117.4	14.6	121.0	13.5	97	NU	Pass
BF	3	6/2/2014	E.5-13.5	284.0	1	117.6	13.8	121.0	13.5	97	NU	Pass
BF	4	6/2/2014	G.8-11.5	286.0	1	116.2	13.5	121.0	13.5	96	NU	Pass
BF	5	6/2/2014	C.2-11.2	286.0	1	117.5	14.2	121.0	13.5	97	NU	Pass
BF	6	6/2/2014	C.5-16.2	286.0	1	112.9	13.0	121.0	13.5	93	NU	Pass
BF	7	6/2/2014	G-15	286.0	1	112.5	13.8	121.0	13.5	93	NU	Pass
BF	8	6/4/2014	E.5-16.5	287.0	4	110.9	11.2	117.0	10.0	95	NU	Pass
BF	9	6/4/2014	E.1-15	288.0	4	112.8	12.3	117.0	10.0	96	NU	Pass
BF	10	6/4/2014	D-13.2	288.0	4	110.3	11.6	117.0	10.0	94	SC	Pass
BF	11	6/4/2014	F.9-13.2	288.0	4	107.8	12.0	117.0	10.0	92	NU	Pass
BF	12	6/4/2014	F.5-16.9	290.0	4	109.9	12.3	117.0	10.0	94	NU	Pass
BF	13	6/4/2014	D.1-16.9	290.0	4	107.9	11.0	117.0	10.0	92	NU	Pass
BF	14	6/5/2014	D.5-12.2	288.0	4	107.5	11.4	117.0	10.0	92	NU	Pass
BF	15	6/5/2014	H-12.8	288.0	4	110.2	10.9	117.0	10.0	94	NU	Pass
BF	16	6/5/2014	B-13	288.0	4	108.3	11.0	117.0	10.0	93	NU	Pass
BF	17	6/5/2014	E.2-11	290.0	4	108.8	11.3	117.0	10.0	93	NU	Pass
BF	18	6/5/2014	F.5-11.8	291.0	4	109.7	11.0	117.0	10.0	94	NU	Pass
BF	19	6/5/2014	D.6-15.9	291.0	4	108.1	10.3	117.0	10.0	92	NU	Pass
BF	20	6/10/2014	G-10	282.0	1	116.1	14.9	121.0	13.5	96	SC	Pass
BF	21	6/10/2014	B-7	282.0	1	117.3	14.3	121.0	13.5	97	NU	Pass
BF	22	6/10/2014	G-7	282.0	1	114.5	13.1	121.0	13.5	95	NU	Pass
BF	23	6/10/2014	B-10	283.0	3	115.1	13.9	124.0	8.5	93	NU	Pass
BF	24	6/11/2014	E-7	284.0	3	120.4	10.1	124.0	8.5	97	NU	Pass
BF	25	6/11/2014	E-10	284.0	3	116.9	10.8	124.0	8.5	94	NU	Pass
BF	26	6/11/2014	C-8.5	284.0	3	117.6	11.1	124.0	8.5	95	NU	Pass
BF	27	6/11/2014	G-8.5	284.0	3	119.4	10.6	124.0	8.5	96	NU	Pass
BF	28	6/12/2014	E-8.5	286.0	3	121.3	11.2	124.0	8.5	98	NU	Pass
BF	29	6/12/2014	D-8.5	286.0	3	118.3	11.0	124.0	8.5	95	NU	Pass
BF	30	6/12/2014	F.5-9.5	286.0	3	117.6	10.8	124.0	8.5	95	SC	Pass
BF	31	6/12/2014	D-9.5	286.0	3	116.3	11.4	124.0	8.5	94	NU	Pass
BF	32	6/12/2014	F.5-7.5	288.0	3	116.8	10.9	124.0	8.5	94	NU	Pass
BF	33	6/12/2014	A.5-10	288.0	3	117.0	11.3	124.0	8.5	94	NU	Pass
BF	34	6/12/2014	F-8.5	288.0	3	116.2	11.4	124.0	8.5	94	NU	Pass
BF	35	6/13/2014	A.5-10	290.0	3	118.0	10.4	124.0	8.5	95	NU	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED

SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field Dry Unit Weight (pcf)	Field Moisture Content (%)	Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
BF	36	6/13/2014	F.1-6.9	290.0	3	117.4	10.9	124.0	8.5	95	NU	Pass
BF	37	6/13/2014	G.5-9.5	290.0	3	116.4	11.1	124.0	8.5	94	NU	Pass
BF	38	6/13/2014	C.9-8.8	290.0	3	114.8	10.7	124.0	8.5	93	NU	Pass
BF	39	7/7/2014	BH.5-1	270.0	9	121.0	12.1	125.0	11.0	97	NU	Pass
BF	40	7/7/2014	BH-2	270.0	9	119.4	11.7	125.0	11.0	96	SC	Pass
BF	41	7/7/2014	BH.5-1	270.0	9	119.6	11.6	125.0	11.0	96	NU	Pass
BF	42	7/8/2014	BH.5-1	270.0	9	118.8	11.4	125.0	11.0	95	NU	Pass
BF	43	7/8/2014	BH-1	266.0	9	118.9	11.8	125.0	11.0	95	NU	Pass
BF	44	7/8/2014	BH.5-2	266.0	9	119.8	12.1	125.0	11.0	96	NU	Pass
BF	45	7/8/2014	BG.5-2	272.0	9	120.4	11.6	125.0	11.0	96	NU	Pass
BF	46	7/8/2014	BH.5-1	272.0	9	121.9	11.7	125.0	11.0	98	NU	Pass
BF	47	7/8/2014	BG.5-1	274.0	9	120.4	11.9	125.0	11.0	96	NU	Pass
BF	48	7/8/2014	BH.5-2.5	270.0	9	119.0	11.2	125.0	11.0	95	NU	Pass
BF	49	7/8/2014	BH.5-0.5	274.0	9	120.0	11.3	125.0	11.0	96	NU	Pass
BF	50	7/8/2014	BG.5-1	276.0	9	119.9	11.6	125.0	11.0	96	SC	Pass
BF	51	7/8/2014	BE-B7	270.0	9	119.1	10.9	125.0	11.0	95	NU	Pass
BF	52	7/8/2014	BG-B7	272.0	9	119.3	11.7	125.0	11.0	95	NU	Pass
BF	53	7/8/2014	BH.5-B1	270.0	9	120.4	11.9	125.0	11.0	96	NU	Pass
BF	54	7/8/2014	BH.5-B3.5	272.0	9	118.9	11.1	125.0	11.0	95	NU	Pass
BF	55	7/8/2014	BH-B2	274.0	9	119.9	11.9	125.0	11.0	96	NU	Pass
BF	56	7/8/2014	BG.5-B3	276.0	9	119.6	11.6	125.0	11.0	96	NU	Pass
BF	57	7/8/2014	B2.5-BJ	278.0	9	121.4	11.4	125.0	11.0	97	NU	Pass
BF	58	7/15/2014	BF-B2	260.0	9	122.0	11.2	125.0	11.0	98	NU	Pass
BF	59	7/15/2014	BG-B3	262.0	9	121.0	11.5	125.0	11.0	97	NU	Pass
BF	60	7/15/2014	BF-B3	264.0	9	121.6	11.3	125.0	11.0	97	SC	Pass
BF	61	7/15/2014	BG-B2	266.0	9	122.3	11.8	125.0	11.0	98	NU	Pass
BF	62	7/15/2014	BH.5-B2.5	268.0	9	121.4	12.3	125.0	11.0	97	NU	Pass
BF	63	7/15/2014	BE.5-B2.5	268.0	9	121.8	11.6	125.0	11.0	97	NU	Pass
BF	64	7/15/2014	BF.8-B3.5	264.0	9	121.1	11.3	125.0	11.0	97	NU	Pass
BF	65	7/15/2014	BE.8-B2.5	266.0	9	121.3	12.1	125.0	11.0	97	NU	Pass
BF	66	7/15/2014	BE.5-B3.8	268.0	9	120.4	11.9	125.0	11.0	96	NU	Pass
BF	67	7/18/2014	BB.5-B2.5	263.0	9	121.5	11.2	125.0	11.0	97	NU	Pass
BF	68	7/18/2014	BB.5-B5.5	263.0	9	121.0	11.3	125.0	11.0	97	NU	Pass
BF	69	7/18/2014	BC.5-B4	263.0	9	122.0	11.8	125.0	11.0	98	NU	Pass
BF	70	7/18/2014	BD.8-B2.5	263.0	9	121.1	12.3	125.0	11.0	97	SC	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED

SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field		Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
						Dry Unit Weight (pcf)	Moisture Content (%)					
BF	71	7/18/2014	BD.5-B5.8	263.0	9	119.9	11.9	125.0	11.0	96	NU	Pass
BF	72	7/18/2014	BC.5-B2.5	265.0	9	123.4	11..8	125.0	11.0	99	NU	Pass
BF	73	7/18/2014	BB.5-B4	265.0	9	121.5	11.6	125.0	11.0	97	NU	Pass
BF	74	7/18/2014	BC.5-B5.5	265.0	9	121.9	12.0	125.0	11.0	98	NU	Pass
BF	75	7/18/2014	BD.8-B4	265.0	9	120.5	11.7	125.0	11.0	96	NU	Pass
BF	76	7/18/2014	BB.8-B4	267.0	9	118.8	12.8	125.0	11.0	95	NU	Pass
BF	77	7/18/2014	BC-B5	267.0	9	119.3	12.1	125.0	11.0	95	NU	Pass
BF	78	7/18/2014	BD.5-B3.2	267.0	9	119.0	12.6	125.0	11.0	95	NU	Pass
BF	79	7/18/2014	BD.2-B5	269.0	9	120.9	11.9	125.0	11.0	97	NU	Pass
BF	80	7/18/2014	BB.5-B4.8	269.0	9	120.0	11.8	125.0	11.0	96	SC	Pass
BF	81	7/18/2014	BD-B2.5	270.0	9	119.6	12.1	125.0	11.0	96	NU	Pass
BF	82	7/19/2014	BB.5-B1.9	272.0	9	119.9	12.4	125.0	11.0	96	NU	Pass
BF	83	7/19/2014	BC-B1.9	274.0	9	118.8	12.0	125.0	11.0	95	NU	Pass
BF	84	7/19/2014	BB.2-B1.2	276.0	9	120.3	11.4	125.0	11.0	96	NU	Pass
BF	85	7/19/2014	BA.9-B2.5	272.0	9	120.9	11.9	125.0	11.0	97	NU	Pass
BF	86	7/19/2014	BA.5-B2.2	274.0	9	119.8	12.0	125.0	11.0	96	NU	Pass
BF	87	7/19/2014	BA.5-B2.8	276.0	9	119.0	12.4	125.0	11.0	95	NU	Pass
BF	88	7/19/2014	BA.5-B4	272.0	9	118.8	12.8	125.0	11.0	95	NU	Pass
BF	89	7/19/2014	BA.2-B3.2	274.0	9	120.4	11.4	125.0	11.0	96	NU	Pass
BF	90	7/19/2014	BA.5-B4.8	276.0	9	118.8	12.0	125.0	11.0	95	SC	Pass
BF	91	7/19/2014	BB-B5.5	272.0	9	118.8	12.3	125.0	11.0	95	NU	Pass
BF	92	7/19/2014	BA.2-B5.2	275.0	9	120.1	11.8	125.0	11.0	96	NU	Pass
BF	93	7/19/2014	BA.2-B5.8	277.0	9	120.9	11.9	125.0	11.0	97	NU	Pass
BF	94	7/21/2014	BA.1-B6.8	272.0	9	119.0	11.3	125.0	11.0	95	NU	Pass
BF	95	7/21/2014	BA.8-B6.1	274.0	9	119.8	11.8	125.0	11.0	96	NU	Pass
BF	96	7/21/2014	BB.2-B6.8	266.0	9	121.0	12.1	125.0	11.0	97	NU	Pass
BF	97	7/21/2014	BC-B7	268.0	9	121.5	11.8	125.0	11.0	97	NU	Pass
BF	98	7/21/2014	BC.5-B7	266.0	9	120.5	11.9	125.0	11.0	96	NU	Pass
BF	99	7/21/2014	BC.2-B6.2	270.0	9	120.0	12.0	125.0	11.0	96	NU	Pass
BF	100	7/21/2014	BB.6-B6	272.0	9	120.4	11.7	125.0	11.0	96	SC	Pass
BF	101	7/22/2014	BD.5-B7	266.0	9	119.1	11.0	125.0	11.0	95	NU	Pass
BF	102	7/22/2014	BC.8-B6.9	266.0	9	120.0	11.8	125.0	11.0	96	NU	Pass
BF	103	7/22/2014	BD.8-B6.9	268.0	9	119.8	11.3	125.0	11.0	96	NU	Pass
BF	104	7/22/2014	BD.5-B6.5	272.0	9	118.8	11.9	125.0	11.0	95	NU	Pass
BF	105	7/23/2014	BD-B3	272.0	10	111.7	14.9	116.3	13.7	96	NU	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED

SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field Dry Unit Weight (pcf)	Field Moisture Content (%)	Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
BF	106	7/23/2014	BB.8-B5.6	272.0	10	110.7	16.1	116.3	13.7	95	NU	Pass
BF	107	7/23/2014	BD.9-B3	272.0	10	111.5	14.7	116.3	13.7	96	NU	Pass
BF	108	7/23/2014	BD.9-B5.8	272.0	10	112.2	15.2	116.3	13.7	96	NU	Pass
BF	109	7/25/2014	BD-B4	274.0	10	112.4	15.8	116.3	13.7	97	NU	Pass
BF	110	7/25/2014	BH.8-B3.2	266.0	10	110.5	16.4	116.3	13.7	95	SC	Pass
BF	111	7/25/2014	BJ-B3	268.0	9	120.1	11.4	125.0	11.0	96	NU	Pass
BF	112	7/25/2014	BJ.2-B3.1	270.0	9	118.8	11.2	125.0	11.0	95	NU	Pass
BF	113	7/25/2014	BC-B3.8	276.0	9	119.5	11.0	125.0	11.0	96	NU	Pass
BF	114	7/25/2014	BC.8-B1	272.0	9	120.9	11.3	125.0	11.0	97	NU	Pass
BF	115	7/25/2014	BD.8-B1	274.0	9	121.4	11.8	125.0	11.0	97	NU	Pass
BF	116	7/25/2014	BD.5-B1	276.0	9	121.3	11.1	125.0	11.0	97	NU	Pass
BF	117	7/25/2014	BE.5-B1	278.0	9	120.3	11.4	125.0	11.0	96	NU	Pass
BF	118	7/26/2014	BE.5-B3	276.0	9	119.3	11.9	125.0	11.0	95	NU	Pass
BF	119	7/26/2014	BF.5-B6	276.0	9	118.8	11.7	125.0	11.0	95	NU	Pass
BF	120	7/26/2014	BG.3-B5	278.0	9	119.1	12.6	125.0	11.0	95	SC	Pass
BF	121	7/26/2014	BH.5-B2.5	278.0	9	118.8	12.3	125.0	11.0	95	NU	Pass
BF	122	7/26/2014	BH-B5	280.0	9	119.8	11.8	125.0	11.0	96	NU	Pass
BF	123	7/26/2014	BF.8-B7.5	276.0	9	121.0	11.0	125.0	11.0	97	NU	Pass
BF	124	7/26/2014	BE.5-B7.5	278.0	9	119.0	12.8	125.0	11.0	95	NU	Pass
BF	125	7/26/2014	BF-B7.8	266.0	9	118.8	12.2	125.0	11.0	95	NU	Pass
BF	126	7/26/2014	BG-B7.9	268.0	9	118.9	11.9	125.0	11.0	95	NU	Pass
BF	127	7/26/2014	BE-B7.6	270.0	9	118.8	11.7	125.0	11.0	95	NU	Pass
BF	128	7/26/2014	BE.8-B7.8	274.0	9	119.4	11.3	125.0	11.0	96	NU	Pass
BF	129	7/26/2014	BF.8-B7.8	278.0	9	119.9	11.9	125.0	11.0	96	NU	Pass
BF	130	7/26/2014	BC.5-B3	280.0	9	119.1	12.3	125.0	11.0	95	SC	Pass
BF	131	7/26/2014	BG-B3.5	282.0	9	120.9	11.3	125.0	11.0	97	NU	Pass
BF	132	7/26/2014	BD-B5.5	282.0	9	119.8	11.7	125.0	11.0	96	NU	Pass
BF	133	7/26/2014	BF.8-B1	272.0	9	119.0	11.8	125.0	11.0	95	NU	Pass
BF	134	7/26/2014	BG.5-B1	276.0	9	119.5	11.6	125.0	11.0	96	NU	Pass
BF	135	7/26/2014	BF.2-B1	278.0	9	120.4	11.7	125.0	11.0	96	NU	Pass
BF	136	7/28/2014	BC.5-B2	276.0	10	110.5	12.4	116.3	13.7	95	NU	Pass
BF	137	7/28/2014	BF.3-B5.5	276.0	10	111.4	13.3	116.3	13.7	96	NU	Pass
BF	138	7/28/2014	BB.1-B3	278.0	10	111.2	13.9	116.3	13.7	96	NU	Pass
BF	139	7/28/2014	BG-B6	278.0	10	110.6	13.3	116.3	13.7	95	NU	Pass
BF	140	7/28/2014	BG.5-B2	280.0	10	110.2	13.9	116.3	13.7	95	SC	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED

SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field		Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
						Dry Unit Weight (pcf)	Moisture Content (%)					
BF	141	7/28/2014	BG-B4.8	280.0	10	110.2	14.0	116.3	13.7	95	NU	Pass
BF	142	7/28/2014	BE.5-B4	280.0	10	111.4	13.9	116.3	13.7	96	NU	Pass
BF	143	7/28/2014	BC.5-B5	280.0	10	110.5	14.5	116.3	13.7	95	NU	Pass
BF	144	7/28/2014	BB.5-B6	280.0	10	110.4	14.1	116.3	13.7	95	NU	Pass
BF	145	7/28/2014	BF.5-B8	282.0	10	111.3	13.8	116.3	13.7	96	NU	Pass
BF	146	7/28/2014	BH.5-B3	282.0	10	111.4	14.4	116.3	13.7	96	NU	Pass
BF	147	7/28/2014	BD.8-B3.5	282.0	10	110.5	14.1	116.3	13.7	95	NU	Pass
BF	148	7/28/2014	BB.5-B4.1	284.0	10	110.2	13.9	116.3	13.7	95	NU	Pass
BF	149	7/28/2014	BH-B4	284.0	10	111.7	13.7	116.3	13.7	96	NU	Pass
BF	150	7/28/2014	BB.8-B2	285.0	10	110.1	14.4	116.3	13.7	95	SC	Pass
BF	151	7/28/2014	BD-B6	285.0	10	110.3	14.1	116.3	13.7	95	NU	Pass
BF	152	7/28/2014	BF.5-B4	285.0	10	110.2	13.8	116.3	13.7	95	NU	Pass
BF	153	7/28/2014	BF-B2	287.0	10	110.8	13.7	116.3	13.7	95	NU	Pass
BF	154	7/28/2014	BF-B7.5	287.0	10	112.5	14.1	116.3	13.7	97	NU	Pass
BF	155	7/28/2014	BI-B2	287.0	10	110.5	14.0	116.3	13.7	95	NU	Pass
BF	156	7/29/2014	BH-B1	282.0	10	110.4	14.0	116.3	13.7	95	NU	Pass
BF	157	7/29/2014	BB.5-B1	282.0	10	112.5	14.6	116.3	13.7	97	NU	Pass
BF	158	7/29/2014	BA-B4	282.0	10	111.4	14.3	116.3	13.7	96	NU	Pass
BF	159	7/29/2014	BA-B2	284.0	10	111.2	14.1	116.3	13.7	96	NU	Pass
BF	160	7/29/2014	BE.8-B1	284.0	10	110.6	13.7	116.3	13.7	95	SC	Pass
BF	161	7/29/2014	BA-B7	284.0	10	110.6	14.1	116.3	13.7	95	NU	Pass
BF	162	7/29/2014	BA.5-B1	286.0	10	111.0	13.9	116.3	13.7	95	NU	Pass
BF	163	7/29/2014	BG-B1	286.0	10	110.4	14.6	116.3	13.7	95	NU	Pass
BF	164	7/29/2014	BA-B6	286.0	10	110.5	14.5	116.3	13.7	95	NU	Pass
BF	165	7/29/2014	BJ-B1	288.0	10	111.9	14.1	116.3	13.7	96	NU	Pass
BF	166	7/29/2014	BD-B1	288.0	10	110.1	13.8	116.3	13.7	95	NU	Pass
BF	167	7/29/2014	BA-B3.5	288.0	10	111.4	14.0	116.3	13.7	96	NU	Pass
BF	168	7/29/2014	BA-B3.5	287.0	9	119.8	11.9	125.0	11.0	96	NU	Pass
BF	169	7/29/2014	C.5-2.1	289.0	9	118.8	12.0	125.0	11.0	95	NU	Pass
BF	170	7/29/2014	C3.2-3.1	291.0	9	119.2	12.4	125.0	11.0	95	SC	Pass
BF	171	7/30/2014	BD.5-B7.9	284.0	9	120.0	11.7	125.0	11.0	96	NU	Pass
BF	172	7/30/2014	BB-B7.3	284.0	9	119.1	12.5	125.0	11.0	95	NU	Pass
BF	173	7/30/2014	BC.5-B7.5	286.0	9	119.3	12.1	125.0	11.0	95	NU	Pass
BF	174	7/30/2014	BE-B7	286.0	9	119.6	12.4	125.0	11.0	96	NU	Pass
BF	175	7/30/2014	BB.5-B8	288.0	9	118.8	11.9	125.0	11.0	95	NU	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED
SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field Dry Unit Weight (pcf)	Field Moisture Content (%)	Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
BF	176	7/30/2014	BC.5-B7.4	288.0	9	120.5	13.1	125.0	11.0	96	NU	Pass
BF	177	7/30/2014	BC-B3.8	287.0	9	121.1	11.9	125.0	11.0	97	NU	Pass
BF	178	7/30/2014	BD-B2	287.0	9	121.2	12.4	125.0	11.0	97	NU	Pass
BF	179	7/30/2014	A-7	292.0	9	119.2	12.5	125.0	11.0	95	NU	Pass
BF	180	7/30/2014	H-7	292.0	9	119.3	12.0	125.0	11.0	95	SC	Pass
BF	181	7/30/2014	D.5-7	294.0	9	119.2	11.5	125.0	11.0	95	NU	Pass
BF	182	7/30/2014	A-7	294.0	9	118.8	11.7	125.0	11.0	95	NU	Pass
BF	183	7/30/2014	F-7	296.0	9	120.0	11.4	125.0	11.0	96	NU	Pass
BF	184	7/30/2014	C.5-7	296.0	9	119.8	12.3	125.0	11.0	96	NU	Pass
BF	185	7/30/2014	E-1	293.0	9	120.3	11.5	125.0	11.0	96	NU	Pass
BF	186	7/30/2014	A-1	298.0	8	130.4	8.4	134.5	8.0	97	NU	Pass
BF	187	7/30/2014	G-5	290.0	8	131.1	8.9	134.5	8.0	97	NU	Pass
BF	188	7/30/2014	A-5.5	294.0	8	129.7	9.4	134.5	8.0	96	NU	Pass
BF	189	7/30/2014	A-1.1	300.0	8	130.5	9.0	134.5	8.0	97	NU	Pass
BF	190	7/30/2014	A-1	300.0	8	128.3	9.1	134.5	8.0	95	SC	Pass
BF	191	7/30/2014	A-1	302.0	8	128.9	8.7	134.5	8.0	96	NU	Pass
BF	192	7/30/2014	A-1	302.0	8	130.3	8.8	134.5	8.0	97	NU	Pass
BF	193	7/31/2014	BF.5-B7.2	289.0	9	119.8	12.1	125.0	11.0	96	NU	Pass
BF	194	7/31/2014	BC-B7.5	289.0	11	130.7	6.8	133.9	6.3	98	NU	Pass
BF	195	7/31/2014	BG.5-B4.5	289.0	9	120.0	11.1	125.0	11.0	96	NU	Pass
BF	196	7/31/2014	BE-B4.5	289.0	8	130.5	8.8	134.5	8.0	97	NU	Pass
BF	197	7/31/2014	BB.8-B4.8	290.0	9	119.3	10.8	125.0	11.0	95	NU	Pass
BF	198	7/31/2014	BC-B2.5	290.0	9	118.8	10.5	125.0	11.0	95	NU	Pass
BF	199	7/31/2014	BF.2-B2.5	289.0	8	130.7	8.9	134.5	8.0	97	NU	Pass
BF	200	7/31/2014	BH.6-B2.4	290.0	8	129.7	8.4	134.5	8.0	96	SC	Pass
BF	201	7/31/2014	BD.8-B7.1	290.0	9	118.8	11.9	125.0	11.0	95	NU	Pass
BF	202	7/31/2014	G-2	291.0	8	131.3	8.6	134.5	8.0	98	NU	Pass
BF	203	7/31/2014	H.5-4	291.0	9	119.5	11.3	125.0	11.0	96	NU	Pass
BF	204	7/31/2014	C-1	291.0	8	131.0	8.8	134.5	8.0	97	NU	Pass
BF	205	7/31/2014	E-B7	291.0	8	129.4	8.2	134.5	8.0	96	NU	Pass
BF	206	7/31/2014	G.5-B3	292.0	8	129.1	8.7	134.5	8.0	96	NU	Pass
BF	207	7/31/2014	BH-6	292.0	8	129.5	8.8	134.5	8.0	96	NU	Pass
BF	208	7/31/2014	B-5	294.0	9	119.9	12.3	125.0	11.0	96	NU	Pass
BF	209	7/31/2014	J-3.2	294.0	8	128.3	8.9	134.5	8.0	95	NU	Pass
BF	210	7/31/2014	D-B2.8	294.0	9	119.5	12.8	125.0	11.0	96	SC	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED

SUMMARY OF IN-PLACE DENSITY TESTS

						Field						
Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Dry Unit Weight (pcf)	Moisture Content (%)	Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
BF	211	7/31/2014	E-4	294.0	8	129.7	8.1	134.5	8.0	96	NU	Pass
BF	212	7/31/2014	D-6	294.0	8	128.7	8.6	134.5	8.0	96	NU	Pass
BF	213	7/31/2014	H-5	294.0	8	128.9	8.9	134.5	8.0	96	NU	Pass
BF	214	8/1/2014	BH-B2.5	292.0	9	119.1	12.0	125.0	11.0	95	NU	Pass
BF	215	8/1/2014	BB-B4	292.0	9	118.8	12.4	125.0	11.0	95	NU	Pass
BF	216	8/1/2014	BD-B7.5	292.0	9	119.6	11.7	125.0	11.0	96	NU	Pass
BF	217	8/1/2014	BD.5-B4	292.0	9	120.8	11.5	125.0	11.0	97	NU	Pass
BF	218	8/1/2014	BH.2-B5	292.0	9	121.3	11.1	125.0	11.0	97	NU	Pass
BF	219	8/1/2014	BF-B7.5	292.0	9	120.4	11.8	125.0	11.0	96	NU	Pass
BF	220	8/1/2014	BB.5-B7.8	292.0	9	118.8	12.2	125.0	11.0	95	SC	Pass
BF	221	8/2/2014	BH.5-B3.1	294.0	9	120.0	11.0	125.0	11.0	96	NU	Pass
BF	222	8/2/2014	BG.2-B7.5	294.0	9	120.4	11.6	125.0	11.0	96	NU	Pass
BF	223	8/2/2014	BE-B7.8	294.0	9	121.0	11.3	125.0	11.0	97	NU	Pass
BF	224	8/2/2014	BB.5-B7.8	294.0	9	119.8	11.9	125.0	11.0	96	NU	Pass
BF	225	8/2/2014	BC.5-B5.5	294.0	9	118.8	10.9	125.0	11.0	95	NU	Pass
BF	226	8/2/2014	BB-B2.5	294.0	9	119.9	11.1	125.0	11.0	96	NU	Pass
BF	227	8/2/2014	BF-B4	294.0	9	118.8	11.3	125.0	11.0	95	NU	Pass
BF	228	8/2/2014	BB-B2.8	294.0	9	120.5	11.7	125.0	11.0	96	NU	Pass
BF	229	8/2/2014	E-B2	296.0	9	120.1	11.2	125.0	11.0	96	NU	Pass
BF	230	8/2/2014	B-2.5	296.0	9	120.5	11.8	125.0	11.0	96	SC	Pass
BF	231	8/2/2014	E-4	296.0	9	120.0	11.7	125.0	11.0	96	NU	Pass
BF	232	8/2/2014	BH-5.5	296.0	4	111.4	12.1	117.0	10.0	95	NU	Pass
BF	233	8/2/2014	A-5.5	294.0	4	111.2	12.5	117.0	10.0	95	NU	Pass
BF	234	8/2/2014	A-4.5	294.0	4	111.2	12.3	117.0	10.0	95	NU	Pass
BF	235	8/2/2014	A-3.5	294.0	4	111.5	12.0	117.0	10.0	95	NU	Pass
BF	236	8/2/2014	A-2.5	294.0	4	111.3	12.2	117.0	10.0	95	NU	Pass
BF	237	8/4/2014	BC-B7.5	294.0	8	127.8	9.1	134.5	8.0	95	NU	Pass
BF	238	8/4/2014	BC-B4	294.0	8	128.0	9.7	134.5	8.0	95	NU	Pass
BF	239	8/4/2014	BC-B2.2	296.0	8	128.9	9.5	134.5	8.0	96	NU	Pass
BF	240	8/4/2014	BH-B2.5	296.0	8	130.3	10.2	134.5	8.0	97	SC	Pass
BF	241	8/4/2014	BE.5-B3.2	296.0	8	128.9	10.3	134.5	8.0	96	NU	Pass
BF	242	8/4/2014	BF.8-B7	296.0	8	127.8	9.8	134.5	8.0	95	NU	Pass
BF	243	8/4/2014	BE.8-B5	296.0	8	128.0	10.8	134.5	8.0	95	NU	Pass
BF	244	8/4/2014	A-3	298.0	8	128.7	10.1	134.5	8.0	96	NU	Pass
BF	245	8/5/2014	BH.5-6	298.0	8	129.1	9.7	134.5	8.0	96	NU	Pass

* - See "Explanation of Coded Terms"

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TABLE 1 CONTINUED

SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field		Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
						Dry Unit Weight (pcf)	Moisture Content (%)					
BF	246	8/5/2014	F-2	300.0	8	128.9	10.3	134.5	8.0	96	NU	Pass
BF	247	8/5/2014	A-6	300.0	8	128.2	9.6	134.5	8.0	95	NU	Pass
BF	248	8/5/2014	G.9-3.9	300.0	8	129.9	9.9	134.5	8.0	97	NU	Pass
BF	249	8/5/2014	C.5-1.5	300.0	8	129.4	10.4	134.5	8.0	96	NU	Pass
BF	250	8/5/2014	B-4	300.0	8	128.9	10.2	134.5	8.0	96	SC	Pass
BF	251	8/6/2014	D-4	302.0	8	128.3	9.6	134.5	8.0	95	NU	Pass
BF	252	8/6/2014	A-5	302.0	8	129.1	9.1	134.5	8.0	96	NU	Pass
BF	253	8/6/2014	A-1	304.0	8	128.6	9.7	134.5	8.0	96	NU	Pass
BF	254	8/6/2014	G-6	302.0	8	127.8	9.0	134.5	8.0	95	NU	Pass
BF	255	8/6/2014	G-1	302.0	8	129.5	9.3	134.5	8.0	96	NU	Pass
BF	256	8/6/2014	B2.5-5	304.0	8	128.9	9.0	134.5	8.0	96	NU	Pass
BF	257	8/6/2014	BG.8-B5.5	298.0	8	129.7	8.8	134.5	8.0	96	NU	Pass
BF	258	8/6/2014	BC-B5	296.0	8	129.5	9.2	134.5	8.0	96	NU	Pass
BF	259	8/6/2014	BF-B3	298.0	8	129.9	9.4	134.5	8.0	97	NU	Pass
BF	260	8/6/2014	BD-B7.5	296.0	8	128.0	9.2	134.5	8.0	95	SC	Pass
BF	261	8/7/2014	A-2.5	304.0	8	127.8	9.9	134.5	8.0	95	NU	Pass
BF	262	8/7/2014	G-4	304.0	8	127.8	10.1	134.5	8.0	95	NU	Pass
BF	263	8/7/2014	E-2	304.0	8	128.7	9.2	134.5	8.0	96	NU	Pass
BF	264	8/7/2014	C-6	304.0	8	128.3	9.8	134.5	8.0	95	NU	Pass
BF	265	8/7/2014	BH-6.5	304.0	8	128.0	8.8	134.5	8.0	95	NU	Pass
BF	266	8/7/2014	A-5	306.0	8	128.6	9.0	134.5	8.0	96	NU	Pass
BF	267	8/7/2014	B2.5-0.5	306.0	8	127.8	8.6	134.5	8.0	95	NU	Pass
BF	268	8/7/2014	A.5-1	300.0	8	128.9	9.0	134.5	8.0	96	NU	Pass
BF	269	8/7/2014	BH.4-6.5	298.0	8	129.1	9.3	134.5	8.0	96	NU	Pass
BF	270	8/7/2014	A-5	303.0	8	127.9	8.9	134.5	8.0	95	SC	Pass
BF	271	8/8/2014	A-8	295.0	8	130.1	14.1	134.5	8.0	97	NU	Pass
BF	272	8/8/2014	A-11	295.0	8	128.2	12.8	134.5	8.0	95	NU	Pass
BF	273	8/8/2014	B-15	295.0	8	127.8	13.9	134.5	8.0	95	NU	Pass
BF	274	8/8/2014	A-7.5	297.0	8	129.4	14.6	134.5	8.0	96	NU	Pass
BF	275	8/8/2014	A-10	297.0	8	128.7	13.8	134.5	8.0	96	NU	Pass
BF	276	8/8/2014	B-12.5	297.0	8	127.8	13.0	134.5	8.0	95	NU	Pass
BF	277	8/9/2014	BG.2-B2.2	290.0	8	128.3	10.9	134.5	8.0	95	NU	Pass
BF	278	8/9/2014	BB.2-B2	290.0	8	127.8	11.2	134.5	8.0	95	NU	Pass
BF	279	8/9/2014	BE.5-B2.2	296.0	8	130.1	10.3	134.5	8.0	97	NU	Pass
BF	280	8/9/2014	BB-B5	294.0	8	128.2	9.0	134.5	8.0	95	SC	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED
SUMMARY OF IN-PLACE DENSITY TESTS

						Field						
Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Dry Unit Weight (pcf)	Moisture Content (%)	Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
BF	281	8/9/2014	BB.1-B6.1	290.0	8	129.5	10.1	134.5	8.0	96	NU	Pass
BF	282	8/9/2014	BB.1-B2.2	290.0	8	128.6	9.3	134.5	8.0	96	NU	Pass
BF	283	8/9/2014	BH.2-B1	296.0	8	127.8	8.9	134.5	8.0	95	NU	Pass
BF	284	8/9/2014	BE.5-B1	294.0	8	127.8	9.0	134.5	8.0	95	NU	Pass
BF	285	8/9/2014	BC.5-B1.1	292.0	8	128.7	9.3	134.5	8.0	96	NU	Pass
BF	286	8/9/2014	BA-B2.5	290.0	8	127.8	10.1	134.5	8.0	95	NU	Pass
BF	287	8/9/2014	BA.1-B6.1	291.0	8	129.1	9.7	134.5	8.0	96	NU	Pass
BF	288	8/9/2014	BA.1-B3.8	291.0	8	128.9	9.4	134.5	8.0	96	NU	Pass
BF	289	8/10/2014	A-7	299.0	8	128.2	8.4	134.5	8.0	95	NU	Pass
BF	290	8/11/2014	A-9	299.0	8	127.8	8.6	134.5	8.0	95	SC	Pass
BF	291	8/11/2014	A-11	299.0	8	128.6	8.8	134.5	8.0	96	NU	Pass
BF	292	8/11/2014	A-12	299.0	8	127.8	8.3	134.5	8.0	95	NU	Pass
BF	293	8/12/2014	A-6.5	301.0	8	129.1	9.1	134.5	8.0	96	NU	Pass
BF	294	8/12/2014	A.5-9	301.0	8	128.2	8.0	134.5	8.0	95	NU	Pass
BF	295	8/12/2014	A-10	300.0	8	127.8	8.4	134.5	8.0	95	NU	Pass
BF	296	8/12/2014	A-11.2	300.0	8	128.3	8.1	134.5	8.0	95	NU	Pass
BF	297	8/14/2014	A-13.8	298.0	8	128.9	8.0	134.5	8.0	96	NU	Pass
BF	298	8/14/2014	A-9	300.0	8	127.8	8.9	134.5	8.0	95	NU	Pass
BF	299	8/14/2014	A-12.5	300.0	8	128.0	8.7	134.5	8.0	95	NU	Pass
BF	300	8/14/2014	A-14.5	300.0	8	127.8	8.3	134.5	8.0	95	SC	Pass
BF	301	8/14/2014	BB.2-B3	290.0	8	128.9	8.3	134.5	8.0	96	NU	Pass
BF	302	8/14/2014	BB.2-B5.1	290.0	8	127.8	7.9	134.5	8.0	95	NU	Pass
BF	303	8/14/2014	BC.5-B2	292.0	8	127.8	8.2	134.5	8.0	95	NU	Pass
BF	304	8/15/2014	BF.2-B2	292.0	8	127.8	8.0	134.5	8.0	95	NU	Pass
BF	305	8/15/2014	BH.2-B2	294.0	8	128.9	8.7	134.5	8.0	96	NU	Pass
BF	306	8/15/2014	BB-B5.5	294.0	8	127.8	8.1	134.5	8.0	95	NU	Pass
BF	307	8/15/2014	BB-B2.5	296.0	8	127.8	8.3	134.5	8.0	95	NU	Pass
BF	308	8/15/2014	BD-B2.1	294.0	8	129.3	9.1	134.5	8.0	96	NU	Pass
BF	309	8/15/2014	BA1.5-B2	298.0	8	128.9	8.9	134.5	8.0	96	NU	Pass
BF	310	8/15/2014	BB.5-8	284.0	12	119.0	12.8	124.5	10.0	96	SC	Pass
BF	311	8/15/2014	BB.5-9	284.0	12	119.3	12.2	124.5	10.0	96	NU	Pass
BF	312	8/15/2014	BB.5-10	290.0	12	120.5	12.0	124.5	10.0	97	NU	Pass
BF	313	8/15/2014	BB.5-11	290.0	12	118.3	13.1	124.5	10.0	95	NU	Pass
BF	314	8/15/2014	BB.5-11.5	284.0	12	118.3	12.0	124.5	10.0	95	NU	Pass
BF	315	8/15/2014	BB.5-12	286.0	12	118.4	12.9	124.5	10.0	95	NU	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED

SUMMARY OF IN-PLACE DENSITY TESTS

						Field		Max.	Opt.			
Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Dry Unit Weight (pcf)	Moisture Content (%)	Dry Density (pcf)	Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
BF	316	9/30/2014	BB.5-8.5	284.0	12	118.3	11.4	124.5	10.0	95	NU	Pass
BF	317	10/2/2014	BB.5-7	286.0	12	118.8	12.4	124.5	10.0	95	NU	Pass
BF	318	10/2/2014	BB.5-10	284.0	12	118.4	13.1	124.5	10.0	95	NU	Pass
BF	319	10/2/2014	BB.5-12.5	286.0	12	118.3	12.2	124.5	10.0	95	NU	Pass
BF	320	10/6/2014	BD-8	284.0	12	118.5	9.9	124.5	10.0	95	NU	Pass
BF	321	10/6/2014	BH-9	284.0	2	126.7	8.4	129.0	8.5	98	NU	Pass
BF	322	10/6/2014	BC-10	284.0	10	110.2	13.2	116.3	13.7	95	NU	Pass
BF	323	10/6/2014	BC-7	284.0	12	118.3	9.9	124.5	10.0	95	SC	Pass
BF	324	10/6/2014	BC.5-10.2	284.0	2	125.0	9.1	129.0	8.5	97	NU	Pass
BF	325	10/7/2014	BC.5-8	286.0	12	121.8	10.8	124.5	10.0	98	NU	Pass
BF	326	10/7/2014	BE-10.5	286.0	12	119.9	11.0	124.5	10.0	96	NU	Pass
BF	327	10/7/2014	BE-7.5	286.0	12	119.4	10.2	124.5	10.0	96	NU	Pass
BF	328	10/7/2014	BC-9.5	286.0	12	121.0	10.9	124.5	10.0	97	NU	Pass
BF	329	10/8/2014	BG-8	288.0	12	118.8	11.2	124.5	10.0	95	SC	Pass
BF	330	10/8/2014	BH-10.5	288.0	12	119.1	11.8	124.5	10.0	96	NU	Pass
BF	331	10/8/2014	BD-8	288.0	12	120.5	12.8	124.5	10.0	97	NU	Pass
BF	332	10/8/2014	BF.5-10	288.0	12	118.3	12.1	124.5	10.0	95	NU	Pass
BF	333	10/8/2014	BD-10	290.0	12	120.1	11.0	124.5	10.0	96	NU	Pass
BF	334	10/8/2014	BH-7	290.0	12	118.4	11.5	124.5	10.0	95	NU	Pass
BF	335	10/8/2014	BE.5-9	290.0	12	118.6	11.2	124.5	10.0	95	NU	Pass
BF	336	10/8/2014	BE-14	284.0	12	119.3	11.1	124.5	10.0	96	NU	Pass
BF	337	10/8/2014	BD-15	284.0	12	118.3	11.7	124.5	10.0	95	NU	Pass
BF	338	10/8/2014	BF-12	284.0	12	119.5	10.5	124.5	10.0	96	SC	Pass
BF	339	10/9/2014	BC-12	287.0	12	118.4	11.3	124.5	10.0	95	NU	Pass
BF	340	10/9/2014	BB.5-16.5	287.0	12	118.3	11.5	124.5	10.0	95	NU	Pass
BF	341	10/9/2014	BG-16.5	287.0	12	119.0	11.3	124.5	10.0	96	NU	Pass
BF	342	10/9/2014	BG-12	287.0	12	118.3	11.0	124.5	10.0	95	NU	Pass
BF	343	10/9/2014	BD-10	292.0	12	118.3	11.8	124.5	10.0	95	NU	Pass
BF	344	10/9/2014	BH.5-9	292.0	12	119.0	10.7	124.5	10.0	96	NU	Pass
BF	345	10/9/2014	BC-8	292.0	12	118.3	10.3	124.5	10.0	95	NU	Pass
BF	346	10/9/2014	BE-16.5	289.0	12	118.5	11.1	124.5	10.0	95	NU	Pass
BF	347	10/9/2014	BH-14	286.0	12	119.5	11.5	124.5	10.0	96	NU	Pass
BF	348	10/9/2014	J-16.5	286.0	12	118.3	10.3	124.5	10.0	95	SC	Pass
BF	349	10/9/2014	BC-16.5	289.0	12	119.4	10.9	124.5	10.0	96	NU	Pass
BF	350	10/9/2014	BD-12	289.0	12	119.9	10.0	124.5	10.0	96	NU	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED

SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field		Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
						Dry Unit Weight (pcf)	Moisture Content (%)					
BF	351	10/10/2014	BF.5-14.5	289.0	12	118.4	11.4	124.5	10.0	95	NU	Pass
BF	352	10/13/2014	BC-14	289.0	12	119.0	10.3	124.5	10.0	96	NU	Pass
BF	353	10/13/2014	BH-12.5	288.0	12	119.3	10.8	124.5	10.0	96	NU	Pass
BF	354	10/13/2014	BF-16	288.0	12	118.3	10.0	124.5	10.0	95	NU	Pass
BF	355	10/13/2014	BC-12.5	291.0	12	118.6	11.1	124.5	10.0	95	NU	Pass
BF	356	10/13/2014	BC.5-16.5	291.0	12	118.3	10.9	124.5	10.0	95	NU	Pass
BF	357	10/13/2014	BG-14	291.0	12	118.5	11.3	124.5	10.0	95	SC	Pass
BF	358	10/14/2014	BB.5-6	288.0	12	118.3	11.0	124.5	10.0	95	NU	Pass
BF	359	10/14/2014	BB-5	288.0	12	118.6	10.2	124.5	10.0	95	NU	Pass
BF	360	10/14/2014	BB-6.5	290.0	12	118.3	10.6	124.5	10.0	95	NU	Pass
BF	361	10/15/2014	BB.5-5.5	290.0	12	118.8	10.1	124.5	10.0	95	NU	Pass
BF	362	10/15/2014	BB.5-5	290.0	12	119.0	10.9	124.5	10.0	96	NU	Pass
BF	363	10/15/2014	BB-4.9	292.0	8	128.2	8.3	134.5	8.0	95	NU	Pass
BF	364	10/17/2014	A-14	296.0	8	128.2	8.1	134.5	8.0	95	NU	Pass
BF	365	10/17/2014	A-12.5	296.0	8	127.8	8.4	134.5	8.0	95	NU	Pass
BF	366	10/17/2014	A-13.5	298.0	8	127.7	8.7	134.5	8.0	95	NU	Pass
BF	367	10/17/2014	A-15	296.0	8	128.0	8.0	134.5	8.0	95	SC	Pass
BF	368	10/17/2014	A-14.5	298.0	8	127.8	8.3	134.5	8.0	95	NU	Pass
BF	369	10/17/2014	A-15.5	296.0	8	127.9	8.3	134.5	8.0	95	NU	Pass
BF	370	10/17/2014	A-16	298.0	8	128.4	8.0	134.5	8.0	95	NU	Pass
BF	371	10/20/2014	A-16.5	292.0	8	127.8	8.6	134.5	8.0	95	NU	Pass
BF	372	10/20/2014	A-16.8	294.0	14	123.3	10.3	128.0	9.2	96	NU	Pass
BF	373	10/20/2014	A-16.2	296.0	14	122.8	10.1	128.0	9.2	96	NU	Pass
BF	374	10/21/2014	BG.5-B2	298.0	8	127.8	8.9	134.5	8.0	95	SC	Pass
BF	375	10/21/2014	BC-B2	296.0	8	128.3	9.1	134.5	8.0	95	NU	Pass
BF	376	10/21/2014	BB.5-B2	295.0	8	127.8	8.6	134.5	8.0	95	NU	Pass
BF	377	10/21/2014	BE.8-B2	300.0	8	128.0	8.0	134.5	8.0	95	NU	Pass
BF	378	10/21/2014	BH.5-B2	300.0	8	127.8	8.3	134.5	8.0	95	NU	Pass
BF	379	11/6/2014	A-16	294.0	4	112.1	10.7	117.0	10.0	96	NU	Pass
BF	380	11/6/2014	C-16.5	294.0	4	112.3	10.3	117.0	10.0	96	NU	Pass
BF	381	11/6/2014	C-15	296.0	14	121.6	9.3	128.0	9.2	95	NU	Pass
BF	382	11/6/2014	A-16.5	296.0	14	122.4	9.0	128.0	9.2	96	NU	Pass
BF	383	11/6/2014	A-16	298.0	14	122.8	9.1	128.0	9.2	96	NU	Pass
BF	384	11/6/2014	A-3	307.0	8	130.9	8.3	134.5	8.0	97	SC	Pass
BF	385	11/6/2014	A-8	303.0	8	130.2	8.0	134.5	8.0	97	NU	Pass

* - See "Explanation of Coded Terms"

TABLE 1 CONTINUED
SUMMARY OF IN-PLACE DENSITY TESTS

Test Prefix*	Test No.	Date	Location	Elevation (FT.)	Curve No.*	Field		Max. Dry Density (pcf)	Opt. Moisture Content (%)	Relative Compaction (%)	Type of Test*	Pass or Fail
						Dry Unit Weight (pcf)	Moisture Content (%)					
BF	386	10/10/2014	A-15	299.0	14	122.5	9.1	128.0	9.2	96	NU	Pass
BF	387	10/13/2014	E-2	305.0	8	127.8	8.7	134.5	8.0	95	NU	Pass
BF	388	10/13/2014	E-7	301.0	8	127.9	8.0	134.5	8.0	95	NU	Pass
BF	389	10/13/2014	E-15	298.0	14	123.0	9.4	128.0	9.2	96	NU	Pass
BF	390	10/13/2014	BH-2	300.0	8	127.8	8.3	134.5	8.0	95	NU	Pass
BF	391	10/13/2014	BH-7.5	297.0	14	123.0	9.0	128.0	9.2	96	NU	Pass
BF	392	10/13/2014	BH-15	294.0	14	122.6	8.3	128.0	9.2	96	NU	Pass
BF	393	11/7/2014	BC-2	297.0	8	127.8	8.1	134.5	8.0	95	SC	Pass
BF	394	11/7/2014	BC-8.5	295.0	14	122.0	9.9	128.0	9.2	95	NU	Pass
BF	395	11/7/2014	BC-15.5	292.0	14	123.9	9.7	128.0	9.2	97	NU	Pass

* - See "Explanation of Coded Terms"

TABLE 2

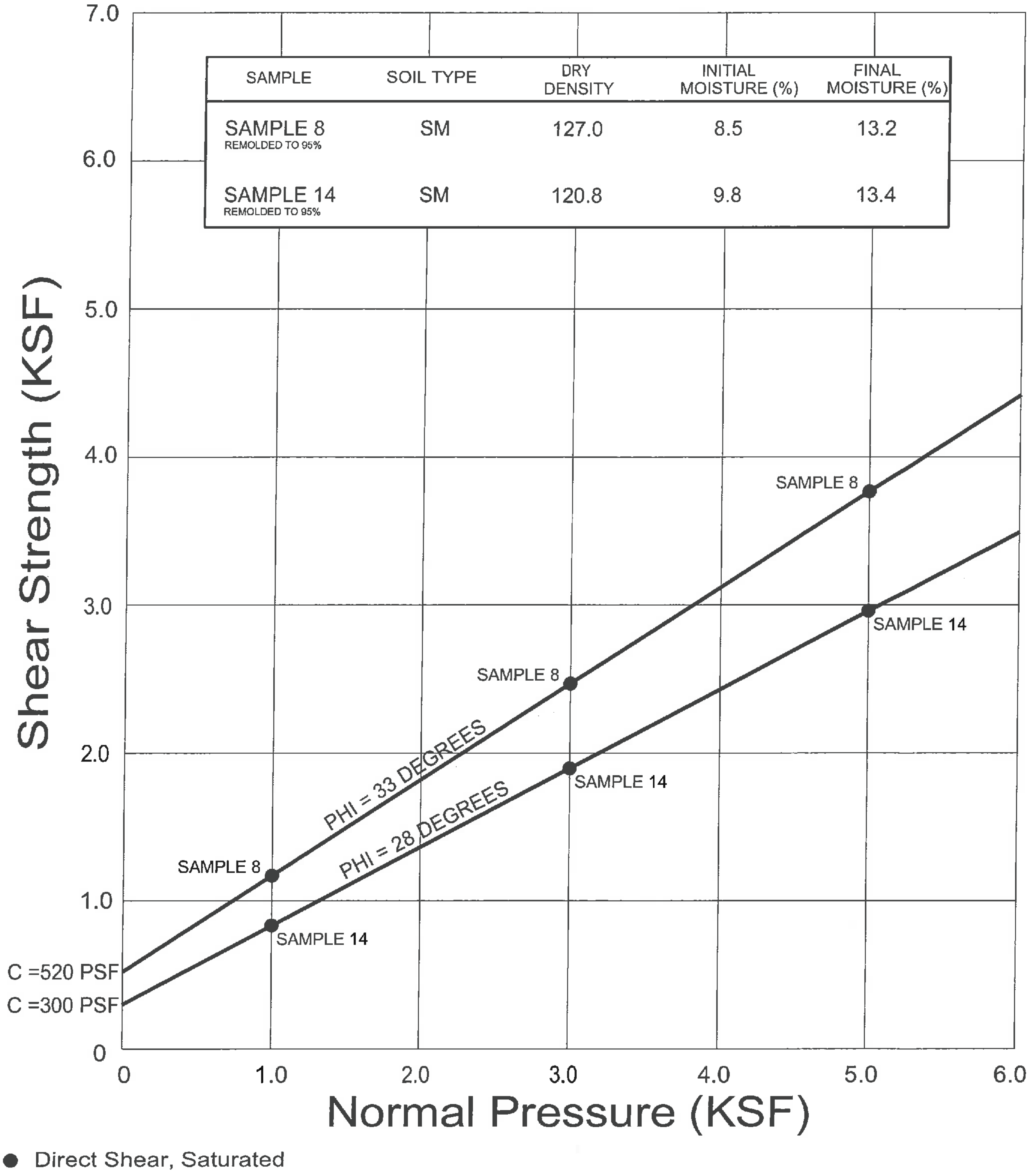
SUMMARY OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT RESULTS

ASTM D 1557-12

CURVE NO.	DESCRIPTION	MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)	EXPANSION INDEX	
				UBC*	CBC**
1	Brown Sandy Clay (On-Site))	121.0	13.5	---	---
2	Brown Clayey Sand with Gravel (On-site)	129.0	8.5	---	---
3	Light Olive Brown Sandy Clay (On-Site)	124.0	8.5	Very Low	Non-Expansive
4	Olive Brown Clay & Silt with Sand (On-Site)	117.0	10.0	Medium	Expansive
5	Not Used				
6	Not Used				
7	Not Used				
8	Dark Reddish Brown Silty Sand (Import)	134.5	8.0	Very Low	Non-Expansive
9	Dark Brn Sandy Clay w/ Crushed Concrete (On-Site)	125.0	11.0	---	---
10	Gray Siltstone w/ Crushed Concrete & Gravel (On-Site)	116.3	13.7	---	---
11	Grayish Brn Silty Sand w/ Crushed Concrete (Import)	133.9	6.3	---	---
12	Drk Brn Sandy Clay w/ Crushed Concrete & Gravel(On-Site)	124.5	10.0	---	---
13	Not Used				
14	Brown Silty Sand (Import)	128.0	9.2	---	---

*Reference: 1997 Uniform Building Code, Table 18-I-B.

**Reference: 2013 California Building Code, Section 18.02.3.2



SAMPLE	SOIL TYPE	DRY DENSITY	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
SAMPLE 8 REMOLDED TO 95%	SM	127.0	8.5	13.2
SAMPLE 14 REMOLDED TO 95%	SM	120.8	9.8	13.4

GEOCON
WEST, INC.

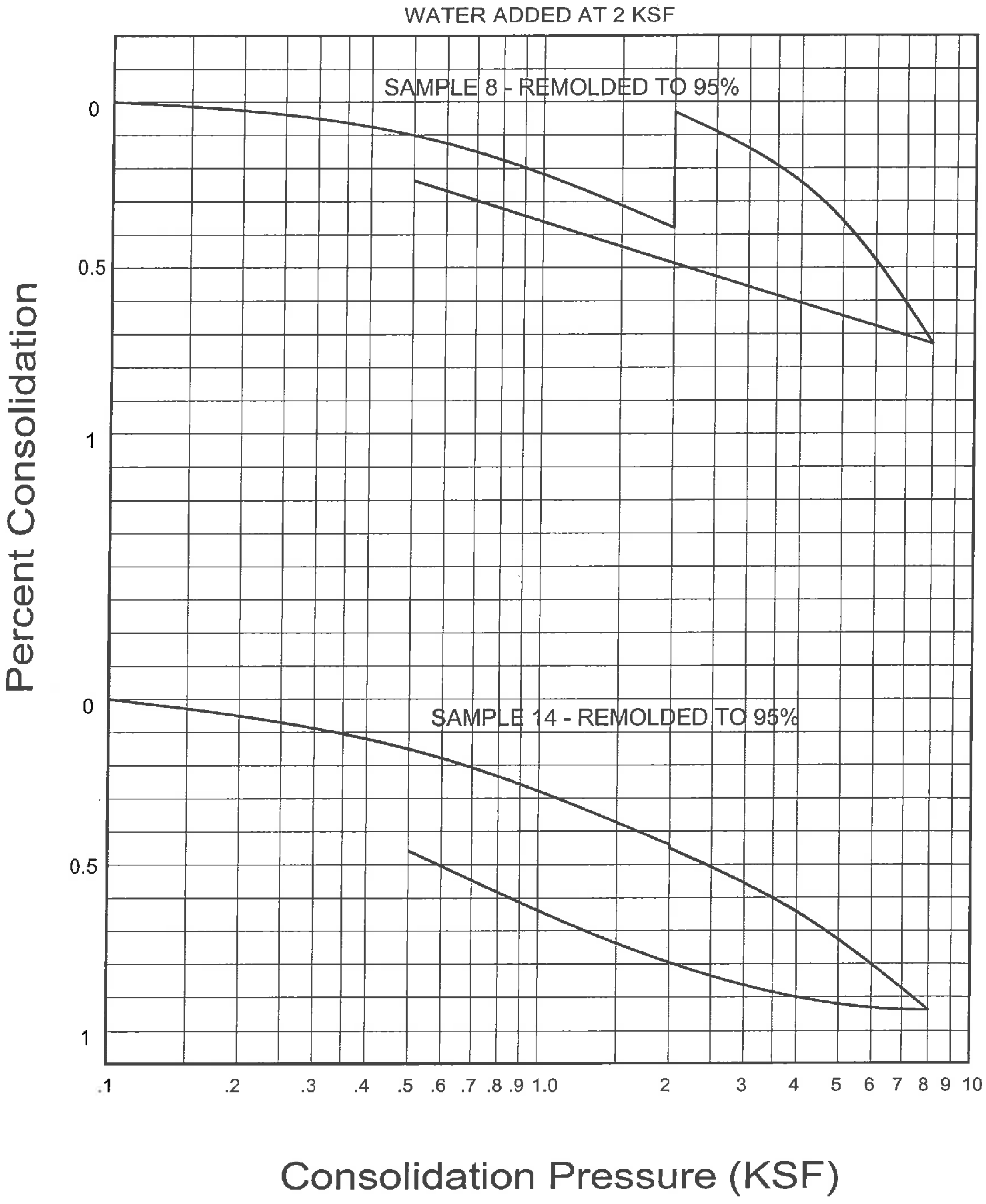
ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

DRAFTED BY: TL
CHECKED BY: HHD

DIRECT SHEAR TEST RESULTS

1ST STREET & BROADWAY CIVIC CENTER PARK
CITY OF LOS ANGELES GEOTECHNICAL ENGINEERING GROUP
217 WEST 1ST STREET
LOS ANGELES, CA 90012

DEC. 8, 2014
PROJECT NO. A8950-06-01
FIG. B1



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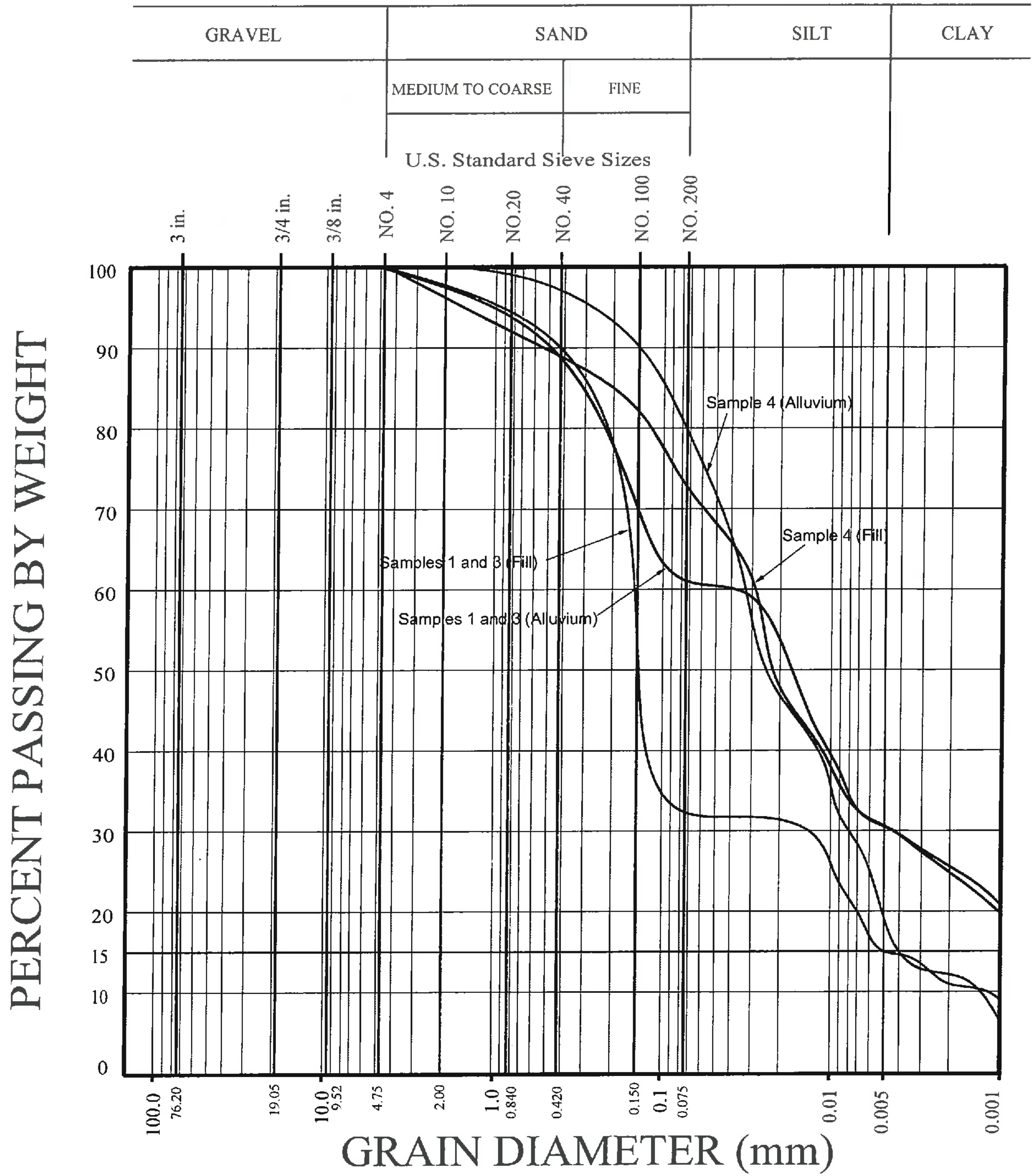
PHONE (818) 841-8388 - FAX (818) 841-1704

CONSOLIDATION TEST RESULTS

1ST STREET & BROADWAY CIVIC CENTER PARK
CITY OF LOS ANGELES GEOTECHNICAL ENGINEERING GROUP
217 WEST 1ST STREET
LOS ANGELES, CA 90012

DRAFTED BY: TL	CHECKED BY: HHD	DEC. 8, 2014	PROJECT NO. A8950-06-01	FIG. B2



SAMPLE	UNIFIED SOIL CLASSIFICATION
Samples 1 and 3	CL (Alluvium)
Samples 1 and 3	SM (Fill)

SAMPLE	UNIFIED SOIL CLASSIFICATION
Sample 4	ML (Alluvium)
Sample 4	ML/CL (Fill)

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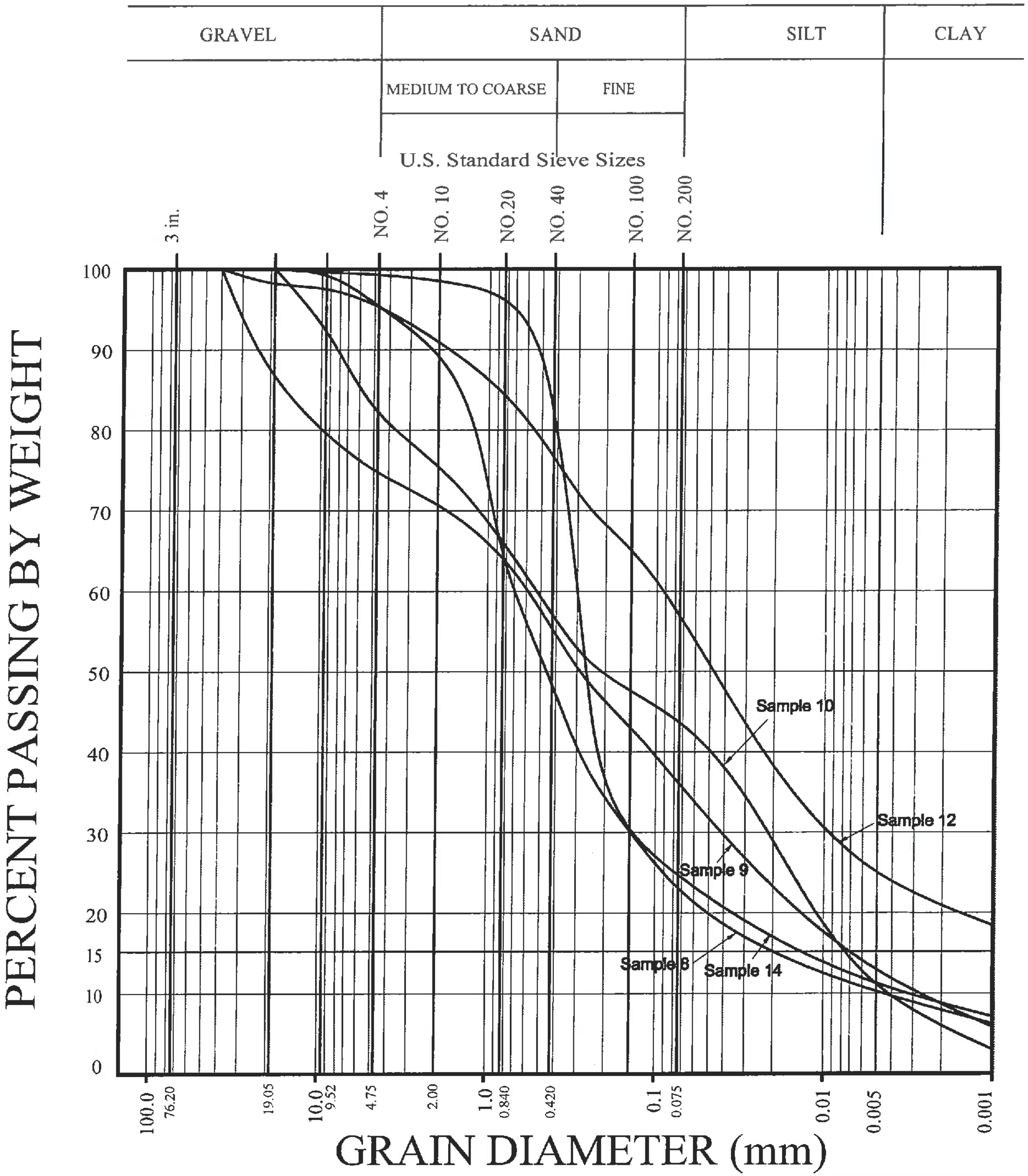
DRAFTED BY: TL
CHECKED BY: NDB

GRAIN SIZE DISTRIBUTION

1ST STREET & BROADWAY CIVIC CENTER PARK
CITY OF LOS ANGELES GEOTECHNICAL ENGINEERING GROUP
217 WEST 1ST STREET
LOS ANGELES, CA 90012

DEC. 8, 2014
PROJECT NO. A8950-06-01
FIG. B3



SAMPLE	UNIFIED SOIL CLASSIFICATION
Sample 8	SM
Sample 9	CL with Crushed Concrete
Sample 10	Siltstone with Crushed Conrete

SAMPLE	UNIFIED SOIL CLASSIFICATION
Sample 12	CL with Crushed Concrete and Gravel
Sample 14	SM

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PHONE (818) 841-8388 - FAX (818) 841-1704

DRAFTED BY: TL | CHECKED BY: NDB

GRAIN SIZE DISTRIBUTION

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217 WEST 1ST STREET
LOS ANGELES, CA 90012

DEC. 8, 2014 | PROJECT NO. A8950-06-01 | FIG. B4

APPENDIX E

Noise and Vibration Impact Study

taha
environmental planners

Technical Memorandum

TO: Shannon Ledet, Senior Project Manager/Senior Associate
AECOM

FROM: Sam Silverman, Senior Associate
Andy Uk, Assistant Planner
Terry A. Hayes Associates Inc.

DATE: December 19, 2018

RE: 1st & Broadway Civic Center Park Project – Noise and Vibration Impact Assessment

Introduction

Terry A. Hayes Associates Inc. (TAHA) has completed a Noise and Vibration impact assessment for the 1st & Broadway Civic Center Park Project (proposed project) in accordance with the provisions of the California Environmental Quality Act (CEQA) Statutes and Guidelines.

The assessment was undertaken to determine whether construction or operation of the proposed project would have the potential to result in significant environmental impacts related to noise or vibration in the context of the Appendix G Environmental Checklist criteria of the CEQA Statute and Guidelines. Implementation of the proposed project may result in a significant environmental impact related to noise and vibration if the proposed project would:

a) Result in the exposure of persons to or generation of noise in levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
b) Result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the proposed project;
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the proposed 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, expose people residing or working in the project area to excessive noise levels; and/or
f) For a project located within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Project Description

The project site is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles. The project site address is 126 North Broadway, Los Angeles, California 90012. The proposed project would include the development of a 1.96-acre vacant lot into an open space public park incorporating a two-story restaurant building complex with rooftop access within the northwest corner of the park; trees and green spaces for public enjoyment, numerous seating areas, 16 decorative canopies to provide shade and lighting throughout the park, new hardscaping and landscaped areas, and bioswales or other treatment best management practices.

The proposed approximately 19,200-square-foot restaurant building complex would include space for concessionaires to operate all concepts in the facility. The new building would include a rooftop patio and bar, an upscale restaurant, an approximately 1,380-square-foot café with a food service window to serve outdoor patrons, and an approximately 1,500-square-foot outdoor beer garden attached to the two-story structure. A portion of the ground level floor of the restaurant building would be externally shaped into a tiered sitting area with a capacity to seat up to 60 park patrons at a time, and would be shaded by cantilevering above. Rooftop access would be available with an approximately 450-square-foot bar, an approximately 1,330-square-foot dining and lounge area for restaurant patrons, and an approximately 1,260-square-foot public space. A loading zone would be provided on the north side of the building and project site for use in routine restaurant operations. Public restrooms would be provided on the first floor of the restaurant building and at the rooftop. The proposed project would include a bicycle parking area, outdoor seating areas, planting of a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting.

An appropriate combination of monitoring and resource avoidance would be employed during all construction activities, including implementation of the following Best Management Practices (BMPs):

- Construction of the proposed project is anticipated to occur Monday through Friday from 7:00 a.m. to 4:00 p.m. Should construction be required outside of the anticipated hours, construction activity would comply with the allowable hours of construction as dictated in the *Los Angeles Municipal Code Section 41.40*, including 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction activity on Sundays or City holidays.
- The proposed project would minimize short-term construction noise through: (1) proper maintenance and tuning of all construction equipment engines to minimize noise emissions; and (2) proper maintenance and functioning of the mufflers on all internal combustion and equipment engines.

Noise Basics

The standard unit of measurement for noise is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The A-weighted scale, abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA.

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

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

Noise generated by a mobile source decreases by approximately 3 dBA over hard surfaces and 4.8 dBA over soft surfaces for each doubling of the distance. Generally, noise is most audible when the source is in a direct line-of-sight of the receiver. Barriers, such as walls, berms, or buildings that break the line-of-sight between the source and the receiver greatly reduce noise levels from the source since sound can only reach the receiver by bending over the top of the barrier. However, if a barrier is not sufficiently high or long to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced.

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and may evoke a community reaction. A 10-dBA increase is subjectively heard as a doubling in loudness and would likely cause a negative community reaction.

Vibration Basics

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as rock blasting, pile driving, and heavy earth-moving equipment. High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that may affect concentration or disturb sleep. In addition, high levels of vibration may damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes).

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The VdB acts to compress the range of numbers required to describe vibration.[1]

---

[1] Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment*, May 2006.

Significance Thresholds and Local Standards

Noise. The proposed project would exceed the local standards and substantially increase temporary construction noise levels if construction activities would occur within 500 feet of a noise-sensitive use and outside the hours allowed in the Los Angeles Municipal Code (LAMC). The allowable hours of construction in the LAMC include 7:00 a.m. to 9:00 p.m. Monday through Friday and 8:00 a.m. to 6:00 p.m. on Saturday. In addition, the LAMC states that equipment noise levels should not exceed 75 dBA L_{eq} at 50 feet unless technically infeasible. For permanent operational noise, a significant impact would result if the proposed project would increase noise levels at sensitive receptors by 5 dBA.

The City has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. Regarding construction, LAMC Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited) states that no construction or repair work shall be performed between the hours of 9:00 p.m. and 7:00 a.m. on Monday through Friday since such activities would generate loud noises and disturb persons occupying sleeping quarters in any adjacent dwelling, hotel, apartment, or other place of residence. Further, no person, other than an individual home owner engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind or perform such work within 500 feet of land so occupied before 8:00 a.m. or after 6:00 p.m. on any Saturday, nor at any time on any Sunday or on a federal holiday.

LAMC Section 112.01 (Radios, Television Sets, and Similar Devices) states that it is unlawful to use or operate any radio, musical instrument, television receiver, or other machine or device for the producing, reproducing or amplification of the human voice, music, or any other sound, in such a manner, as to disturb the peace, quiet, and comfort of neighbor occupants or any reasonable person residing or working in the area. A violation of the LAMC results if the noise level caused by such use or operation which is audible to the human ear at a distance in excess of 150 feet from the property line of the noise source, within any residential zone of the City or within 500 feet thereof. In addition, a violation results if any noise level caused by such use or operation which exceeds the ambient noise level on the premises of any other occupied property by more than 5 dBA.

LAMC Section 112.04 (Powered Equipment Intended for Repetitive Use in Residential Areas and Other Machinery, Equipment, and Devices) specifies that no person shall operate any lawn mower, backpack blower, lawn edger, riding tractor, or any other machinery, equipment, or other mechanical or electrical device, or any hand tool which creates a loud, raucous or impulsive sound, within any residential zone or within 500 feet of a residence between the hours of 10:00 p.m. and. 7:00 a.m. of the following day.

LAMC Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools) specifies the maximum noise level of powered equipment or powered hand tools. Any powered equipment or hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet is prohibited. However, this noise limitation does not apply where compliance is technically infeasible. Technically infeasible means the above noise limitation cannot be met despite the use of mufflers, shields, sound barriers and/or any other noise-reduction device or techniques during the operation of equipment.

LAMC Section 115.02 (Amplified Sound Prohibitions and Regulations) contain regulations regarding the use of amplified sound within the City. Sound emanating from sound amplifying equipment shall be limited in volume and shall not be audible in excess of 200 feet from the sound equipment and shall not be loud and raucous or unreasonably disturbing to persons of normal hearing sensitivity.

LAMC Section 116.01 (Loud, Unnecessary, and Unusual Noise) states that it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary, and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

Vibration. The City has not established significance thresholds related to vibration. In the absence of City thresholds, Federal Transit Administration (FTA) guidance may be used to assess the potential for vibration-related damage and annoyance.[2] For damage, the impact criteria are established based on the structural foundation of the potentially impacted building. Site visits indicate that the buildings near the project site are constructed with engineer concrete or reinforced concrete and steel. Vibration levels that exceed a PPV of 0.3 inches per second could potentially damage these thresholds. The Los Angeles Law Library is located near the project site and may be considered particularly sensitive to vibration. The most stringent impact criteria related to annoyance is 65 VdB for buildings subject to frequent vibration events (e.g., multiple equipment passbys).

Methodology

Noise. The projected noise level during the construction period at each receptor location was calculated by (1) making a distance adjustment to the construction source sound level and (2) logarithmically adding the adjusted construction noise source level to the ambient noise level. Operational noise levels were calculated based on traffic volumes in the traffic study and the stationary noise sources located on the project site (e.g., mechanical equipment). According to California Department of Transportation (Caltrans) guidance, air temperature and humidity affect molecular absorption differently depending on the frequency spectrum and can vary significantly over long distances in a complex manner. Molecular absorption in air also reduces noise levels with distance. According to Caltrans, this process only accounts for about 1 dBA per 1,000 feet, which is an inaudible and negligible difference in noise levels. Noise levels have been estimated using a decrease of 6 dBA over hard surfaces for each doubling of the distance. The methodology and formulas obtained from the Caltrans Technical Noise Supplement can be viewed below.

(1) *Noise Distance Attenuation Formula:* $dBA_2 = dBA_1 + 20 \times LOG_{10} (D_1/D_2)$

Where:

dBA_1 = *Noise level at the reference distance of 50 feet*

dBA_2 = *Noise level at the receptor*

D_1 = *Reference distance (50 feet)*

D_2 = *Distance from source to receptor (measured distance)*

---

[2] FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

(2) Logarithmic Noise Level Addition Formula: $Nc = 10 \times LOG10 ((10^\wedge(N1/10))+ (10^\wedge(N2/10)))$

Where:

Nc = *Combined noise level*

$N1$ = *Noise level one*

$N2$ = *Noise level two*

Vibration. Vibration levels were estimated using the following propagation formulas.[3] Vibration damage is assessed using formula and vibration annoyance is assessed using formula. Construction activity was considered to be a frequent vibration event resulting in over 30 vibration exposures per day. In addition, the annoyance analysis accounted for a 7-VdB reduction related to propagation loss associated with a low-level masonry building.

Vibration Damage Attenuation Formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

Where:

PPV_{equip} = *Peak particles velocity in inches per second of the equipment adjusted for distance*

PPV_{ref} = *Reference vibration level in inches per second at 25 feet*

D = *Distance from the equipment to the receptor in feet*

Vibration Annoyance Attenuation Formula: $Lv_{equip} = Lv_{ref} - 30 \times LOG (D/25)$

Where:

Lv_{equip} = *Vibration level in vibration decibels of equipment adjusted for distance*

Lv_{ref} = *Reference vibration level in vibration decibels at 25 feet*

D = *Distance from the equipment to the receptor in feet*

Noise and Vibration Impact Assessment

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

The impact analysis is predicated on the location of noise- and vibration-sensitive land uses and the existing setting. Sensitive receptors are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. They typically include residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas.

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[3] FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

The area immediately surrounding the project site is completely urbanized and developed with Grand Park and a Los Angeles County courthouse to the north, the Los Angeles City Hall and City Hall Park to the east, the Los Angeles Police Department Headquarters to the southeast, office buildings and the Times Mirror building (formerly the Los Angeles Times building) to the south, the Los Angeles Federal Courthouse to the southwest, and the Los Angeles Law Library to the west. The existing nearby parks are not considered particularly sensitive to noise or vibration due to their urban nature. Commercial and municipal land uses are also not typically considered sensitive to noise or vibration. The Times Mirror site is in the process of being redeveloped with 1,127 residential units within multiple structures, which would be sensitive to changes in permanent noise levels from the existing condition. Therefore, the following analysis focuses on the Los Angeles Law Library and the Time Mirror Project, which are located approximately 115 feet to the west and south of the project site, respectively. The Los Angeles Law Library is open Monday, Wednesday, Thursday, and Friday from 8:30 a.m. to 6:00 p.m., Tuesday from 8:30 a.m. to 8:00 p.m., and Saturday from 9:00 a.m. to 5:00 p.m.

The existing noise level at the corner of 1st Street and Broadway was monitored on June 20, 2018 at 12:25 p.m. using a SoundPro DL Sound Level Meter. This time of day represents a typical construction time without the added noise source of peak hour traffic. The monitored 15-minute noise level was 67.1 dBA L_{eq}.

Construction

Construction activity is anticipated to begin in Summer/Fall 2019 and take approximately two years to complete, concluding in Summer/Fall 2021. LAMC allow construction activity to occur Monday through Friday between the hours of 7:00 a.m. and 9:00 p.m., although daily construction would not likely occur after 6:00 p.m. Construction would occur between the hours of 8:00 a.m. and 6:00 p.m. on Saturdays. There would be no construction activities on Sundays or federal holidays, and no construction would occur during prohibited hours.

Typical noise levels from various types of equipment that may be used during construction are listed in **Table 1**. The table shows noise levels at distances of 50 from the construction noise source. Construction activities typically require the use of numerous pieces of noise-generating equipment. The noise levels shown in **Table 2** take into account that multiple pieces of construction equipment would be operating simultaneously. When considered as an entire process with multiple pieces of equipment, project-related activity (i.e., ground clearing and site preparation) would generate noise levels between 84 and 89 dBA L_{eq} at 50 feet.

Construction noise is not typically a concern for human health and is a common occurrence within the urban environment. The existing nearby parks are not considered particularly sensitive to noise or vibration due to their urban nature. Commercial and municipal land uses are also not typically considered sensitive to noise or vibration. The proposed project is anticipated to be completed before the construction of the Times Mirror Project. Therefore, the following analysis focuses on the Los Angeles Law Library, which is located approximately 115 feet to the west of the project site. Based on a typical noise level of 89 dBA L_{eq} at 50 feet for sustained equipment activity, the maximum noise level at the Los Angeles Law Library would be 82 dBA L_{eq}. The impact analysis is based on the construction limits in the LAMC. Construction activity would comply with the allowable hours of construction in the LAMC, including 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction activity on Sundays or federal holidays. The LAMC limits equipment noise levels to 75 dBA L_{eq} at 50 feet unless technically infeasible. Unmitigated noise levels would typically exceed the allowable noise level stated in the LAMC. Therefore, without mitigation, the proposed project would result in a significant impact related to on-site construction noise.

TABLE 1: NOISE LEVEL RANGES OF TYPICAL CONSTRUCTION EQUIPMENT		
	Noise Level (dBA) /a/	
Noise Source	**50 Feet**	**100 Feet /a/**
Backhoe	73.6	67.6
Compressor	73.7	67.7
Concrete Mixer Truck	74.8	68.8
Concrete Pump Truck	74.4	68.4
Concrete Saw	82.6	76.6
Drum Mixer	77.0	71.0
Dump Truck	72.5	66.5
Excavator	76.7	70.7
Front End Loader	75.1	69.1
Generator	77.6	71.6
Grader	81.0	75.0
Man Lift	67.7	61.7
Tractor	80.0	74.0
Vacuum Street Sweeper	71.6	65.6

/a/ Assumes a 6-dBA drop-off rate for noise generated by a point source and traveling over hard surfaces. Actual measured noise levels of the equipment listed in this table were taken at distances of ten and 30 feet from the noise source.
SOURCE: Federal Highway Administration, *Roadway Construction Noise Model (RCNM) Version 1.1*.

TABLE 2: TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS	
Construction Method	**Noise Level at 50 feet (dBA, L_{eq})**
Ground Clearing	84
Site Preparation	89
Foundations	78
Structural	85
Finishing	89

SOURCE: USEPA, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, PB 206717, 1971.

In addition to on-site construction activities, noise would be generated off-site by construction-related trucks. The proposed project would require the export of 1,500 cubic yards of soil resulting in approximately 100 truck trips. It is not anticipated that there would be more than 25 truck trips per day. A doubling of traffic volume is typically needed to audibly increase noise levels along a roadway segment. An additional 25 trucks per day would not double the volume on any roadway segment in the congested downtown Los Angeles area. It is not anticipated that off-site vehicle activity would audibly change average daily noise levels due the low volume of haul truck trips per day. Therefore, the proposed project would result in a less-than-significant impact related to off-site construction noise.

Operations

The primary sources of operational noise would be the restaurant facilities and landscaping activities. The restaurant facilities would include a rooftop patio and bar, an upscale restaurant, a café with a food service window to serve outdoor patrons, and an outdoor beer garden. Rooftop access would be available for a bar, dining, a lounge area for restaurant patrons, and a public space. A loading zone would be provided on the north side of the building and project site for use in routine restaurant operations. Expected hours of operation for the restaurant complex would be Monday through Thursday from 7:00 a.m. to 11:00 p.m. and Friday through Sunday from 8:00 a.m. to 1:00 a.m.

In social situations, people often talk at distances of approximately three to 12 feet. A typical very loud voice level at this distance is approximately 66 dBA.[4] A group of 20 people speaking simultaneously, which is a reasonable assumption for the rooftop area, would result in a reference noise level of 79 dBA L_{eq} at six feet. The rooftop area would be approximately 150 feet from the Los Angeles Law Library, and the resulting noise level would be approximately 51.0 dBA L_{eq}. This noise level would be well below the existing monitoring noise level of 67.1 dBA L_{eq} and would not result in an audible noise level increase. In addition, the Los Angeles Law Library closes most nights by 6:00 p.m. and by 8:00 p.m. on Tuesdays, which is before the nosiest hours for most restaurants and bars. Regarding the Times Mirror Project, the rooftop area would be located approximately 280 feet away, and the resulting noise level would be approximately 45.6 dBA L_{eq}. This noise level would be well below the existing monitoring noise level of 69.4 dBA L_{eq} and would not result in an audible noise level increase. Existing traffic noise would remain the dominant noise source.

The truck loading zone would be located on the northwest side of the project site and would accommodate one truck at a time. The project site currently includes a temporary parking area and related activity is not known to disturb the Los Angeles Law Library. It is not anticipated that intermittent medium-duty truck activity would be audible at the Los Angeles Law Library beyond existing traffic noise on Broadway.

Furthermore, noise generating park and restaurant activities (e.g., landscaping activities and music) would be regulated by LAMC Section 112.01 (Radios, Television Sets, and Similar Devices), LAMC Section 112.04 (Powered Equipment Intended for Repetitive Use In Residential Areas and Other Machinery, Equipment, and Devices), LAMC Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools), LAMC Section 115.02 (Amplified Sound Prohibitions and Regulations), and LAMC Section 116.01 (Loud, Unnecessary, and Unusual Noise), which would be enforced through the Los Angeles Police Department.

The above analysis demonstrates that proposed project would not generate excessive noise levels that would conflict with City standards. Therefore, the proposed project would result in a less-than-significant impact related to operational noise.

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[4] The Engineering Toolbox, Voice Level and Distance, available at http://www.engineeringtoolbox.com/voicelevel-d_938.html, accessed June 20, 2018.

Mitigation Measures

N1 Construction equipment shall be properly maintained and equipped with mufflers.

N2 Grading and construction contractors shall use rubber-tired equipment rather than metal-tracked equipment.

N3 Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.

N4 The public shall be notified in advance of the location and dates of construction hours and activities.

N5 Construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to noise.

N6 A Noise Disturbance Coordinator shall be established by the construction contractor and responsible for responding to local complaints about construction noise. The Noise Disturbance Coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the Noise Disturbance Coordinator.

N7 The Noise Disturbance Coordinator shall coordinate with the site administrator of the Los Angeles Law Library to avoid disruptions to normal operations.

N8 An eight-foot barrier constructed out of manufactured noise attenuating materials (e.g., soundproof panels instead of plywood) shall be erected on the western side of the project site between the Los Angeles Law Library and construction activities. These barriers shall be capable of reducing noise levels by at least nine decibels as described in the material specification sheet provided by the manufacturer.

Significance After Mitigation

Mitigation Measures **N1** through **N8** are designed to reduce construction noise levels. The equipment mufflers associated with Mitigation Measure **N1** would reduce construction noise levels by approximately 3 dBA and the Mitigation Measure **N8** would reduce noise levels by approximately nine dBA. Mitigation Measures **N2** through **N7**, although difficult to quantify, would also reduce and/or control construction noise levels. Mitigation Measures **N1** through **N8** are feasible measures to control noise levels, including engine mufflers. With implementation of these feasible mitigation measures, and based on compliance with the LAMC, construction equipment noise would be mitigated to the greatest extent feasible and would result in equipment noise being reduced to below 75 dBA at 50 feet. Therefore, the proposed project would result in a less-than-significant impact related to construction noise.

b) Would the proposed project result in exposure of people to or generation of excessive ground-borne vibration or ground-borne noise levels? (Less-than-Significant Impact)

Construction

Construction activity can generate varying degrees of vibration, depending on the procedure and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to slight damage at the highest levels. In most cases, the primary concern regarding construction vibration relates to damage.

Vibration levels for various types of construction equipment with an average source level reported in terms of velocity are shown in **Table 3**. A large bulldozer, which would be used on the project site, produces a PPV of 0.089 inches per second at 25 feet.[5] The nearest structure to the project site is located in Grand Park, approximately 40 feet from the edge of the project site. The vibration level at this distance from a large bulldozer would be approximately 0.04 inches per second, which would be less than the 0.3 inches per second damage criterion. Buildings located across Broadway, Spring Street, and 1st Street are at least 100 feet from construction activity and there is no potential for these buildings to be damaged by the proposed project.

TABLE 3: TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS

Equipment	**PPV at 25 feet (Inches/Second)**	**Approximate L_v at 25 feet /a/**
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Small Bulldozer	0.003	58

/a/ RMS velocity in decibels (VdB) related to 1 micro-inch/second.
SOURCE: FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

Vibration annoyance is another concern related to construction activity. However, perceptible vibration is not typically a concern for human health and is a common occurrence within the urban environment. The Los Angeles Law Library is located approximately 115 feet west of the project site and may be considered particularly sensitive to vibration annoyance. A large bulldozer produces a vibration level of 87 VdB at 25 feet.[6] The related vibration level at the Los Angeles Law Library would be approximately 60 VdB, which would be below the most stringent annoyance threshold of 65 VdB Buildings for frequent vibration events occurring where vibration could interfere with interior operations.

In addition to on-site construction activities, construction trucks on the roadway network have the potential to expose vibration-sensitive land uses. Rubber-tired vehicles, including trucks, rarely generate perceptible

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[5] *FTA, Transit Noise and Vibration Impact Assessment, May 2006.*

[6] *Ibid.*

vibration.[7] It is not anticipated that project-related trucks would generate perceptible vibration adjacent to the roadway network.

The analysis above demonstrates that construction vibration would not damage buildings or annoy sensitive uses. Therefore, the proposed project would result in a less-than-significant impact construction vibration.

Operations

The primary sources of proposed project operational-related vibration would include vehicles traveling to the project site for events. Vehicular movements would generate similar vibration levels as existing traffic conditions. The proposed project would not introduce any significant stationary sources of vibration that would be perceptible off the project site, including at the Los Angeles Law Library or the Times Mirror Project site. Therefore, operational activity would result in a less-than-significant impact related to vibration.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Therefore, no mitigation measures are required.

c) Would the proposed project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the proposed project? (Less-than-Significant Impact)

The primary sources of operational noise would be the restaurant facilities and landscaping activities. As discussed above, operational activities would not result in significant permanent increase in noise levels related to these sources. Regarding mobile noise, the proposed project would generate 992 daily trips, including 95 weekday PM and 121 Saturday mid-day peak-hour trips. Roadway segments were selected for analysis based on intersections included in the traffic analysis, proximity to sensitive receptors, and trip distribution. Operational mobile noise was assessed using the Federal Highway Administration Traffic Noise Model (TNM). **Table 4** shows mobile source noise and **Table 5** shows changes in mobile noise. Mobile noise would increase by less than 1-dBA at the analyzed segments, which would be less than the 3-dBA audibility standard or any relevant significance threshold. Therefore, the proposed project would result in a less-than-significant impact related to operational noise.

TABLE 4: ESTIMATED MOBILE SOURCE NOISE LEVELS

Roadway Segment	Estimated dBA, L_{eq}			
	Existing (2018)	Existing Plus Project (2018)	Future No Project (2021)	Future With Project (2021)
Spring St. between Temple St. and 1st St.	66.5	66.5	66.9	67.0
Broadway between Temple St. and 1st St.	68.4	68.4	68.9	68.9
1st St. between Broadway and Spring St.	70.0	70.1	70.3	70.3

SOURCE: TAHA, 2018.

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[7] *Ibid.*

TABLE 5: CHANGE IN MOBILE SOURCE NOISE LEVELS

Roadway Segment	Estimated dBA, L_{eq}		
	Existing (2018) vs. Existing Plus Project (2018	Future With Project (2021) vs. Future No Project (2021)	Existing (2018) vs. Future With Project (2021)
Spring St. between Temple St. and 1st St.	0.0	0.1	0.5
Broadway between Temple St. and 1st St.	0.0	0.0	0.5
1st St. between Broadway and Spring St.	0.1	0.0	0.3

SOURCE: TAHA, 2018.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Therefore, no mitigation measures are required.

d) Would the proposed project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the proposed project? (Less-than-Significant Impact)

As discussed above, nearby sensitive receptors would experience increased noise levels associated with construction. Construction noise impacts would be temporary in nature, but equipment noise levels would exceed 75 dBA at the Los Angeles Law Library. Therefore, without mitigation, the proposed project would result in a significant noise impact related to temporary and periodic construction activity.

Mitigation Measures

Refer to Mitigation Measures **N1** through **N8**, above.

Significance After Mitigation

Based on compliance with the LAMC, construction equipment noise would be mitigated to the greatest extent feasible. The implementation of Mitigation Measures **N1** through **N8** would reduce noise impacts to less-than-significant.

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

f) For a project located within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels? (No Impact)

The project site is not located within an airport land use plan, within two miles of a public airport, or near a private airstrip. There is no potential for the proposed project to expose people working or residing in the project area to excessive aircraft noise.

Mitigation Measures

No significant impacts have been identified related to the proposed project. Therefore, no mitigation measures are required.

References

California Department of Transportation, *Technical Noise Supplement*, September 2013.

Federal Highway Administration, *Roadway Construction Noise Model*, *Software Version 1.1*, 2008.

Federal Highway Administration, *Traffic Noise Model Version 2.5*, February 2004.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.

Los Angeles Municipal Code, *Section 112.04 (Powered Equipment Intended for Repetitive Use in Residential Areas and Other Machinery, Equipment, and Devices).*

Los Angeles Municipal Code, *Section 112.01 (Radios, Television Sets, and Similar Devices)*.

Los Angeles Municipal Code, *Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools*).

Los Angeles Municipal Code, *Section 115.02 (Amplified Sound Prohibitions and Regulations)*.

Los Angeles Municipal Code, *Section 116.01 (Loud, Unnecessary, and Unusual Noise)*.

Los Angeles Municipal Code, *Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited*).

United States Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, PB 206717, 1971.

Appendix

Construction Noise and Vibration

Noise Formulas

Noise Distance Attenuation

Hard Site

Equation: Ni = No - 20 X (log Di/Do)

Di = distance to receptor (Di>Do)

Ni = attenuated noise level of interest

No = reference noise level

Do = reference distance

Source: (Bolt, Beranek, and Newman, 1971)

Summation of Noise Levels

Equation: Ns=10 x LOG10((10^(N1/10))+(10^(N2/10))+(10^(N3/10))+(10^(N4/10)))

Ns = Noise Level Sum
N1 = Noise Level 1
N2 = Noise Level 2
N3 = Noise Level 3
N4 = Noise Level 4

Source: California Department of Transportation, *Technical Noise Supplement* , 2009

Construction Noise Analysis

Outdoor Construction Noise Levels

Construction Phase	Noise Level at 50 feet (dBA)	Noise Level at 100 feet (dBA)
Ground Clearing	84	78
Grading/Excavation	89	83
Foundations	78	72
Structural	85	79
Finishing	89	83

Source: EPA. 1971. Noise from Construction Equipment and Operations, Building Equipment and Home Appliances. PB 206717.

On-Site Construction Noise: Resulting Noise Level Increases

Sensitive Receptor	Distance (feet) /a/	Reference Noise Level (dBA)	Max Construction Noise (dBA, Leq)
Los Angeles Law Library	115	89	81.8

/a/ distance is the sloped distance from the location of the suite to ground level noise

Vibration Formulas

Vibration PPV Attenuation

Equation: PPVequip = PPVref x (25/D)^1.5
PPV (equip) is the peak particle velocity in in/sec of the equipment adjusted for distance
PPV (ref) is the reference vibration level in in/sec at 25 feet from Table 12-2
D is the distance from the equipment to the receiver.

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

Vibration VdB Attenuation

Equation: Lv(D) = Lv(25 ft) – 30log(D/25)
D = Distance (feet)
Lv(D) = Vibration Level

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

Vibration Damage and Annoyance Analysis

Vibration Velocities for Construction Equipment		
Equipment	**PPV at 25 Feet (Inches/Second)**	**VdB at 25 feet (Micro-Inches/Second)**
Large Bulldozer	0.089	87

Vibration VdB Attenuation		
Equipment	**VdB at 25 feet (Micro-Inches/Second)**	**VdB at 115 feet (Micro-Inches/Second) /a/**
Large Bulldozer	87	67

Continuous Construction	Distance	PPV
Nearest Structure	40	0.044
Los Angeles Law Library	115	0.009

/a/ Includes a 7 dB reduction for building coupling associated with a 1-2 story masonry building

TNM Model Runs

<Organization?> 19 December 2018
<Analysis By?> TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	386	35	25	35	0	0	94	35	0	0
	point2	2										

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height above Ground**	**Input Sound Levels and Criteria**				**Active in Calc.**
			X	**Y**	**Z**		**Existing LAeq1h**	**Impact Criteria**		**NR Goal**	
								LAeq1h	**Sub'l**		
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?> 19 December 2018

<Analysis By?> TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: <Project Name?>

RUN: <Run Title?>

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> 19 December 2018
<Analysis By?> TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>

Roadway	Points												
Name	Name	No.	Segment										
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	387	35	25	35	0	0	94	35	0	0
	point2	2										

<Organization?> 19 December 2018
<Analysis By?> TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>

Receiver Name	No.	#DUs	Coordinates (ground) X	 Y	 Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	 Impact Criteria LAeq1h	 Sub'l	 NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**
BARRIER DESIGN: **INPUT HEIGHTS**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: **68 deg F, 50% RH**

Receiver

Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?>			**19 December 2018**		
<Analysis By?>			**TNM 2.5**		

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	464	35	30	35	0	0	97	35	0	0
	point2	2										

<Organization?>						**19 December 2018**					
<Analysis By?>						**TNM 2.5**					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	**<Project Name?>**										
RUN:	**<Run Title?>**										
Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height above Ground**	**Input Sound Levels and Criteria**				**Active in Calc.**
			X	**Y**	**Z**		**Existing LAeq1h**	**Impact Criteria**		**NR Goal**	
								LAeq1h	**Sub'l**		
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>				19 December 2018			
<Analysis By?>				TNM 2.5			
				Calculated with TNM 2.5			
RESULTS: SOUND LEVELS							
PROJECT/CONTRACT:	<Project Name?>						
RUN:	<Run Title?>						
BARRIER DESIGN:	INPUT HEIGHTS				Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.		
ATMOSPHERICS:	68 deg F, 50% RH						

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	 Crit'n	 Increase over existing Calculated	 Crit'n Sub'l Inc	 Type Impact	With Barrier Calculated LAeq1h	 Noise Reduction Calculated	 Goal	 Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	 Avg	 Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?>					**19 December 2018**							
<Analysis By?>					**TNM 2.5**							
INPUT: ROADWAYS							**Average pavement type shall be used unless**					
PROJECT/CONTRACT:	**<Project Name?>**						**a State highway agency substantiates the use**					
RUN:	**<Run Title?>**						**of a different type with the approval of FHWA**					
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**		
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**	
	ft			ft	ft	ft		mph	%			
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average		
		point2	2	869.1	231.0	0.00						

<Organization?>				**19 December 2018**								
<Analysis By?>				**TNM 2.5**								

INPUT: TRAFFIC FOR LAeq1h Volumes

PROJECT/CONTRACT: **<Project Name?>**

RUN: **<Run Title?>**

Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	495	35	30	35	0	0	97	35	0	0
	point2	2										

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height above Ground**	**Input Sound Levels and Criteria**				**Active in Calc.**
			X	**Y**	**Z**		**Existing LAeq1h**	**Impact Criteria**		**NR Goal**	
								LAeq1h	**Sub'l**		
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>		19 December 2018
<Analysis By?>		TNM 2.5
		Calculated with TNM 2.5
RESULTS: SOUND LEVELS		
PROJECT/CONTRACT:	<Project Name?>	
RUN:	<Run Title?>	
BARRIER DESIGN:	INPUT HEIGHTS	Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.
ATMOSPHERICS:	68 deg F, 50% RH	

Receiver Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	1514	35	97	35	0	0	0	0	0	0
	point2	2										

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Receiver Name	**No.**	**#DUs**	**Coordinates (ground) X**	**Y**	**Z**	**Height above Ground**	**Input Sound Levels and Criteria Existing LAeq1h**	**Impact Criteria LAeq1h**	**Sub'l**	**NR Goal**	**Active in Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**
BARRIER DESIGN: **INPUT HEIGHTS**
ATMOSPHERICS: **68 deg F, 50% RH**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	**No.**	**#DUs**	**Existing**	**No Barrier**					**With Barrier**			
			LAeq1h	**LAeq1h**		**Increase over existing**		**Type**	**Calculated**	**Noise Reduction**		
				Calculated	**Crit'n**	**Calculated**	**Crit'n Sub'l Inc**	**Impact**	**LAeq1h**	**Calculated**	**Goal**	**Calculated minus Goal**
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	68.4	66	68.4	10	Snd Lvl	68.4	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> 19 December 2018
<Analysis By?> TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	1516	35	97	35	0	0	0	0	0	0
	point2	2										

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>
<Analysis By?>

19 December 2018
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	68.4	66	68.4	10	Snd Lvl	68.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	1681	35	107	35	0	0	0	0	0	0
	point2	2										

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>	19 December 2018
<Analysis By?>	TNM 2.5
	Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:	**<Project Name?>**	
RUN:	**<Run Title?>**	
BARRIER DESIGN:	**INPUT HEIGHTS**	**Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.**
ATMOSPHERICS:	**68 deg F, 50% RH**	

Receiver

Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	**Points**												
Name	**Name**	**No.**	**Segment**										
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**		
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Roadway1	point1	1	1683	35	107	35	0	0	0	0	0	0	
	point2	2											

<Organization?>
<Analysis By?>

19 December 2018
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>

Receiver											
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active
			X	Y	Z	above	Existing	Impact Criteria		NR	in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?> 19 December 2018
<Analysis By?> TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**

<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes

PROJECT/CONTRACT: **<Project Name?>**

RUN: **<Run Title?>**

Roadway	**Points**												
Name	**Name**	**No.**	**Segment**										
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**		
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Roadway1	point1	1	2204	35	141	35	0	0	0	0	0	0	
	point2	2											

<Organization?>						**19 December 2018**					
<Analysis By?>						**TNM 2.5**					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	**<Project Name?>**										
RUN:	**<Run Title?>**										

Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>		19 December 2018
<Analysis By?>		TNM 2.5
		Calculated with TNM 2.5
RESULTS: SOUND LEVELS		
PROJECT/CONTRACT:	<Project Name?>	
RUN:	<Run Title?>	
BARRIER DESIGN:	INPUT HEIGHTS	Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.
ATMOSPHERICS:	68 deg F, 50% RH	

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?>				19 December 2018							
<Analysis By?>				TNM 2.5							
INPUT: ROADWAYS							Average pavement type shall be used unless				
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use				
RUN:	<Run Title?>						of a different type with the approval of FHWA				

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	**Points**												
Name	**Name**	**No.**	**Segment**										
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**		
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Roadway1	point1	1	2219	35	142	35	0	0	0	0	0	0	
	point2	2											

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>
<Analysis By?>

19 December 2018
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	70.1	66	70.1	10	Snd Lvl	70.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: ROADWAYS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	Points												
Name	Name	No.	Segment										
			Autos		MTrucks		HTrucks		Buses		Motorcycles		
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Roadway1	point1	1	2334	35	149	35	0	0	0	0	0	0	
	point2	2											

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Receiver **Name**	**No.**	**#DUs**	**Coordinates (ground)**			**Height above Ground**	**Input Sound Levels and Criteria**				**Active in Calc.**
			X	**Y**	**Z**		**Existing LAeq1h**	**Impact Criteria**		**NR Goal**	
								LAeq1h	**Sub'l**		
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>
<Analysis By?>

19 December 2018
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

<Organization?>					**19 December 2018**						
<Analysis By?>					**TNM 2.5**						
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**<Project Name?>**						**a State highway agency substantiates the use**				
RUN:	**<Run Title?>**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Roadway1	75.0	point1	1	-224.0	231.0	0.00				Average	
		point2	2	869.1	231.0	0.00					

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Roadway	**Points**												
Name	**Name**	**No.**	**Segment**										
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1	point1	1	2349	35	150	35	0	0	0	0	0	0
	point2	2										

<Organization?> **19 December 2018**
<Analysis By?> **TNM 2.5**

INPUT: RECEIVERS
PROJECT/CONTRACT: **<Project Name?>**
RUN: **<Run Title?>**

Receiver												
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	248.0	269.0	0.00	5.00	0.00	66	10.0	8.0	Y

<Organization?>
<Analysis By?>

19 December 2018
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: <Run Title?>
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

APPENDIX F

Traffic Study

TRAFFIC IMPACT STUDY

1st & Broadway Civic Center Park

DECEMBER 2018

DRAFT

Prepared For:

AECOM
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Prepared by:

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Rev. 3

TABLE OF CONTENT

FIGURES

TABLES

APPENDICES

1. INTRODUCTION

The 1st & Broadway Civic Center Park Project (proposed Project) would construct a two-story restaurant use and a city park, featuring a variety of activities, programs, and events. The project has been proposed by the City of Los Angeles Departments of Recreation and Parks (RAP) and Public Works, Bureau of Engineering (BOE). KOA Corporation has been retained by AECOM to analyze the potential traffic impacts associated with the proposed Project.

1.1 PROJECT DESCRIPTION

The proposed Project would construct a 1.96-acre park and a two-story restaurant building with an 19,200 square-foot footprint. The currently vacant Project site is located at the northeast corner of the Broadway and 1st Street intersection, within the Civic Center area of downtown Los Angeles.

The proposed project would include a 1.96-acre innovative park located in the Civic Center area of downtown Los Angeles at 126 North Broadway. The proposed project would incorporate a two-story restaurant building complex within the northwest corner of the park. The proposed approximately 19,200-square-foot restaurant building complex would include space for four restaurant operators.

The new building would include a rooftop patio and bar, an upscale restaurant, an approximately 1,380-square-foot outdoor café with a food service window to serve outdoor patrons, and an approximately 1,500-square-foot outdoor beer garden attached to the two-story structure. A portion of the ground level floor of the restaurant building would be externally shaped into a tiered sitting area with a capacity to seat up to 60 park patrons at a time. Programming for the proposed project would potentially include art exhibit events, concessionaire-sponsored events, and RAP-sponsored events.

No parking spaces would be provided with the proposed project, and parking is not currently provided on the project site. According to the Los Angeles Municipal Code, 21 parking spaces would be required for the restaurant uses proposed. As such, a parking variance would be required to implement the proposed project. Existing parking facilities and public transportation are readily available in the project area for patrons to utilize. The restaurant operators will be required to lease parking spaces from local parking lots or structures in the area to provide nearby parking for restaurant patrons. Therefore, the trip generation analysis and parking impacts analysis focuses on nearby parking areas.

The Project is anticipated to be completed and operational by year 2021. The proposed Project site plan is illustrated on Figure 1.

1.2 PROJECT STUDY AREA

The project study area includes the following six study intersections on routes to and from the site area and the potential parking areas:

1. Broadway & Temple Street
2. Spring Street & Temple Street
3. Hill Street & 1st Street
4. Broadway & 1st Street
5. Spring Street & 1st Street
6. Judge John Aliso/San Pedro & 1st Street

Figure 2 illustrates the study area and the locations of the study intersections.

1.3 ANALYZED SCENARIOS

Traffic impacts associated with operations of the proposed Project were analyzed at the study intersections for the weekday p.m. peak-hour and Saturday mid-day peak-hour periods. These periods were analyzed for Project operations, due to typical special event times. Construction-period operations were analyzed for weekday a.m. and p.m. peak periods, in order to analyze potential impacts during peak commute times.

The study included the analysis of the following traffic scenarios:

- Existing
- Existing with-Project
- Future without-Project
- Future with-Project
- Future with Project with Construction

FIGURE
1

1ST & BROADWAY CIVIC CENTER PARK PROJECT

Project Site Plan

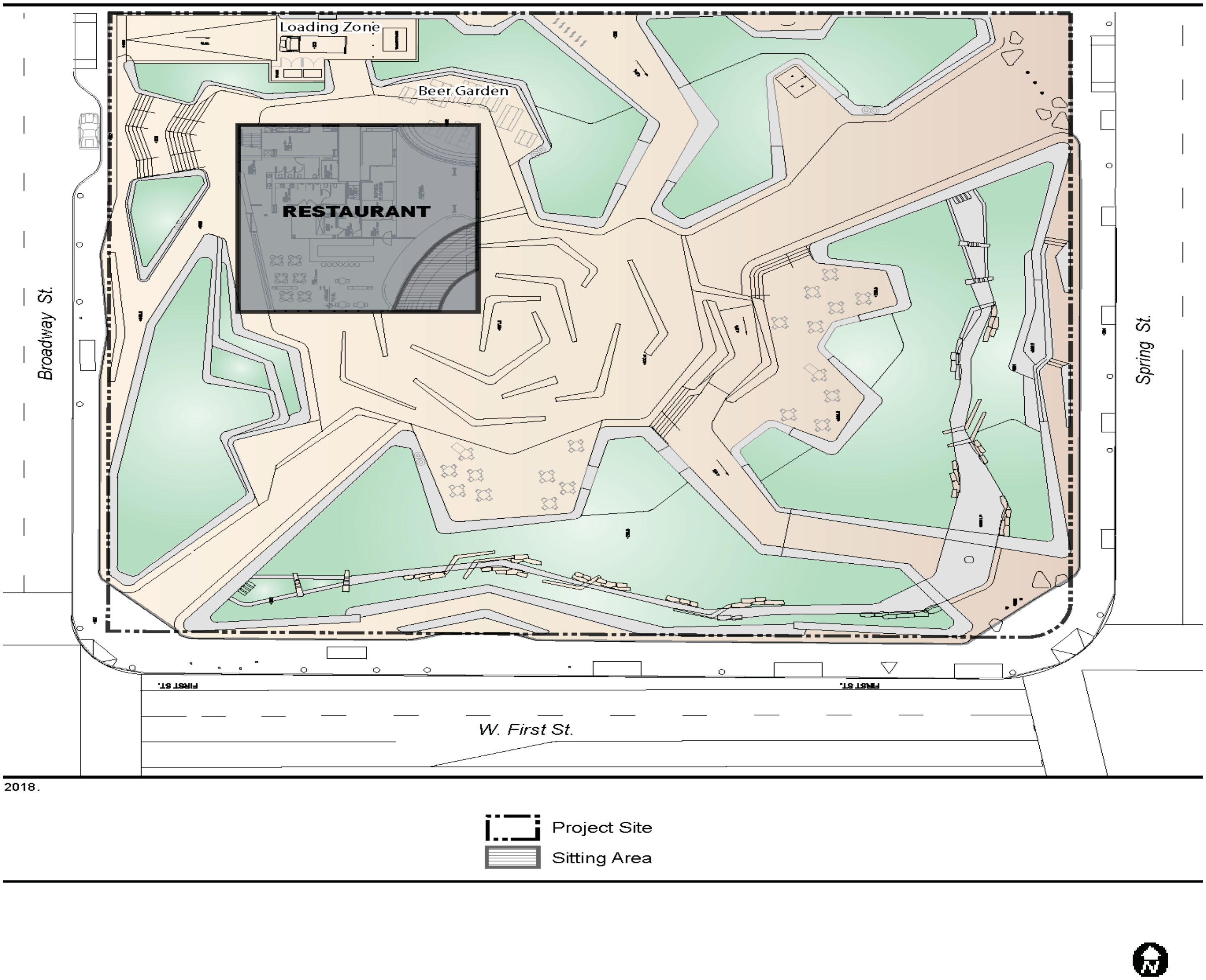
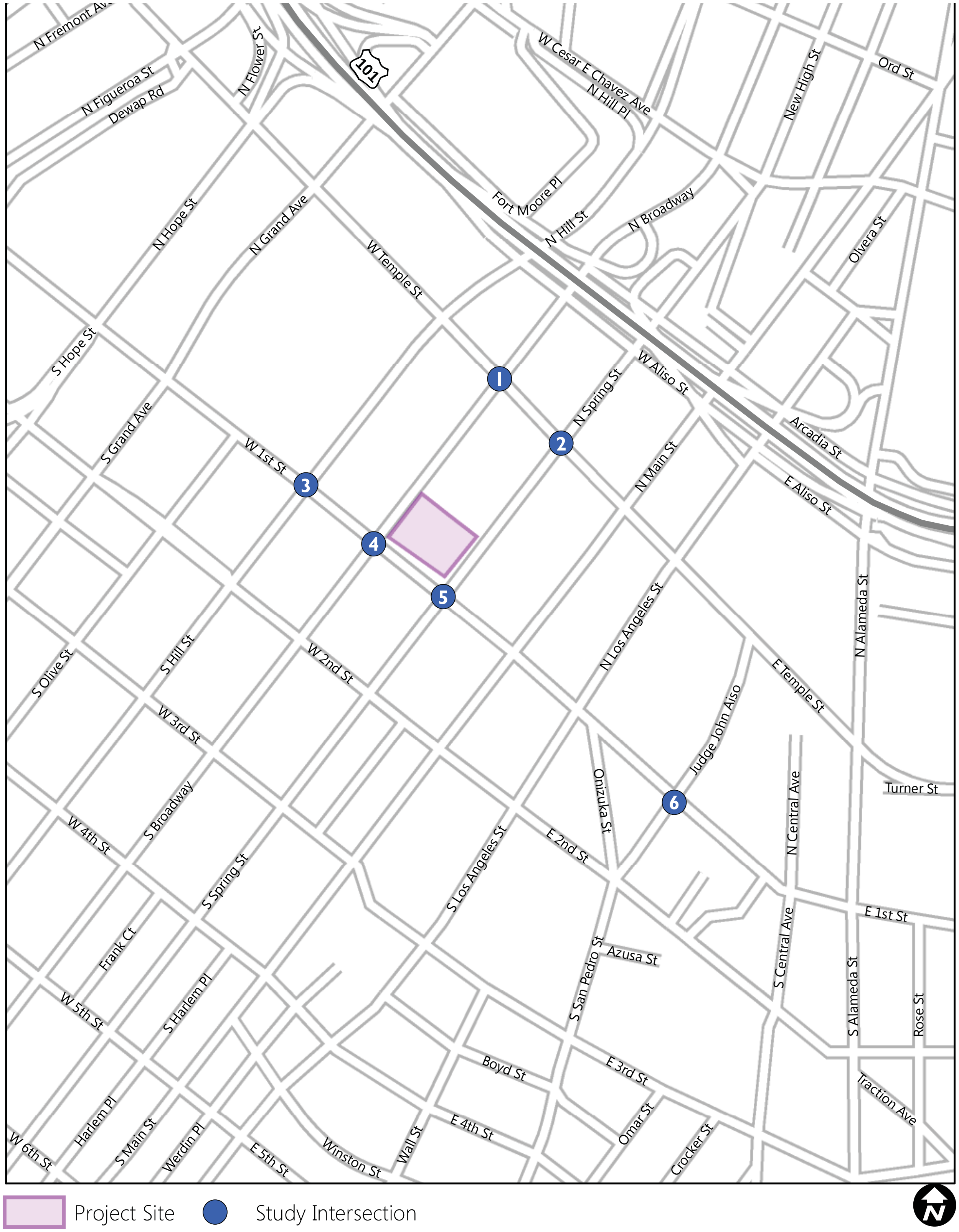


FIGURE
2

1ST & BROADWAY CIVIC CENTER PARK PROJECT

Study Area Map



1.4 ANALYSIS METHODOLOGY

KOA coordinated with City staff as the first step in the traffic analysis, in order to define the study area and other major details. A traffic study Memorandum of Understanding (MOU) was submitted to the City of Los Angeles Department of Transportation (LADOT) and was executed on December 17, 2018. The MOU is provided in Appendix A. The following text describes the study methodology for this report.

Existing Conditions

New weekend traffic counts were conducted on Saturday, May 19, 2018 from 12:00 p.m. to 3:00 p.m. at the study intersections. New traffic counts were also conducted on a typical weekday from 3:00 p.m. to 6:00 p.m. at the intersection of Judge John Aliso/San Pedro Street and 1st Street on May 31, 2018. Recent traffic counts at five of the study intersections during the weekday afternoon period were utilized for the project, and these counts were collected on March 23, 2017.

As per LADOT policies, traffic counts conducted within a two-year period are permitted for use in traffic impact studies. The growth rate considered growth rates provided by the *Congestion Management Program for Los Angeles County*, published by Metro. In that document, the growth rate for Regional Statistical Area #23 (Downtown L.A.) within the ten-year period between 2010 and 2010 is 1.8 percent. To be conservative, the traffic counts from 2017 were increased by one percent per year to reflect year 2018 existing conditions.

The traffic counts were used to determine existing traffic conditions. Fieldwork within the study area was undertaken to identify the condition of key study area roadways including traffic control and approach lane configurations at each study intersection, and on-street parking restrictions.

The existing level of service (LOS) at each of the study intersections is discussed in Section 2 of this report.

Project Trip Generation and Distribution

Project trip generation was based on land use intensities and trip rates defined by *Trip Generation, 10th Edition,* published by the Institute of Transportation Engineers (ITE). The trip generation and distribution calculations are discussed in Section 3 of this report.

Existing with-Project Conditions

Based on the projected Project traffic and the traffic count totals, an Existing plus-Proposed Project conditions scenario was analyzed per the *Sunnyvale* and *Smart Rail* California Environmental Quality Act (CEQA) court case decisions that determined that project impacts should be analyzed against existing conditions. The level of service for existing with-Project conditions at the study intersections is discussed in Section 4 of this report.

Future without-Project Conditions

In order to account for traffic growth in the study area, an ambient/background traffic growth rate was applied to the traffic counts conducted in 2017 (some locations). In addition, traffic from related/area projects (approved and pending developments) was also added to the study area. The levels of service at the study intersections for future without-Project conditions are discussed in Section 5 of this report.

Future with-Project Conditions

Based on the future without-Project volumes plus traffic from the proposed Project, the future with-Project traffic volume conditions were determined and analyzed. The levels of service for this scenario are discussed in Section 6 of this report.

Level of Service Methodology

For analysis of Level of Service (LOS) at signalized intersections, LADOT has designated the Circular 212 Planning methodology as the desired tool. The concept of roadway level of service under the Circular 212 methodology is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility. A facility is "at capacity" (V/C of 1.00 or greater) when extreme congestion occurs. This volume/capacity ratio value is a function of hourly volumes, signal phasing, and approach lane configuration on each leg of the intersection.

Level of service values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating "capacity" of a roadway. Table 1 defines the level of service criteria applied to the study intersections.

Table 1 defines the level of service criteria applied to the study intersections.

Table 1 – Level of Service Definitions

Level of Service	Definition	Volume-to-Capacity Ratio
A	Excellent operation. Free-flow speeds prevail. Vehicles are almost unimpeded in their ability to maneuver within the traffic stream.	0.00–0.600
B	Very good operation. Reasonably free-flow speeds are maintained. The ability to maneuver within traffic is only slightly restricted.	0.601–0.700
C	Good operation. Flow with speeds at or near free-flow speed of the roadway. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more care and vigilance on the part of the driver.	0.701–0.800
D	Fair operation. Speeds begin to decline slightly with increasing flows. In this range, density begins to increase somewhat more quickly with increasing flow. Freedom to maneuver within the traffic stream is noticeably limited.	0.801–0.900
E	Poor operation. Operation at capacity with no usable gaps in the traffic stream. Any disruption to the traffic stream has little or no room to dissipate.	0.901–1.000
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 1.000

Source: Highway Capacity Manual, Special Report 209, Transportation Researach Board, Washington D.C., 2000 and Interim Materials on Highway Capacity, NCHRP Circular 2012, 1982

Significant Traffic Impacts

Traffic impacts are identified if a proposed development will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below acceptable level of service values and project traffic will cause a further decline below a threshold.

As defined by the LADOT traffic study guidelines, significant impacts of a proposed project on a facility must be mitigated to a level of insignificance, where feasible. Determination of potential significant traffic impacts due to the proposed Project is discussed in Section 7 of this report.

2. EXISTING CONDITIONS

This section describes the existing conditions within the study area in terms of roadway facilities, transit service and traffic operating conditions.

2.1 EXISTING ROADWAY SYSTEM

The characteristics of the key roadways within the study area are provided in Table 2. The discussion is limited to specific roadways that traverse the study intersections and border the Project site. Figure 3 illustrates the existing traffic controls and approach lane configurations at the study intersections.

Table 2 – Existing Roadway Description

Roadway	Classification	# Lanes		Median Type	Parking Restrictions		Posted Speed Limit (mph)	General Land Use
		NB/ EB	SB/ WB		North Side / East Side	South Side / West Side		
Broadway	Avenue II	2	1-2	DY	2 HR, 8AM-8PM Ex Sat/Sun NSAT	2 HR, 8AM-8PM Ex Sat/Sun NSAT	NP	Commercial
W First Street	Boulevard II	2	2	DY	2 HR, 8AM-8PM Ex Sat/Sun NSAT	2 HR, 8AM-8PM Ex Sat/Sun NSAT	NP	Commercial / Civic
Spring Street	Avenue 1/Avenue	-	2-3	DY	NSAT NS 7-9AM, 4-6PM Ex Sat/Sun 30 min, 8AM-8PM 4 HR, 9-4PM/6-8PM, M-F 4 HR, 8AM-8PM, Sat	NSAT 30 min, 8AM-8PM Ex Sun 15 min, 8AM-8PM Ex Sun	NP	Commercial
Temple Street	Avenue II	2	2	DY	NSAT	2 HR, 9AM-4PM, M-F 2 HR, 9AM-4PM, M-F 2 HR, 8AM-8PM, Sat NS 7-9AM NSAT	NP	Commercial
San Pedro Street	Avenue II	2	2	DY	2 HR, 8AM-6PM, Ex Sun 2 HR, 8AM-8PM, Ex Sun	2 HR, 8AM-6PM, Ex Sun 2 HR, 8AM-8PM, Ex Sun	NP	Commercial
Judge John Aiso Street	Avenue II	2	2	DY	2 HR, 8AM-8PM, Ex Sun NSAT	NSAT	NP	Commercial
Olive Street	Avenue II	2-3	1-2	DY	2 HR, 8AM-3PM, M-F 2 HR, 8AM-8PM, Sun NSAT	NSAT	NP	Commercial
Hill Street	Avenue II	2	2	DY	4 HR, 8AM-4PM, M-F 2 HR, 8AM-8PM, Sun NSAT	4 HR, 9AM-8PM, Ex Sun NSAT	NP	Commercial
Main Street	Avenue 1/Avenue	4	-	DY	2 HR, 8AM-8PM 4 HR, 9-4PM/6-8PM, M-F 4 HR, 8AM-8PM, Sun NSAT NS 4-6PM	4 HR, 8AM-8PM, Sun 15 min, 8AM-8PM, Ex Sun	NP	Commercial / Civic

2.2 EXISTING TRANSIT SERVICE

The Project study area is served by bus transit lines operated by the Los Angeles County Metropolitan Transit Authority (Metro), Antelope Valley Transit Authority, Commerce Municipal Bus Lines, Gardena Transit, Foothill Transit, LADOT Dash, LADOT Commuter Express, Montebello Transit, OCTA, Santa Clarita Transit, Santa Monica Big Blue Bus, Torrance Transit. Table 3 summarizes the Project Study transit services.

Table 3 – Existing Transit Service

Agency	Line	From	To	Via	Peak Frequency
Metro	2	West LA	Downtown LA	Vermont/Sunset	5-15
	4	Downtown LA	West LA	Santa Monica Blvd	9-12
	28	Glendale	Downtown LA	Eagle Rock Blvd	6-15
	30	East LA	Beverly Hills	1st St/Pico Blvd/San Vicente Blvd	6-12
	40	Downtown LA	Rendondo Beach	Alameda St/Spring St/Broadway/MLK Jr Blvd/Crenshaw/Florence Ave/La Brea Ave/Hawthrone Blvd	7-12
	45	Downtown LA	South LA	Broadway	4-8
	68	Downtown LA	Montebello	Cesar E Chavez Ave	13-16
	70	Downtown LA	El Monte	Garvey Ave	10-15
	71	Downtown LA	City Terrace	Gramd Ave/Olive St/Marengo St/Wabash Ave/City Trrace Dr	15-35
	76	Downtown LA	El Monte	Valley Blvd	12-15
	78	Downtown LA	South Arcadia	Las Tunas Drive	6-20
	79	Downtown LA	South Arcadia	Huntington Drive	15-30
	83	Downtown LA	Glendale	Pasadena Ave/Marion Way/Monte Vista St/York Blvd/Colorado Blvd	20-30
	92	Downtown LA	Sylmar	Glenoaks Blvd	16-20
	96	Downtown LA	Burbank	Victory Blvd/Crystal Springs Dr/Griffith Park DR/Riverside Dr	30-35
	302	West LA	Downtown LA	Vermont/Sunset	20-40
	330	East LA	Beverly Hills	1st St/Pico Blvd/San Vicente Blvd	20-30
	378	Downtown LA	South Arcadia	Huntington Drive	11-28
	442	Downtown LA	Hawthorne	Harbor Transitway/Manchester Ave	25-55
	487	Downtown LA	El Monte	Wilshire Blvd/I-10/Del Mar Ave/New Ave/Las Tunas Dr/San Gabriel Blvd/Sierra Madre Blvd/Santa Anita Ave/Ramona Blvd	20-30
	489	Downtown LA	El Monte	Wilshire Blvd/I-10/Valley Blvd/Rosemead Blvd	20
	728	Glendale	Downtown LA	Eagle Rock Blvd	10-12
	745	Downtown LA	South LA	Broadway	5-13
	770	Downtown LA	El Monte	Garvey Ave	10-15
Antelope Valley Transit Authority	785	Lancaster/Palmdale	Downtown LA	S-14/I-5	15-20
Commerce Municipal Bus Lines	Citadel Outlets Express	Downtown LA	Citadel Outlets	S-60/I-710/I-5	35
Foothill Transit	FT493	Industry Park-and-Ride	Downtown LA	I-10	8
	FT Silver Streak	Downtown LA	Montclair	I-10	15
	FT495	Industry Park	Downtown LA	I-10/I-605/S-60	28
	FT497	Chino Park-and-Ride	Downtown LA		10
	FT498	Glendora/West Covina Park-and-Ride	Downtown LA	Grand Ave/Rowland Ave/I-10	1
	FT499	San Dimas Park-and-Ride	Downtown LA	I-10	8
	FT699	Montclair/Fairplex Park-and-Ride	Downtown LA	I-10	5

Continued on next page…

Table 3 – Existing Transit Service

Agency	Line	From	To	Via	Peak Frequency
Gardena Transit	1X	Redondo Beach Green Line Station	Downtown LA	I-110	30
LADOT Commuter Express	409	Sylmar	Downtown LA	Foothill Blvd/I-210/S-2/I-5	8
	419	Chatsworth	Downtown LA	Devonshire Street/S-118/I-5/S-110/Hill Street	15
	422	Thousand Oaks	Downtown LA	S-101	10
	423	Thousand Oaks	Downtown LA	S-101	5
	431	Westwood	Downtown LA	I-10	15
	437	Venice	Downtown LA	I-10	15
	438	Palos Verdes Estates	Downtown LA	Manhattan Avenue/Highland Avenue/Vista Del Mar/I-105/I-10	5
	448	Palos Verdes Peninsula	Downtown LA	Hawthorne Blvd/Pacific Coast Hwy/I-110	15
	534	Westwood	Downtown LA	Olympic Blvd	20
LADOT Dash	Route A	Arts District	Financial District	1st St/Figueroa St	7
	Route B	Financial District	Chinatown	Grand Ave/Temple St/Los Angeles St/Broadway	8
	Route D	South Park	Union Station	Olive St/Hill St/Spring St/Temple St	5
Montebello Transit	40	Pico Rivera	Downtown LA	Beverly Blvd/3rd Street	12
	90	Pico Rivera	Downtown LA	Beverly Blvd/S-60	30
Orange County Transit Authority	701	Huntington Beach	Union Station	I-605/I-105/I-110	20
Santa Clarita Transit	799	Santa Clarita	Downtown LA	I-5	10
Santa Monica Big Blue Bus	R10	Downtown Santa Monica	Downtown LA	I-10	20
Torrance Transit	4X	Torrance	Downtown LA	I-110	35

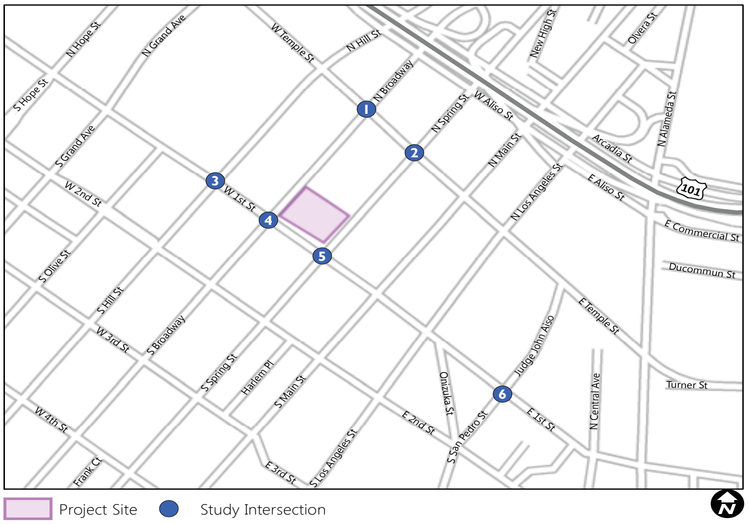
Source: Metro, Antelope Valley Transit Authority, City of Commerce, Gardena Transit, Foothill Transit, LADOT Dash, LADOT Commuter Express, Montebello Transit, OCTA, Santa Clarita Transit, Santa Monica Big Blue Bus, Torrance Transit

The routes of these transit services are illustrated on Figure 4.

FIGURE
3

1ST & BROADWAY CIVIC CENTER PARK PROJECT

Existing Lane Configuration

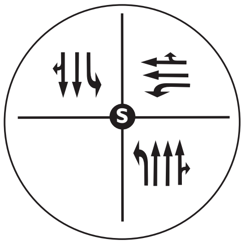


LANE CONFIGURATION

S Signalized Intersection

→ Intersection Lane Geometry

#1 Broadway & Temple Street



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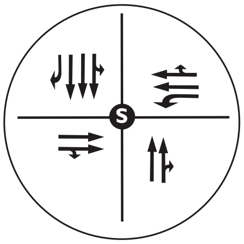

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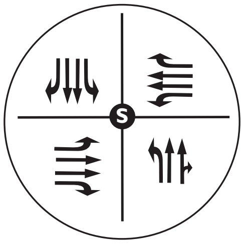

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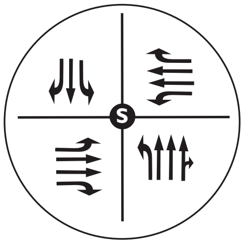
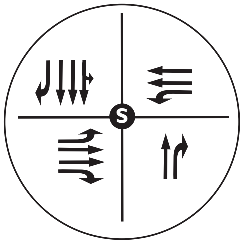


#5 1st Street & Spring Street



#6 1st Street & Judge John Aiso Street

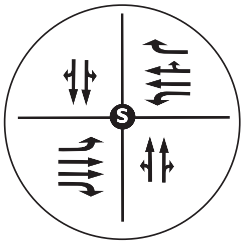
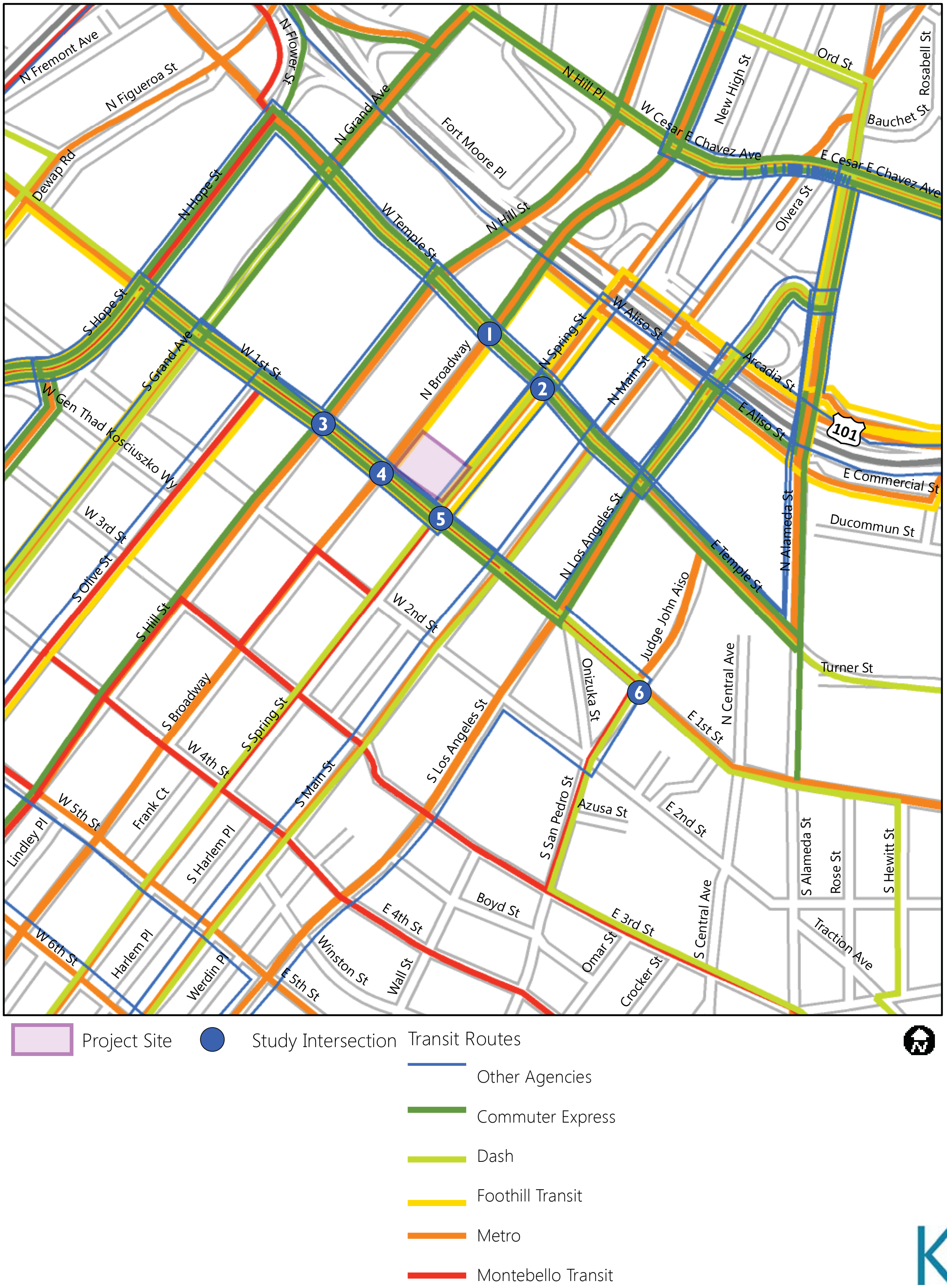


FIGURE 4

1ST & BROADWAY CIVIC CENTER PARK PROJECT

Existing Transit Services



KOA

2.3 EXISTING TRAFFIC VOLUMES

New traffic counts were conducted on a typical Saturday mid-day period from 12:00 p.m. to 3:00 p.m. at the study intersections on May 19, 2018. New traffic counts were also conducted on a typical weekday from 3:00 p.m. to 6:00 p.m. at the intersection of Judge John Aiso Street/San Pedro Street and 1st Street on May 31, 2018.

Recent traffic counts at five of the study intersection during the weekday afternoon period were utilized for the project, and the counts were collected in March 23, 2017. As per City of Los Angeles Department of Transportation (LADOT) policies, traffic counts conducted within a two-year period are permitted for use in traffic impact studies. To be conservative, traffic counts in 2017 were increased by one percent to reflect year 2018 existing conditions.

The traffic count data sheets are provided in Appendix B.

2.4 EXISTING INTERSECTION LEVEL OF SERVICE

Based on the intersection lane configurations and the existing traffic volumes, volume-to-capacity ratios and corresponding levels of service (LOS) were determined for each of the study intersections during the weekday p.m. peak hour and the Saturday mid-day peak hour.

Table 4 summarizes the volume-to-capacity ratios and LOS values for existing traffic conditions.

Table 4 – Intersection Performance –
Existing Conditions

		SAT MD Peak		PM Peak	
	Study Intersections	V/C	LOS	V/C	LOS
1	Broadway & Temple Street	0.597	A	0.635	B
2	Spring Street & Temple Street	0.360	A	0.369	A
3	Hill Street & 1st Street	0.379	A	0.739	C
4	Broadway & 1st Street	0.359	A	0.638	B
5	Spring Street & 1st Street	0.180	A	0.416	A
6	Judge John Aiso/San Pedro & 1st Street	0.224	A	0.562	A

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

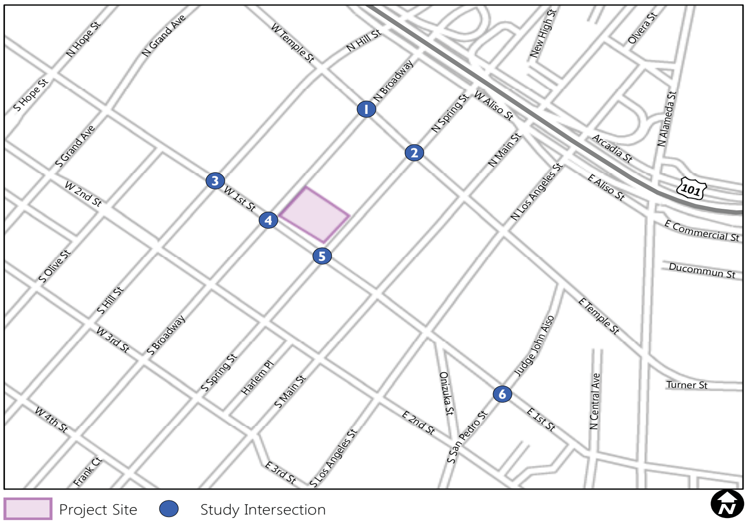
As shown in Table 3, all of the study intersections are currently operating at acceptable LOS C or better during the weekday p.m. peak hour and Saturday mid-day peak hour.

The existing weekday p.m. peak-hour and Saturday mid-day peak hour turning movement volumes are illustrated on Figure 5. The CMA analysis worksheets for all scenarios are provided in Appendix C.

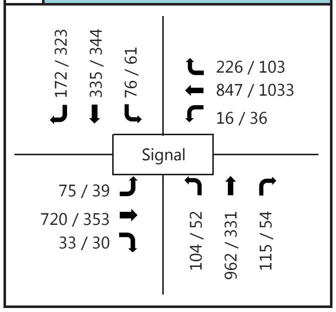
FIGURE
5

1ST & BROADWAY CIVIC CENTER PARK PROJECT

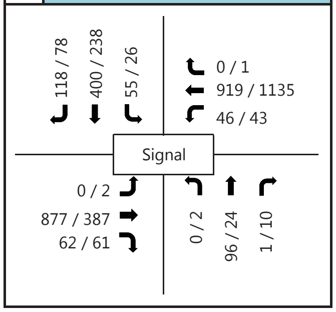
Existing - Weekday PM/Saturday Mid-Day Peak Hour Traffic Volumes



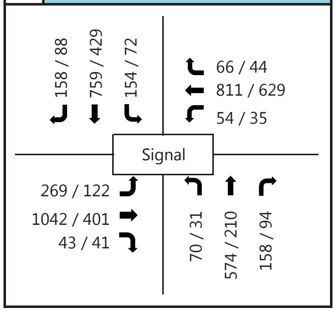
1 **Broadway at Temple Street**



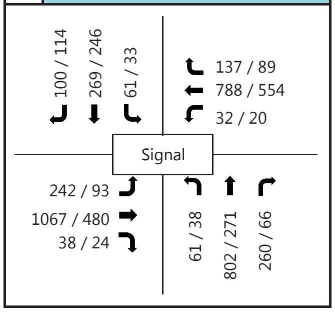
2 **Spring Street at Temple Street**



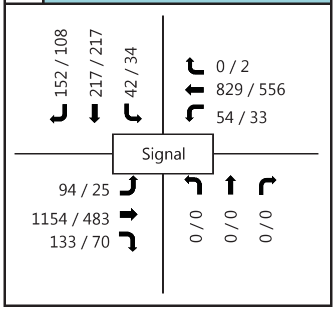
3 **Hill Street at 1st Street**



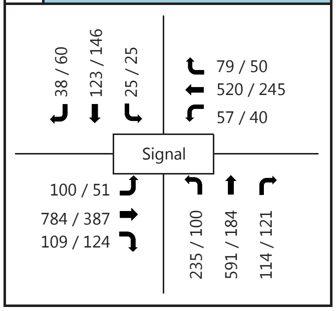
4 **Broadway at First Street**



5 **Spring Street at First Street**



6 **Judge John Aiso/San Pedro at 1st Street**



3. PROJECT TRAFFIC

This section defines the traffic that would be generated by the proposed Project in a three-step process including trip generation, trip distribution and trip assignment.

3.1 PROJECT TRIP GENERATION

The trip generation of the Project was calculated using nationally-accepted rates defined by *Trip Generation (10th edition)*, published by the Institute of Transportation Engineers (ITE), and is provided in Table 5. The Project site is close to numerous transit lines including Metro Rail Red/Purple Line subway service; and Metro, Foothill transit, and other bus lines. Therefore, a 25% Transit Trip Credit was included,. as any incremental impacts of the Project would likely be lessened by the use of area transit services.

The Project would generate 992 daily trips, including 95 vehicle trips during the weekday p.m. peak-hour (54 inbound trips and 41 outbound trips) and 121 vehicle trips during the Saturday mid-day peak hour (65 inbound trips and 56 outbound trips).

Table 5 – Project Trip Generation

				WEEKDAY				SATURDAY		
			Daily	PM Peak Hour			Saturday	Mid-Day Peak Hour		
Land Use	Intensity	Units	Total	Total	In	Out	Total	Total	In	Out
Trip Generation Rates										
Public Park (ITE 411)	-	acres	0.78	0.11	55%	45%	1.96	0.28	55%	45%
High-Turnover Restaurant (ITE 932)	-	seats	4.37	0.42	57%	43%	5.60	0.53	53%	47%
Trip Generation Estimates										
Public Park (ITE 411)	1.960	acres	2	0	0	0	4	1	1	0
High-Turnover Restaurant (ITE 932)	302	seats	1,320	127	72	55	1,691	160	85	75
Subtotal			**1,322**	**127**	**72**	**55**	**1,695**	**161**	**86**	**75**
Trip Credit										
Transit Trips Credit (25%)			-331	-32	-18	-14	-424	-40	-22	-19
Total			**992**	**95**	**54**	**41**	**1,271**	**121**	**65**	**56**

Source: ITE Trip Generation Manual, 10th Edition

3.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of assigning the directions from which traffic will access the Project site. Trip distribution is dependent upon the land use characteristics of the Project, the local roadway network, and the general locations of other land uses to which Project trips would originate or terminate. Figure 6 illustrates the trip distribution percentages that were utilized for the Project traffic.

3.3 PROJECT TRIP ASSIGNMENT

Based on the trip generation and distribution assumptions described above, Project traffic was assigned to the roadway system. The peak hour Project trip assignment is illustrated on Figure 7.

FIGURE
6

1ST & BROADWAY CIVIC CENTER PARK PROJECT

Project Trip Distribution

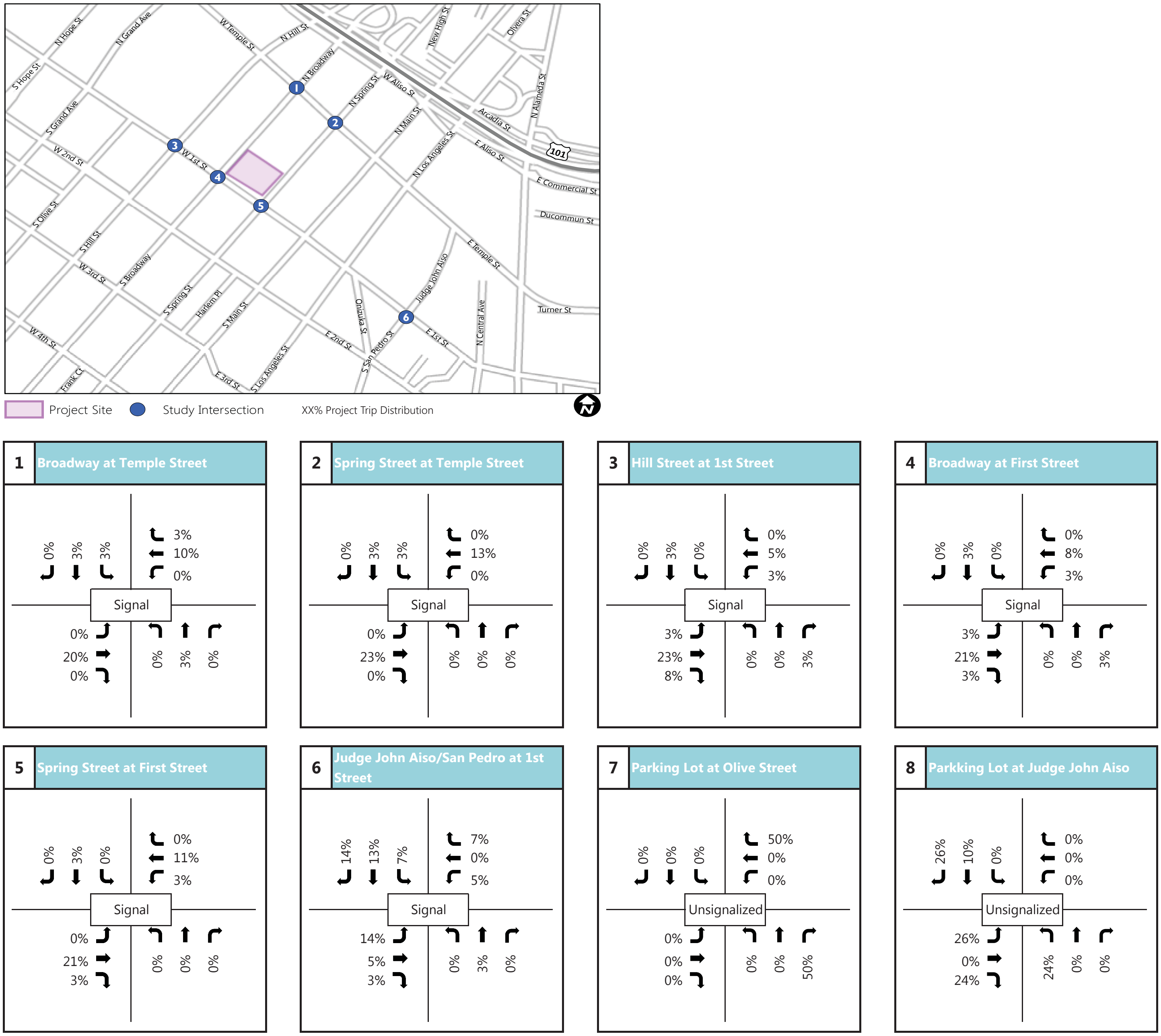
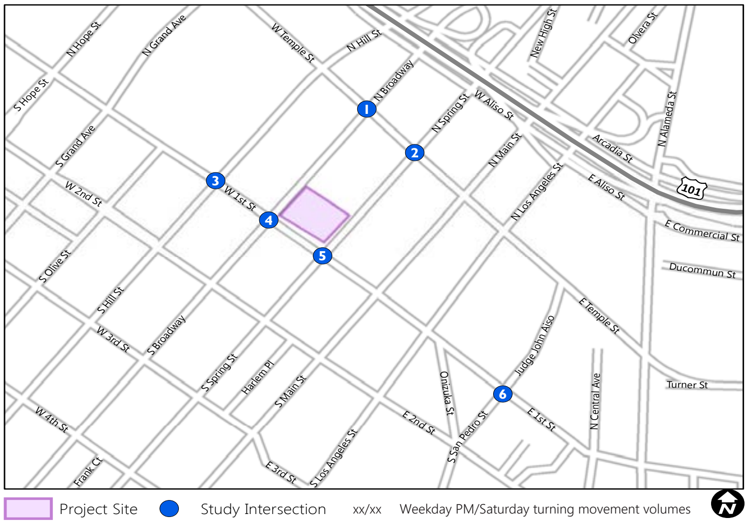


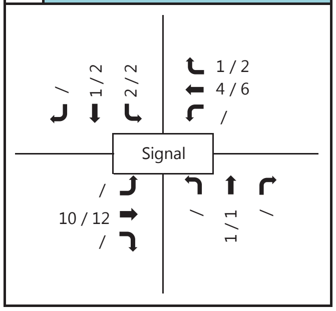
FIGURE 7

1ST & BROADWAY CIVIC CENTER PARK PROJECT

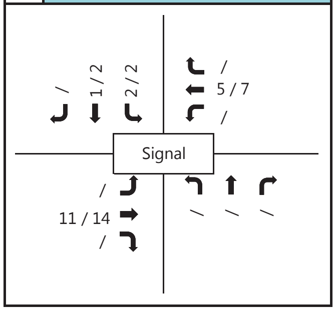
Project Trip Assignment - Weekday PM/Saturday Mid-Day Peak Hour Traffic Volumes



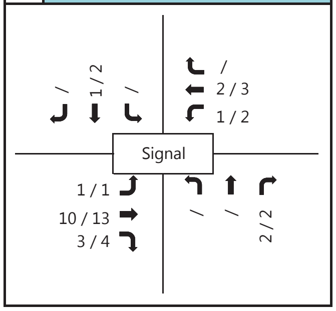
1 **Broadway at Temple Street**



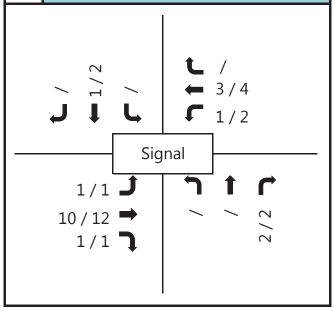
2 **Spring Street at Temple Street**



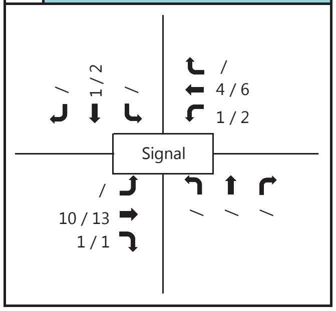
3 **Hill Street at 1st Street**



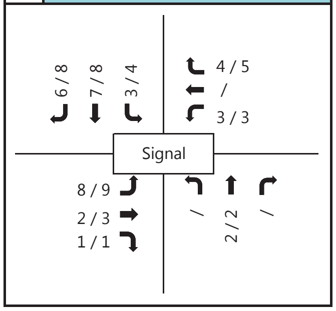
4 **Broadway at First Street**



5 **Spring Street at First Street**



6 **Judge John Aliso/San Pedro at 1st Street**



4. EXISTING WITH PROJECT CONDITIONS

This section documents existing traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for these conditions were derived by adding Project trips to the existing traffic volumes.

Table 6 summarizes the resulting operational data for the study intersections under existing with-Project conditions. The CMA analysis worksheets for all scenarios are provided in Appendix C.

Table 6 – Intersection Performance –
Existing With-Project

Study Intersections		SAT MD Peak		PM Peak	
		V/C	LOS	V/C	LOS
1	Broadway & Temple Street	0.600	A	0.638	B
2	Spring Street & Temple Street	0.364	A	0.373	A
3	Hill Street & 1st Street	0.381	A	0.741	C
4	Broadway & 1st Street	0.362	A	0.640	B
5	Spring Street & 1st Street	0.182	A	0.421	A
6	Judge John Aiso/San Pedro & 1st Street	0.235	A	0.568	A

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

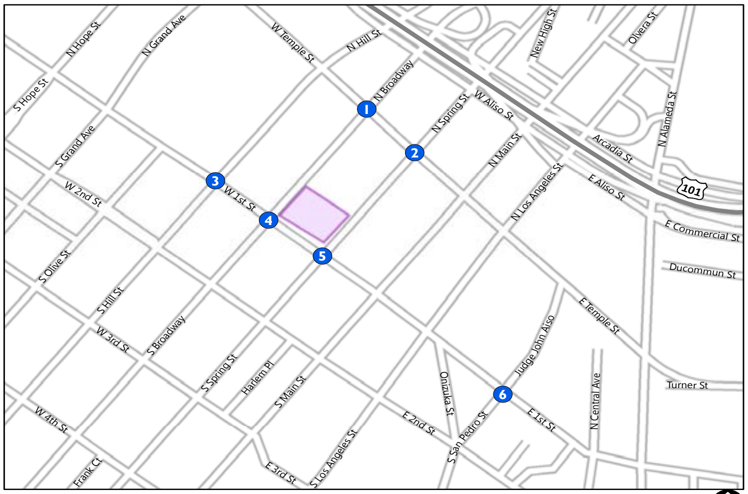
All of the study intersections would continue to operate at acceptable LOS C or better during the weekday p.m. peak hour and the Saturday mid-day peak hour.

The existing with-Project traffic volumes for the analyzed peak hours are illustrated on Figure 8.

FIGURE
8

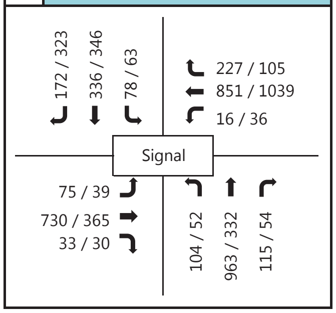
1ST & BROADWAY CIVIC CENTER PARK PROJECT

Existing with Project - Weekday PM/Saturday Mid-Day Peak Hour Traffic Volumes

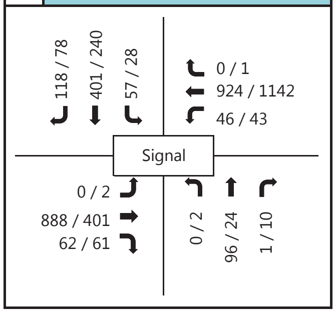


▭ Project Site ● Study Intersection xx/xx Weekday PM/Saturday turning movement volumes

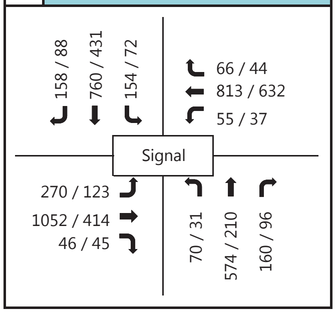
1 **Broadway at Temple Street**



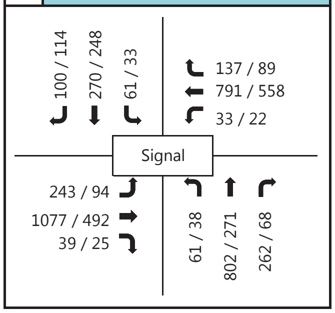
2 **Spring Street at Temple Street**



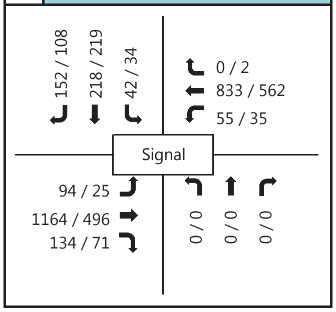
3 **Hill Street at 1st Street**



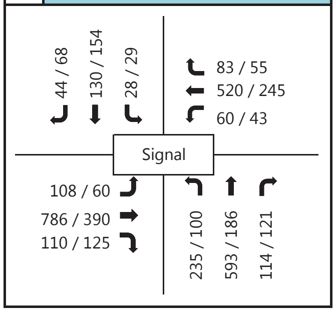
4 **Broadway at First Street**



5 **Spring Street at First Street**



6 **Judge John Aiso/San Pedro at 1st Street**



5. FUTURE WITHOUT PROJECT CONDITIONS

This section provides an analysis of future traffic conditions in the study area with cumulative/area project trips and background growth added, but without Project traffic. The proposed Project is anticipated to be completed by 2021, and therefore this defines the future analysis year.

5.1 AMBIENT GROWTH

In order to acknowledge regional population and employment growth outside of the study area, an ambient/background traffic growth rate was applied to the existing traffic counts. The growth rate considered growth rates provided by the *Congestion Management Program for Los Angeles County*, published by Metro. In that document, the growth rate for Regional Statistical Area #23 (Downtown L.A.) within the ten-year period between 2010 and 2010 is 1.8 percent. To be conservative, the traffic counts from 2017 were increased by one percent per year to reflect future conditions.

5.2 AREA PROJECTS

In addition to the application of the ambient traffic growth rate, traffic from related/area projects (approved and pending developments) was also included in the analysis. Twenty related projects in the City of Los Angeles were identified for inclusion in the traffic impact analysis.

Table 7 provides the trip generation estimates for the related/area projects that were identified during coordination with the City of Los Angeles, and the project locations are illustrated on Figure 9.

Table 7 – Area Projects Trip Generation Estimate

						Daily	Weeday AM Peak			Weekday PM Peak			Saturday Mid-Day		
Project		Location	Land use	Size	Units	Total	Total	In	Out	Total	In	Out	Total	In	Out
1	Bus Maintenance & Inspection Facility	454 E Commercial St	Maintenance Facility	2.000	acres	0	30	22	8	10	9	1	0	0	0
2	5th & Olive (Park Fifth)	437 S Hill St	Condominium Quality Restaurant	660 13.742	d.u. k.s.f.	4,707	344	71	273	437	279	158	437	229	208
3	Zen Mixed-Use (Kawada Tower)	250 S Hill St	Condominium Retail	330 12.000	d.u. k.s.f.	1,217	94	21	73	108	66	42	199	99	100
4	Grand Avenue Project	237 S Grand Av	Condominium Apartments Office Retail Restaurant Hotel Supermarket Museum	1,613 513 681.000 145.900 94.000 275 53.000 115.231	d.u. d.u. k.s.f. k.s.f. k.s.f. rooms k.s.f. k.s.f.	21,631	1,540	929	611	2,414	1,067	1,348	3,691	1,898	1,793
5	LA Civic Center Office	150 N Los Angeles St	Office Retail Child Care	712.500 35.000 2.500	k.s.f. k.s.f. k.s.f.	13,534	1,048	930	118	1,377	435	942	540	289	251
6	ISAF - Retail/Restaurant	201 S Broadway	Office Retail Restaurant	27.675	k.s.f.	0	-81	-40	-41	70	53	17	0	0	0
7	Perla Mixed-Use	400 S Broadway	Apartments Retail	450 7.500	d.u. k.s.f.	2,266	183	36	147	212	139	73	196	107	89
8	La Plaza Cultural Village	527 N Spring St	Apartments Retail Restaurant	345 440.000 110.000	d.u. k.s.f. k.s.f.	3,585	167	49	118	320	189	131	3,335	1,726	1,609
9	Lotus 77 Apts	118 S Astronaut Ellison S Onizuka St	Apartments	77	d.u.	97	19	-1	20	25	19	6	28	15	13
10	Mixed-Use	700 W Cesar Chavez Av	Apartments Retail	300 8.000	d.u. k.s.f.	1,511	96	7	89	153	99	54	144	78	66
11	Medallion Phase 2	300 S Main St	Apartments High-Turnover Restaurant Retail	471 27.780 5.190	d.u. k.s.f. k.s.f.	4,691	386	143	243	410	257	153	510	268	242
12	Mixed-Use	433 S Main St	Condominiums Retail Coffee Shop	196 5.300 0.900	d.u. k.s.f. k.s.f.	1,450	104	32	72	98	61	37	188	96	92
13	Fifth & Hill Center MU	333 W 5th St	Condominium Hotel Restaurant	100 200 27.500	d.u. rooms k.s.f.	3,358	136	64	72	330	201	129	464	235	229

To be continued on next page…

Table 7 – Area Project Trip Generation Estimate (continued)

						Daily	Weeday AM Peak			Weekday PM Peak			Saturday Mid-Day		
Project		Location	Land use	Size	Units	Total	Total	In	Out	Total	In	Out	Total	In	Out
14	Equity Residential Mixed-Use	340 S Hill St	Apartments Office Quality Restaurant	426 2.980 2.630	d.u. k.s.f. k.s.f.	2,253	165	36	129	208	133	75	183	102	81
15	4th & Spring Hotel	361 S Spring St	Hotel Meeting Rooms	315 2.000	rooms k.s.f.	2,273	150	91	59	169	84	85	177	89	88
16	643-655 N Spring St MU	643 N Spring St	Apartments Hotel Retail Restaurant	281 142 17.003 2.532	d.u. room k.s.f. k.s.f.	2,723	183	61	122	229	138	91	286	150	136
17	Banco Popular - Hellman Bldg	354 S Spring St	Apartments	212	d.u.	1,410	108	22	86	131	85	46	76	42	34
18	Terasaki Budokan (Little Tokyo Sports Complex)	237 S Los Angeles St	Sports Complex	43.453	k.s.f.	1,869	129	79	50	259	161	98	46	25	21
19	Mixed-Use (Times Mirror Square)	100 S Broadway	Apartments Office Supermarket Quality Restaurant High-Turnover Restaurant	1127 285.088 50.000 22.200 53.389	d.u. k.s.f. k.s.f. k.s.f. k.s.f.	8,535	435	94	341	332	294	38	1,871	985	886
20	Mixed-Use	323 W 5th St	Apartments Hotels Meeting Rooms Restaurant	31 190 6.119 29.232	d.u. room k.s.f. k.s.f.	2,809	122	73	49	226	126	100	447	228	219
TOTAL						#####	5,358	2,719	2,639	7,518	3,895	3,624	12,818	6,661	6,157

Source: LADOT unless otherwise noted.

The area project trip assignment volumes for the a.m. and p.m. peak hours are provided on Figure 10.

5.3 FUTURE WITHOUT PROJECT INTERSECTION LEVEL OF SERVICE

Table 8 summarizes the resulting operational data at the study intersections under this scenario. The CMA analysis worksheets for all scenarios are provided in Appendix C.

Table 8 – Intersection Performance – Future without-Project

		SAT MD Peak		PM Peak	
Study Intersections		V/C	LOS	V/C	LOS
1	Broadway & Temple Street	0.704	C	0.694	B
2	Spring Street & Temple Street	0.485	A	0.424	A
3	Hill Street & 1st Street	0.440	A	0.795	C
4	Broadway & 1st Street	0.465	A	0.687	B
5	Spring Street & 1st Street	0.216	A	0.452	A
6	Judge John Aiso/San Pedro & 1st Street	0.305	A	0.652	B

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

All of the study intersections would continue to operate at LOS C or better during the weekday p.m. peak hour and the Saturday mid-day peak hour.

The future without-Project traffic volumes for the weekday p.m. peak hour and Saturday mid-day peak hour are illustrated on Figure 11 of this report.

FIGURE 9

1ST & BROADWAY CIVIC CENTER PARK PROJECT

Location of Related Projects

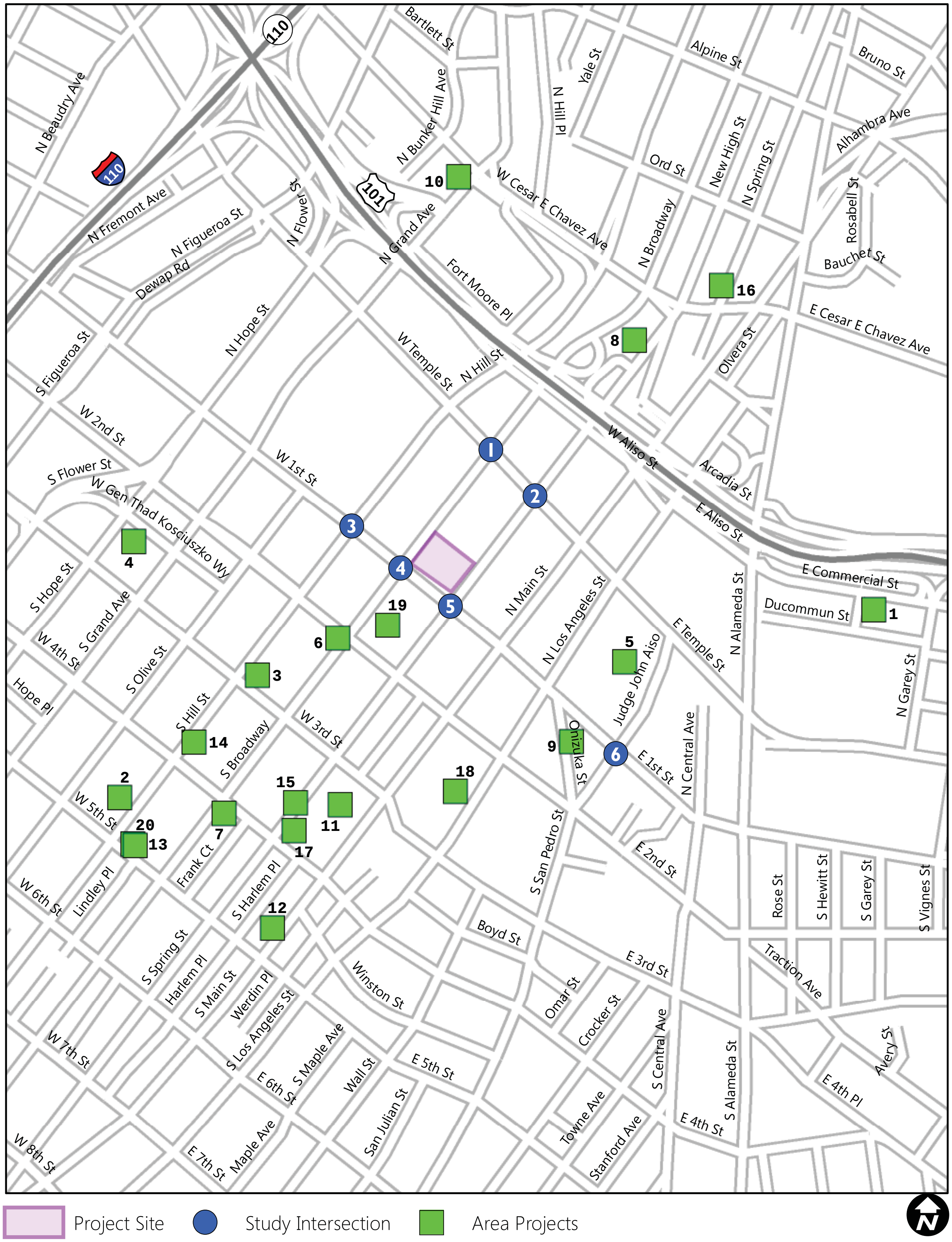
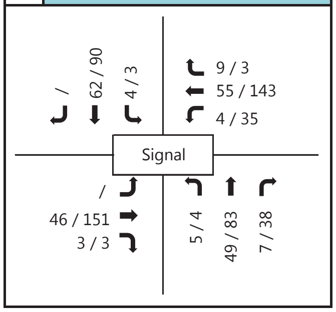


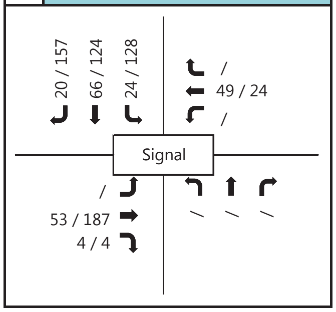
FIGURE
10

1ST & BROADWAY CIVIC CENTER PARK PROJECT
Related Project Trip Assignment - Weekday PM/Saturday Mid-Day Peak Hour Traffic Volumes

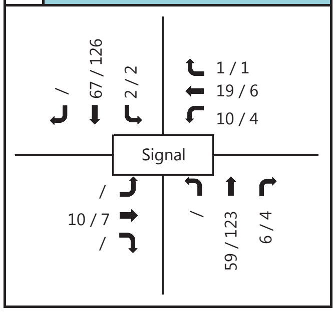
1 Broadway at Temple Street



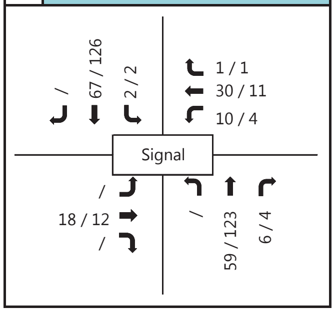
2 Spring Street at Temple Street



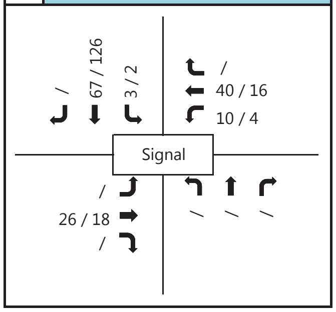
3 Hill Street at 1st Street



4 Broadway at First Street



5 Spring Street at First Street



6 Judge John Aiso/San Pedro Street at 1st Street

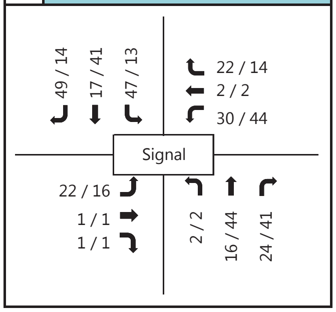


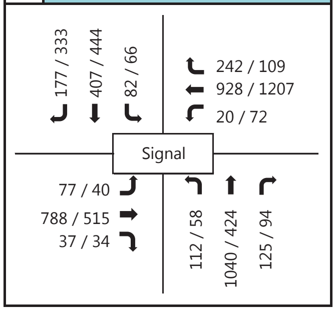
FIGURE
11

1ST & BROADWAY CIVIC CENTER PARK PROJECT

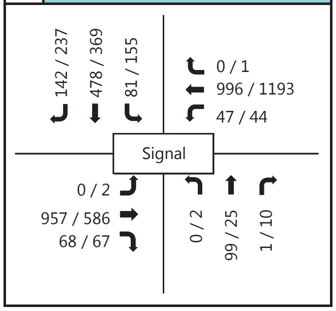
Future without Project - Weekday PM/Saturday Mid-Day Peak Hour Traffic Volumes

▭ Project Site ● Study Intersection xx/xx Weekday PM/Saturday turning movement volumes

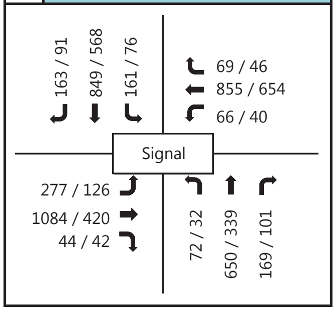
1 **Broadway at Temple Street**



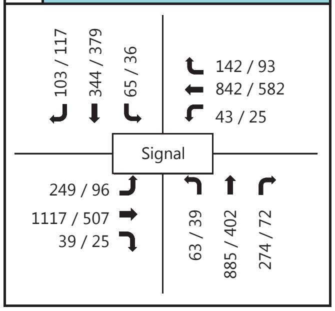
2 **Spring Street at Temple Street**



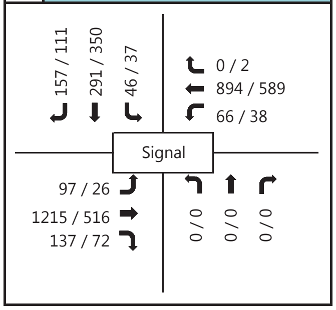
3 **Hill Street at 1st Street**



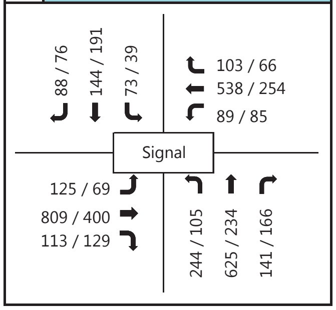
4 **Broadway at First Street**



5 **Spring Street at First Street**



6 **Judge John Aiso/San Pedro Street at 1st Street**



6. FUTURE WITH PROJECT CONDITIONS

This section documents future traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for these conditions were derived by adding Project trips to the future without-Project scenario volumes.

Table 9 summarizes the resulting operational data at the study intersections for future with-Project traffic conditions. The CMA analysis worksheets for all scenarios are provided in Appendix C. .

Table 9 – Intersection Performance –
Future with-Project

		SAT MD Peak		PM Peak	
Study Intersections		V/C	LOS	V/C	LOS
1	Broadway & Temple Street	0.707	C	0.699	B
2	Spring Street & Temple Street	0.488	A	0.428	A
3	Hill Street & 1st Street	0.442	A	0.798	C
4	Broadway & 1st Street	0.468	A	0.689	B
5	Spring Street & 1st Street	0.219	A	0.456	A
6	Judge John Aiso/San Pedro & 1st Street	0.312	A	0.658	B

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

All of the study intersections would continue to operate at acceptable LOS C or better during the weekday p.m. peak hour and Saturday mid-day peak hour.

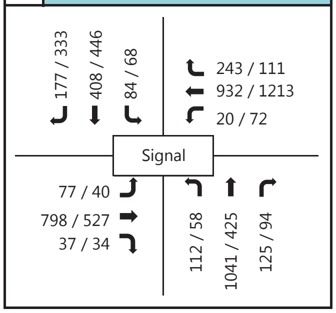
The future with-Project traffic volumes for the weekday p.m. peak hour and Saturday mid-day peak hour are illustrated on Figure 12.

FIGURE 12

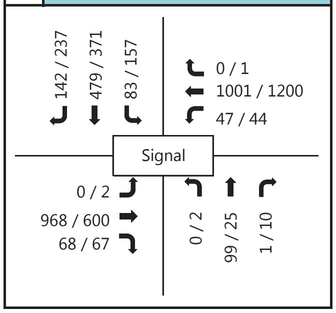
1ST & BROADWAY CIVIC CENTER PARK PROJECT

Future with Project - Weekday PM/Saturday Mid-Day Peak Hour Traffic Volumes

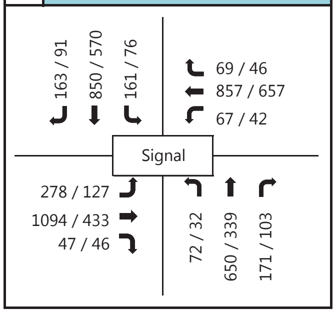
1 Broadway at Temple Street



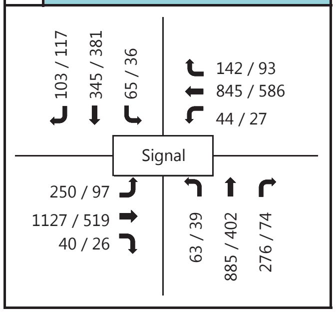
2 Spring Street at Temple Street



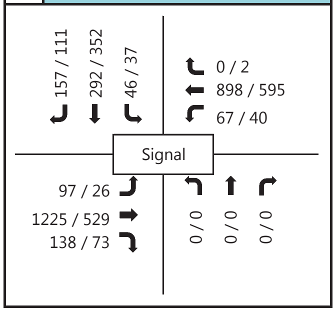
3 Hill Street at 1st Street



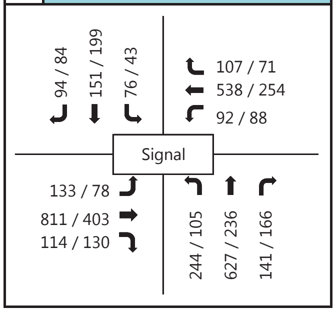
4 Broadway at First Street



5 Spring Street at First Street



6 Judge John Aliso/San Pedro at 1st Street



7. PROJECT TRAFFIC IMPACTS

7.1 DETERMINATION OF TRAFFIC IMPACTS

Traffic impacts are identified if operations of a project would result in a significant change in traffic conditions at analyzed locations. For construction projects, impacts are temporary and only occur during peak construction activities. Significant traffic impacts during the Project construction period are reviewed in Section 8 of this report.

The City of Los Angeles Department of Transportation has established specific thresholds for project-related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. The following increases in peak-hour V/C ratios are considered significant impacts:

Level of Service	Volume/Capacity Ratio	Project-Related Increase in ICU Value
C	< 0.700 – 0.800	Equal to or greater than 0.040
D	< 0.800 – 0.900	Equal to or greater than 0.020
E and F	0.900 or more	Equal to or greater than 0.010

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient growth, trips from area/cumulative projects, but without proposed traffic impact mitigations

7.2 PROJECT TRAFFIC IMPACTS – EXISTING PLUS PROJECT

Table 10 provides a summary of the Project impacts under existing conditions. Traffic impacts created by the proposed Project were determined by comparing the existing scenario conditions to the existing with-Project scenario conditions.

The proposed Project would not create any significant traffic impacts at the study intersections under existing with-Project conditions, during either the weekday p.m. or the Saturday mid-day peak hours. Project mitigation measures, therefore, are not required for existing conditions.

**Table 10 – Determination of Project Impacts –
Existing With-Project Conditions**

Study Intersections		Peak Hour	Existing (2018) Condition		Existing (2018) + Project		Change in V/C	Sig Impact?
			V/C	LOS	V/C	LOS		
1	Broadway & Temple Street	SAT MD	0.597	A	0.600	A	0.003	No
		Weekday PM	0.635	B	0.638	B	0.003	No
2	Spring Street & Temple Street	SAT MD	0.360	A	0.364	A	0.004	No
		Weekday PM	0.369	A	0.373	A	0.004	No
3	Hill Street & 1st Street	SAT MD	0.379	A	0.381	A	0.002	No
		Weekday PM	0.739	C	0.741	C	0.002	No
4	Broadway & 1st Street	SAT MD	0.359	A	0.362	A	0.003	No
		Weekday PM	0.638	B	0.640	B	0.002	No
5	Spring Street & 1st Street	SAT MD	0.180	A	0.182	A	0.002	No
		Weekday PM	0.416	A	0.421	A	0.005	No
6	Judge John Aiso/San Pedro & 1st Street	SAT MD	0.224	A	0.235	A	0.011	No
		Weekday PM	0.562	A	0.568	A	0.006	No

LOS = Level of Service, V/C = Volume-to-Capacity Ratio

7.3 PROJECT TRAFFIC IMPACTS – FUTURE WITH PROJECT

Table 11 provides a summary of the Project impacts under future conditions. Traffic impacts created by the Project were determined by comparing the future without-Project conditions to the future with-Project conditions.

The proposed Project would not create any significant traffic impacts at the study intersections under future with-Project conditions, during either the weekday p.m. or the Saturday mid-day peak hours. Project mitigation measures, therefore, are not required for future conditions.

Table 11 – Determination of Project Impacts – Future With-Project

			Existing (2018) Condition		Future (2021) No Project		Future (2021) With Project		Change in V/C	Sig Impact?
	Study Intersections	Peak Hour	V/C	LOS	V/C	LOS	V/C	LOS		
1	Broadway & Temple Street	SAT MD	0.597	A	0.704	C	0.707	C	0.003	No
		Weekday PM	0.635	B	0.694	B	0.699	B	0.005	No
2	Spring Street & Temple Street	SAT MD	0.360	A	0.485	A	0.488	A	0.003	No
		Weekday PM	0.369	A	0.424	A	0.428	A	0.004	No
3	Hill Street & 1st Street	SAT MD	0.379	A	0.440	A	0.442	A	0.002	No
		Weekday PM	0.739	C	0.795	C	0.798	C	0.003	No
4	Broadway & 1st Street	SAT MD	0.359	A	0.465	A	0.468	A	0.003	No
		Weekday PM	0.638	B	0.687	B	0.689	B	0.002	No
5	Spring Street & 1st Street	SAT MD	0.180	A	0.216	A	0.219	A	0.003	No
		Weekday PM	0.416	A	0.452	A	0.456	A	0.004	No
6	Judge John Aiso/San Pedro & 1st Street	SAT MD	0.224	A	0.305	A	0.312	A	0.007	No
		Weekday PM	0.562	A	0.652	B	0.658	B	0.006	No

LOS = Level of Service, V/C = Volume-to-Capacity Ratio

8. CONSTRUCTION ANALYSIS

Potential traffic impacts that would be caused during the Project construction period were analyzed based on the number of anticipated hauling/delivery trucks and employee vehicle trips that would occur during peak hours. The construction of the proposed Project would take approximately two years to complete, from the summer of 2019 to the summer of 2021. The year 2021 was defined as the construction analysis period.

The construction trip generation was based on the planned intensity of truck hauling and construction employment intensities during the peak period of construction. The inputs to the analysis included 25 truck trips per day and 30 employees on-site during this peak period. Employee trips were assumed to be generated as one vehicle trip per employee in each peak period (inbound commute, outbound commute).

A construction travel route was analyzed from the site, construction trips would be ingress via Spring Street into the Project site and egress via Broadway with an assumed destination to the US-101 freeway.

Table 12 provides the trip generation calculations for the peak period of construction – when the most construction trips would be generated by trucks and construction crew vehicles. Round-trip truck trips were divided into an eight hour workday, multiplied by two to create inbound and outbound one-way trips, and then multiplied by 2.5 to provide Passenger Car Equivalent (PCE) volumes due to vehicle size and speed and effect on traffic flow.

Table 12 – Project Construction Trip Generation

				AM PEAK HOUR						PM PEAK HOUR					
	AVERAGE DAILY TRIPS			Truck Trips*		Employee Trips		Total Trips		Truck Trips*		Employee Trips		Total Trips	
TRIP GENERATION	Trucks*	Employee	Total	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Field Personnel	0	60	60			30	0	30	0			0	30	0	30
Construction Truck	25	0	25	2	2			2	2	2	2			2	2
TOTAL TRIPS	**25**	**60**	**85**	**2**	**2**	**30**	**0**	**32**	**2**	**2**	**2**	**0**	**30**	**2**	**32**

** Truck trips include a Passenger Car Equivalency (PCE) factor of 2.5.*

Note: A maximum of 10 daily construction truck round trips would occur during the most intense construction period. Daily totals were multipled by the PCE factor.

8.1 DETERMINATION OF CONSTRUCTION TRAFFIC IMPACTS

Pedestrian, Transit, and Bicyclist Access Impacts

Project construction may significantly impact access to sidewalks, transit stops, and on-street bicycle facilities, where construction related closures would require temporary closure of some access routes. The potential for impacts is reviewed here.

The bus stop on the east side of Broadway, north of 1st Street, is served by multiple Metro bus lines, including five local lines, a limited-stop line, and a Rapid Bus line. The shelter will be remodeled as part of the project, and temporary closure of the bus stop will be necessary to implement the bus stop improvements. The Bureau of Engineering will coordinate with Metro regarding this closure, in order to properly provide advance warning to bus passengers of the coming closure, and provide information to route passengers to alternate nearby stop locations during the closure period. With proper noticing of the bus stop closure, significant impacts would not occur.

On Spring Street, at the east side of the Project site, there is a striped/buffered bicycle lane with special green striping to denote the lane and traffic conflict points. Project construction activities may necessitate the temporary closure of the bicycle lane along the eastern Project site frontage. If any such closures are necessary, advance noticing should be provided before the closures take place, and detour signage should be provided to route bicyclists to alternate safe routes With proper noticing of the bicycle lane closure, significant impacts would not occur.

Project construction activities may necessitate the temporary closure of sidewalks at the west, south, and/or east frontages of the Project site. If any such closures are necessary, advance noticing should be provided before the closures take place, and detour signage should be provided to route pedestrians to alternate walking routes. With proper noticing of the sidewalk closure(s), significant impacts would not occur.

Vehicle Travel Impacts

Four of the study intersections were included in the construction analysis, as construction trucks would be utilizing these intersections during the construction period.

- Broadway & Temple Street
- Spring Street & Temple Street
- Broadway & 1st Street
- Spring Street & 1st Street

The other two study intersections are located adjacent to parking locations that would be used in the operations period. Potential Project construction period impacts were analyzed for the weekday a.m. and p.m. peak hours.

Table 13 provides a Project construction-period analysis, based on the future conditions scenario and the construction trip generation defined above. CMA worksheets for this analysis are provided in Appendix D.

The generated construction period trips will not create significant impacts based on LADOT impact thresholds. Specific study area traffic mitigation measures during the construction period are therefore not required. General traffic control measures are discussed in the next section.

Table 13 – Determination of Future with Project Construction Impacts

	Study Intersections	Peak Hour	Existing (2018) Condition		Future (2021) No Project Contruction		Future (2021) With Project Construction		Change in V/C	Sig Impact?
			V/C	LOS	V/C	LOS	V/C	LOS		
1	Broadway & Temple Street	Weekday AM	0.627	B	0.669	B	0.669	B	0.000	No
		Weekday PM	0.635	B	0.694	B	0.702	C	0.008	No
2	Spring Street & Temple Street	Weekday AM	0.430	A	0.485	A	0.492	A	0.007	No
		Weekday PM	0.369	A	0.424	A	0.424	A	0.000	No
4	Broadway & 1st Street	Weekday AM	0.598	A	0.652	B	0.652	B	0.000	No
		Weekday PM	0.638	B	0.687	B	0.687	B	0.000	No
5	Spring Street & 1st Street	Weekday AM	0.474	A	0.506	A	0.506	A	0.000	No
		Weekday PM	0.416	A	0.452	A	0.452	A	0.000	No

LOS = Level of Service, V/C = Volume-to-Capacity Ratio

Mitigation of Potential Construction-Related Partial Roadway Closures

A Traffic Management Plan is recommended to be implemented to address potential partial lane closure that may happen temporarily during construction. The Plan should be defined as follows.

The City, prior to the start of construction, shall coordinate with LADOT to prepare a Traffic Management Plan (TMP), with the following aspects:

- The TMP shall be prepared by a registered traffic or civil engineer, as appropriate, based on City of Los Angeles permit guidelines. Methods to inform the public regarding Project construction and associated roadway and/or lane closures shall be implemented as part of the TMP.
- Additional measures to be incorporated into the TMP to improve traffic flow and ensure bicyclist and pedestrian safety shall include the following:
    - Project phasing, truck routes, construction worker parking areas, worksite truck entrance/exit locations shall be detailed.
    - Truck drivers shall be required to maintain roadway speeds of 25 miles per hour or lower while traveling through the downtown area.
    - Truck drivers shall be reminded on an ongoing basis and required throughout construction activities to pay close attention to traffic laws and pedestrian and bicyclist safety, especially at site construction access points. Use of flagmen shall be required if truck ingress/egress points will overlap with active pedestrian sidewalks or bicycle lanes.
    - Methods for spacing of both inbound and outbound haul truck shall be included to avoid caravanning of trucks on downtown roadways and queuing at intersections.

9. PROJECT PARKING ANALYSIS

9.1 AREA PARKING SURVEYS

In order to gauge parking availability at nearby public parking areas, as the Project improvements would not include new off-street parking facilities, weekday and weekend occupancy surveys were conducted at two nearby parking areas. Public parking locations were surveyed that are located to the west and east of the Project site, within the 1st Street corridor. The two chosen locations were the following:

- A surface parking lot at the southeast corner of Olive Street & 1st Street, privately operated but open to the public.
- A public parking structure at the northwest corner of Judge John Aiso Street & 1st Street, operated by the City and open to the public.

These two parking locations have 220 spaces and 300 spaces, respectively. The surveys took place from 4:00 p.m. to 9:00 p.m. on two weekdays (Thursday May 31, 2018 and Thursday June 7, 2018) and on two Saturdays (June 2, 2018 and June 9, 2018). Data was excluded from the analysis for times of Lot closures and special events where public parking was not available at these locations. This is noted in the analysis tables.

The collected data on parking demand at these two parking locations is summarized in Table 14 (Olive St & 1St Street lot) and Table 15 (Judge John Aiso Street & 1st Street structure).

Table 14 – Parking Survey Results –
Olive St & 1st Street Parking Lot

Inventory
220

Thursday, May 31, 2018

DEMAND / OCCUPANCY PERCENTAGE					
4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
78	40	16	7	2	0
35%	18%	7%	3%	1%	0%

Thursday, June 7, 2018

DEMAND / OCCUPANCY PERCENTAGE					
4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
67	48	22	8	4	1
30%	22%	10%	4%	2%	0%

Saturday, June 2, 2018

DEMAND / OCCUPANCY PERCENTAGE											
10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Data unavailable due to downtown event											

Saturday, June 9, 2018

DEMAND / OCCUPANCY PERCENTAGE											
10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Data unavailable due to downtown event											

Table 15 – Parking Survey Results –
Judge John Aiso Street & 1st Street Parking Structure

Inventory
300

Thursday, May 31, 2018

DEMAND / OCCUPANCY PERCENTAGE					
4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
162	102	89	106	103	84
54%	34%	30%	35%	34%	28%

Thursday, June 7, 2018

DEMAND / OCCUPANCY PERCENTAGE					
4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
Data unavailable due to downtown event					

Saturday, June 2, 2018

DEMAND / OCCUPANCY PERCENTAGE											
10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
39	68	101	106	131	142	134	120	127	136	145	123
13%	23%	34%	35%	44%	47%	45%	40%	42%	45%	48%	41%

Saturday, June 9, 2018

DEMAND / OCCUPANCY PERCENTAGE											
10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
37	70	97	110	113	142	124	88	89	91	93	88
12%	23%	32%	37%	38%	47%	41%	29%	30%	30%	31%	29%

Table 14 and Table 15 provide data on parking demand surveyed at these parking areas. From the available days of parking data, the following parking availability is defined, based on that demand data and the total parking supply for each location:

- Olive St & 1st Street Parking Lot
    - Weekday evening parking availability – Ranges from a low of 148 spaces at 4:00 p.m. to a high of 220 spaces at 9:00 p.m.
    - Weekend evening parking availability – Data was not available for this location.

- John Judge Aiso Street & 1st Street Parking Structure
    - Weekday evening parking availability – Ranges from a low of 138 spaces at 4:00 p.m. to a high of 216 spaces at 9:00 p.m.
    - Weekend evening parking availability - Ranges from a low of 158 spaces at 3:00 p.m. to a high of 262 spaces at 10:00 a.m.

9.2 PROJECT PARKING ANALYSIS

No new parking spaces would be provided within the proposed Project site. According to the Los Angeles Municipal Code, 21 parking spaces would be required for the proposed project floor area.

The range of available spaces at the two surveyed parking locations, analyzed in detail in the report section above, would provide adequate supply for the anticipated project need. Area parking supplies would therefore not be significantly impacted by the proposed Project.

10. Vehicles Miles Traveled (VMT)

10.1 VMT ANALYSIS METHODOLOGY

Vehicle Miles Traveled (VMT) is a metric for the analysis of demand on transportation networks. This metric has been determined by the State of California to be an appropriate replacement in the near future for level of service analysis under California Environmental Quality Act (CEQA) traffic impact determinations.

California Senate Bill 743 was signed into law in September of 2013, which created a process to change the way that transportation impacts are analyzed under CEQA. In January 2016, the State of California Office of Planning and Research (OPR) released for public review a revised proposal for changes to the CEQA Guidelines. It is anticipated that modifications to the relevant CEQA Guidelines could be adopted in 2018.

It is proposed by OPR that the new guidelines use VMT as the primary metric for traffic studies under CEQA. The new guidelines, however, have not been adopted by OPR as of the completion of this report.

The City of Los Angeles is currently developing revised traffic study guidelines, but they are yet to be published by LADOT. The City guidelines may include VMT metrics as well as LOS standards, depending on project types and analysis needs such as air quality and noise analysis inputs.

In order to be proactive based on potential future LADOT traffic impact thresholds, analysis of project estimated VMT is provided here for informational purposes. It should be noted that as there are not any local VMT thresholds (nor are there any currently defined at the County or State level), impact determinations are not provided here.

10.2 PROJECT VMT CALCULATIONS

The Vehicle Miles Traveled for the proposed Project was calculated by using the methodology adopted by the California Emission Estimator Model (CalEEMod). CalEEMod, which was released by the California Air Pollution Control Officers Association (CAPCOA) in 2011 and updated in 2013. The model is one of the tools for calculating VMT which is recommended by the Office of Planning and Research in their Updating Transportation Impact Analysis in the CEQA Guidelines.

The Project trip generation totals were input into the CalEEMod analysis, along with average trip length by trip type from the Caltrans Statewide Travel Survey for Los Angeles County.

The VMT calculations are provided below in Table 16 (Trip Generation), Table 17 (Trip Length), and Table 18 (Final VMT Calculations).

Table 16 – VMT Calculations – Trip Generation Inputs

			Daily Trip Generation Rates			Trip Generation				
Land Use Type	Units	Intensity	Weekday Trip Rates	Saturday Trip Rates	Sunday Trip Rates	Avg Weekday	Avg Saturday	Avg Sunday	Weekly Trips	Annual Trips
Public Park (ITE 411)	Acres	1.96	0.78	1.96	2.19	1	1	3	10	525
High-Turnover Restaurant (ITE 932)	Seats	302	4.37	5.60	3.87	990	1,268	877	7,094	368,887
Total						991				

Trip Rates Source based on ITE Trip Generation Manual, 9th Edition, Institute of Transportation Engineers, 2012.

Table 17 – VMT Calculations – Trip Length

Land Use Type	Res H-W Trip Length	Res H-S Trip Length	Res H-O Trip Length	Non Res C-C Trip Length	Non Res C-W Trip Length	Non Res C-NW Trip Length	Primar Trip (%)	Divert Trip (%)	Pass-by Trip (%)	Res H-W Trip (%)	Res H-S Trip (%)	Res H-O Trip (%)	Non Res C-C Trip (%)	Non Res C-W Trip (%)	Non Res C-NW Trip (%)
Public Park	0	0	0	8.4	16.6	6.9	66	28	6	0	0	0	48	33	19
High-Turnover Restaurant	0	0	0	8.4	16.6	6.9	37	20	43	0	0	0	72.5	8.5	19

Note: Trip Length source: 1999 Caltrans Statewide Travel Survey, Los Angeles County

Table 18 – VMT Calculations – Final Calculations

Land Use Type	Trip Length Factor	Avg Primary Trip	Avg Overall Trip	Annual Trip Length
Public Park	0.74	10.82	7.96	4,182
High-Turnover Restaurant	0.46	8.81	4.08	1,505,043

Total Annual VMT	1,509,225
Total Daily VMT	4,135

11. CONGESTION MANAGEMENT PROGRAM

This section provides study conformance with the regional impact analysis procedures mandated by the County of Los Angeles Congestion Management Program (CMP).

The CMP was created statewide because of Proposition 111 and was implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted where:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed Project will add 50 or more vehicle trips during either a.m. or p.m. weekday peak hours.

- At CMP mainline freeway-monitoring locations, where the Project will add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hours.

Based on the trip generation defined in Table 4, it is not expected that 50 or more new Project trips per hour would be added to the nearest CMP intersections, which are listed below. Therefore, no further analysis of potential CMP impacts is required.

- CMP ID 43 – Alameda Street and Washington Boulevard, approximately 2.35 miles southeast of the Project site
- CMP ID 44 – Alvarado Street and Sunset Boulevard, approximately 2.0 miles northwest of the Project site

In addition, the proposed Project is expected to add less than 150 new trips per hour, in either direction, to the I-10 (San Bernardino) freeway segments based on the Project trip generation defined in Table 4. Therefore, no further analysis of CMP freeway monitoring stations is required.

- CMP ID 1036 – north of Vignes Street, approximately 0.72 miles northeast of the Project site
- CMP ID 1048 – south of US-101, approximately 0.60 miles northwest of the Project site

12. ANALYSIS SUMMARY AND CONCLUSIONS

The following summarizes the traffic study results, conclusions and recommendations:

- The proposed Project would construct a 1.96-acre park and a two-story building of restaurant use with a footprint of 19,200 square feet. The currently vacant Project site is located at the northeast corner of the Broadway and 1st Street intersection, within the Civic Center area of downtown Los Angeles.

- The Project is anticipated to be completed and occupied by year 2021.

- The Project would generate 992 daily trips on weekdays and 1,271 daily trips on Saturdays, including 95 vehicle trips during the weekday p.m. peak-hour (54 inbound trips and 41 outbound trips) and 121 vehicle trips during the Saturday mid-day peak hour (65 inbound trips and 56 outbound trips).

- Based on LADOT significant traffic impact criteria, the proposed Project would not create any significant traffic impacts at the study intersections under existing with-Project and future with-Project conditions. Therefore, mitigation measures are not required.

- The Project construction activities would not create any significant traffic impacts at the study intersections. Therefore, construction period mitigation measures are not required. However, the implementation of a Traffic Management Plan is recommended.

- No new parking spaces would be provided within the proposed Project site. According to the Los Angeles Municipal Code, 21 parking spaces would be required for the proposed project floor area. The range of available spaces at the two surveyed parking locations would provide adequate supply for the anticipated project need. Area parking supplies would therefore not be significantly impacted by the proposed Project.

- In order to be proactive based on potential future CEQA and LADOT traffic impact thresholds, an analysis of Project estimated Vehicle Miles Traveled (VMT) was provided in this report. There are not any current local VMT thresholds, nor are there any currently defined at the County or State level. The total annual Project VMT is 2,875,728, and the total daily Project VMT is 7,879.

- The proposed Project is not anticipated to cause a significant traffic impact on any CMP arterial monitoring intersections and mainline freeway monitoring locations.

APPENDIX A
MEMORANDUM OF UNDERSTANDING (MOU) WITH LADOT

APPENDIX B
TRAFFIC COUNT DATA

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Broadway

East/West 1st St

Day: Thursday Date: March 23, 2017 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	123	67	110	138
BIKES	50	47	60	42
BUSES	212	6	509	485

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	144	9.45	174	9.00	213	8.00	325	9.30
PM PK 15 MIN	292	17.15	126	17.00	373	17.00	254	16.45
AM PK HOUR	477	9.00	655	8.15	728	8.00	1209	7.00
PM PK HOUR	1111	16.45	439	16.30	1334	16.45	948	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	38	222	80	340
8-9	46	237	106	389
9-10	57	284	136	477
15-16	43	467	205	715
16-17	43	721	236	1000
17-18	69	752	252	1073
TOTAL	296	2683	1015	3994

SOUTHBOUND Approach **TOTAL** **XING S/L** **XING N/L**

Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	47	311	189	547	887	208	0	140	0
8-9	49	399	199	647	1036	231	0	122	0
9-10	57	346	236	639	1116	239	2	144	0
15-16	49	243	97	389	1104	234	0	146	0
16-17	66	262	82	410	1410	290	3	164	0
17-18	49	269	107	425	1498	280	4	105	1
TOTAL	317	1830	910	3057	7051	1482	9	821	1

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	63	528	27	618
8-9	59	619	50	728
9-10	74	567	54	695
15-16	147	800	26	973
16-17	180	923	41	1144
17-18	241	1047	39	1327
TOTAL	764	4484	237	5485

WESTBOUND Approach **TOTAL** **XING W/L** **XING E/L**

Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	58	1067	84	1209	1827	60	0	123	0
8-9	67	907	97	1071	1799	79	0	174	1
9-10	114	1016	67	1197	1892	78	1	166	2
15-16	42	752	98	892	1865	86	0	108	0
16-17	35	731	124	890	2034	70	0	123	0
17-18	34	748	138	920	2247	51	2	91	5
TOTAL	350	5221	608	6179	11664	424	3	785	8

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

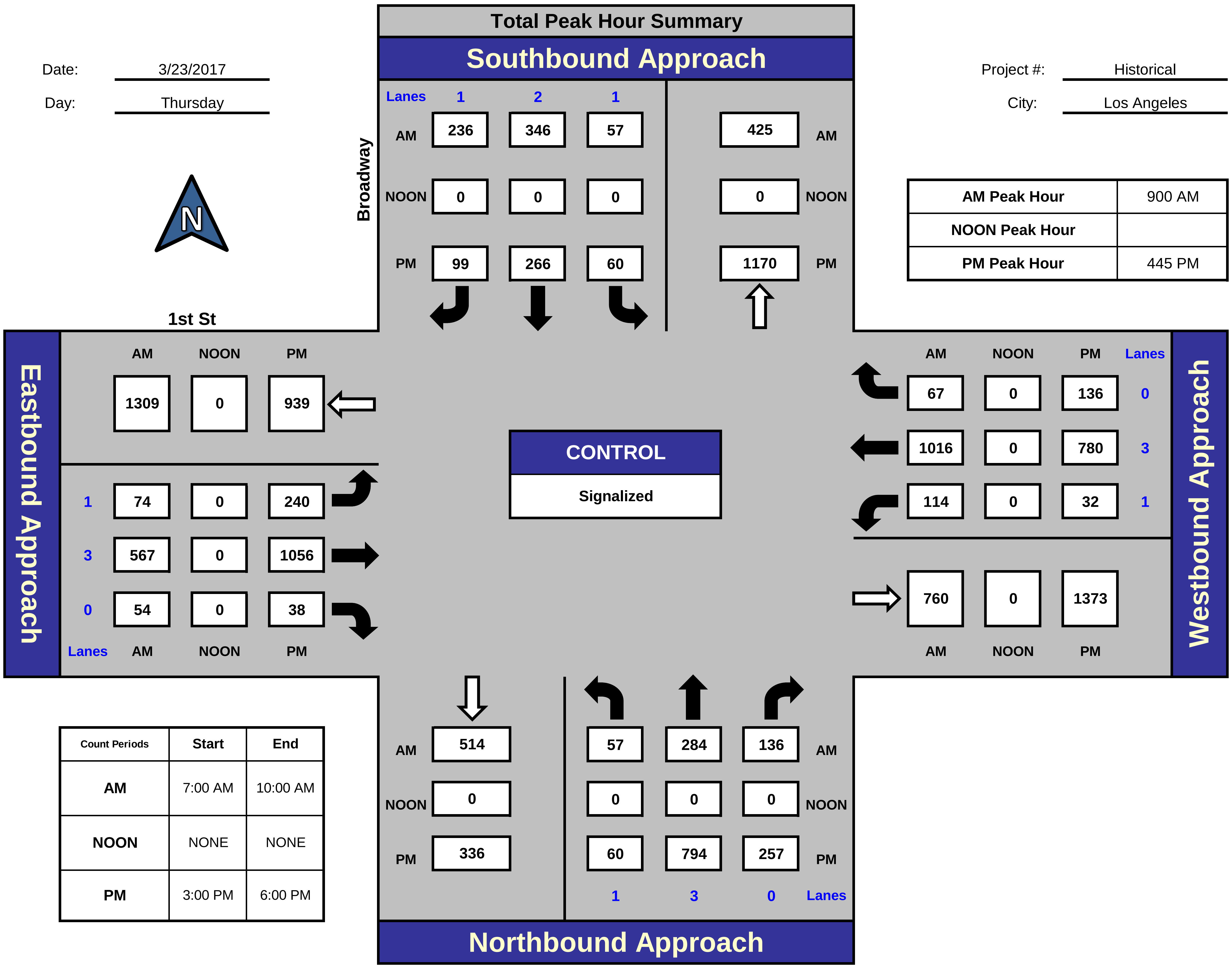
Broadway and 1st St , Los Angeles

Date: 3/23/2017

Day: Thursday

Project #: Historical

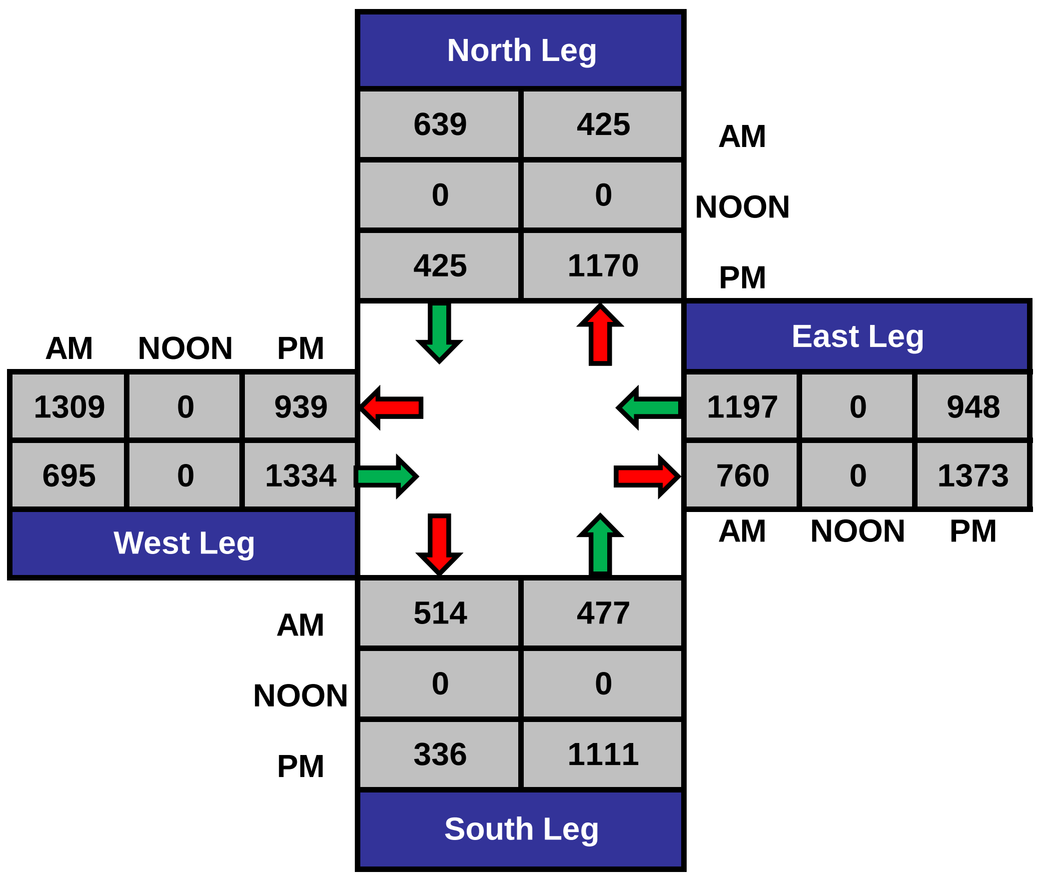
City: Los Angeles



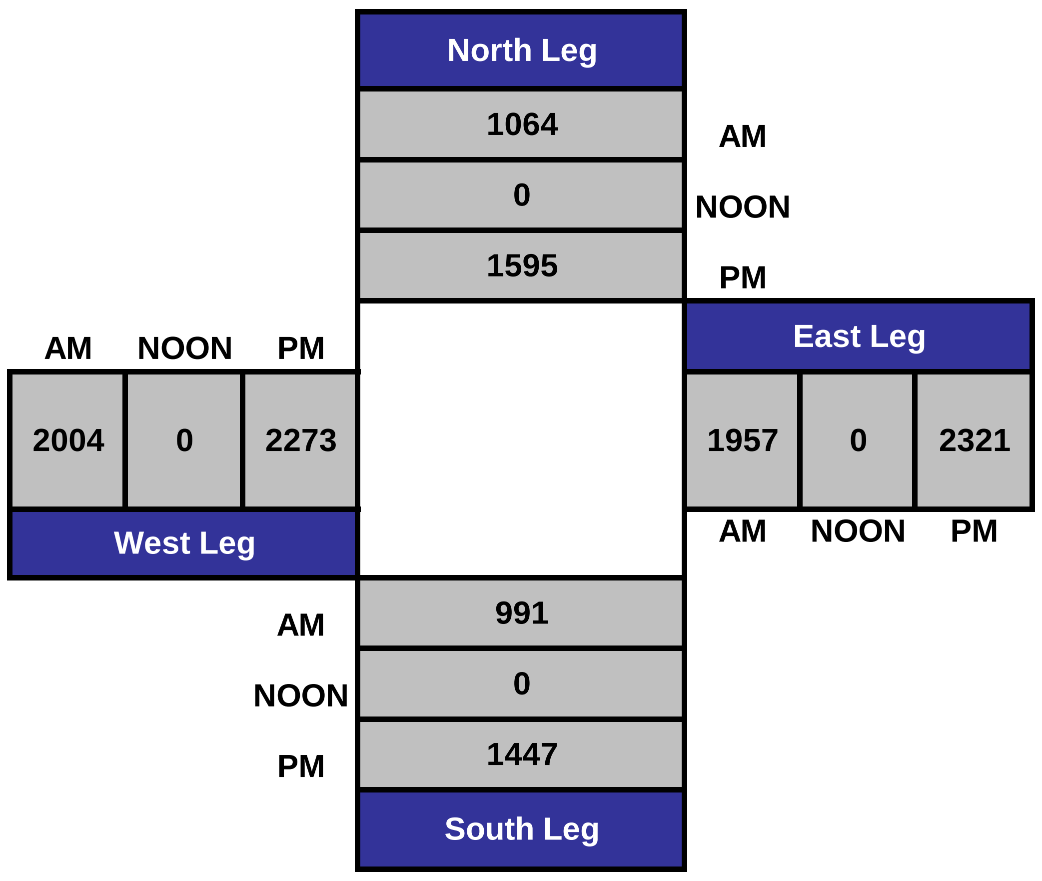
AM Peak Hour	900 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

TOTALS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
7:00 AM	6	44	12	14	73	42	14	103	7	10	268	11	604
7:15 AM	13	53	19	15	76	49	19	124	6	20	262	21	677
7:30 AM	10	61	26	7	85	43	15	151	5	7	282	28	720
7:45 AM	9	64	23	11	77	55	15	150	9	21	255	24	713
8:00 AM	9	50	16	13	95	58	16	184	13	15	233	27	729
8:15 AM	10	63	36	9	120	43	20	139	10	16	211	21	698
8:30 AM	14	59	26	12	97	46	11	137	12	15	223	34	686
8:45 AM	13	65	28	15	87	52	12	159	15	21	240	15	722
9:00 AM	15	59	26	13	92	69	16	157	14	21	244	12	738
9:15 AM	13	82	27	12	96	59	33	134	15	23	250	17	761
9:30 AM	20	56	35	17	79	57	8	144	15	36	270	19	756
9:45 AM	9	87	48	15	79	51	17	132	10	34	252	19	753

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	141	743	322	153	1056	624	196	1714	131	239	2990	248	8557
APPROACH %'s :	11.69%	61.61%	26.70%	8.35%	57.61%	34.04%	9.60%	83.98%	6.42%	6.87%	85.99%	7.13%	

PEAK HR START TIME :	900 AM												TOTAL
PEAK HR VOL :	57	284	136	57	346	236	74	567	54	114	1016	67	3008
PEAK HR FACTOR :		0.828			0.918			0.929			0.921		0.988

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

TOTALS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
3:00 PM	10	110	46	9	58	24	33	202	4	13	169	25	703
3:15 PM	14	112	51	12	57	20	38	188	9	11	177	17	706
3:30 PM	10	121	51	15	59	28	40	220	5	12	206	24	791
3:45 PM	9	124	57	13	69	25	36	190	8	6	200	32	769
4:00 PM	15	149	55	17	70	20	32	194	19	12	163	26	772
4:15 PM	7	182	59	10	63	19	42	248	7	8	167	31	843
4:30 PM	11	185	58	16	67	23	60	238	9	9	184	36	896
4:45 PM	10	205	64	23	62	20	46	243	6	6	217	31	933
5:00 PM	20	177	62	19	79	28	60	297	16	9	175	29	971
5:15 PM	14	215	63	10	70	22	63	260	5	9	189	41	961
5:30 PM	16	197	68	8	55	29	71	256	11	8	199	35	953
5:45 PM	19	163	59	12	65	28	47	234	7	8	185	33	860

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	155	1940	693	164	774	286	568	2770	106	111	2231	360	10158
APPROACH %'s :	5.56%	69.58%	24.86%	13.40%	63.24%	23.37%	16.49%	80.43%	3.08%	4.11%	82.57%	13.32%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	60	794	257	60	266	99	240	1056	38	32	780	136	3818
PEAK HR FACTOR :		0.951			0.843			0.894			0.933		0.983

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

CARS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
7:00 AM	6	34	9	14	70	41	11	86	7	10	231	11	530
7:15 AM	13	43	13	15	72	49	16	103	6	20	234	21	605
7:30 AM	10	48	21	7	83	42	14	136	5	7	249	26	648
7:45 AM	9	52	18	10	75	55	13	126	8	21	227	23	637
8:00 AM	9	44	13	12	91	58	13	162	12	14	205	27	660
8:15 AM	10	55	29	9	117	41	19	119	10	15	177	21	622
8:30 AM	14	52	22	12	93	45	9	113	12	15	197	31	615
8:45 AM	13	57	23	15	85	52	9	139	15	17	205	15	645
9:00 AM	13	52	22	13	88	69	16	135	14	21	215	12	670
9:15 AM	13	73	25	11	88	57	30	122	15	22	220	17	693
9:30 AM	19	52	28	17	76	56	7	123	15	35	245	19	692
9:45 AM	9	71	41	13	77	51	16	121	10	34	229	19	691

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	138	633	264	148	1015	616	173	1485	129	231	2634	242	7708
APPROACH %'s :	13.33%	61.16%	25.51%	8.32%	57.05%	34.63%	9.68%	83.10%	7.22%	7.43%	84.78%	7.79%	

PEAK HR START TIME :	900 AM												TOTAL
PEAK HR VOL :	54	248	116	54	329	233	69	501	54	112	909	67	2746
PEAK HR FACTOR :		0.864			0.906			0.934			0.910		0.991

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

CARS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:		Broadway			Broadway			1st St			1st St		
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
3:00 PM	9	104	44	9	56	23	30	180	4	11	154	25	649
3:15 PM	13	104	45	11	57	20	36	165	9	10	164	17	651
3:30 PM	9	113	48	15	59	27	38	196	5	12	189	24	735
3:45 PM	9	118	54	13	68	24	35	167	8	6	173	31	706
4:00 PM	15	143	50	17	69	20	28	164	19	10	142	25	702
4:15 PM	7	175	52	10	61	19	40	218	7	8	144	31	772
4:30 PM	11	176	53	16	66	22	56	206	9	8	160	36	819
4:45 PM	10	190	58	22	59	20	43	217	6	6	199	31	861
5:00 PM	20	165	57	19	78	28	59	265	16	7	153	29	896
5:15 PM	14	208	56	10	69	22	61	225	5	8	167	41	886
5:30 PM	16	187	61	8	55	28	69	228	11	7	179	35	884
5:45 PM	19	156	55	12	65	28	44	203	7	8	166	33	796
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	152	1839	633	162	762	281	539	2434	106	101	1990	358	9357
APPROACH %'s :	5.79%	70.08%	24.12%	13.44%	63.24%	23.32%	17.51%	79.05%	3.44%	4.12%	81.26%	14.62%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	60	750	232	59	261	98	232	935	38	28	698	136	3527
PEAK HR FACTOR :		0.937			0.836			0.886			0.913		0.984

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: Historical
N/S Street: Broadway
E/W Street: 1st St
DATE: 3/23/2017 DAY: Thursday
CITY: Los Angeles

A M

Adult Pedestrians

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	9	8	27	8	8	4	6	7
7:15 AM	18	34	47	16	30	7	8	7
7:30 AM	18	13	32	20	27	7	3	5
7:45 AM	19	21	39	19	32	8	15	9
8:00 AM	8	21	42	17	29	12	10	6
8:15 AM	13	15	32	16	37	10	15	9
8:30 AM	10	17	42	18	26	11	11	10
8:45 AM	14	24	44	20	34	15	7	11
9:00 AM	15	26	49	22	33	4	6	13
9:15 AM	16	21	44	11	28	8	10	9
9:30 AM	14	28	28	14	16	27	9	17
9:45 AM	16	8	42	29	19	31	7	7
TOTALS	**170**	**236**	**468**	**210**	**319**	**144**	**107**	**110**

School-Aged Pedestrians

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	2	0	2	0	0
TOTALS	**0**	**0**	**0**	**2**	**1**	**2**	**0**	**1**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	21	8	21	30	14	16	6	12
3:15 PM	14	26	32	14	16	9	7	11
3:30 PM	18	26	30	27	10	17	6	15
3:45 PM	12	21	36	44	11	15	9	20
4:00 PM	25	23	31	36	15	14	8	8
4:15 PM	12	34	39	43	6	31	5	12
4:30 PM	17	22	17	43	7	23	5	9
4:45 PM	12	19	37	44	13	14	7	16
5:00 PM	29	16	30	63	8	19	7	8
5:15 PM	12	4	19	41	6	10	5	4
5:30 PM	13	9	31	45	15	7	8	9
5:45 PM	14	8	19	32	12	14	3	7
TOTALS	**199**	**216**	**342**	**462**	**133**	**189**	**76**	**131**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	3	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	2	0	2	0	0
5:30 PM	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	2	0	3	0	0
TOTALS	**1**	**0**	**0**	**7**	**0**	**5**	**0**	**2**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BIKES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
7:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
7:15 AM	0	2	0	0	0	0	0	2	0	0	0	0	4
7:30 AM	0	0	0	0	0	0	0	1	1	0	1	0	3
7:45 AM	0	0	0	0	2	0	1	0	0	1	1	0	5
8:00 AM	0	0	0	0	3	0	0	2	0	1	0	0	6
8:15 AM	0	2	1	0	2	0	0	2	0	1	1	0	9
8:30 AM	0	0	2	0	0	0	0	0	0	1	1	0	4
8:45 AM	1	0	0	0	0	1	0	2	0	2	0	1	7
9:00 AM	1	0	0	0	2	0	0	1	0	0	0	0	4
9:15 AM	0	1	0	1	1	0	0	3	0	0	0	0	6
9:30 AM	0	0	0	0	1	0	0	1	0	1	1	0	4
9:45 AM	0	0	0	0	2	0	0	3	0	0	3	0	8

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	6	3	1	15	1	1	17	1	7	8	1	63
APPROACH %'s :	18.18%	54.55%	27.27%	5.88%	88.24%	5.88%	5.26%	89.47%	5.26%	43.75%	50.00%	6.25%	

PEAK HR START TIME :	900 AM												TOTAL
PEAK HR VOL :	1	1	0	1	6	0	0	8	0	1	4	0	22
PEAK HR FACTOR :	0.500			0.875			0.667			0.417			0.688

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BIKES

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
3:00 PM	0	0	3	1	0	0	0	4	0	1	2	0	11
3:15 PM	0	5	1	0	0	0	0	3	0	1	0	0	10
3:30 PM	0	3	2	0	1	1	0	4	0	2	1	0	14
3:45 PM	0	3	1	0	7	2	0	2	0	0	2	0	17
4:00 PM	0	4	3	2	0	0	0	4	0	2	0	0	15
4:15 PM	0	2	0	0	4	0	0	5	0	0	1	0	12
4:30 PM	0	1	0	0	4	0	1	5	0	1	1	0	13
4:45 PM	0	1	0	0	1	0	0	1	0	1	0	0	4
5:00 PM	0	1	0	0	2	0	0	5	0	1	2	0	11
5:15 PM	1	2	0	0	0	0	0	3	0	1	2	0	9
5:30 PM	0	2	0	0	2	0	0	3	0	0	3	0	10
5:45 PM	0	1	3	0	3	0	0	1	0	1	1	0	10

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	25	13	3	24	3	1	40	0	11	15	0	136
APPROACH %'s :	2.56%	64.10%	33.33%	10.00%	80.00%	10.00%	2.44%	97.56%	0.00%	42.31%	57.69%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	1	6	0	0	5	0	0	12	0	3	7	0	34
PEAK HR FACTOR :		0.583			0.625			0.600			0.833		0.773

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
7:00 AM	0	10	3	0	0	0	2	17	0	0	31	0	63
7:15 AM	0	8	4	0	0	0	2	15	0	0	25	0	54
7:30 AM	0	9	4	0	0	0	1	15	0	0	25	0	54
7:45 AM	0	9	3	0	0	0	1	17	0	0	22	0	52
8:00 AM	0	6	2	0	0	0	3	19	0	0	25	0	55
8:15 AM	0	8	6	0	0	0	1	16	0	0	29	0	60
8:30 AM	0	7	3	0	0	0	2	17	0	0	26	1	56
8:45 AM	0	4	4	0	1	0	2	14	0	0	26	0	51
9:00 AM	1	5	2	0	0	0	0	20	0	0	24	0	52
9:15 AM	0	5	2	0	1	0	3	11	0	0	18	0	40
9:30 AM	0	2	4	0	1	0	0	17	0	0	14	0	38
9:45 AM	0	7	3	0	0	0	0	11	0	0	13	0	34

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	80	40	0	3	0	17	189	0	0	278	1	609
APPROACH %'s :	0.83%	66.12%	33.06%	0.00%	100.00%	0.00%	8.25%	91.75%	0.00%	0.00%	99.64%	0.36%	

PEAK HR START TIME :	900 AM												TOTAL
PEAK HR VOL :	1	19	11	0	2	0	3	59	0	0	69	0	164
PEAK HR FACTOR :	0.775			0.500			0.775			0.719			0.788

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
3:00 PM	0	4	2	0	1	0	2	14	0	0	13	0	36
3:15 PM	0	5	3	0	0	0	1	16	0	0	12	0	37
3:30 PM	0	6	2	0	0	0	2	18	0	0	13	0	41
3:45 PM	0	5	2	0	1	0	1	20	0	0	21	0	50
4:00 PM	0	3	4	0	0	0	3	24	0	0	17	0	51
4:15 PM	0	5	2	0	0	0	2	28	0	0	21	0	58
4:30 PM	0	5	4	0	0	0	2	26	0	0	21	0	58
4:45 PM	0	5	3	1	0	0	2	25	0	0	18	0	54
5:00 PM	0	5	2	0	0	0	1	26	0	0	20	0	54
5:15 PM	0	3	4	0	0	0	2	30	0	0	20	0	59
5:30 PM	0	6	4	0	0	0	2	24	0	0	16	0	52
5:45 PM	0	4	3	0	0	0	2	30	0	0	14	0	53

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	56	35	1	2	0	22	281	0	0	206	0	603
APPROACH %'s :	0.00%	61.54%	38.46%	33.33%	66.67%	0.00%	7.26%	92.74%	0.00%	0.00%	100.00%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	19	13	1	0	0	7	105	0	0	74	0	219
PEAK HR FACTOR :	0.800			0.250			0.875			0.925			0.928

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
7:00 AM	0	0	0	0	3	1	1	0	0	0	6	0	11
7:15 AM	0	2	2	0	4	0	1	6	0	0	3	0	18
7:30 AM	0	4	1	0	2	1	0	0	0	0	8	2	18
7:45 AM	0	3	2	1	2	0	1	7	1	0	6	1	24
8:00 AM	0	0	1	1	4	0	0	3	1	1	3	0	14
8:15 AM	0	0	1	0	3	2	0	4	0	1	5	0	16
8:30 AM	0	0	1	0	4	1	0	7	0	0	0	2	15
8:45 AM	0	4	1	0	1	0	1	6	0	4	9	0	26
9:00 AM	1	2	2	0	4	0	0	2	0	0	5	0	16
9:15 AM	0	4	0	1	7	2	0	1	0	1	12	0	28
9:30 AM	1	2	3	0	2	1	1	4	0	1	11	0	26
9:45 AM	0	9	4	2	2	0	1	0	0	0	10	0	28

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	30	18	5	38	8	6	40	2	8	78	5	240
APPROACH %'s :	4.00%	60.00%	36.00%	9.80%	74.51%	15.69%	12.50%	83.33%	4.17%	8.79%	85.71%	5.49%	

PEAK HR START TIME :	900 AM												TOTAL
PEAK HR VOL :	2	17	9	3	15	3	2	7	0	2	38	0	98
PEAK HR FACTOR :	0.538			0.525			0.450			0.769			0.875

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Broadway			Broadway			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	1	1	3	0	1	3	0	
3:00 PM	1	2	0	0	1	1	1	8	0	2	2	0	18
3:15 PM	1	3	3	1	0	0	1	7	0	1	1	0	18
3:30 PM	1	2	1	0	0	1	0	6	0	0	4	0	15
3:45 PM	0	1	1	0	0	1	0	3	0	0	6	1	13
4:00 PM	0	3	1	0	1	0	1	6	0	2	4	1	19
4:15 PM	0	2	5	0	2	0	0	2	0	0	2	0	13
4:30 PM	0	4	1	0	1	1	2	6	0	1	3	0	19
4:45 PM	0	10	3	0	3	0	1	1	0	0	0	0	18
5:00 PM	0	7	3	0	1	0	0	6	0	2	2	0	21
5:15 PM	0	4	3	0	1	0	0	5	0	1	2	0	16
5:30 PM	0	4	3	0	0	1	0	4	0	1	4	0	17
5:45 PM	0	3	1	0	0	0	1	1	0	0	5	0	11
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	45	25	1	10	5	7	55	0	10	35	2	198
APPROACH %'s :	4.11%	61.64%	34.25%	6.25%	62.50%	31.25%	11.29%	88.71%	0.00%	21.28%	74.47%	4.26%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	25	12	0	5	1	1	16	0	4	8	0	72
PEAK HR FACTOR :		0.712			0.500			0.708			0.600		0.857

CONTROL : Signalized

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Broadway

East/West Temple St

Day: Thursday Date: March 23, 2017 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	88	86	88	94
BIKES	22	36	11	11
BUSES	176	18	123	124

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	121	9.45	291	8.15	171	8.15	282	7.00
PM PK 15 MIN	309	17.15	163	17.15	229	16.30	303	15.00
AM PK HOUR	410	9.00	1089	7.45	615	8.15	1061	7.00
PM PK HOUR	1182	16.45	595	16.30	872	16.30	1079	17.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	60	229	63	352	*7-8*	112	550	276	938	1290	326	1	96	4
8-9	60	214	76	350	*8-9*	129	609	321	1059	1409	415	5	130	7
9-10	66	271	73	410	*9-10*	93	513	266	872	1282	359	2	104	3
15-16	72	589	51	712	*15-16*	61	291	169	521	1233	202	0	108	6
16-17	96	824	120	1040	*16-17*	90	311	136	537	1577	284	2	124	4
17-18	103	952	114	1169	*17-18*	75	332	170	577	1746	144	0	92	6
TOTAL	457	3079	497	4033	TOTAL	560	2606	1338	4504	8537	1730	10	654	30

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	46	417	66	529	*7-8*	85	898	78	1061	1590	98	1	109	0
8-9	35	488	75	598	*8-9*	96	805	74	975	1573	89	0	168	2
9-10	51	497	60	608	*9-10*	66	890	60	1016	1624	54	1	161	5
15-16	44	627	40	711	*15-16*	41	865	159	1065	1776	51	0	99	3
16-17	76	715	53	844	*16-17*	29	721	156	906	1750	108	0	129	1
17-18	74	713	33	820	*17-18*	16	839	224	1079	1899	59	0	69	3
TOTAL	326	3457	327	4110	TOTAL	333	5018	751	6102	10212	459	2	735	14

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Broadway and Temple St , Los Angeles

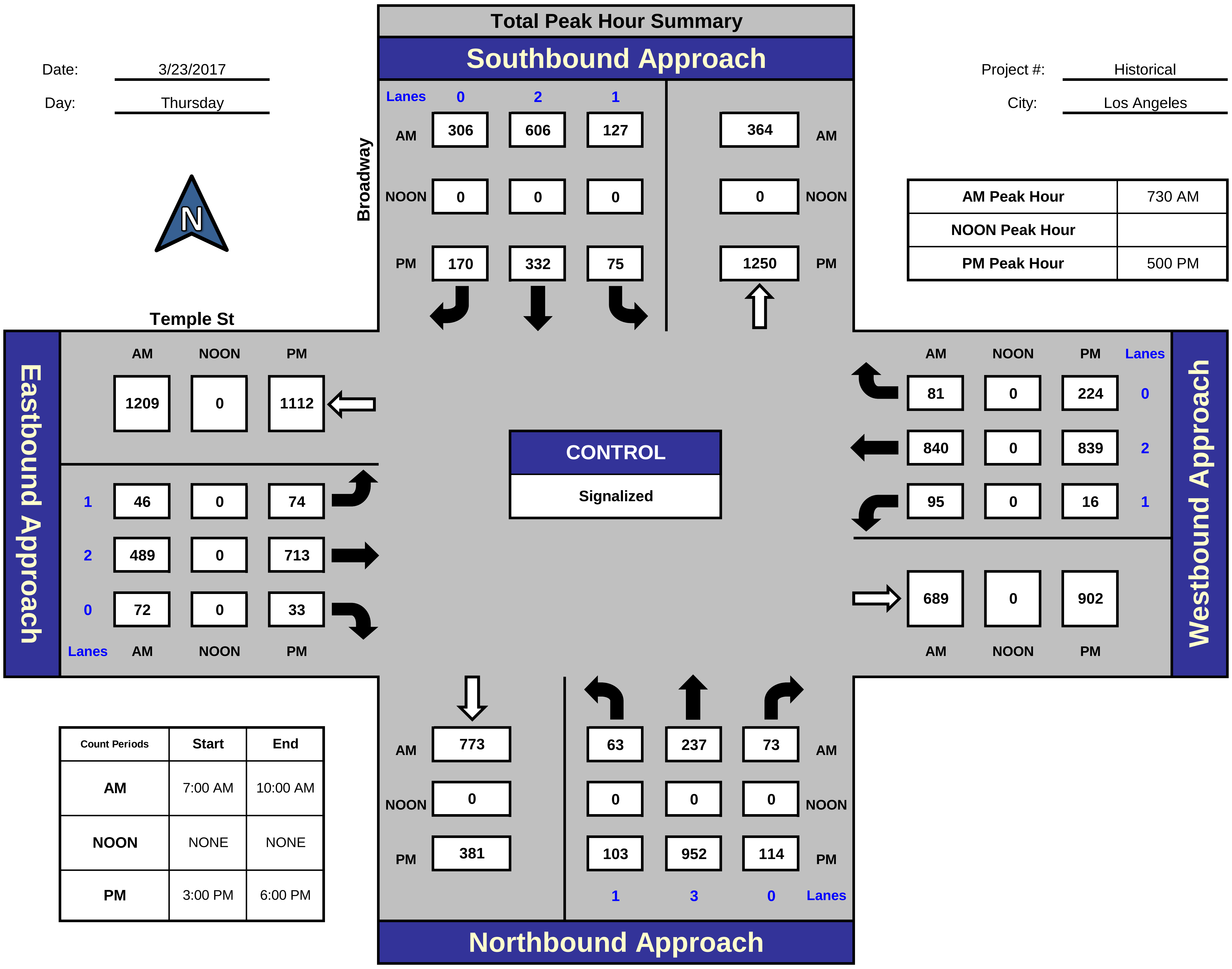
Date: 3/23/2017

Day: Thursday

Project #: Historical

City: Los Angeles

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	500 PM



Southbound Approach

Lanes	0	2	1	
AM	306	606	127	364
NOON	0	0	0	0
PM	170	332	75	1250

Westbound Approach

AM	NOON	PM	Lanes
81	0	224	0
840	0	839	2
95	0	16	1
689	0	902	

Eastbound Approach

Lanes	AM	NOON	PM
	1209	0	1112
1	46	0	74
2	489	0	713
0	72	0	33

CONTROL

Signalized

Northbound Approach

AM	773	63	237	73
NOON	0	0	0	0
PM	381	103	952	114
Lanes		1	3	0

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

AM	1039	364
NOON	0	0
PM	577	1250

East Leg

AM	NOON	PM
1016	0	1079
689	0	902

West Leg

AM	NOON	PM
1209	0	1112
607	0	820

South Leg

AM	773	373
NOON	0	0
PM	381	1169

Total Volume Per Leg

North Leg

AM	1403
NOON	0
PM	1827

East Leg

AM	NOON	PM
1705	0	1981

West Leg

AM	NOON	PM
1816	0	1932

South Leg

AM	1146
NOON	0
PM	1550

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

TOTALS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
7:00 AM	11	54	10	23	132	66	7	79	19	22	242	18	683
7:15 AM	10	47	15	29	140	72	13	105	12	18	237	22	720
7:30 AM	17	67	17	21	119	66	9	113	25	23	228	16	721
7:45 AM	22	61	21	39	159	72	17	120	10	22	191	22	756
8:00 AM	14	48	17	28	162	82	13	111	18	25	212	13	743
8:15 AM	10	61	18	39	166	86	7	145	19	25	209	30	815
8:30 AM	16	50	15	33	143	80	8	120	22	20	162	17	686
8:45 AM	20	55	26	29	138	73	7	112	16	26	222	14	738
9:00 AM	16	58	13	25	134	76	13	120	26	19	191	20	711
9:15 AM	15	68	16	24	132	73	13	128	13	19	233	12	746
9:30 AM	20	64	19	26	123	62	13	119	14	10	236	11	717
9:45 AM	15	81	25	18	124	55	12	130	7	18	230	17	732

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	186	714	212	334	1672	863	132	1402	201	247	2593	212	8768
APPROACH %'s :	16.73%	64.21%	19.06%	11.64%	58.28%	30.08%	7.61%	80.81%	11.59%	8.09%	84.96%	6.95%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	63	237	73	127	606	306	46	489	72	95	840	81	3035
PEAK HR FACTOR :		0.897			0.893			0.887			0.951		0.931

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

City: Los Angeles

TOTALS

PM

Day: Thursday

Date: 3/23/2017

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
3:00 PM	13	128	15	17	65	43	7	136	6	12	254	37	733
3:15 PM	20	130	10	9	71	44	8	145	11	11	212	25	696
3:30 PM	20	157	14	18	76	36	13	169	11	6	232	40	792
3:45 PM	19	174	12	17	79	46	16	177	12	12	167	57	788
4:00 PM	18	171	21	20	81	33	17	178	10	8	177	53	787
4:15 PM	37	187	30	17	69	35	20	174	9	10	177	25	790
4:30 PM	20	241	38	24	73	41	17	192	20	10	181	39	896
4:45 PM	21	225	31	29	88	27	22	171	14	1	186	39	854
5:00 PM	34	222	35	24	94	32	23	181	11	2	196	45	899
5:15 PM	30	249	30	26	84	53	20	191	10	7	192	61	953
5:30 PM	17	256	32	13	75	45	16	160	5	2	230	61	912
5:45 PM	22	225	17	12	79	40	15	181	7	5	221	57	881

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	271	2365	285	226	934	475	194	2055	126	86	2425	539	9981
APPROACH %'s :	9.28%	80.97%	9.76%	13.82%	57.13%	29.05%	8.17%	86.53%	5.31%	2.82%	79.51%	17.67%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	103	952	114	75	332	170	74	713	33	16	839	224	3645
PEAK HR FACTOR :		0.946			0.885			0.928			0.921		0.956

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical
Day: Thursday

CARS

City: Los Angeles
Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
7:00 AM	9	44	10	22	126	63	6	70	19	22	235	17	643
7:15 AM	8	39	14	28	136	69	12	97	12	18	232	22	687
7:30 AM	16	52	17	21	117	64	9	107	24	22	216	15	680
7:45 AM	20	49	21	39	156	71	15	112	10	22	184	22	721
8:00 AM	12	40	17	28	157	80	12	103	18	24	203	13	707
8:15 AM	10	51	18	39	162	84	6	132	19	24	202	30	777
8:30 AM	13	43	15	33	140	79	8	109	22	19	160	17	658
8:45 AM	18	45	24	29	135	73	7	101	16	26	211	14	699
9:00 AM	15	50	12	25	132	74	13	115	26	17	181	20	680
9:15 AM	14	59	16	23	124	72	13	120	13	19	225	12	710
9:30 AM	19	58	19	25	120	62	12	114	14	9	224	11	687
9:45 AM	13	69	24	18	119	55	12	125	7	18	223	16	699

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	167	599	207	330	1624	846	125	1305	200	240	2496	209	8348
APPROACH %'s :	17.16%	61.56%	21.27%	11.79%	58.00%	30.21%	7.67%	80.06%	12.27%	8.15%	84.75%	7.10%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	58	192	73	127	592	299	42	454	71	92	805	80	2885
PEAK HR FACTOR :		0.897			0.893			0.903			0.954		0.928

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

CARS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
3:00 PM	12	122	14	16	62	43	5	130	6	12	249	37	708
3:15 PM	19	121	10	9	70	44	8	137	11	10	204	25	668
3:30 PM	18	150	12	18	75	36	13	157	11	6	221	40	757
3:45 PM	18	167	11	17	77	45	14	162	12	12	157	57	749
4:00 PM	17	165	21	20	80	33	17	170	10	8	168	53	762
4:15 PM	35	178	30	17	66	33	17	167	9	10	166	25	753
4:30 PM	19	233	37	24	72	37	15	187	19	10	169	39	861
4:45 PM	20	214	30	29	84	25	20	167	14	1	179	39	822
5:00 PM	32	212	33	24	93	31	21	173	11	2	187	45	864
5:15 PM	30	242	28	26	83	49	19	186	8	7	182	59	919
5:30 PM	16	246	32	13	74	44	15	156	5	2	224	60	887
5:45 PM	21	215	16	12	79	40	13	177	7	5	212	57	854

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	257	2265	274	225	915	460	177	1969	123	85	2318	536	9604
APPROACH %'s :	9.19%	81.01%	9.80%	14.06%	57.19%	28.75%	7.80%	86.78%	5.42%	2.89%	78.87%	18.24%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	99	915	109	75	329	164	68	692	31	16	805	221	3524
PEAK HR FACTOR :		0.936			0.899			0.928			0.911		0.959

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: Historical
N/S Street: Broadway
E/W Street: Temple St
DATE: 3/23/2017 DAY: Thursday
CITY: Los Angeles

A M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	14	17	20	23	7	17	2	21
7:15 AM	15	6	51	21	16	17	9	12
7:30 AM	19	8	97	16	16	19	4	27
7:45 AM	11	6	78	20	3	14	4	19
8:00 AM	20	10	60	15	7	25	10	26
8:15 AM	23	6	85	22	13	22	4	14
8:30 AM	22	13	68	40	9	35	6	14
8:45 AM	22	14	68	57	19	38	4	11
9:00 AM	20	9	77	26	11	36	3	10
9:15 AM	13	12	75	23	25	14	10	3
9:30 AM	22	11	54	33	21	17	8	7
9:45 AM	8	9	44	27	24	13	7	6
TOTALS	**209**	**121**	**777**	**323**	**171**	**267**	**71**	**170**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	2	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	2	0	2	0	0	1	0	0
8:15 AM	2	0	2	0	0	1	0	0
8:30 AM	0	1	0	1	0	0	0	0
8:45 AM	1	1	0	0	0	0	0	0
9:00 AM	0	1	1	1	1	2	0	1
9:15 AM	1	0	0	0	1	1	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	1	0	0	0	0	0	0
TOTALS	**6**	**8**	**5**	**3**	**2**	**5**	**1**	**1**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	7	11	14	40	29	20	6	4
3:15 PM	8	14	14	37	6	12	7	6
3:30 PM	16	14	23	22	9	10	9	7
3:45 PM	30	8	15	37	10	3	5	7
4:00 PM	7	19	12	68	19	18	12	12
4:15 PM	12	24	17	55	27	16	24	9
4:30 PM	11	28	18	34	11	5	16	19
4:45 PM	5	18	35	45	16	17	9	7
5:00 PM	25	20	34	35	20	16	21	7
5:15 PM	8	13	12	16	6	5	5	7
5:30 PM	4	9	22	17	10	3	8	4
5:45 PM	3	10	8	0	7	2	4	3
TOTALS	**136**	**188**	**224**	**406**	**170**	**127**	**126**	**92**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	1	0	0	1	0	0	0
3:15 PM	0	1	0	0	1	0	0	0
3:30 PM	1	1	0	0	0	0	0	0
3:45 PM	1	1	0	0	1	0	0	0
4:00 PM	2	0	1	1	1	0	0	0
4:15 PM	1	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	4	0	0	0	0	0	0
5:30 PM	1	1	0	0	0	1	0	0
5:45 PM	0	0	0	0	0	1	0	0
TOTALS	**6**	**10**	**1**	**1**	**4**	**3**	**0**	**0**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BIKES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
7:15 AM	0	1	0	0	0	0	0	1	0	0	3	0	5
7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	3	0	0	1	0	0	0	0	4
8:15 AM	0	1	0	0	3	0	0	0	0	1	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
9:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
9:15 AM	1	0	0	0	3	0	0	0	0	0	0	0	4
9:30 AM	0	0	0	0	3	0	0	1	0	0	2	0	6
9:45 AM	0	1	0	0	1	1	0	0	0	0	0	0	3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	4	0	0	17	1	0	4	0	1	6	0	35
APPROACH %'s :	33.33%	66.67%	0.00%	0.00%	94.44%	5.56%	0.00%	100.00%	0.00%	14.29%	85.71%	0.00%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	1	1	0	0	7	0	0	1	0	1	0	0	11
PEAK HR FACTOR :	0.500			0.583			0.250			0.250			0.550

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BIKES

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
3:00 PM	0	1	0	0	0	1	0	2	0	0	0	0	4
3:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	2
3:30 PM	0	3	0	0	2	0	0	0	0	0	1	0	6
3:45 PM	0	2	0	1	4	0	0	0	0	0	1	1	9
4:00 PM	0	4	0	0	0	1	0	0	0	0	1	0	6
4:15 PM	0	1	0	0	4	0	0	2	0	0	0	0	7
4:30 PM	0	0	0	0	3	0	0	0	0	0	0	0	3
4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	2	0	0	1	0	0	0	0	3
5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	15	0	1	15	2	1	6	0	0	3	1	45
APPROACH %'s :	6.25%	93.75%	0.00%	5.56%	83.33%	11.11%	14.29%	85.71%	0.00%	0.00%	75.00%	25.00%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	1	2	0	0	2	0	0	1	0	0	0	0	6
PEAK HR FACTOR :	0.375			0.250			0.250			0.000			0.500

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
7:00 AM	2	9	0	0	1	2	1	7	0	0	5	0	27
7:15 AM	2	6	0	0	0	0	0	6	0	0	2	0	16
7:30 AM	1	10	0	0	0	1	0	4	0	0	4	0	20
7:45 AM	1	8	0	0	0	1	2	7	0	0	4	0	23
8:00 AM	2	8	0	0	0	2	0	6	0	0	3	0	21
8:15 AM	0	9	0	0	0	1	1	7	0	0	4	0	22
8:30 AM	3	7	0	0	0	1	0	6	0	0	2	0	19
8:45 AM	1	7	0	0	1	0	0	8	0	0	5	0	22
9:00 AM	1	4	0	0	0	0	0	3	0	0	4	0	12
9:15 AM	1	5	0	0	0	1	0	6	0	0	2	0	15
9:30 AM	0	5	0	0	1	0	0	4	0	0	4	0	14
9:45 AM	2	4	0	0	1	0	0	3	0	0	3	0	13

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	16	82	0	0	4	9	4	67	0	0	42	0	224
APPROACH %'s :	16.33%	83.67%	0.00%	0.00%	30.77%	69.23%	5.63%	94.37%	0.00%	0.00%	100.00%	0.00%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	4	35	0	0	0	5	3	24	0	0	15	0	86
PEAK HR FACTOR :		0.886			0.625			0.750			0.938		0.935

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
3:00 PM	1	4	0	0	1	0	1	3	0	0	3	0	13
3:15 PM	1	7	0	0	0	0	0	4	0	0	4	0	16
3:30 PM	1	5	0	0	0	0	0	2	0	0	7	0	15
3:45 PM	1	6	0	0	1	0	1	4	0	0	8	0	21
4:00 PM	1	3	0	0	0	0	0	3	0	0	7	0	14
4:15 PM	2	7	0	0	0	0	2	4	0	0	7	0	22
4:30 PM	1	6	0	0	0	1	2	1	0	0	10	0	21
4:45 PM	1	5	0	0	1	0	2	4	0	0	7	0	20
5:00 PM	2	5	0	0	0	0	2	6	0	0	8	0	23
5:15 PM	0	4	0	0	0	1	1	2	0	0	9	0	17
5:30 PM	1	8	0	0	0	0	1	3	0	0	5	0	18
5:45 PM	1	5	0	0	0	0	2	2	0	0	7	0	17

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	13	65	0	0	3	2	14	38	0	0	82	0	217
APPROACH %'s :	16.67%	83.33%	0.00%	0.00%	60.00%	40.00%	26.92%	73.08%	0.00%	0.00%	100.00%	0.00%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	4	22	0	0	0	1	6	13	0	0	29	0	75
PEAK HR FACTOR :	0.722			0.250			0.594			0.806			0.815

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:		Broadway			Broadway			Temple St			Temple St		
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
7:00 AM	0	1	0	1	5	1	0	2	0	0	2	1	13
7:15 AM	0	2	1	1	4	3	1	2	0	0	3	0	17
7:30 AM	0	5	0	0	2	1	0	2	1	1	8	1	21
7:45 AM	1	4	0	0	3	0	0	1	0	0	3	0	12
8:00 AM	0	0	0	0	5	0	1	2	0	1	6	0	15
8:15 AM	0	1	0	0	4	1	0	6	0	1	3	0	16
8:30 AM	0	0	0	0	3	0	0	5	0	1	0	0	9
8:45 AM	1	3	2	0	2	0	0	3	0	0	6	0	17
9:00 AM	0	4	1	0	2	2	0	2	0	2	6	0	19
9:15 AM	0	4	0	1	8	0	0	2	0	0	6	0	21
9:30 AM	1	1	0	1	2	0	1	1	0	1	8	0	16
9:45 AM	0	8	1	0	4	0	0	2	0	0	4	1	20

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	33	5	4	44	8	3	30	1	7	55	3	196
APPROACH %'s :	7.32%	80.49%	12.20%	7.14%	78.57%	14.29%	8.82%	88.24%	2.94%	10.77%	84.62%	4.62%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	1	10	0	0	14	2	1	11	1	3	20	1	64
PEAK HR FACTOR :		0.550			0.800			0.542			0.600		0.762

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Broadway			Broadway			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	2	0	1	2	0	1	2	0	
3:00 PM	0	2	1	1	2	0	1	3	0	0	2	0	12
3:15 PM	0	2	0	0	1	0	0	4	0	1	4	0	12
3:30 PM	1	2	2	0	1	0	0	10	0	0	4	0	20
3:45 PM	0	1	1	0	1	1	1	11	0	0	2	0	18
4:00 PM	0	3	0	0	1	0	0	5	0	0	2	0	11
4:15 PM	0	2	0	0	3	2	1	3	0	0	4	0	15
4:30 PM	0	2	1	0	1	3	0	4	1	0	2	0	14
4:45 PM	0	6	1	0	3	2	0	0	0	0	0	0	12
5:00 PM	0	5	2	0	1	1	0	2	0	0	1	0	12
5:15 PM	0	3	2	0	1	3	0	3	2	0	1	2	17
5:30 PM	0	2	0	0	1	1	0	1	0	0	1	1	7
5:45 PM	0	5	1	0	0	0	0	2	0	0	2	0	10

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	35	11	1	16	13	3	48	3	1	25	3	160
APPROACH %'s :	2.13%	74.47%	23.40%	3.33%	53.33%	43.33%	5.56%	88.89%	5.56%	3.45%	86.21%	10.34%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	15	5	0	3	5	0	8	2	0	5	3	46
PEAK HR FACTOR :	0.714			0.500			0.500			0.667			0.676

CONTROL : Signalized

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Hill St

East/West 1st St

Day: Thursday Date: March 23, 2017 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	63	44	98	133
BIKES	65	70	28	22
BUSES	203	185	440	485

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	93	8.00	349	7.00	227	8.00	342	9.30
PM PK 15 MIN	217	17.15	292	17.00	346	17.00	242	17.45
AM PK HOUR	331	7.45	1356	7.30	819	8.00	1316	7.00
PM PK HOUR	793	16.45	1119	16.15	1341	16.45	931	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	51	188	47	286
8-9	45	202	73	320
9-10	40	178	77	295
15-16	37	424	136	597
16-17	56	514	137	707
17-18	69	562	147	778
TOTAL	298	2068	617	2983

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	126	1028	192	1346
8-9	111	969	216	1296
9-10	121	836	205	1162
15-16	104	756	129	989
16-17	125	816	149	1090
17-18	152	714	154	1020
TOTAL	739	5119	1045	6903

Hours	**TOTAL** N-S	**XING S/L** Ped	 Sch	**XING N/L** Ped	 Sch
7-8	1632	274	1	255	6
8-9	1616	326	1	282	0
9-10	1457	257	1	261	2
15-16	1586	304	2	214	2
16-17	1797	354	0	260	0
17-18	1798	317	1	163	0
TOTAL	9886	1832	6	1435	10

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	55	455	58	568
8-9	129	551	139	819
9-10	82	491	97	670
15-16	232	737	73	1042
16-17	250	878	54	1182
17-18	269	1010	42	1321
TOTAL	1017	4122	463	5602

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	97	1141	78	1316
8-9	111	970	85	1166
9-10	115	1101	69	1285
15-16	67	765	73	905
16-17	59	712	80	851
17-18	50	829	52	931
TOTAL	499	5518	437	6454

Hours	**TOTAL** E-W	**XING W/L** Ped	 Sch	**XING E/L** Ped	 Sch
7-8	1884	519	3	91	0
8-9	1985	580	3	158	1
9-10	1955	523	44	137	0
15-16	1947	312	2	94	2
16-17	2033	530	0	146	2
17-18	2252	357	0	88	0
TOTAL	12056	2821	52	714	5

ITM Peak Hour Summary

Prepared by:

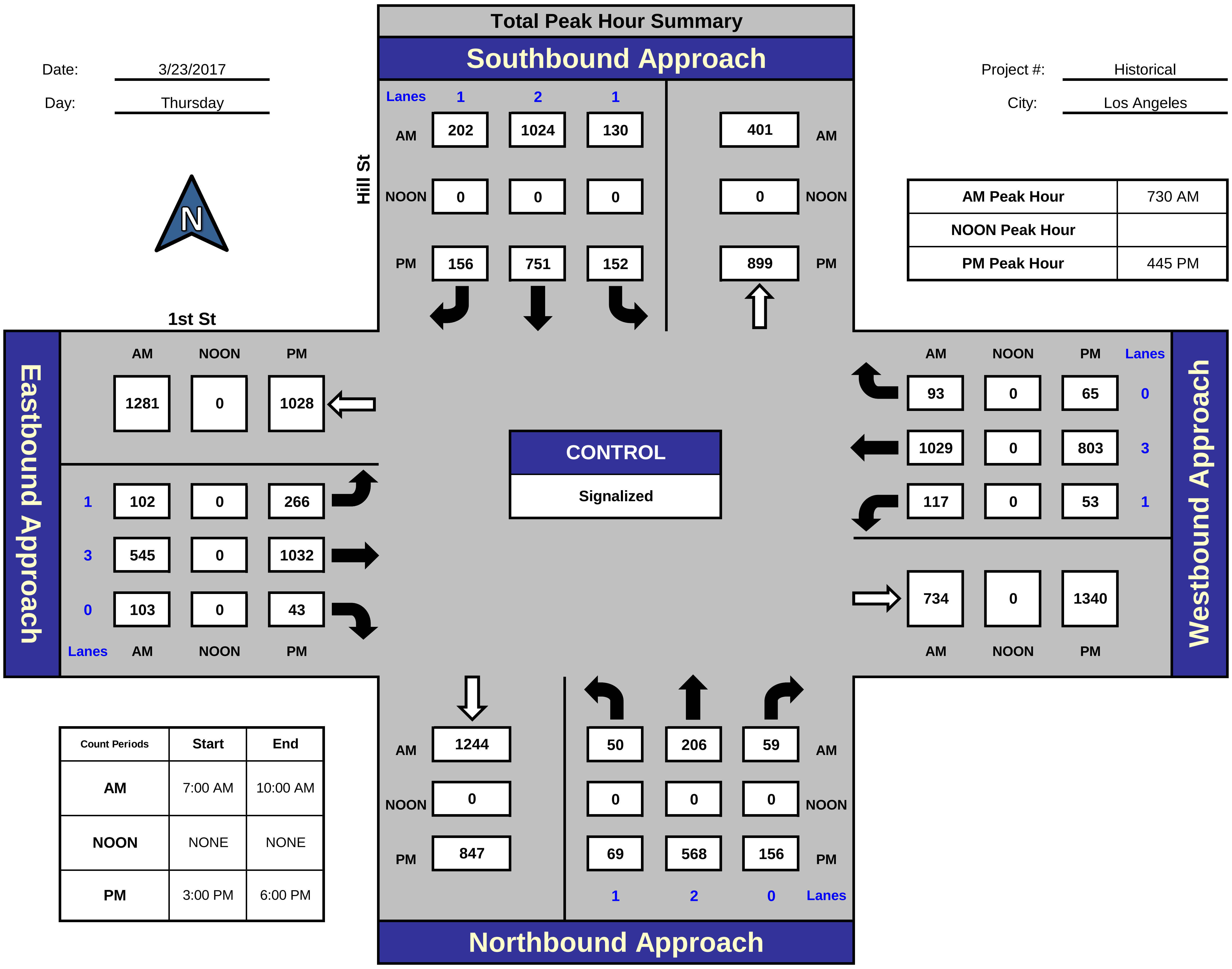
National Data & Surveying Services

Hill St and 1st St , Los Angeles

Date: 3/23/2017
Day: Thursday

Project #: Historical
City: Los Angeles

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	445 PM



Total Peak Hour Summary

Southbound Approach (Hill St)

Lanes	1	2	1	
AM	202	1024	130	401
NOON	0	0	0	0
PM	156	751	152	899

Eastbound Approach (1st St)

	AM	NOON	PM
	1281	0	1028
1	102	0	266
3	545	0	1032
0	103	0	43
Lanes	AM	NOON	PM

Westbound Approach

AM	NOON	PM	Lanes
93	0	65	0
1029	0	803	3
117	0	53	1
734	0	1340	
AM	NOON	PM	

CONTROL

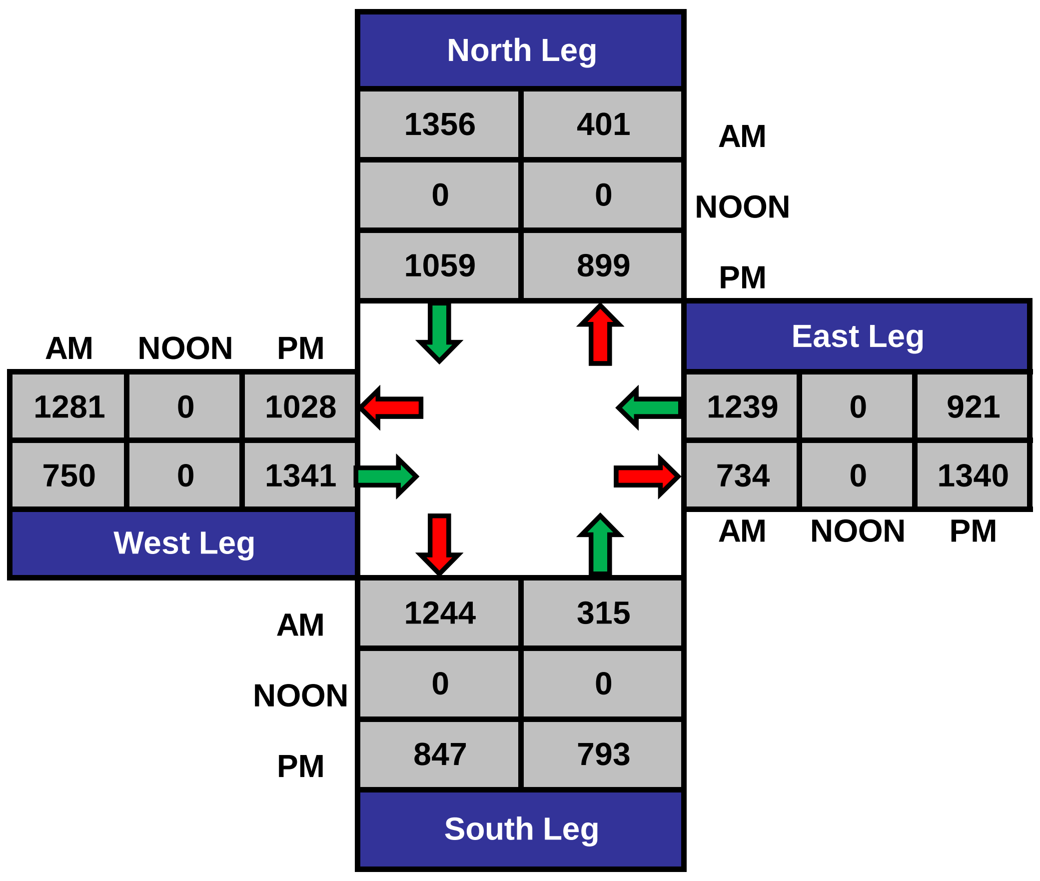
Signalized

Northbound Approach

AM	1244	50	206	59	AM
NOON	0	0	0	0	NOON
PM	847	69	568	156	PM
		1	2	0	Lanes

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

1356	401	AM
0	0	NOON
1059	899	PM

West Leg

AM	NOON	PM
1281	0	1028
750	0	1341

East Leg

1239	0	921
734	0	1340
AM	NOON	PM

South Leg

AM	1244	315
NOON	0	0
PM	847	793

Total Volume Per Leg

North Leg

1757	AM
0	NOON
1958	PM

West Leg

AM	NOON	PM
2031	0	2369

East Leg

1973	0	2261
AM	NOON	PM

South Leg

AM	1559
NOON	0
PM	1640

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

TOTALS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
7:00 AM	13	44	10	28	270	51	6	96	11	18	288	20	855
7:15 AM	13	44	15	21	253	45	13	106	9	23	294	16	852
7:30 AM	9	46	9	41	236	56	19	113	17	22	279	22	869
7:45 AM	16	54	13	36	269	40	17	140	21	34	280	20	940
8:00 AM	16	56	21	21	258	54	25	167	35	33	245	28	959
8:15 AM	9	50	16	32	261	52	41	125	30	28	225	23	892
8:30 AM	10	54	16	22	216	55	35	131	33	25	246	22	865
8:45 AM	10	42	20	36	234	55	28	128	41	25	254	12	885
9:00 AM	9	39	18	30	256	50	22	131	23	32	255	22	887
9:15 AM	10	52	25	46	201	45	22	115	33	30	281	19	879
9:30 AM	9	41	13	18	184	55	18	122	23	34	293	15	825
9:45 AM	12	46	21	27	195	55	20	123	18	19	272	13	821
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	136	568	197	358	2833	613	266	1497	294	323	3212	232	10529
APPROACH %'s :	15.09%	63.04%	21.86%	9.41%	74.47%	16.11%	12.93%	72.78%	14.29%	8.57%	85.27%	6.16%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	50	206	59	130	1024	202	102	545	103	117	1029	93	3660
PEAK HR FACTOR :		0.847			0.983			0.826			0.927		0.954

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

TOTALS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
3:00 PM	9	80	35	22	142	33	54	182	18	14	191	11	791
3:15 PM	12	107	37	27	184	25	61	176	20	14	191	17	871
3:30 PM	7	113	32	29	221	30	54	197	20	21	194	23	941
3:45 PM	9	124	32	26	209	41	63	182	15	18	189	22	930
4:00 PM	14	132	40	36	197	30	62	157	10	17	178	15	888
4:15 PM	16	136	23	35	215	34	66	234	19	13	148	22	961
4:30 PM	13	121	32	29	190	47	56	241	13	12	191	23	968
4:45 PM	13	125	42	25	214	38	66	246	12	17	195	20	1013
5:00 PM	12	146	42	57	189	46	76	259	11	11	199	24	1072
5:15 PM	21	159	37	40	193	34	66	257	10	13	194	9	1033
5:30 PM	23	138	35	30	155	38	58	270	10	12	215	12	996
5:45 PM	13	119	33	25	177	36	69	224	11	14	221	7	949

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	162	1500	420	381	2286	432	751	2625	169	176	2306	205	11413
APPROACH %'s :	7.78%	72.05%	20.17%	12.29%	73.77%	13.94%	21.18%	74.05%	4.77%	6.55%	85.82%	7.63%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	69	568	156	152	751	156	266	1032	43	53	803	65	4114
PEAK HR FACTOR :		0.914			0.907			0.969			0.963		0.959

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

CARS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
7:00 AM	12	35	8	28	259	51	6	77	11	16	253	20	776
7:15 AM	13	34	10	21	246	44	13	85	7	22	267	16	778
7:30 AM	9	39	6	41	225	55	19	100	17	21	249	22	803
7:45 AM	16	47	6	36	264	40	17	118	20	34	250	20	868
8:00 AM	15	48	15	21	246	54	25	150	35	32	220	28	889
8:15 AM	9	44	13	32	253	51	41	110	30	28	192	23	826
8:30 AM	10	48	11	21	207	54	35	108	32	25	216	21	788
8:45 AM	10	38	14	35	224	53	27	110	40	24	219	12	806
9:00 AM	8	34	13	30	247	47	22	116	23	30	223	22	815
9:15 AM	10	46	20	46	196	43	21	100	31	29	252	19	813
9:30 AM	9	36	11	18	174	54	17	105	23	33	259	15	754
9:45 AM	12	40	19	27	190	55	20	113	18	18	254	13	779

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	133	489	146	356	2731	601	263	1292	287	312	2854	231	9695
APPROACH %'s :	17.32%	63.67%	19.01%	9.65%	74.05%	16.30%	14.28%	70.14%	15.58%	9.18%	84.02%	6.80%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	49	178	40	130	988	200	102	478	102	115	911	93	3386
PEAK HR FACTOR :		0.856			0.969			0.812			0.920		0.952

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

CARS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
3:00 PM	9	73	31	22	137	31	53	163	18	11	177	11	736
3:15 PM	12	104	31	27	173	25	60	158	20	14	175	17	816
3:30 PM	7	105	28	28	209	30	54	174	19	21	176	22	873
3:45 PM	7	117	29	26	198	41	62	162	15	18	167	21	863
4:00 PM	14	125	32	35	189	30	60	133	10	17	157	15	817
4:15 PM	15	127	20	35	205	33	66	202	19	12	125	22	881
4:30 PM	13	115	28	28	183	47	56	212	13	11	169	23	898
4:45 PM	13	119	39	25	208	38	63	218	12	17	173	20	945
5:00 PM	11	140	40	57	179	46	76	228	11	11	180	24	1003
5:15 PM	21	151	33	40	185	34	66	226	10	11	172	9	958
5:30 PM	23	131	31	30	148	38	58	240	10	12	200	12	933
5:45 PM	13	113	29	25	165	36	69	195	11	13	197	7	873

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	158	1420	371	378	2179	429	743	2311	168	168	2068	203	10596
APPROACH %'s :	8.11%	72.86%	19.04%	12.66%	72.97%	14.37%	23.06%	71.73%	5.21%	6.89%	84.79%	8.32%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	68	541	143	152	720	156	263	912	43	51	725	65	3839
PEAK HR FACTOR :		0.917			0.911			0.967			0.939		0.957

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: Historical
N/S Street: Hill St
E/W Street: 1st St
DATE: 3/23/2017 DAY: Thursday
CITY: Los Angeles

A M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	22	18	40	7	11	2	60	41
7:15 AM	47	39	66	16	12	8	76	46
7:30 AM	30	28	60	11	17	6	73	32
7:45 AM	31	40	49	25	24	11	160	31
8:00 AM	13	51	70	12	26	9	132	35
8:15 AM	25	55	69	21	28	13	129	37
8:30 AM	24	42	49	21	27	11	81	49
8:45 AM	40	32	49	35	22	22	73	44
9:00 AM	43	34	56	19	30	13	61	62
9:15 AM	39	23	49	25	29	9	50	64
9:30 AM	25	32	38	11	17	15	64	89
9:45 AM	42	23	46	13	11	13	60	73
TOTALS	**381**	**417**	**641**	**216**	**254**	**132**	**1019**	**603**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	0	0	0	1
7:15 AM	2	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	2	0
7:45 AM	2	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	1	1
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	1	0	1	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	1	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	44	0
TOTALS	**4**	**4**	**2**	**1**	**1**	**0**	**47**	**3**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	32	11	42	46	11	20	29	43
3:15 PM	21	37	36	35	12	14	12	49
3:30 PM	36	33	17	36	7	12	27	56
3:45 PM	28	16	34	58	5	13	21	75
4:00 PM	41	40	27	54	14	26	19	98
4:15 PM	37	43	43	61	15	24	18	104
4:30 PM	28	26	36	59	8	21	22	139
4:45 PM	30	15	26	48	19	19	12	118
5:00 PM	30	29	26	85	8	19	16	153
5:15 PM	23	14	20	50	6	8	19	70
5:30 PM	22	11	27	56	7	18	19	33
5:45 PM	23	11	19	34	7	15	12	35
TOTALS	**351**	**286**	**353**	**622**	**119**	**209**	**226**	**973**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	2	0	1	0	1	0	0	1
3:15 PM	0	0	1	0	0	0	0	1
3:30 PM	0	0	0	0	0	1	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	2	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**0**	**3**	**0**	**3**	**1**	**0**	**2**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BIKES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
7:00 AM	0	1	0	0	1	0	0	0	1	0	0	0	3
7:15 AM	0	1	0	1	0	1	0	0	0	0	1	0	4
7:30 AM	0	0	1	1	1	1	0	0	0	0	0	1	5
7:45 AM	0	1	1	0	0	0	0	0	0	0	1	0	3
8:00 AM	0	1	1	0	0	1	0	0	0	0	0	0	3
8:15 AM	0	1	1	0	1	2	0	1	0	0	0	0	6
8:30 AM	0	2	0	0	0	0	1	0	0	0	0	1	4
8:45 AM	0	2	1	0	0	0	0	0	0	0	1	2	6
9:00 AM	0	1	2	0	0	1	0	0	0	0	0	1	5
9:15 AM	0	0	0	0	0	1	1	1	0	0	0	0	3
9:30 AM	0	2	2	0	0	0	0	0	1	0	0	1	6
9:45 AM	0	2	1	1	2	0	0	1	0	2	1	1	11

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	14	10	3	5	7	2	3	2	2	4	7	59
APPROACH %'s :	0.00%	58.33%	41.67%	20.00%	33.33%	46.67%	28.57%	42.86%	28.57%	15.38%	30.77%	53.85%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	3	4	1	2	4	0	1	0	0	1	1	17
PEAK HR FACTOR :	0.875			0.583			0.250			0.500			0.708

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

City: Los Angeles

BIKES

PM

Day: Thursday

Date: 3/23/2017

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
3:00 PM	1	3	0	1	4	0	1	3	0	0	0	0	13
3:15 PM	0	3	0	0	4	0	1	3	0	0	0	0	11
3:30 PM	0	5	1	2	5	0	0	1	0	0	1	1	16
3:45 PM	0	7	0	1	3	1	0	0	0	2	1	0	15
4:00 PM	0	4	1	2	8	1	1	1	1	0	1	1	21
4:15 PM	1	6	1	1	7	1	0	0	0	0	0	0	17
4:30 PM	0	2	1	1	9	0	0	1	1	0	0	0	15
4:45 PM	0	1	0	0	0	0	0	2	1	0	0	0	4
5:00 PM	0	2	0	0	1	1	0	1	1	0	0	0	6
5:15 PM	0	0	1	0	0	0	0	0	0	1	0	0	2
5:30 PM	0	0	0	1	1	0	0	2	0	0	0	0	4
5:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	2

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	34	5	9	42	4	3	14	4	3	4	2	126
APPROACH %'s :	4.88%	82.93%	12.20%	16.36%	76.36%	7.27%	14.29%	66.67%	19.05%	33.33%	44.44%	22.22%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	3	1	1	2	1	0	5	2	1	0	0	16
PEAK HR FACTOR :	0.500			0.500			0.583			0.250			0.667

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
7:00 AM	0	9	2	0	10	0	0	17	0	0	29	0	67
7:15 AM	0	8	4	0	5	0	0	16	0	0	25	0	58
7:30 AM	0	6	1	0	10	0	0	13	0	0	22	0	52
7:45 AM	0	6	4	0	5	0	0	17	0	0	25	0	57
8:00 AM	0	8	5	0	11	0	0	14	0	0	21	0	59
8:15 AM	0	5	2	0	7	0	0	12	0	0	28	0	54
8:30 AM	0	5	3	0	9	0	0	19	0	0	25	0	61
8:45 AM	0	3	3	0	9	0	0	12	0	0	28	0	55
9:00 AM	0	5	3	0	8	0	0	15	0	0	26	0	57
9:15 AM	0	4	4	0	3	0	0	13	0	0	20	0	44
9:30 AM	0	5	2	0	10	0	0	15	0	0	18	0	50
9:45 AM	0	3	1	0	4	0	0	8	0	0	12	0	28

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	67	34	0	91	0	0	171	0	0	279	0	642
APPROACH %'s :	0.00%	66.34%	33.66%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	25	12	0	33	0	0	56	0	0	96	0	222
PEAK HR FACTOR :		0.712			0.750			0.824			0.857		0.941

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

City: Los Angeles

BUSES

PM

Day: Thursday

Date: 3/23/2017

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
3:00 PM	0	6	2	0	4	0	0	12	0	0	12	0	36
3:15 PM	0	3	1	0	9	0	0	15	0	0	13	0	41
3:30 PM	0	7	3	0	10	0	0	18	0	0	14	0	52
3:45 PM	1	4	1	0	8	0	0	19	0	0	16	0	49
4:00 PM	0	6	5	0	8	0	0	21	0	0	18	0	58
4:15 PM	1	7	2	0	9	0	0	30	0	0	21	0	70
4:30 PM	0	5	4	0	4	0	0	23	0	0	20	0	56
4:45 PM	0	6	3	0	6	0	0	24	0	0	20	0	59
5:00 PM	1	5	2	0	9	0	0	27	0	0	18	0	62
5:15 PM	0	6	2	0	8	0	0	27	0	1	21	0	65
5:30 PM	0	6	4	0	7	0	0	24	0	0	12	0	53
5:45 PM	0	5	4	0	12	0	0	29	0	0	20	0	70

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	66	33	0	94	0	0	269	0	1	205	0	671
APPROACH %'s :	2.94%	64.71%	32.35%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.49%	99.51%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	1	23	11	0	30	0	0	102	0	1	71	0	239
PEAK HR FACTOR :		0.875			0.833			0.944			0.818		0.919

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
7:00 AM	1	0	0	0	1	0	0	2	0	2	6	0	12
7:15 AM	0	2	1	0	2	1	0	5	2	1	2	0	16
7:30 AM	0	1	2	0	1	1	0	0	0	1	8	0	14
7:45 AM	0	1	3	0	0	0	0	5	1	0	5	0	15
8:00 AM	1	0	1	0	1	0	0	3	0	1	4	0	11
8:15 AM	0	1	1	0	1	1	0	3	0	0	5	0	12
8:30 AM	0	1	2	1	0	1	0	4	1	0	5	1	16
8:45 AM	0	1	3	1	1	2	1	6	1	1	7	0	24
9:00 AM	1	0	2	0	1	3	0	0	0	2	6	0	15
9:15 AM	0	2	1	0	2	2	1	2	2	1	9	0	22
9:30 AM	0	0	0	0	0	1	1	2	0	1	16	0	21
9:45 AM	0	3	1	0	1	0	0	2	0	1	6	0	14

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	12	17	2	11	12	3	34	7	11	79	1	192
APPROACH %'s :	9.38%	37.50%	53.13%	8.00%	44.00%	48.00%	6.82%	77.27%	15.91%	12.09%	86.81%	1.10%	

PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	1	3	7	0	3	2	0	11	1	2	22	0	52
PEAK HR FACTOR :		0.688			0.625			0.500			0.667		0.867

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Hill St			Hill St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1	3	0	1	3	0	
3:00 PM	0	1	2	0	1	2	1	7	0	3	2	0	19
3:15 PM	0	0	5	0	2	0	1	3	0	0	3	0	14
3:30 PM	0	1	1	1	2	0	0	5	1	0	4	1	16
3:45 PM	1	3	2	0	3	0	1	1	0	0	6	1	18
4:00 PM	0	1	3	1	0	0	2	3	0	0	3	0	13
4:15 PM	0	2	1	0	1	1	0	2	0	1	2	0	10
4:30 PM	0	1	0	1	3	0	0	6	0	1	2	0	14
4:45 PM	0	0	0	0	0	0	3	4	0	0	2	0	9
5:00 PM	0	1	0	0	1	0	0	4	0	0	1	0	7
5:15 PM	0	2	2	0	0	0	0	4	0	1	1	0	10
5:30 PM	0	1	0	0	0	0	0	6	0	0	3	0	10
5:45 PM	0	1	0	0	0	0	0	0	0	1	4	0	6

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	14	16	3	13	3	8	45	1	7	33	2	146
APPROACH %'s :	3.23%	45.16%	51.61%	15.79%	68.42%	15.79%	14.81%	83.33%	1.85%	16.67%	78.57%	4.76%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	4	2	0	1	0	3	18	0	1	7	0	36
PEAK HR FACTOR :	0.375			0.250			0.750			0.667			0.900

CONTROL : Signalized

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Spring St

East/West 1st St

Day: Thursday Date: March 23, 2017 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: YES District: I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	82	144	135
BIKES	15	124	88	69
BUSES	0	700	546	150

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	0.00	334	8.15	215	8.45	281	7.15
PM PK 15 MIN	0	0.00	139	16.15	356	17.00	243	17.15
AM PK HOUR	0	0.00	1225	8.15	809	8.30	1024	7.00
PM PK HOUR	0	0.00	494	15.45	1369	16.30	890	17.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	0	0	0	0	*7-8*	42	673	252	967	967	185	4	105	0
8-9	0	0	0	0	*8-9*	94	823	273	1190	1190	237	16	112	0
9-10	0	0	0	0	*9-10*	101	663	250	1014	1014	252	18	131	0
15-16	0	0	0	0	*15-16*	52	270	122	444	444	294	17	95	1
16-17	0	0	0	0	*16-17*	42	267	172	481	481	267	18	133	0
17-18	0	0	0	0	*17-18*	35	205	142	382	382	281	19	124	0
TOTAL	0	0	0	0	TOTAL	366	2901	1211	4478	4478	1516	92	700	1

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	54	426	130	610	*7-8*	70	952	2	1024	1634	136	0	80	0
8-9	51	573	172	796	*8-9*	91	895	2	988	1784	149	2	111	1
9-10	48	562	168	778	*9-10*	89	865	1	955	1733	143	2	121	5
15-16	59	865	122	1046	*15-16*	89	693	0	782	1828	80	1	109	1
16-17	87	1061	103	1251	*16-17*	78	723	0	801	2052	129	1	142	2
17-18	92	1109	127	1328	*17-18*	45	845	0	890	2218	119	1	133	7
TOTAL	391	4596	822	5809	TOTAL	462	4973	5	5440	11249	756	7	696	16

ITM Peak Hour Summary

Prepared by:

NDS

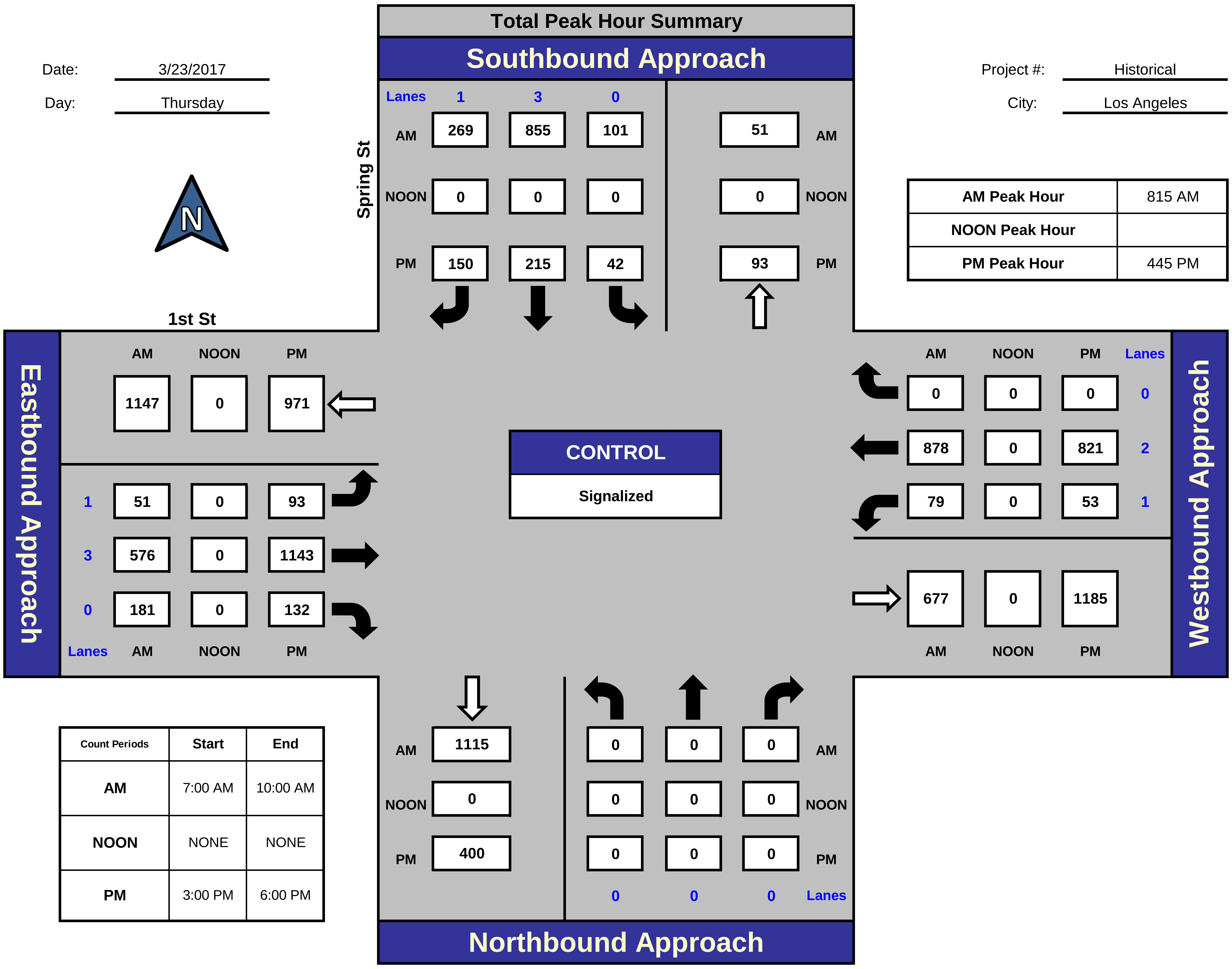
National Data & Surveying Services

Spring St and 1st St , Los Angeles

Date: 3/23/2017
Day: Thursday

Project #: Historical
City: Los Angeles

AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	445 PM



Total Peak Hour Summary

Southbound Approach

Lanes	1	3	0		
AM	269	855	101	51	AM
NOON	0	0	0	0	NOON
PM	150	215	42	93	PM

Eastbound Approach

	AM	NOON	PM
	1147	0	971
1	51	0	93
3	576	0	1143
0	181	0	132
Lanes	AM	NOON	PM

Westbound Approach

AM	NOON	PM	Lanes
0	0	0	0
878	0	821	2
79	0	53	1
677	0	1185	
AM	NOON	PM	

CONTROL

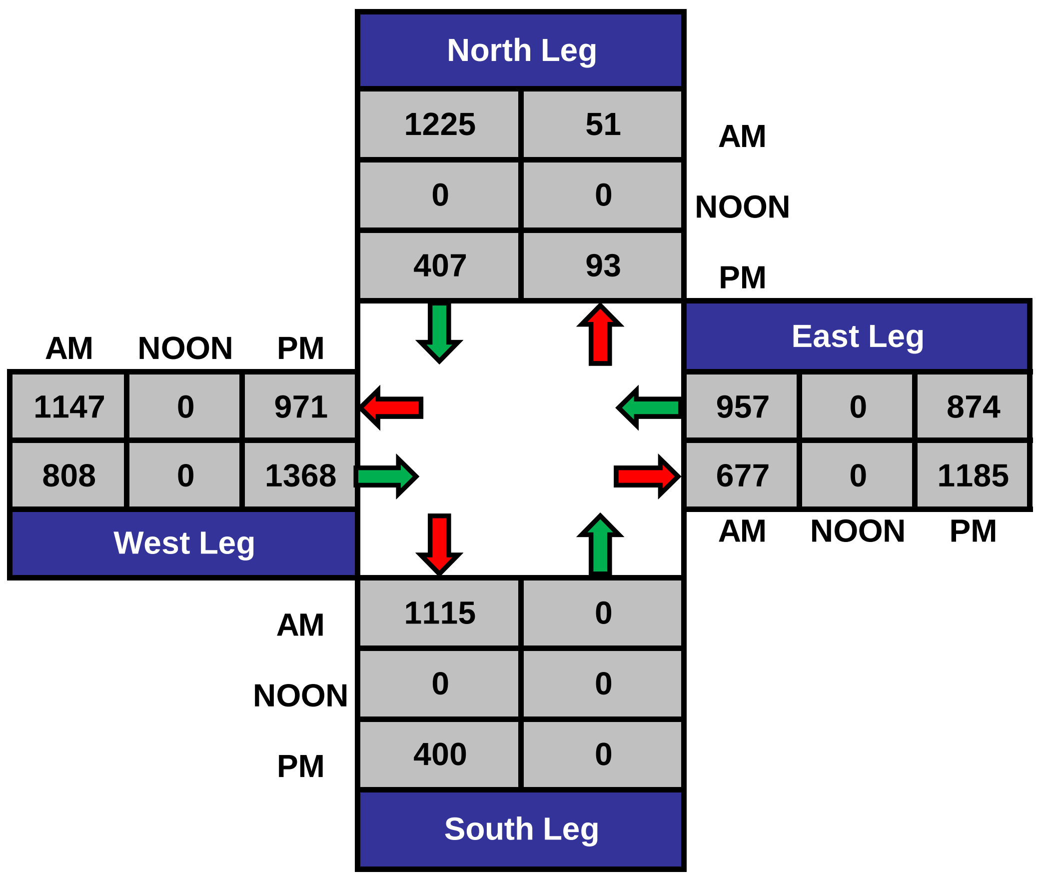
Signalized

Northbound Approach

AM	1115	0	0	0	AM
NOON	0	0	0	0	NOON
PM	400	0	0	0	PM
		0	0	0	Lanes

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

1225	51	AM
0	0	NOON
407	93	PM

West Leg

AM	NOON	PM
1147	0	971
808	0	1368

East Leg

957	0	874
677	0	1185
AM	NOON	PM

South Leg

AM	1115	0
NOON	0	0
PM	400	0

Total Volume Per Leg

North Leg

1276	AM
0	NOON
500	PM

West Leg

AM	NOON	PM
1955	0	2339

East Leg

1634	0	2059
AM	NOON	PM

South Leg

AM	1115
NOON	0
PM	400

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

TOTALS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
7:00 AM	0	0	0	4	144	55	13	75	16	16	242	0	565
7:15 AM	0	0	0	10	139	58	12	100	33	18	262	1	633
7:30 AM	0	0	0	14	177	70	15	122	34	18	222	1	673
7:45 AM	0	0	0	14	213	69	14	129	47	18	226	0	730
8:00 AM	0	0	0	29	161	71	13	134	44	31	217	2	702
8:15 AM	0	0	0	20	245	69	13	140	35	19	204	0	745
8:30 AM	0	0	0	19	198	62	14	146	42	24	244	0	749
8:45 AM	0	0	0	26	219	71	11	153	51	17	230	0	778
9:00 AM	0	0	0	36	193	67	13	137	53	19	200	0	718
9:15 AM	0	0	0	16	168	65	11	145	33	22	213	1	674
9:30 AM	0	0	0	23	146	56	13	139	44	24	221	0	666
9:45 AM	0	0	0	26	156	62	11	141	38	24	231	0	689

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	237	2159	775	153	1561	470	250	2712	5	8322
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	7.47%	68.09%	24.44%	7.01%	71.47%	21.52%	8.43%	91.41%	0.17%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	0	0	101	855	269	51	576	181	79	878	0	2990
PEAK HR FACTOR :	0.000			0.917			0.940			0.893			0.961

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

City: Los Angeles

TOTALS

PM

Day: Thursday

Date: 3/23/2017

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
3:00 PM	0	0	0	8	63	22	14	195	28	24	167	0	521
3:15 PM	0	0	0	13	68	31	12	216	32	14	164	0	550
3:30 PM	0	0	0	13	64	34	15	229	27	21	194	0	597
3:45 PM	0	0	0	18	75	35	18	225	35	30	168	0	604
4:00 PM	0	0	0	6	68	38	14	235	21	20	178	0	580
4:15 PM	0	0	0	16	82	41	26	256	26	18	185	0	650
4:30 PM	0	0	0	9	50	56	24	272	27	22	166	0	626
4:45 PM	0	0	0	11	67	37	23	298	29	18	194	0	677
5:00 PM	0	0	0	6	57	42	22	290	44	10	186	0	657
5:15 PM	0	0	0	11	43	31	23	289	28	15	228	0	668
5:30 PM	0	0	0	14	48	40	25	266	31	10	213	0	647
5:45 PM	0	0	0	4	57	29	22	264	24	10	218	0	628

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	129	742	436	238	3035	352	212	2261	0	7405
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	9.87%	56.77%	33.36%	6.57%	83.72%	9.71%	8.57%	91.43%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	0	0	42	215	150	93	1143	132	53	821	0	2649
PEAK HR FACTOR :		0.000			0.885			0.961			0.899		0.978

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

City: Los Angeles

CARS

AM

Day: Thursday

Date: 3/23/2017

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
7:00 AM	0	0	0	4	124	31	0	67	16	13	231	0	486
7:15 AM	0	0	0	10	122	36	0	87	32	12	257	0	556
7:30 AM	0	0	0	13	160	47	0	115	34	16	208	0	593
7:45 AM	0	0	0	13	196	45	0	118	46	12	223	0	653
8:00 AM	0	0	0	28	148	44	0	120	43	27	211	0	621
8:15 AM	0	0	0	20	231	50	0	128	34	14	194	0	671
8:30 AM	0	0	0	17	187	36	0	133	40	20	238	0	671
8:45 AM	0	0	0	25	205	50	0	140	49	13	219	0	701
9:00 AM	0	0	0	36	182	42	0	130	52	16	191	0	649
9:15 AM	0	0	0	16	154	46	0	134	33	17	201	0	601
9:30 AM	0	0	0	23	133	43	0	129	44	23	205	0	600
9:45 AM	0	0	0	26	147	50	0	134	36	21	220	0	634

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	231	1989	520	0	1435	459	204	2598	0	7436
APPROACH %'s :				8.43%	72.59%	18.98%	0.00%	75.77%	24.23%	7.28%	92.72%	0.00%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	0	0	98	805	178	0	531	175	63	842	0	2692
PEAK HR FACTOR :		0.000			0.898			0.934			0.877		0.960

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

CARS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
3:00 PM	0	0	0	7	48	14	0	180	28	21	160	0	458
3:15 PM	0	0	0	13	48	20	0	198	30	11	158	0	478
3:30 PM	0	0	0	11	55	18	0	217	26	19	187	0	533
3:45 PM	0	0	0	16	59	23	0	216	33	27	158	0	532
4:00 PM	0	0	0	5	49	22	0	221	19	17	174	0	507
4:15 PM	0	0	0	16	73	24	0	242	26	14	180	0	575
4:30 PM	0	0	0	9	31	39	0	262	25	17	155	0	538
4:45 PM	0	0	0	10	53	19	0	286	28	14	189	0	599
5:00 PM	0	0	0	6	45	26	0	283	40	6	181	0	587
5:15 PM	0	0	0	10	35	14	0	278	26	11	221	0	595
5:30 PM	0	0	0	14	31	29	0	255	29	7	207	0	572
5:45 PM	0	0	0	4	48	12	0	254	23	8	211	0	560

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	121	575	260	0	2892	333	172	2181	0	6534
APPROACH %'s :				12.66%	60.15%	27.20%	0.00%	89.67%	10.33%	7.31%	92.69%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	0	0	40	164	88	0	1102	123	38	798	0	2353
PEAK HR FACTOR :		0.000			0.890			0.948			0.901		0.982

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: Historical
N/S Street: Spring St
E/W Street: 1st St
DATE: 3/23/2017 DAY: Thursday
CITY: Los Angeles

AM

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	23	6	28	13	3	18	3	26
7:15 AM	16	11	23	17	2	23	13	22
7:30 AM	16	7	42	16	6	15	15	27
7:45 AM	18	8	22	24	6	7	10	20
8:00 AM	12	13	38	21	11	13	14	22
8:15 AM	13	10	27	31	18	16	16	23
8:30 AM	22	14	49	19	16	14	18	24
8:45 AM	17	11	29	23	8	15	12	20
9:00 AM	20	23	40	33	21	9	20	24
9:15 AM	15	7	28	24	13	12	17	22
9:30 AM	21	11	32	24	14	17	9	22
9:45 AM	20	14	44	27	27	8	12	17
TOTALS	**213**	**135**	**402**	**272**	**145**	**167**	**159**	**269**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	3	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	2	5	0	0	0	0
8:30 AM	0	0	3	1	1	0	1	1
8:45 AM	0	0	1	4	0	0	0	0
9:00 AM	0	0	3	0	1	1	0	2
9:15 AM	0	0	2	1	1	0	0	0
9:30 AM	0	0	2	8	0	1	0	0
9:45 AM	0	0	1	1	1	0	0	0
TOTALS	**0**	**0**	**15**	**23**	**4**	**2**	**1**	**3**

PM

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	6	16	31	44	10	8	5	19
3:15 PM	13	9	29	25	16	8	4	14
3:30 PM	16	13	59	30	20	10	6	12
3:45 PM	12	10	49	27	22	15	4	16
4:00 PM	15	4	32	34	20	10	11	13
4:15 PM	12	18	36	30	23	9	12	21
4:30 PM	39	14	47	41	25	17	13	24
4:45 PM	15	16	25	22	24	14	7	28
5:00 PM	30	25	38	37	34	12	20	28
5:15 PM	16	10	50	37	14	12	11	15
5:30 PM	13	12	40	26	19	11	13	13
5:45 PM	7	11	36	17	22	9	5	14
TOTALS	**194**	**158**	**472**	**370**	**249**	**135**	**111**	**217**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	2	2	0	0	0	1
3:15 PM	0	0	0	4	0	0	0	0
3:30 PM	0	1	2	5	0	1	0	0
3:45 PM	0	0	2	0	0	0	0	0
4:00 PM	0	0	2	0	0	0	0	0
4:15 PM	0	0	0	2	0	0	0	1
4:30 PM	0	0	9	1	0	0	0	0
4:45 PM	0	0	2	2	0	2	0	0
5:00 PM	0	0	3	0	3	0	0	0
5:15 PM	0	0	0	9	3	0	0	0
5:30 PM	0	0	1	3	0	0	1	0
5:45 PM	0	0	3	0	0	1	0	0
TOTALS	**0**	**1**	**26**	**28**	**6**	**4**	**1**	**2**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BIKES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
7:00 AM	0	0	0	0	4	0	0	0	0	3	1	0	8
7:15 AM	0	0	0	0	1	2	0	3	0	2	0	0	8
7:30 AM	0	1	0	0	5	0	0	3	0	3	1	0	13
7:45 AM	0	0	0	0	6	1	0	3	0	5	2	0	17
8:00 AM	0	0	0	0	4	0	0	4	1	0	1	0	10
8:15 AM	0	0	0	0	6	0	0	1	0	5	0	1	13
8:30 AM	1	0	0	1	6	1	0	1	0	0	3	0	13
8:45 AM	0	0	0	0	8	0	0	2	1	1	2	0	14
9:00 AM	0	2	0	0	9	0	1	3	0	0	2	0	17
9:15 AM	0	0	0	0	5	0	0	1	0	1	0	0	7
9:30 AM	0	0	0	0	2	0	0	4	2	0	2	0	10
9:45 AM	1	1	0	0	1	1	0	3	0	1	2	0	10
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	4	0	1	57	5	1	28	4	21	16	1	140
APPROACH %'s :	33.33%	66.67%	0.00%	1.59%	90.48%	7.94%	3.03%	84.85%	12.12%	55.26%	42.11%	2.63%	
PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	1	2	0	1	29	1	1	7	1	6	7	1	57
PEAK HR FACTOR :	0.375			0.861			0.563			0.583			0.838

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

City: Los Angeles

BIKES

PM

Day: Thursday

Date: 3/23/2017

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
3:00 PM	0	0	0	0	4	0	0	4	2	1	0	0	11
3:15 PM	0	2	0	0	2	1	1	4	1	0	6	0	17
3:30 PM	0	1	0	0	3	0	0	3	0	1	2	0	10
3:45 PM	0	0	0	0	3	0	0	4	0	0	3	0	10
4:00 PM	0	1	0	1	2	0	2	4	0	0	3	0	13
4:15 PM	0	0	0	0	7	0	0	7	0	0	0	0	14
4:30 PM	0	1	0	1	1	1	0	2	0	0	3	0	9
4:45 PM	0	1	0	1	5	1	0	2	0	0	1	0	11
5:00 PM	0	1	0	1	5	0	1	5	0	0	1	0	14
5:15 PM	0	1	0	0	5	0	0	4	0	0	3	0	13
5:30 PM	0	0	0	0	8	0	0	2	0	1	3	0	14
5:45 PM	0	1	0	0	8	1	1	5	1	1	2	0	20
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	9	0	4	53	4	5	46	4	4	27	0	156
APPROACH %'s :	0.00%	100.00%	0.00%	6.56%	86.89%	6.56%	9.09%	83.64%	7.27%	12.90%	87.10%	0.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	3	0	2	23	1	1	13	0	1	8	0	52
PEAK HR FACTOR :		0.750			0.813			0.583			0.563		0.929

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
7:00 AM	0	0	0	0	17	24	13	6	0	3	4	0	67
7:15 AM	0	0	0	0	13	22	12	7	1	5	5	1	66
7:30 AM	0	0	0	1	9	21	15	5	0	2	2	1	56
7:45 AM	0	0	0	0	11	24	14	7	0	5	2	0	63
8:00 AM	0	0	0	0	13	27	13	6	0	4	2	2	67
8:15 AM	0	0	0	0	12	17	13	8	0	3	6	0	59
8:30 AM	0	0	0	0	10	26	14	7	1	4	3	0	65
8:45 AM	0	0	0	0	12	20	11	6	1	3	3	0	56
9:00 AM	0	0	0	0	10	24	13	6	0	2	2	0	57
9:15 AM	0	0	0	0	10	18	11	5	0	4	2	1	51
9:30 AM	0	0	0	0	9	12	13	7	0	1	1	0	43
9:45 AM	0	0	0	0	7	10	11	3	0	2	2	0	35

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	1	133	245	153	73	3	38	34	5	685
APPROACH %'s :				0.26%	35.09%	64.64%	66.81%	31.88%	1.31%	49.35%	44.16%	6.49%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	0	0	0	44	87	51	27	2	12	14	0	237
PEAK HR FACTOR :		0.000			0.910			0.909			0.722		0.912

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
3:00 PM	0	0	0	0	15	7	14	3	0	2	2	0	43
3:15 PM	0	0	0	0	17	10	12	7	0	3	3	0	52
3:30 PM	0	0	0	1	9	16	15	8	0	2	3	0	54
3:45 PM	0	0	0	1	13	11	18	5	0	3	6	0	57
4:00 PM	0	0	0	1	15	16	14	4	1	3	3	0	57
4:15 PM	0	0	0	0	9	17	26	7	0	4	3	0	66
4:30 PM	0	0	0	0	18	16	24	4	2	5	3	0	72
4:45 PM	0	0	0	1	8	18	23	6	1	3	1	0	61
5:00 PM	0	0	0	0	11	15	22	4	3	4	2	0	61
5:15 PM	0	0	0	1	8	17	23	7	2	4	5	0	67
5:30 PM	0	0	0	0	16	11	25	6	2	3	2	0	65
5:45 PM	0	0	0	0	6	17	22	7	0	2	2	0	56

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	5	145	171	238	68	11	38	35	0	711
APPROACH %'s :				1.56%	45.17%	53.27%	75.08%	21.45%	3.47%	52.05%	47.95%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	0	0	2	43	61	93	23	8	14	10	0	254
PEAK HR FACTOR :	0.000			0.981			0.939			0.667			0.948

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
7:00 AM	0	0	0	0	3	0	0	2	0	0	7	0	12
7:15 AM	0	0	0	0	4	0	0	6	0	1	0	0	11
7:30 AM	0	0	0	0	8	2	0	2	0	0	12	0	24
7:45 AM	0	0	0	1	6	0	0	4	1	1	1	0	14
8:00 AM	0	0	0	1	0	0	0	8	1	0	4	0	14
8:15 AM	0	0	0	0	2	2	0	4	1	2	4	0	15
8:30 AM	0	0	0	2	1	0	0	6	1	0	3	0	13
8:45 AM	0	0	0	1	2	1	0	7	1	1	8	0	21
9:00 AM	0	0	0	0	1	1	0	1	1	1	7	0	12
9:15 AM	0	0	0	0	4	1	0	6	0	1	10	0	22
9:30 AM	0	0	0	0	4	1	0	3	0	0	15	0	23
9:45 AM	0	0	0	0	2	2	0	4	2	1	9	0	20

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	5	37	10	0	53	8	8	80	0	201
APPROACH %'s :				9.62%	71.15%	19.23%	0.00%	86.89%	13.11%	9.09%	90.91%	0.00%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	0	0	3	6	4	0	18	4	4	22	0	61
PEAK HR FACTOR :		0.000			0.813			0.688			0.722		0.726

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Spring St			Spring St			1st St			1st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	3	1	1	3	0	1	2	0	
3:00 PM	0	0	0	1	0	1	0	12	0	1	5	0	20
3:15 PM	0	0	0	0	3	1	0	11	2	0	3	0	20
3:30 PM	0	0	0	1	0	0	0	4	1	0	4	0	10
3:45 PM	0	0	0	1	3	1	0	4	2	0	4	0	15
4:00 PM	0	0	0	0	4	0	0	10	1	0	1	0	16
4:15 PM	0	0	0	0	0	0	0	7	0	0	2	0	9
4:30 PM	0	0	0	0	1	1	0	6	0	0	8	0	16
4:45 PM	0	0	0	0	6	0	0	6	0	1	4	0	17
5:00 PM	0	0	0	0	1	1	0	3	1	0	3	0	9
5:15 PM	0	0	0	0	0	0	0	4	0	0	2	0	6
5:30 PM	0	0	0	0	1	0	0	5	0	0	4	0	10
5:45 PM	0	0	0	0	3	0	0	3	1	0	5	0	12

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	3	22	5	0	75	8	2	45	0	160
APPROACH %'s :				10.00%	73.33%	16.67%	0.00%	90.36%	9.64%	4.26%	95.74%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	0	0	0	8	1	0	18	1	1	13	0	42
PEAK HR FACTOR :	0.000			0.375			0.792			0.700			0.618

CONTROL : Signalized

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Spring St

East/West Temple St

Day: Thursday Date: March 23, 2017 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	6	86	95	90
BIKES	7	108	14	15
BUSES	395	634	105	173

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	17	7.30	355	8.45	198	8.15	264	7.00
PM PK 15 MIN	25	16.15	151	16.45	251	16.30	280	15.00
AM PK HOUR	60	7.00	1190	8.15	716	7.45	979	7.00
PM PK HOUR	99	16.15	567	16.45	969	16.30	1024	15.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	0	59	1	60	*7-8*	42	725	139	906	966	162	0	183	2
8-9	0	51	0	51	*8-9*	76	887	184	1147	1198	262	1	154	4
9-10	0	49	0	49	*9-10*	53	721	178	952	1001	210	2	114	3
15-16	0	56	0	56	*15-16*	41	349	95	485	541	152	0	103	9
16-17	0	91	0	91	*16-17*	38	392	74	504	595	237	0	173	5
17-18	0	93	1	94	*17-18*	49	363	120	532	626	187	1	123	8
TOTAL	0	399	2	401	TOTAL	299	3437	790	4526	4927	1210	4	850	31

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	0	454	143	597	*7-8*	51	928	0	979	1576	230	0	105	2
8-9	0	517	173	690	*8-9*	65	780	0	845	1535	157	4	104	0
9-10	0	524	149	673	*9-10*	78	848	0	926	1599	142	0	91	1
15-16	0	676	51	727	*15-16*	52	971	1	1024	1751	97	1	67	1
16-17	0	843	83	926	*16-17*	61	826	0	887	1813	139	2	121	1
17-18	0	850	63	913	*17-18*	45	952	0	997	1910	97	0	87	1
TOTAL	0	3864	662	4526	TOTAL	352	5305	1	5658	10184	862	7	575	6

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

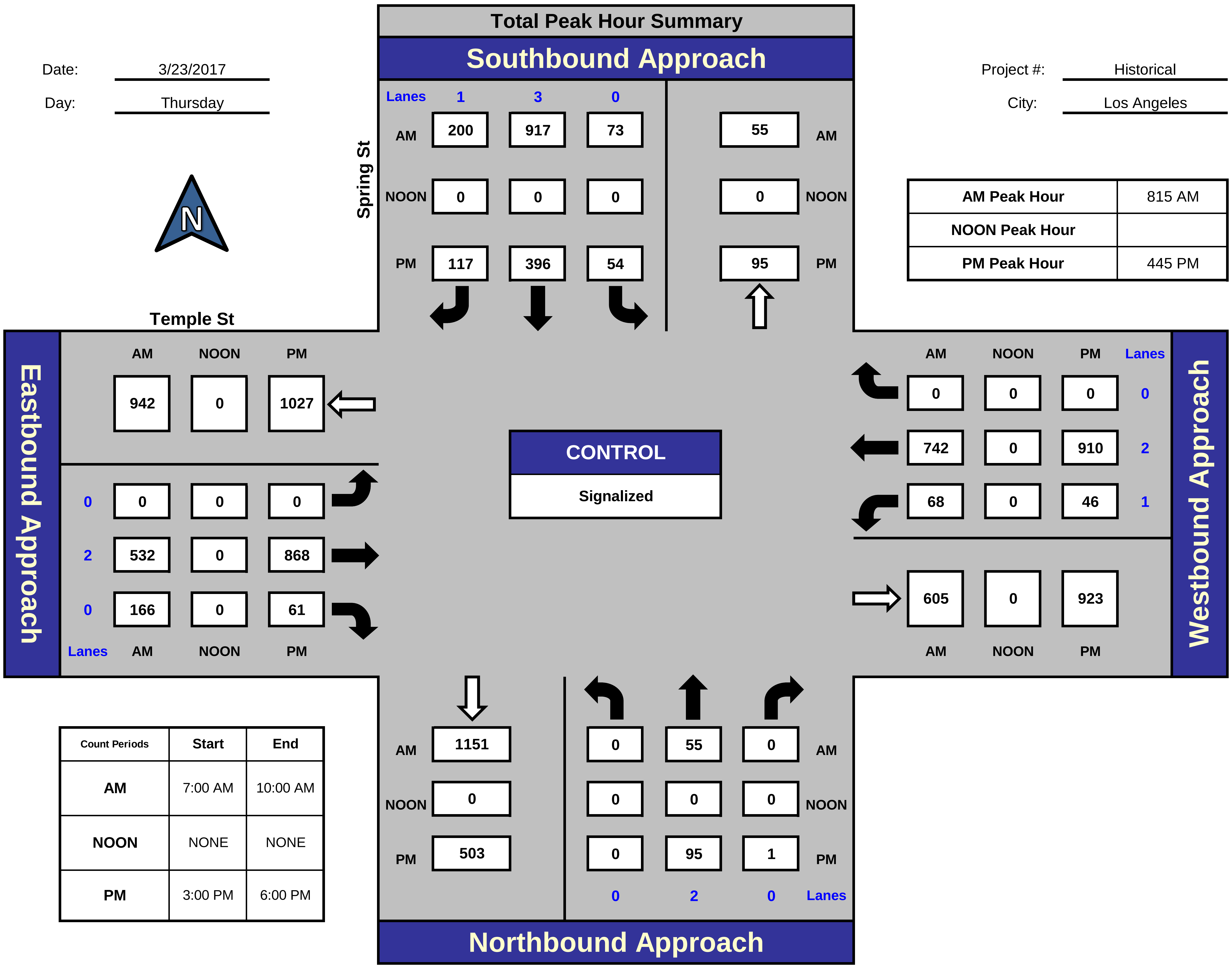
Spring St and Temple St , Los Angeles

Date: 3/23/2017

Day: Thursday

Project #: Historical

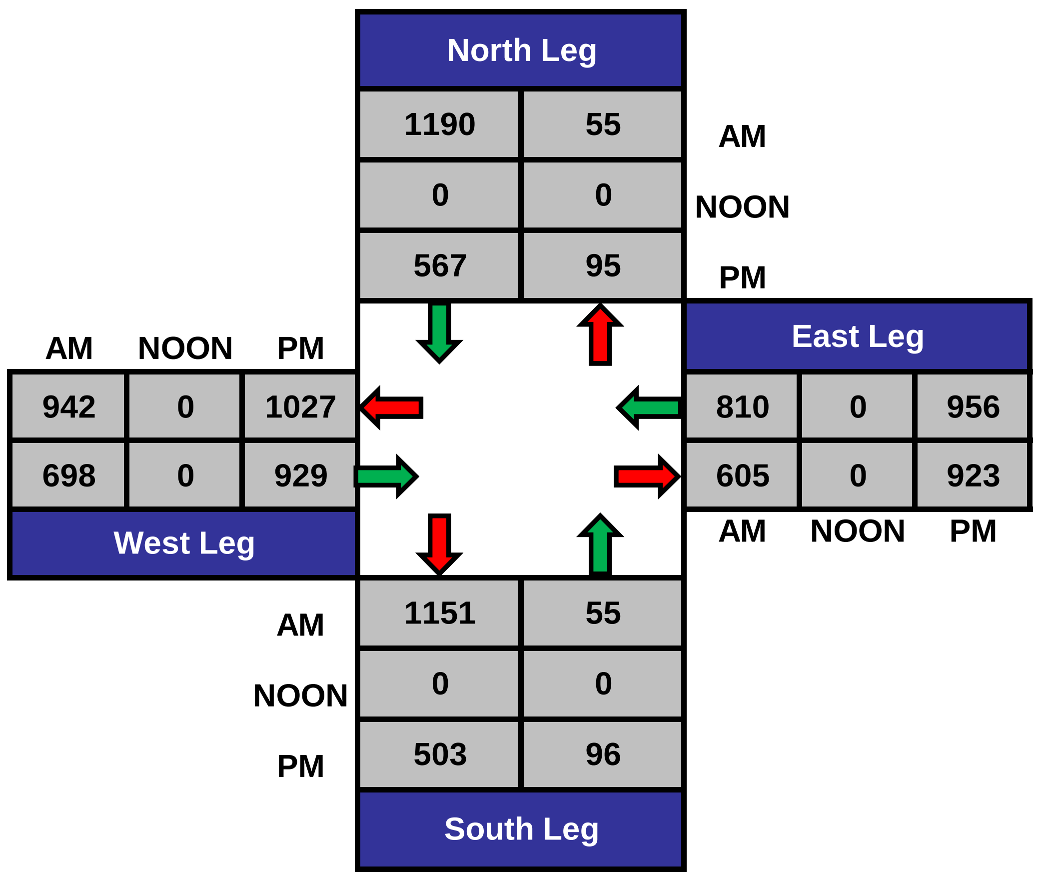
City: Los Angeles



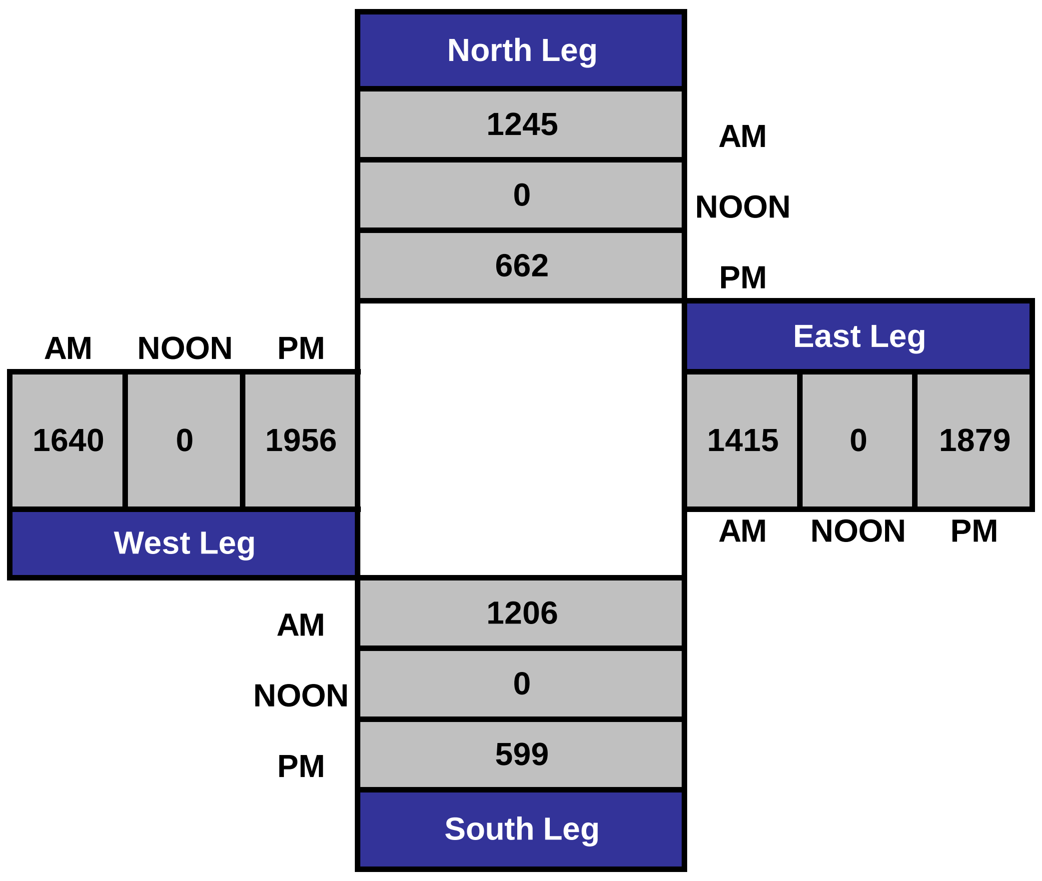
AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	10:00 AM
NOON	NONE	NONE
PM	3:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

TOTALS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
7:00 AM	0	13	0	6	168	36	0	97	23	12	252	0	607
7:15 AM	0	14	0	8	154	29	0	109	40	6	244	0	604
7:30 AM	0	16	1	15	202	34	0	111	31	21	233	0	664
7:45 AM	0	16	0	13	201	40	0	137	49	12	199	0	667
8:00 AM	0	10	0	11	177	38	0	117	39	18	220	0	630
8:15 AM	0	16	0	19	255	53	0	156	42	16	191	0	748
8:30 AM	0	15	0	15	193	31	0	123	53	17	179	0	626
8:45 AM	0	10	0	31	262	62	0	121	39	14	190	0	729
9:00 AM	0	14	0	8	207	54	0	132	32	21	182	0	650
9:15 AM	0	11	0	19	164	36	0	129	43	18	226	0	646
9:30 AM	0	15	0	11	170	40	0	123	35	26	220	0	640
9:45 AM	0	9	0	15	180	48	0	140	39	13	220	0	664

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	159	1	171	2333	501	0	1495	465	194	2556	0	7875
APPROACH %'s :	0.00%	99.38%	0.63%	5.69%	77.64%	16.67%	0.00%	76.28%	23.72%	7.05%	92.95%	0.00%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	55	0	73	917	200	0	532	166	68	742	0	2753
PEAK HR FACTOR :		0.859			0.838			0.881			0.978		0.920

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

TOTALS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
3:00 PM	0	11	0	14	80	23	0	155	13	11	269	0	576
3:15 PM	0	17	0	11	88	25	0	146	15	12	247	1	562
3:30 PM	0	13	0	9	90	22	0	187	9	19	240	0	589
3:45 PM	0	15	0	7	91	25	0	188	14	10	215	0	565
4:00 PM	0	17	0	9	86	14	0	195	18	11	212	0	562
4:15 PM	0	25	0	7	98	13	0	208	23	14	216	0	604
4:30 PM	0	25	0	9	93	24	0	226	25	19	197	0	618
4:45 PM	0	24	0	13	115	23	0	214	17	17	201	0	624
5:00 PM	0	24	1	19	90	34	0	222	19	10	206	0	625
5:15 PM	0	24	0	11	88	30	0	237	9	8	246	0	653
5:30 PM	0	23	0	11	103	30	0	195	16	11	257	0	646
5:45 PM	0	22	0	8	82	26	0	196	19	16	243	0	612

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	240	1	128	1104	289	0	2369	197	158	2749	1	7236
APPROACH %'s :	0.00%	99.59%	0.41%	8.42%	72.58%	19.00%	0.00%	92.32%	7.68%	5.43%	94.53%	0.03%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	95	1	54	396	117	0	868	61	46	910	0	2548
PEAK HR FACTOR :		0.960			0.939			0.944			0.892		0.975

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

CARS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
7:00 AM	0	0	0	6	121	36	0	87	23	10	242	0	525
7:15 AM	0	0	0	8	123	29	0	100	39	4	238	0	541
7:30 AM	0	0	0	15	165	33	0	104	30	19	220	0	586
7:45 AM	0	0	0	13	169	40	0	131	48	10	191	0	602
8:00 AM	0	0	0	10	142	37	0	108	39	15	213	0	564
8:15 AM	0	0	0	17	217	53	0	145	41	14	183	0	670
8:30 AM	0	0	0	15	163	31	0	115	51	14	175	0	564
8:45 AM	0	0	0	31	228	62	0	112	35	12	180	0	660
9:00 AM	0	0	0	7	177	54	0	126	31	18	172	0	585
9:15 AM	0	0	0	19	138	34	0	123	41	14	217	0	586
9:30 AM	0	0	0	11	143	38	0	117	34	23	212	0	578
9:45 AM	0	0	0	15	159	47	0	135	39	11	216	0	622

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	167	1945	494	0	1403	451	164	2459	0	7083
APPROACH %'s :				6.41%	74.64%	18.96%	0.00%	75.67%	24.33%	6.25%	93.75%	0.00%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	0	0	70	785	200	0	498	158	58	710	0	2479
PEAK HR FACTOR :		0.000			0.822			0.882			0.975		0.925

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

CARS

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
3:00 PM	0	0	0	11	53	22	0	149	11	10	266	0	522
3:15 PM	0	0	0	10	68	25	0	139	13	10	237	0	502
3:30 PM	0	0	0	8	64	21	0	176	9	16	234	0	528
3:45 PM	0	0	0	6	65	24	0	176	12	6	206	0	495
4:00 PM	0	0	0	9	55	14	0	188	17	8	203	0	494
4:15 PM	0	0	0	7	72	13	0	203	22	10	205	0	532
4:30 PM	0	0	0	9	62	24	0	218	25	17	186	0	541
4:45 PM	0	0	0	11	91	23	0	211	16	15	193	0	560
5:00 PM	0	0	0	18	65	34	0	217	17	8	198	0	557
5:15 PM	0	0	0	11	66	30	0	229	8	6	235	0	585
5:30 PM	0	0	0	11	77	29	0	190	16	8	248	0	579
5:45 PM	0	0	0	8	58	26	0	192	18	14	233	0	549
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	119	796	285	0	2288	184	128	2644	0	6444
APPROACH %'s :				9.92%	66.33%	23.75%	0.00%	92.56%	7.44%	4.62%	95.38%	0.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	0	0	51	299	116	0	847	57	37	874	0	2281
PEAK HR FACTOR :		0.000			0.932			0.954			0.890		0.975

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: Historical
N/S Street: Spring St
E/W Street: Temple St
DATE: 3/23/2017 DAY: Thursday
CITY: Los Angeles

A M

Adult Pedestrians

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	43	10	18	13	3	20	17	37
7:15 AM	32	23	13	27	5	28	23	49
7:30 AM	31	11	19	25	7	17	12	52
7:45 AM	19	14	21	26	8	17	11	29
8:00 AM	23	26	15	36	10	19	16	35
8:15 AM	29	8	20	38	10	17	7	25
8:30 AM	22	7	37	60	10	14	6	28
8:45 AM	26	13	12	44	6	18	9	31
9:00 AM	21	8	27	35	20	7	7	36
9:15 AM	16	12	32	23	13	9	18	20
9:30 AM	18	9	28	20	10	13	17	13
9:45 AM	20	10	30	15	10	9	19	12
TOTALS	**300**	**151**	**272**	**362**	**112**	**188**	**162**	**367**

School-Aged Pedestrians

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	1	0	0	0	1	0	0
8:00 AM	3	0	0	0	0	0	0	1
8:15 AM	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	2
9:00 AM	0	0	0	1	0	1	0	0
9:15 AM	0	2	0	0	0	0	0	0
9:30 AM	0	1	1	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
TOTALS	**5**	**4**	**1**	**2**	**0**	**3**	**0**	**4**

P M

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	10	11	23	9	7	8	13	21
3:15 PM	7	9	35	13	4	7	11	8
3:30 PM	15	11	15	5	18	5	16	11
3:45 PM	34	6	42	10	11	7	6	11
4:00 PM	20	14	49	17	12	5	15	8
4:15 PM	41	15	34	16	24	27	20	8
4:30 PM	33	17	38	13	13	12	30	13
4:45 PM	21	12	56	14	17	11	28	17
5:00 PM	36	15	63	9	18	11	24	13
5:15 PM	16	15	36	7	8	9	13	15
5:30 PM	13	8	30	8	9	19	14	7
5:45 PM	10	10	27	7	5	8	6	5
TOTALS	**256**	**143**	**448**	**128**	**146**	**129**	**196**	**137**

School-Aged Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	6	0	0	0	0	0	0	0
3:45 PM	3	0	0	0	0	1	0	1
4:00 PM	1	0	0	0	0	0	0	1
4:15 PM	2	0	0	0	0	1	0	0
4:30 PM	1	0	0	0	0	0	1	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	3	0	0	0	0	0	0	0
5:30 PM	1	0	0	0	0	0	0	0
5:45 PM	3	1	0	0	0	1	0	0
TOTALS	**21**	**1**	**0**	**1**	**0**	**3**	**1**	**2**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BIKES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
7:00 AM	0	0	0	0	4	0	0	0	0	0	1	0	5
7:15 AM	0	0	0	0	8	0	0	0	0	1	3	0	12
7:30 AM	0	0	0	0	3	0	0	0	0	1	0	0	4
7:45 AM	0	0	0	1	9	0	0	0	0	0	0	0	10
8:00 AM	0	0	0	0	2	0	0	1	0	0	0	0	3
8:15 AM	0	0	0	0	5	0	1	0	0	0	1	0	7
8:30 AM	0	0	0	0	8	0	0	0	0	0	1	0	9
8:45 AM	0	0	0	0	7	0	0	1	0	0	0	0	8
9:00 AM	0	0	0	0	4	0	0	0	1	0	0	0	5
9:15 AM	0	0	0	1	4	0	0	0	0	0	1	0	6
9:30 AM	0	1	0	1	1	0	0	1	1	0	0	0	5
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1	0	3	55	0	1	3	2	2	7	0	74
APPROACH %'s :	0.00%	100.00%	0.00%	5.17%	94.83%	0.00%	16.67%	50.00%	33.33%	22.22%	77.78%	0.00%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	0	0	0	24	0	1	1	1	0	2	0	29
PEAK HR FACTOR :		0.000			0.750			0.750			0.500		0.806

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BIKES

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
3:00 PM	0	1	0	0	2	0	0	2	0	0	0	0	5
3:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
3:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	1	0	0	0	0	1	1	0	3
4:00 PM	0	0	0	0	2	1	0	1	0	0	0	0	4
4:15 PM	0	0	0	0	6	0	0	1	0	0	0	0	7
4:30 PM	0	1	0	0	4	0	0	0	0	2	0	0	7
4:45 PM	0	0	1	0	5	0	0	1	0	0	0	0	7
5:00 PM	0	0	0	0	5	0	0	0	0	1	1	0	7
5:15 PM	0	1	0	0	1	0	0	1	0	0	0	0	3
5:30 PM	0	1	0	0	11	0	0	1	1	0	0	0	14
5:45 PM	0	1	0	0	8	1	0	0	0	0	0	0	10

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	5	1	0	48	2	0	7	1	4	2	0	70
APPROACH %'s :	0.00%	83.33%	16.67%	0.00%	96.00%	4.00%	0.00%	87.50%	12.50%	66.67%	33.33%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	2	1	0	22	0	0	3	1	1	1	0	31
PEAK HR FACTOR :	0.750			0.500			0.500			0.250			0.554

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
7:00 AM	0	13	0	0	42	0	0	6	0	2	5	0	68
7:15 AM	0	14	0	0	29	0	0	6	1	2	2	0	54
7:30 AM	0	16	1	0	32	0	0	5	1	1	4	0	60
7:45 AM	0	15	0	0	29	0	0	5	1	2	5	0	57
8:00 AM	0	10	0	0	32	0	0	7	0	3	2	0	54
8:15 AM	0	16	0	1	34	0	0	6	1	1	4	0	63
8:30 AM	0	15	0	0	27	0	0	5	1	3	3	0	54
8:45 AM	0	9	0	0	32	0	0	5	2	2	5	0	55
9:00 AM	0	14	0	0	27	0	0	4	0	2	5	0	52
9:15 AM	0	11	0	0	22	0	0	4	1	3	1	0	42
9:30 AM	0	15	0	0	20	0	0	3	1	3	3	0	45
9:45 AM	0	9	0	0	18	0	0	2	0	2	2	0	33

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	157	1	1	344	0	0	58	9	26	41	0	637
APPROACH %'s :	0.00%	99.37%	0.63%	0.29%	99.71%	0.00%	0.00%	86.57%	13.43%	38.81%	61.19%	0.00%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	54	0	1	120	0	0	20	4	8	17	0	224
PEAK HR FACTOR :	0.844			0.864			0.857			0.893			0.889

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

BUSES

City: Los Angeles

Date: 3/23/2017

PM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
3:00 PM	0	11	0	1	23	0	0	3	0	1	3	0	42
3:15 PM	0	17	0	0	20	0	0	2	2	2	5	0	48
3:30 PM	0	13	0	0	24	0	0	2	0	2	6	0	47
3:45 PM	0	14	0	0	22	0	0	3	1	3	9	0	52
4:00 PM	0	17	0	0	27	0	0	2	1	2	7	0	56
4:15 PM	0	25	0	0	25	0	0	2	1	3	8	0	64
4:30 PM	0	24	0	0	29	0	0	2	0	2	9	0	66
4:45 PM	0	24	0	0	24	0	0	2	1	2	8	0	61
5:00 PM	0	24	0	0	25	0	0	4	1	2	7	0	63
5:15 PM	0	24	0	0	21	0	0	3	1	2	8	0	59
5:30 PM	0	22	0	0	24	1	0	3	0	3	5	0	58
5:45 PM	0	22	0	0	23	0	0	1	1	1	6	0	54

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	237	0	1	287	1	0	29	9	25	81	0	670
APPROACH %'s :	0.00%	100.00%	0.00%	0.35%	99.31%	0.35%	0.00%	76.32%	23.68%	23.58%	76.42%	0.00%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	94	0	0	94	1	0	12	3	9	28	0	241
PEAK HR FACTOR :		0.979			0.950			0.750			0.925		0.956

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Thursday

HEAVY TRUCKS

City: Los Angeles

Date: 3/23/2017

AM

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
7:00 AM	0	0	0	0	5	0	0	4	0	0	5	0	14
7:15 AM	0	0	0	0	2	0	0	3	0	0	4	0	9
7:30 AM	0	0	0	0	5	1	0	2	0	1	9	0	18
7:45 AM	0	1	0	0	3	0	0	1	0	0	3	0	8
8:00 AM	0	0	0	1	3	1	0	2	0	0	5	0	12
8:15 AM	0	0	0	1	4	0	0	5	0	1	4	0	15
8:30 AM	0	0	0	0	3	0	0	3	1	0	1	0	8
8:45 AM	0	1	0	0	2	0	0	4	2	0	5	0	14
9:00 AM	0	0	0	1	3	0	0	2	1	1	5	0	13
9:15 AM	0	0	0	0	4	2	0	2	1	1	8	0	18
9:30 AM	0	0	0	0	7	2	0	3	0	0	5	0	17
9:45 AM	0	0	0	0	3	1	0	3	0	0	2	0	9

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2	0	3	44	7	0	34	5	4	56	0	155
APPROACH %'s :	0.00%	100.00%	0.00%	5.56%	81.48%	12.96%	0.00%	87.18%	12.82%	6.67%	93.33%	0.00%	

PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	1	0	2	12	0	0	14	4	2	15	0	50
PEAK HR FACTOR :		0.250			0.700			0.750			0.708		0.833

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

City: Los Angeles

HEAVY TRUCKS

PM

Day: Thursday

Date: 3/23/2017

NS/EW Streets:	Spring St			Spring St			Temple St			Temple St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	3	1	0	2	0	1	2	0	
3:00 PM	0	0	0	2	4	1	0	3	2	0	0	0	12
3:15 PM	0	0	0	1	0	0	0	5	0	0	5	1	12
3:30 PM	0	0	0	1	2	1	0	9	0	1	0	0	14
3:45 PM	0	1	0	1	4	1	0	9	1	1	0	0	18
4:00 PM	0	0	0	0	4	0	0	5	0	1	2	0	12
4:15 PM	0	0	0	0	1	0	0	3	0	1	3	0	8
4:30 PM	0	1	0	0	2	0	0	6	0	0	2	0	11
4:45 PM	0	0	0	2	0	0	0	1	0	0	0	0	3
5:00 PM	0	0	1	1	0	0	0	1	1	0	1	0	5
5:15 PM	0	0	0	0	1	0	0	5	0	0	3	0	9
5:30 PM	0	1	0	0	2	0	0	2	0	0	4	0	9
5:45 PM	0	0	0	0	1	0	0	3	0	1	4	0	9

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3	1	8	21	3	0	52	4	5	24	1	122
APPROACH %'s :	0.00%	75.00%	25.00%	25.00%	65.63%	9.38%	0.00%	92.86%	7.14%	16.67%	80.00%	3.33%	

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	1	1	3	3	0	0	9	1	0	8	0	26
PEAK HR FACTOR :	0.500			0.750			0.500			0.500			0.722

CONTROL : Signalized

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Judge John Aiso St/San Pedro St

East/West 1st St

Day: Thursday Date: 05/31/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	26	17	59	28
BIKES	19	11	47	33
BUSES	34	39	64	5

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
PM PK 15 MIN	277	17.45	65	16.00	287	16.30	167	17.45
PM PK HOUR	931	17.00	234	16.00	1080	16.15	649	17.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
15-16	87	240	91	418	*15-16*	22	135	34	191	609	250	7	91	1
16-17	120	314	89	523	*16-17*	33	150	51	234	757	268	11	178	0
17-18	233	585	113	931	*17-18*	25	122	38	185	1116	249	5	172	2
TOTAL	440	1139	293	1872	TOTAL	80	407	123	610	2482	767	23	441	3

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
15-16	89	611	110	810	*15-16*	62	420	39	521	1331	92	1	165	4
16-17	95	816	122	1033	*16-17*	66	455	51	572	1605	88	1	155	5
17-18	99	776	108	983	*17-18*	56	515	78	649	1632	86	3	163	4
TOTAL	283	2203	340	2826	TOTAL	184	1390	168	1742	4568	266	5	483	13

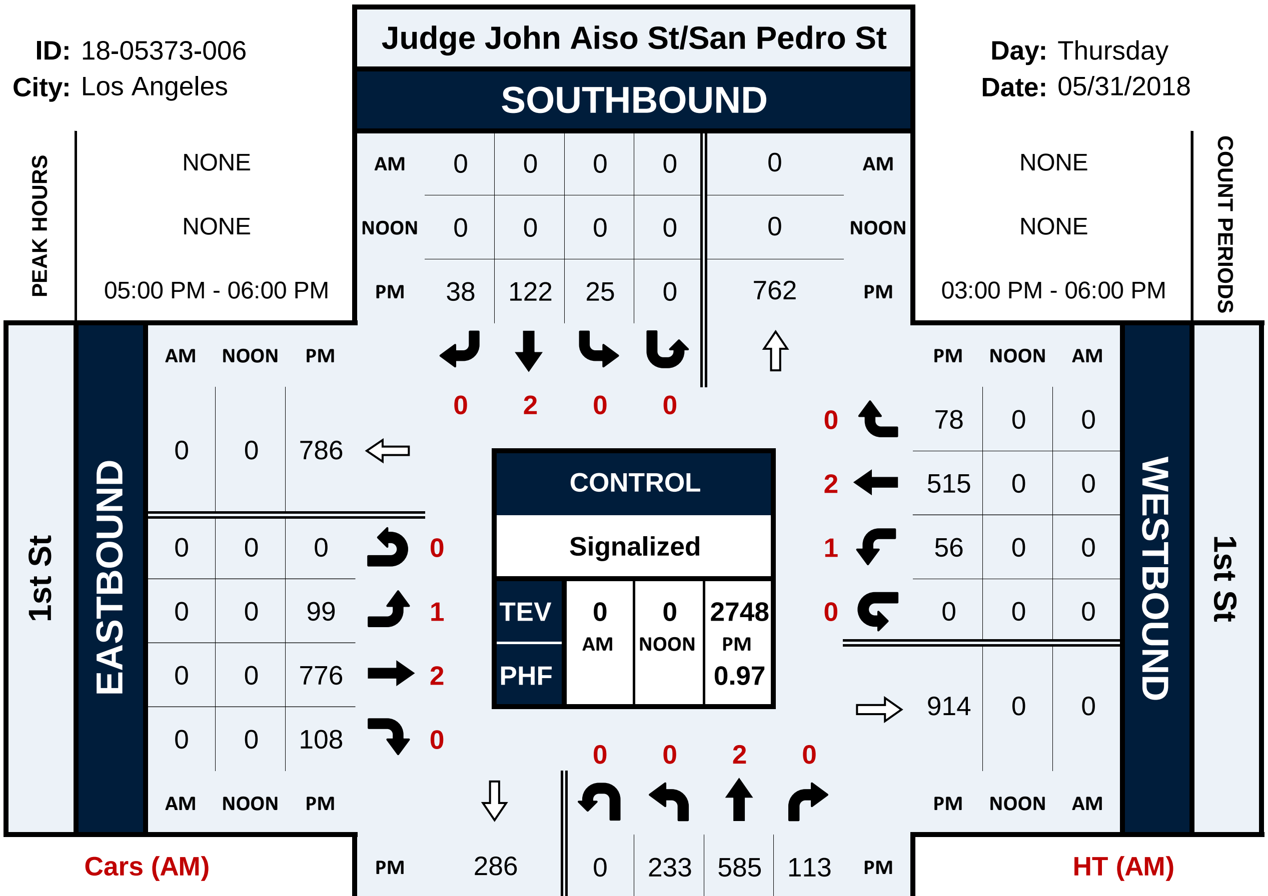
Prepared by National Data & Surveying Services

Judge John Aiso St/San Pedro St & 1st St

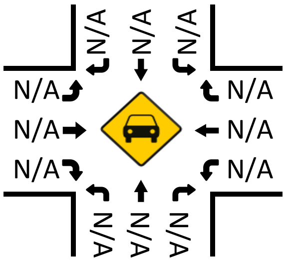
Peak Hour Turning Movement Count

ID: 18-05373-006
City: Los Angeles

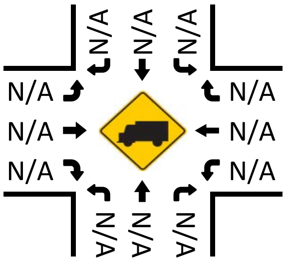
Day: Thursday
Date: 05/31/2018



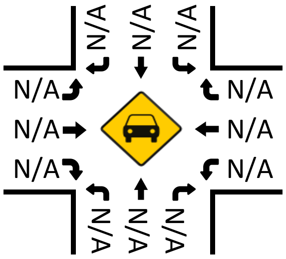
Cars (AM)



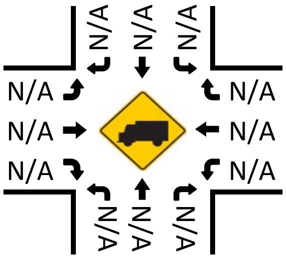
HT (AM)



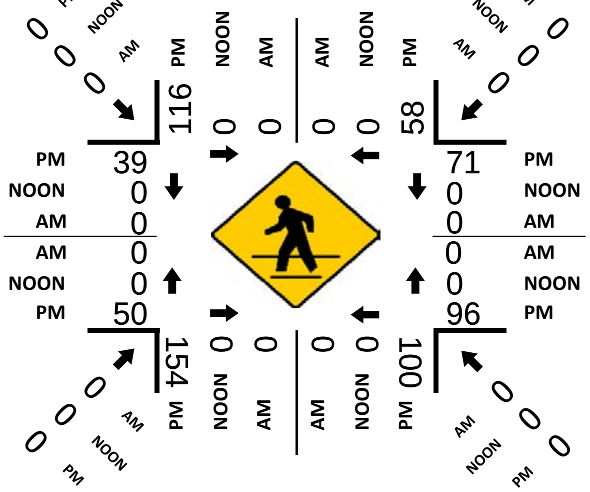
Cars (NOON)



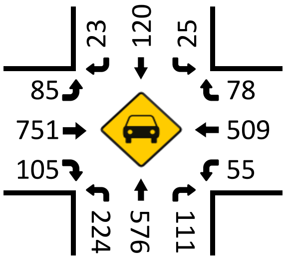
HT (NOON)



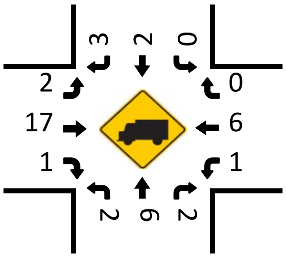
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Spring St

East/West 1st St

Day: Saturday Date: 05/19/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	6	25	18
BIKES	19	43	25	14
BUSES	0	140	93	25

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
PM PK 15 MIN	0	0.00	107	13.00	156	13.45	178	14.45
PM PK HOUR	0	0.00	389	12.30	580	13.00	605	13.15

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
12-13	0	0	0	0	*12-13*	43	242	81	366	366	155	23	121	12
13-14	0	0	0	0	*13-14*	35	220	103	358	358	129	13	110	6
14-15	0	0	0	0	*14-15*	42	232	101	375	375	166	15	96	0
TOTAL	0	0	0	0	TOTAL	120	694	285	1099	1099	450	51	327	18

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
12-13	27	466	73	566	*12-13*	26	380	6	412	978	96	7	92	9
13-14	29	471	80	580	*13-14*	38	542	4	584	1164	84	6	70	9
14-15	29	445	67	541	*14-15*	28	574	1	603	1144	72	1	65	10
TOTAL	85	1382	220	1687	TOTAL	92	1496	11	1599	3286	252	14	227	28

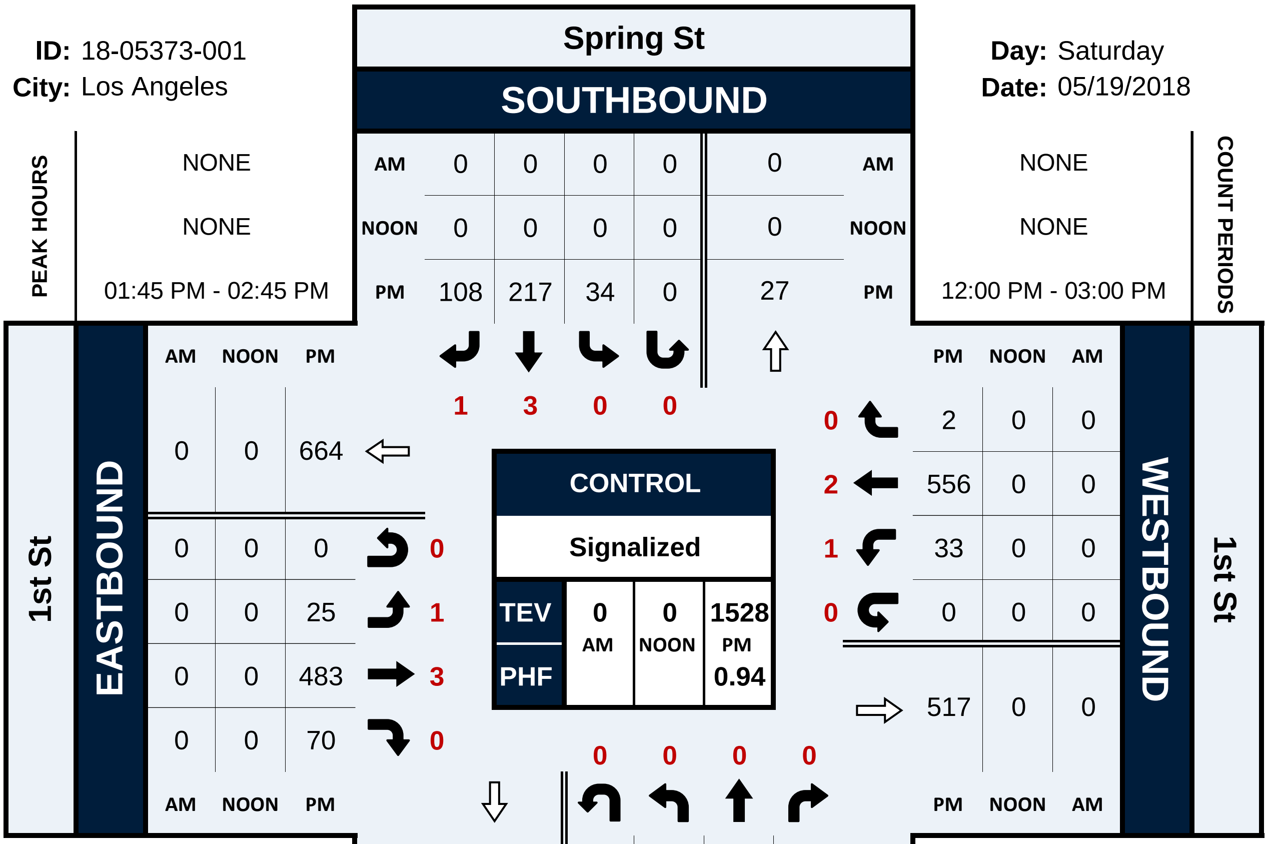
Prepared by National Data & Surveying Services

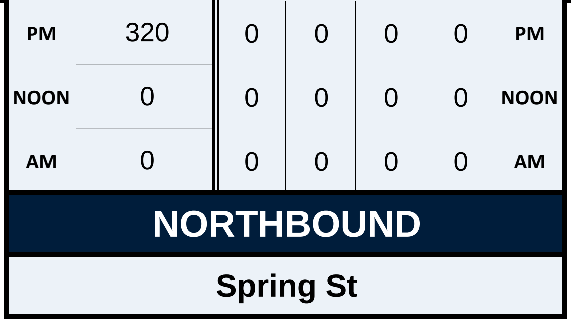
Spring St & 1st St

Peak Hour Turning Movement Count

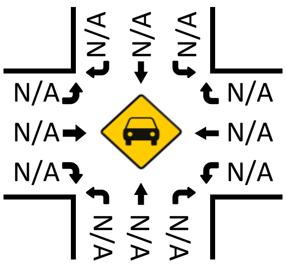
ID: 18-05373-001
City: Los Angeles

Day: Saturday
Date: 05/19/2018





Cars (AM)



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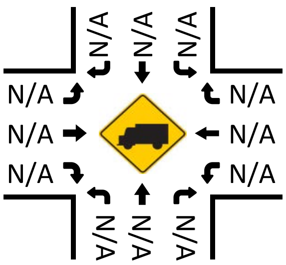
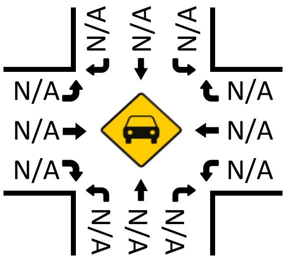
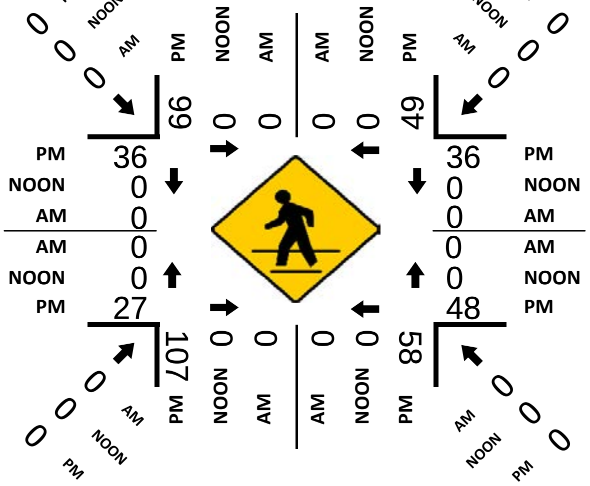


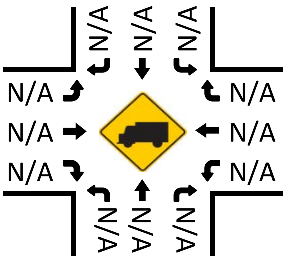
Cars (NOON)



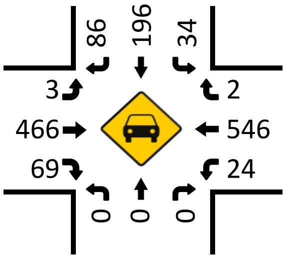
Pedestrians (Crosswalks)



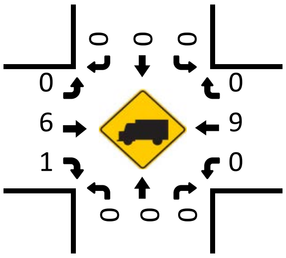
HT (NOON)



Cars (PM)



HT (PM)



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Broadway

East/West 1st St

Day: Saturday Date: 05/19/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	21	7	28	18
BIKES	15	28	18	14
BUSES	73	1	78	71

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
PM PK 15 MIN	109	13.45	126	12.45	161	12.45	193	14.45
PM PK HOUR	381	13.00	421	12.45	597	13.45	673	14.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	32	240	55	327
13-14	33	269	79	381
14-15	37	261	60	358
TOTAL	102	770	194	1066

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	38	250	81	369
13-14	45	248	89	382
14-15	33	242	115	390
TOTAL	116	740	285	1141

Hours	**TOTAL**	**XING S/L**		**XING N/L**	
	N-S	Ped	Sch	Ped	Sch
12-13	696	105	8	76	2
13-14	763	139	15	88	6
14-15	748	174	6	78	5
TOTAL	2207	418	29	242	13

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	90	473	29	592
13-14	85	456	18	559
14-15	88	453	28	569
TOTAL	263	1382	75	1720

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	19	391	62	472
13-14	17	519	112	648
14-15	24	555	94	673
TOTAL	60	1465	268	1793

Hours	**TOTAL**	**XING W/L**		**XING E/L**	
	E-W	Ped	Sch	Ped	Sch
12-13	1064	52	7	48	3
13-14	1207	64	4	98	7
14-15	1242	49	2	88	4
TOTAL	3513	165	13	234	14

Prepared by National Data & Surveying Services

Broadway & 1st St

Peak Hour Turning Movement Count

ID: 18-05373-002
City: Los Angeles

Day: Saturday
Date: 05/19/2018

PEAK HOURS	NONE	AM
	NONE	NOON
	01:45 PM - 02:45 PM	PM

AM	NONE	COUNT PERIODS
NOON	NONE	
PM	12:00 PM - 03:00 PM	

Broadway

SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	114	246	33	0	453	PM
	↲	↓	↳	↶	⇧	
	1	1	1	0		

1st St

EASTBOUND

AM	NOON	PM		
0	0	706	⇦	
0	0	0	↶	0
0	0	93	↱	1
0	0	480	→	3
0	0	24	↴	0
AM	NOON	PM		

CONTROL

Signalized

	AM	NOON	PM
TEV	**0**	**0**	**2028**
PHF			**0.96**

1st St

WESTBOUND

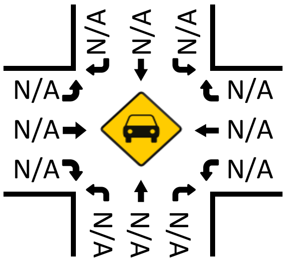
		PM	NOON	AM
0	↰	89	0	0
3	←	554	0	0
1	↲	19	0	0
0	↶	1	0	0
	⇨	580	0	0
		PM	NOON	AM

		0	1	3	0	
	⇩	↶	↰	↑	↱	
PM	289	0	38	271	66	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

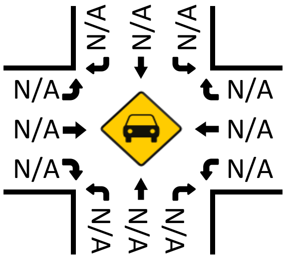
NORTHBOUND

Broadway

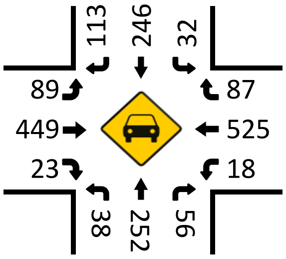
Cars (AM)



Cars (NOON)



Cars (PM)



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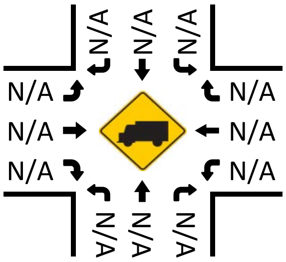

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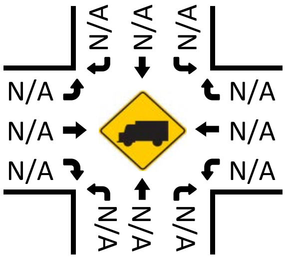
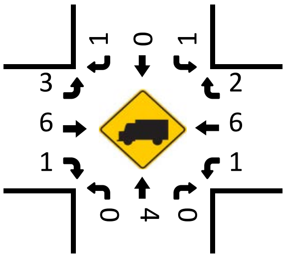
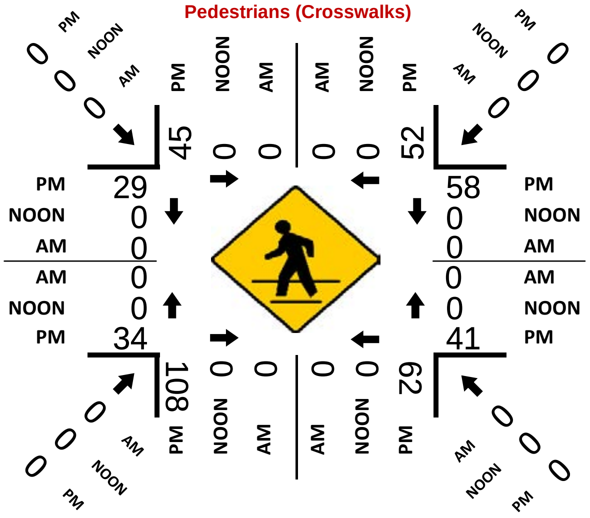


HT (PM)



Pedestrians (Crosswalks)



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Hill St

East/West 1st St

Day: Saturday Date: 05/19/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	13	15	31	13
BIKES	11	14	6	7
BUSES	45	56	69	71

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
PM PK 15 MIN	93	14.00	165	14.45	159	12.45	187	14.45
PM PK HOUR	335	14.00	612	12.00	570	13.45	708	14.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
12-13	30	167	70	267	*12-13*	88	458	66	612	879	138	10	65	0
13-14	23	202	63	288	*13-14*	88	396	71	555	843	135	17	59	4
14-15	31	210	94	335	*14-15*	72	429	88	589	924	198	8	70	0
TOTAL	84	579	227	890	TOTAL	248	1283	225	1756	2646	471	35	194	4

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
12-13	81	430	39	550	*12-13*	36	421	38	495	1045	77	3	85	1
13-14	110	406	29	545	*13-14*	31	574	38	643	1188	120	8	59	5
14-15	122	401	41	564	*14-15*	35	629	44	708	1272	146	10	72	2
TOTAL	313	1237	109	1659	TOTAL	102	1624	120	1846	3505	343	21	216	8

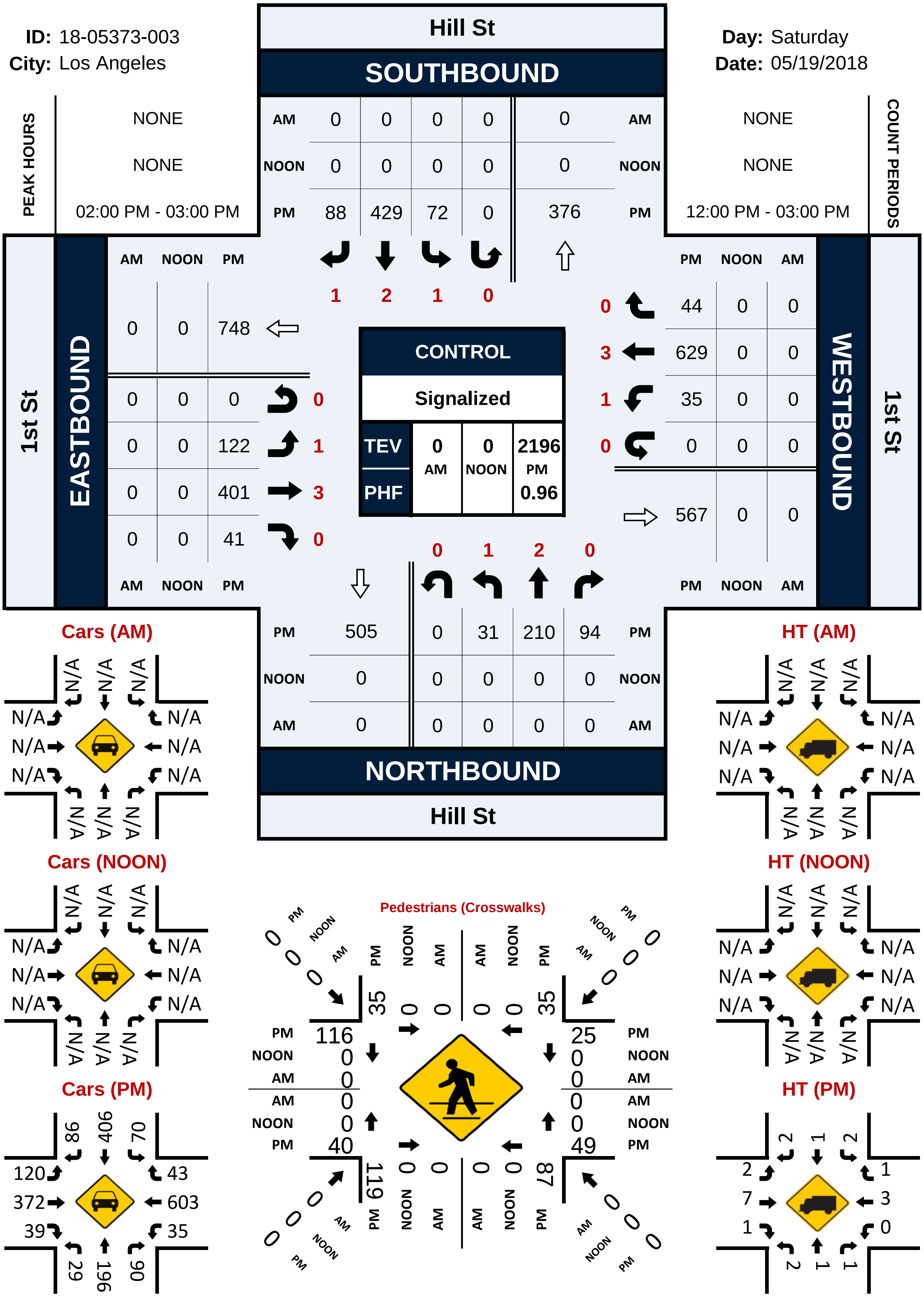
Prepared by National Data & Surveying Services

Hill St & 1st St

Peak Hour Turning Movement Count

ID: 18-05373-003
City: Los Angeles

Day: Saturday
Date: 05/19/2018



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Broadway

East/West Temple St

Day: Saturday Date: 05/19/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	21	23	14	18
BIKES	9	26	6	4
BUSES	57	2	7	10

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
PM PK 15 MIN	121	14.30	199	13.30	116	13.30	311	13.00
PM PK HOUR	439	12.45	728	13.15	426	12.45	1214	13.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
12-13	38	308	26	372	*12-13*	58	316	235	609	981	34	0	42	5
13-14	54	326	45	425	*13-14*	61	333	290	684	1109	46	3	38	0
14-15	52	320	47	419	*14-15*	49	326	300	675	1094	34	1	37	3
TOTAL	144	954	118	1216	TOTAL	168	975	825	1968	3184	114	4	117	8

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
12-13	36	330	30	396	*12-13*	31	763	79	873	1269	24	4	20	1
13-14	38	349	29	416	*13-14*	43	1073	98	1214	1630	22	0	37	0
14-15	30	318	32	380	*14-15*	42	961	108	1111	1491	7	0	36	1
TOTAL	104	997	91	1192	TOTAL	116	2797	285	3198	4390	53	4	93	2

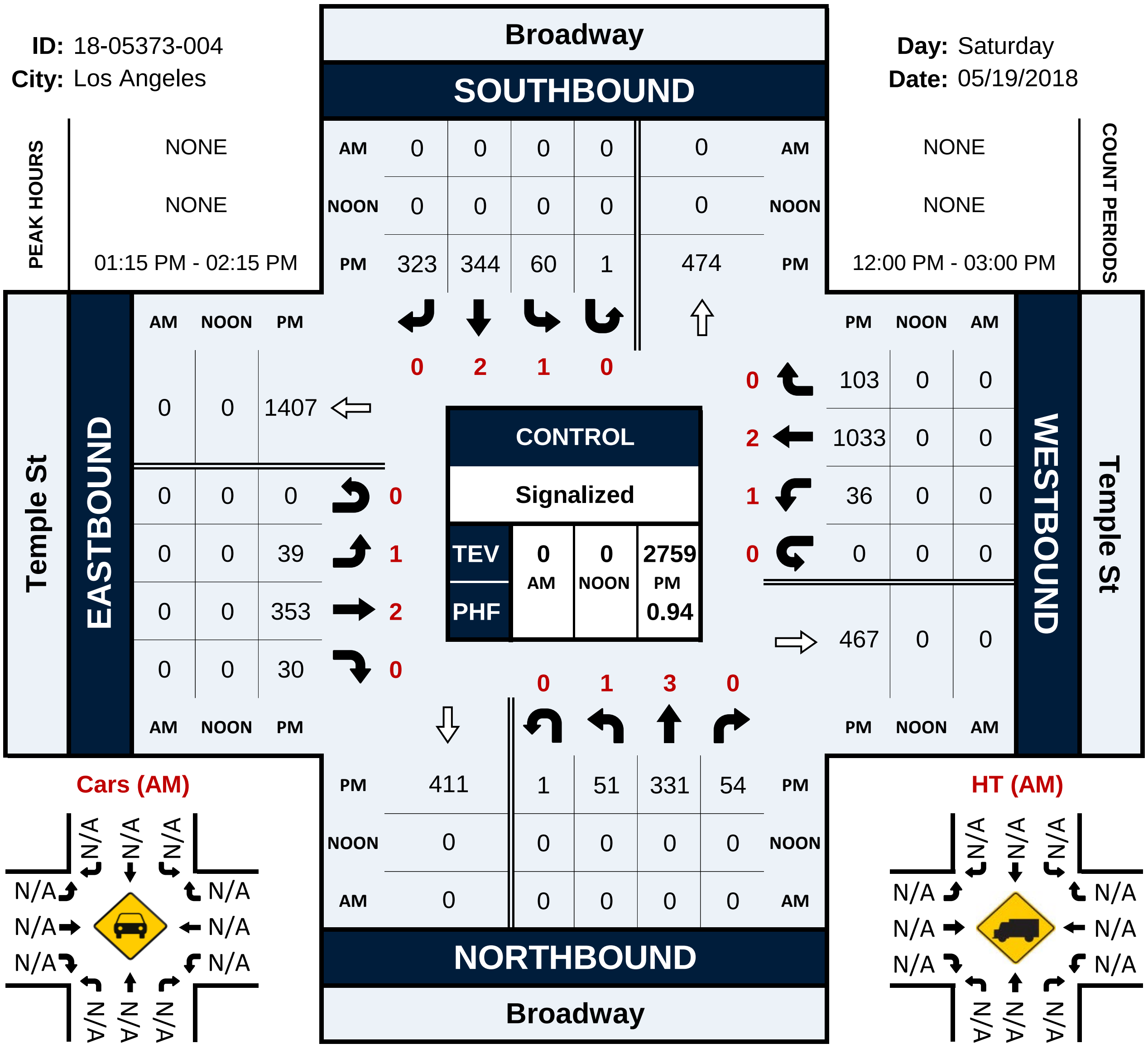
Prepared by National Data & Surveying Services

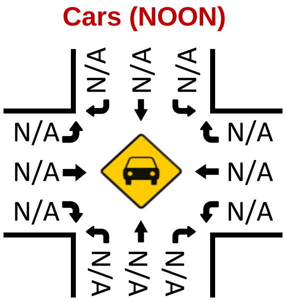
Broadway & Temple St

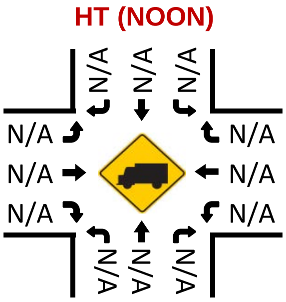
Peak Hour Turning Movement Count

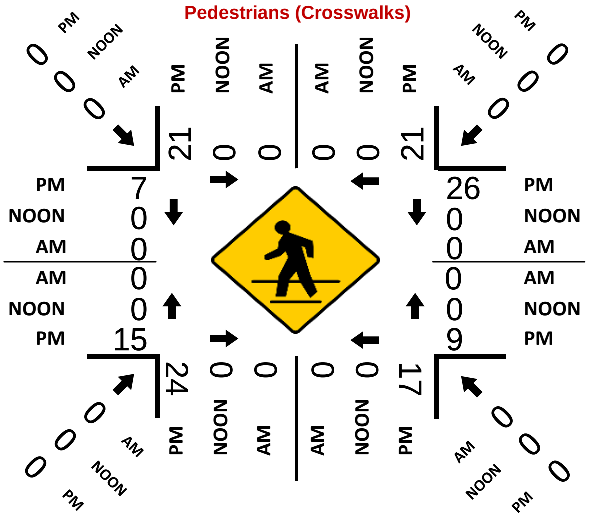
ID: 18-05373-004
City: Los Angeles

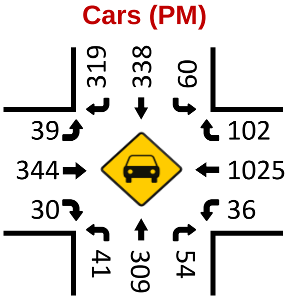
Day: Saturday
Date: 05/19/2018

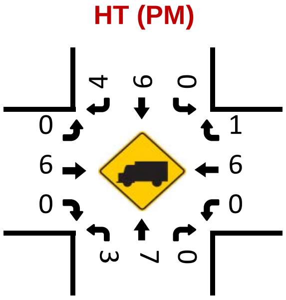












City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Spring St

East/West Temple St

Day: Saturday Date: 05/19/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	3	12	18
BIKES	18	34	7	8
BUSES	69	134	8	10

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
PM PK 15 MIN	11	13.15	146	12.00	123	14.30	309	14.45
PM PK HOUR	39	13.15	429	12.00	465	13.15	1179	13.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	1	26	5	32
13-14	2	24	10	36
14-15	4	24	5	33
TOTAL	7	74	20	101

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	44	273	112	429
13-14	26	238	78	342
14-15	17	263	77	357
TOTAL	87	774	267	1128

TOTAL

N-S
461
378
390
1229

XING S/L

Ped	Sch
42	1
52	4
47	2
141	7

XING N/L

Ped	Sch
44	1
32	3
32	1
108	5

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	0	366	55	421
13-14	2	387	61	450
14-15	1	358	58	417
TOTAL	3	1111	174	1288

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	41	768	2	811
13-14	43	1135	1	1179
14-15	48	1035	3	1086
TOTAL	132	2938	6	3076

TOTAL

E-W
1232
1629
1503
4364

XING W/L

Ped	Sch
126	3
35	2
39	2
200	7

XING E/L

Ped	Sch
36	2
34	1
38	1
108	4

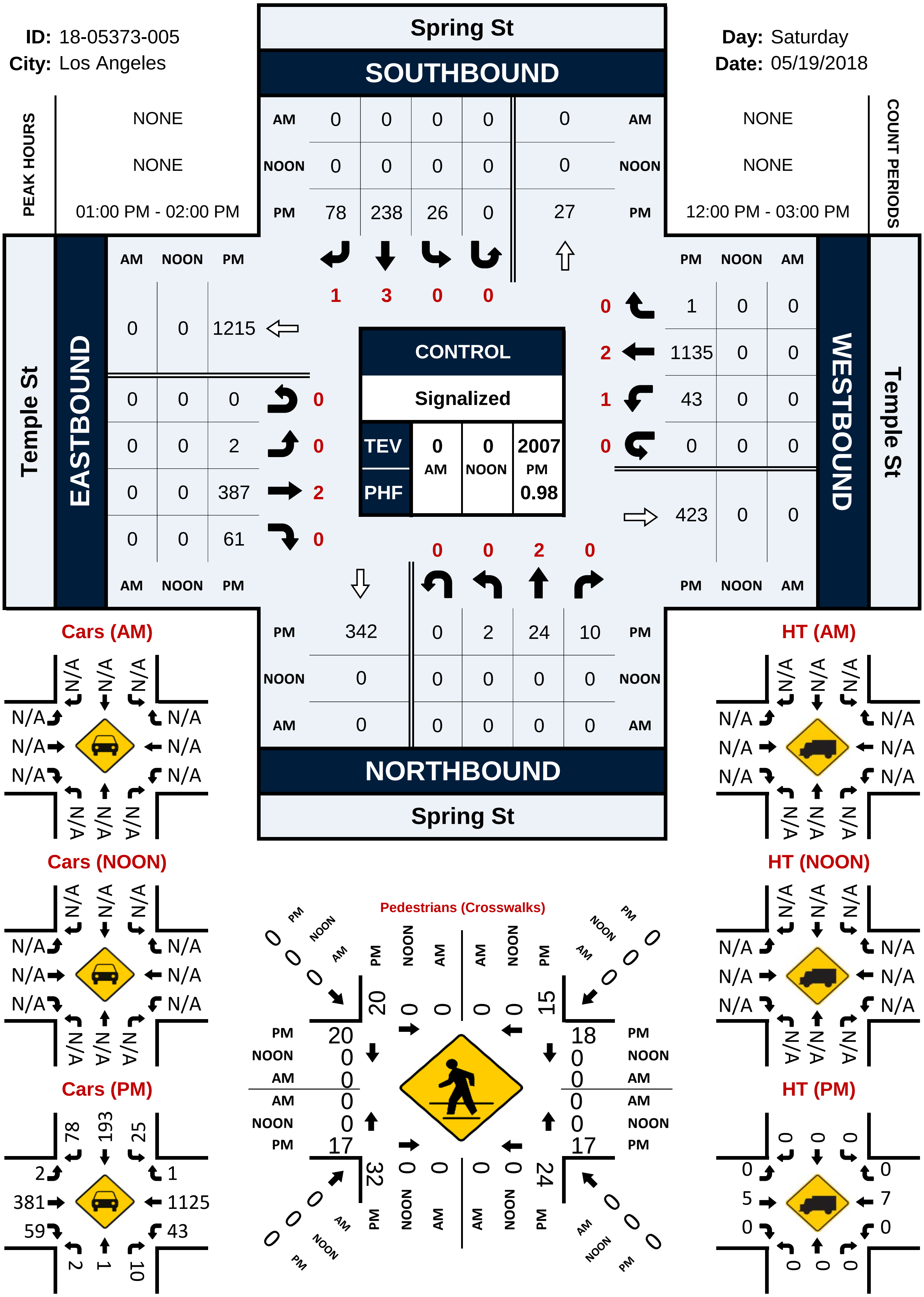
Prepared by National Data & Surveying Services

Spring St & Temple St

Peak Hour Turning Movement Count

ID: 18-05373-005
City: Los Angeles

Day: Saturday
Date: 05/19/2018



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Judge John Aiso St/San Pedro St

East/West 1st St

Day: Saturday Date: 05/19/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

	N/B	S/B	E/B	W/B
DUAL-WHEELED	11	22	9	4
BIKES	15	12	27	24
BUSES	0	25	19	1

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
PM PK 15 MIN	125	13.15	67	14.45	154	14.30	91	14.30
PM PK HOUR	432	12.45	237	13.00	586	13.45	331	13.15

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	70	197	101	368
13-14	106	185	128	419
14-15	88	191	97	376
TOTAL	264	573	326	1163

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	32	158	32	222
13-14	26	160	51	237
14-15	34	140	48	222
TOTAL	92	458	131	681

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
590	280	3	224	6
656	248	4	188	9
598	293	7	157	7
1844	821	14	569	22

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	55	392	118	565
13-14	53	382	115	550
14-15	41	389	123	553
TOTAL	149	1163	356	1668

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
12-13	46	174	61	281
13-14	46	231	46	323
14-15	46	215	53	314
TOTAL	138	620	160	918

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
846	134	2	237	12
873	111	7	241	5
867	106	2	272	15
2586	351	11	750	32

Prepared by National Data & Surveying Services

Judge John Aiso St/San Pedro St & 1st St

Peak Hour Turning Movement Count

ID: 18-05373-006
City: Los Angeles

Day: Saturday
Date: 05/19/2018

PEAK HOURS		COUNT PERIODS
	AM	NONE
NONE	NOON	NONE
NONE	PM	12:00 PM - 03:00 PM
01:15 PM - 02:15 PM		

Judge John Aiso St/San Pedro St
SOUTHBOUND

	↲	↓	↳	↶	⇧
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	60	151	25	0	291
	0	2	0	0	

1st St
EASTBOUND

AM	NOON	PM		
0	0	403	⇦	
0	0	0	↷	0
0	0	52	↱	1
0	0	381	→	2
0	0	125	↴	0

1st St
WESTBOUND

		PM	NOON	AM
0	↰	51	0	0
2	←	242	0	0
1	↙	37	0	0
0	↶	1	0	0
	⇨	526	0	0

CONTROL

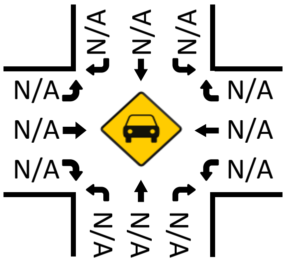
Signalized

	AM	NOON	PM
TEV	0	0	1533
PHF			0.96

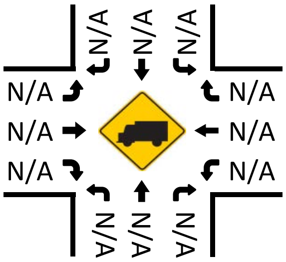
NORTHBOUND
Judge John Aiso St/San Pedro St

	⇩	↶	↰	↑	↱
		0	0	2	0
PM	313	0	101	188	119
NOON	0	0	0	0	0
AM	0	0	0	0	0

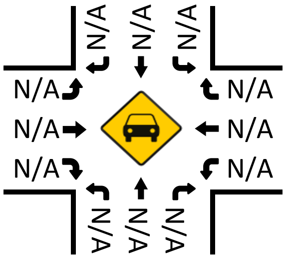
Cars (AM)



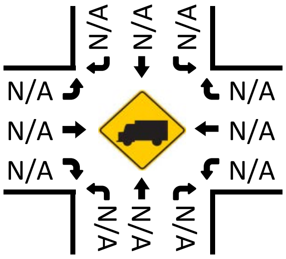
HT (AM)



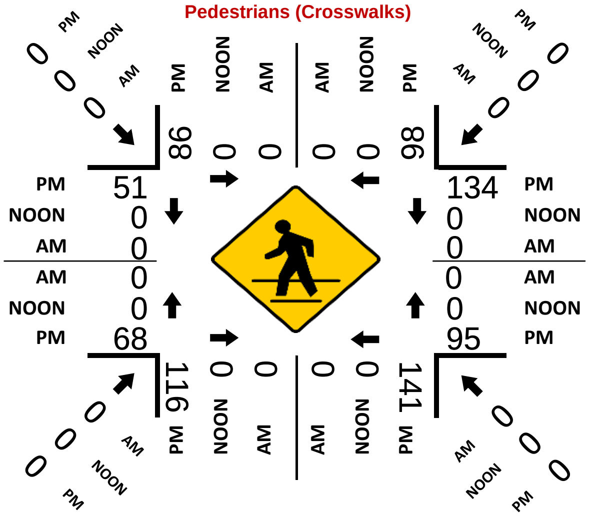
Cars (NOON)



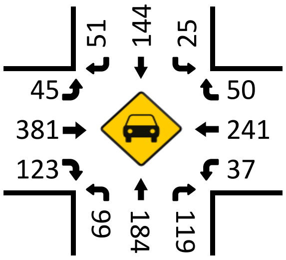
HT (NOON)



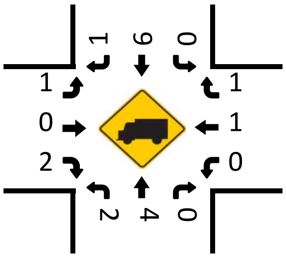
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



APPENDIX C
LADOT CRITICAL MOVEMENT ANALYSIS (CMA) WORKSHEETS

Level of Service Worksheet

(Circular 212 Method)

I/S #:	**North-South Street:**	Broadway	**Year of Count:**	2018	**Ambient Growth: (%):**	1	**Conducted by:**	KOA Corp	**Date:** 12/19/18
1	**East-West Street:**	Temple Street	**Projection Year:**	2021	**Peak Hour:**	SAT MD	**Reviewed by:**	RL	**Project:** Broadway-1st Civic Center Park

No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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**	52	1	**52**	0	52	**52**	4	58	1	**58**	0	58	1	**58**	0	58	1	**58**
	Left-Through		0							0				0				0	
	Through	331	2	128	1	332	129	83	424	2	173	1	425	2	173	0	425	2	173
	Through-Right		1							1				1				1	
	Right	54	0	54	0	54	54	38	94	0	94	0	94	0	94	0	94	0	94
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	**Left**	61	1	61	2	63	63	3	66	1	66	2	68	1	68	0	68	1	68
	Left-Through		0							0				0				0	
	Through	344	1	**334**	2	346	**335**	90	444	1	**389**	2	446	1	**390**	0	446	1	**390**
	Through-Right		1							1				1				1	
	Right	323	0	323	0	323	323	0	333	0	333	0	333	0	333	0	333	0	333
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	**Left**	39	1	**39**	0	39	**39**	0	40	1	**40**	0	40	1	**40**	0	40	1	**40**
	Left-Through		0							0				0				0	
	Through	353	1	192	12	365	198	151	515	1	275	12	527	1	281	0	527	1	281
	Through-Right		1							1				1				1	
	Right	30	0	30	0	30	30	3	34	0	34	0	34	0	34	0	34	0	34
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	**Left**	36	1	36	0	36	36	35	72	1	72	0	72	1	72	0	72	1	72
	Left-Through		0							0				0				0	
	Through	1033	1	**568**	6	1039	**572**	143	1207	1	**658**	6	1213	1	**662**	0	1213	1	**662**
	Through-Right		1							1				1				1	
	Right	103	0	103	2	105	105	3	109	0	109	2	111	0	111	0	111	0	111
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

CRITICAL VOLUMES	*North-South:*	386	*North-South:*	387	*North-South:*	447	*North-South:*	448	*North-South:*	448
	East-West:	607	*East-West:*	611	*East-West:*	698	*East-West:*	702	*East-West:*	702
	SUM:	993	*SUM:*	998	*SUM:*	1145	*SUM:*	1150	*SUM:*	1150
VOLUME/CAPACITY *(V/C)* RATIO:		0.697		0.700		0.804		0.807		0.807
***V/C* LESS ATSAC/ATCS ADJUSTMENT:**		0.597		0.600		0.704		0.707		0.707
LEVEL OF SERVICE (LOS):		A		B		C		C		C

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.003

Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.003

Significant impacted? NO

Δ*v/c* after mitigation: 0.003

Fully mitigated? N/A

Level of Service Workheet

(Circular 212 Method)

I/S #:	North-South Street:	Broadway	Year of Count:	2018	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	12/19/18
1	East-West Street:	Temple Street	Projection Year:	2021	Peak Hour:	wkdy PM	Reviewed by:	RL	Project:	Broadway-1st Civic Center Park

No. of Phases					3					3					3					3					3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0					0					0					0					0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	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	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	104	1	104	0	104	104	5	112	1	112	0	112	1	112	0	112	1	112
	Left-Through		0							0				0				0	
	Through	962	2	**359**	1	963	**359**	49	1040	2	**388**	1	1041	2	**389**	0	1041	2	**389**
	Through-Right		1							1				1				1	
	Right	115	0	115	0	115	115	7	125	0	125	0	125	0	125	0	125	0	125
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	76	1	**76**	2	78	**78**	4	82	1	**82**	2	84	1	**84**	0	84	1	**84**
	Left-Through		0							0				0				0	
	Through	335	1	254	1	336	254	62	407	1	292	1	408	1	293	0	408	1	293
	Through-Right		1							1				1				1	
	Right	172	0	172	0	172	172	0	177	0	177	0	177	0	177	0	177	0	177
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	75	1	**75**	0	75	**75**	0	77	1	**77**	0	77	1	**77**	0	77	1	**77**
	Left-Through		0							0				0				0	
	Through	720	1	377	10	730	382	46	788	1	413	10	798	1	418	0	798	1	418
	Through-Right		1							1				1				1	
	Right	33	0	33	0	33	33	3	37	0	37	0	37	0	37	0	37	0	37
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	16	1	16	0	16	16	4	20	1	20	0	20	1	20	0	20	1	20
	Left-Through		0							0				0				0	
	Through	847	1	**537**	4	851	**539**	55	928	1	**585**	4	932	1	**588**	0	932	1	**588**
	Through-Right		1							1				1				1	
	Right	226	0	226	1	227	227	9	242	0	242	1	243	0	243	0	243	0	243
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

CRITICAL VOLUMES	*North-South:*	435	*North-South:*	437	*North-South:*	470	*North-South:*	473	*North-South:*	473
	East-West:	612	*East-West:*	614	*East-West:*	662	*East-West:*	665	*East-West:*	665
	SUM:	1047	*SUM:*	1051	*SUM:*	1132	*SUM:*	1138	*SUM:*	1138
VOLUME/CAPACITY *(V/C)* RATIO:		0.735		0.738		0.794		0.799		0.799
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.635		0.638		0.694		0.699		0.699
LEVEL OF SERVICE (LOS):		B		B		B		B		B

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.003

Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.005

Significant impacted? NO

Δ*v/c* after mitigation: 0.005

Fully mitigated? N/A

LADOT
Moving Los Angeles Forward

Level of Service Worksheet

(Circular 212 Method)

I/S #:	**North-South Street:**	Spring Street	**Year of Count:**	2018	**Ambient Growth: (%):**	1	**Conducted by:**	KOA Corp	**Date:**	12/19/18
2	**East-West Street:**	Temple Street	**Projection Year:**	2021	**Peak Hour:**	SAT MD	**Reviewed by:**	RL	**Project:**	Broadway-1st Civic Center Park

No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2
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	2	0	**0**	0	2	**0**	0	2	0	**0**	0	2	0	**0**	0	2	0	**0**
	Left-Through		0							0				0				0	
	Through	24	1	17	0	24	17	0	25	1	18	0	25	1	18	0	25	1	18
	Through-Right		1							1				1				1	
	Right	10	0	10	0	10	10	0	10	0	10	0	10	0	10	0	10	0	10
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	26	0	26	2	28	28	128	155	0	155	2	157	0	157	0	157	0	157
	Left-Through		1							1				1				1	
	Through	238	2	**88**	2	240	**89**	124	369	2	175	2	371	2	176	0	371	2	176
	Through-Right		0							0				0				0	
	Right	78	1	78	0	78	78	157	237	1	**237**	0	237	1	**237**	0	237	1	**237**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	2	0	**0**	0	2	**0**	0	2	0	**0**	0	2	0	**0**	0	2	0	**0**
	Left-Through		0							0				0				0	
	Through	387	1	224	14	401	231	187	586	1	327	14	600	1	334	0	600	1	334
	Through-Right		1							1				1				1	
	Right	61	0	61	0	61	61	4	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	43	1	43	0	43	43	0	44	1	44	0	44	1	44	0	44	1	44
	Left-Through		0							0				0				0	
	Through	1135	1	**568**	7	1142	**572**	24	1193	1	**597**	7	1200	1	**601**	0	1200	1	**601**
	Through-Right		1							1				1				1	
	Right	1	0	1	0	1	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

CRITICAL VOLUMES	*North-South:*	88	*North-South:*	89	*North-South:*	237	*North-South:*	237	*North-South:*	237
	East-West:	568	*East-West:*	572	*East-West:*	597	*East-West:*	601	*East-West:*	601
	SUM:	656	*SUM:*	661	*SUM:*	834	*SUM:*	838	*SUM:*	838
VOLUME/CAPACITY *(V/C)* RATIO:		0.460		0.464		0.585		0.588		0.588
***V/C* LESS ATSAC/ATCS ADJUSTMENT:**		0.360		0.364		0.485		0.488		0.488
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project:	0.004
Significant impacted?	NO

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

Moving Los Angeles Forward

Level of Service Worksheet
(Circular 212 Method)

I/S #:	**North-South Street:**	Spring Street	**Year of Count:**	2018	**Ambient Growth: (%):**	1	**Conducted by:**	KOA Corp	**Date:**	12/19/18
2	**East-West Street:**	Temple Street	**Projection Year:**	2021	**Peak Hour:**	wkdy PM	**Reviewed by:**	RL	**Project:**	Broadway-1st Civic Center Park

No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	*NB--* 0 *SB--* 0 *EB--* 0 *WB--* 2	*NB--* 0 *SB--* 0 *EB--* 0 *WB--* 2	*NB--* 0 *SB--* 0 *EB--* 0 *WB--* 2	*NB--* 0 *SB--* 0 *EB--* 0 *WB--* 2	*NB--* 0 *SB--* 0 *EB--* 0 *WB--* 2
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	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	96	1	49	0	96	49	0	99	1	50	0	99	1	50	0	99	1	50
	Through-Right		1							1				1				1	
	Right	1	0	1	0	1	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	55	0	55	2	57	57	24	81	0	81	2	83	0	83	0	83	0	83
	Left-Through		1							1				1				1	
	Through	400	2	**152**	1	401	**153**	66	478	2	**186**	1	479	2	**187**	0	479	2	**187**
	Through-Right		0							0				0				0	
	Right	118	1	118	0	118	118	20	142	1	142	0	142	1	142	0	142	1	142
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	877	1	**470**	11	888	**475**	53	957	1	**513**	11	968	1	**518**	0	968	1	**518**
	Through-Right		1							1				1				1	
	Right	62	0	62	0	62	62	4	68	0	68	0	68	0	68	0	68	0	68
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	46	1	**46**	0	46	**46**	0	47	1	**47**	0	47	1	**47**	0	47	1	**47**
	Left-Through		0							0				0				0	
	Through	919	1	460	5	924	462	49	996	1	498	5	1001	1	501	0	1001	1	501
	Through-Right		1							1				1				1	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES			*North-South:*	152		*North-South:*	153			*North-South:*	186			*North-South:*	187			*North-South:*	187
			East-West:	516		*East-West:*	521			*East-West:*	560			*East-West:*	565			*East-West:*	565
			SUM:	668		*SUM:*	674			*SUM:*	746			*SUM:*	752			*SUM:*	752
VOLUME/CAPACITY *(V/C)* RATIO:				0.469			0.473				0.524				0.528				0.528
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.369			0.373				0.424				0.428				0.428
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project:	0.004
Significant impacted?	NO

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:**	Hill Street	**Year of Count:**	2018	**Ambient Growth: (%):**	1	**Conducted by:**	KOA Corp	**Date:**	12/19/18
3	**East-West Street:**	1st Street	**Projection Year:**	2021	**Peak Hour:**	SAT MD	**Reviewed by:**	RL	**Project:**	Broadway-1st Civic Center Park

	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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	31	1	**31**	0	31	**31**	0	32	1	**32**	0	32	1	**32**	0	32	1	**32**
	Left-Through		0							0				0				0	
	Through	210	1	152	0	210	153	123	339	1	220	0	339	1	221	0	339	1	221
	Through-Right		1							1				1				1	
	Right	94	0	94	2	96	96	4	101	0	101	2	103	0	103	0	103	0	103
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	72	1	72	0	72	72	2	76	1	76	0	76	1	76	0	76	1	76
	Left-Through		0							0				0				0	
	Through	429	2	**215**	2	431	**216**	126	568	2	**284**	2	570	2	**285**	0	570	2	**285**
	Through-Right		0							0				0				0	
	Right	88	1	27	0	88	27	0	91	1	28	0	91	1	28	0	91	1	28
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	122	1	**122**	1	123	**123**	0	126	1	**126**	1	127	1	**127**	0	127	1	**127**
	Left-Through		0							0				0				0	
	Through	401	2	201	13	414	207	7	420	2	210	13	433	2	217	0	433	2	217
	Through-Right		0							0				0				0	
	Right	41	1	26	4	45	30	0	42	1	26	4	46	1	30	0	46	1	30
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	35	1	35	2	37	37	4	40	1	40	2	42	1	42	0	42	1	42
	Left-Through		0							0				0				0	
	Through	629	2	**315**	3	632	**316**	6	654	2	**327**	3	657	2	**329**	0	657	2	**329**
	Through-Right		0							0				0				0	
	Right	44	1	8	0	44	8	1	46	1	8	0	46	1	8	0	46	1	8
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

	EXISTING CONDITION		EXISTING PLUS PROJECT		FUTURE CONDITION W/O PROJECT		FUTURE CONDITION W/ PROJECT		FUTURE W/ PROJECT W/ MITIGATION	
CRITICAL VOLUMES	*North-South:*	246	*North-South:*	247	*North-South:*	316	*North-South:*	317	*North-South:*	317
	East-West:	437	*East-West:*	439	*East-West:*	453	*East-West:*	456	*East-West:*	456
	SUM:	683	*SUM:*	686	*SUM:*	769	*SUM:*	773	*SUM:*	773
VOLUME/CAPACITY *(V/C)* RATIO:		0.479		0.481		0.540		0.542		0.542
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.379		0.381		0.440		0.442		0.442
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project:	0.002
Significant impacted?	NO

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 #: 3
North-South Street: Hill Street
East-West Street: 1st Street
Year of Count: 2018
Projection Year: 2021
Ambient Growth: (%): 1
Peak Hour: wkdy PM
Conducted by: KOA Corp
Reviewed by: RL
Date: 12/19/18
Project: Broadway-1st Civic Center Park

No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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	70	1	70	0	70	70	0	72	1	72	0	72	1	72	0	72	1	72
	Left-Through		0							0				0				0	
	Through	574	1	**366**	0	574	**367**	59	650	1	**410**	0	650	1	**411**	0	650	1	**411**
	Through-Right		1							1				1				1	
	Right	158	0	158	2	160	160	6	169	0	169	2	171	0	171	0	171	0	171
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	154	1	**154**	0	154	**154**	2	161	1	**161**	0	161	1	**161**	0	161	1	**161**
	Left-Through		0							0				0				0	
	Through	759	2	380	1	760	380	67	849	2	425	1	850	2	425	0	850	2	425
	Through-Right		0							0				0				0	
	Right	158	1	24	0	158	23	0	163	1	25	0	163	1	24	0	163	1	24
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	269	1	**269**	1	270	**270**	0	277	1	**277**	1	278	1	**278**	0	278	1	**278**
	Left-Through		0							0				0				0	
	Through	1042	2	521	10	1052	526	10	1084	2	542	10	1094	2	547	0	1094	2	547
	Through-Right		0							0				0				0	
	Right	43	1	8	3	46	11	0	44	1	8	3	47	1	11	0	47	1	11
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	54	1	54	1	55	55	10	66	1	66	1	67	1	67	0	67	1	67
	Left-Through		0							0				0				0	
	Through	811	2	**406**	2	813	**407**	19	855	2	**428**	2	857	2	**429**	0	857	2	**429**
	Through-Right		0							0				0				0	
	Right	66	1	0	0	66	0	1	69	1	0	0	69	1	0	0	69	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES			*North-South:*	520		*North-South:*	521			*North-South:*	571			*North-South:*	572			*North-South:*	572
			East-West:	675		*East-West:*	677			*East-West:*	705			*East-West:*	707			*East-West:*	707
			SUM:	1195		*SUM:*	1198			*SUM:*	1276			*SUM:*	1279			*SUM:*	1279
VOLUME/CAPACITY *(V/C)* RATIO:				0.839			0.841				0.895				0.898				0.898
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.739			0.741				0.795				0.798				0.798
LEVEL OF SERVICE (LOS):				C			C				C				C				C

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.002
Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.003
Significant impacted? NO

Δ*v/c* after mitigation: 0.003
Fully mitigated? N/A

Moving Los Angeles Forward

Level of Service Worksheet
(Circular 212 Method)

I/S #: 4	**North-South Street:** Broadway	**Year of Count:** 2018	**Ambient Growth: (%):** 1	**Conducted by:** KOA Corp	**Date:** 12/19/18
	East-West Street: 1st Street	**Projection Year:** 2021	**Peak Hour:** SAT MD	**Reviewed by:** RL	**Project:** Broadway-1st Civic Center Park

No. of Phases					3					3					3					3					3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0					0					0					0					0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--		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		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	38	1	**38**	0	38	**38**	0	39	1	**39**	0	39	1	**39**	0	39	1	**39**
	Left-Through		0							0				0				0	
	Through	271	2	112	0	271	113	123	402	2	158	0	402	2	159	0	402	2	159
	Through-Right		1							1				1				1	
	Right	66	0	66	2	68	68	4	72	0	72	2	74	0	74	0	74	0	74
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	33	1	33	0	33	33	2	36	1	36	0	36	1	36	0	36	1	36
	Left-Through		0							0				0				0	
	Through	246	1	**246**	2	248	**248**	126	379	1	**379**	2	381	1	**381**	0	381	1	**381**
	Through-Right		0							0				0				0	
	Right	114	1	68	0	114	67	0	117	1	69	0	117	1	69	0	117	1	69
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	93	1	**93**	1	94	**94**	0	96	1	**96**	1	97	1	**97**	0	97	1	**97**
	Left-Through		0							0				0				0	
	Through	480	2	240	12	492	246	12	507	2	254	12	519	2	260	0	519	2	260
	Through-Right		0							0				0				0	
	Right	24	1	5	1	25	6	0	25	1	6	1	26	1	7	0	26	1	7
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	20	1	20	2	22	22	4	25	1	25	2	27	1	27	0	27	1	27
	Left-Through		0							0				0				0	
	Through	554	2	**277**	4	558	**279**	11	582	2	**291**	4	586	2	**293**	0	586	2	**293**
	Through-Right		0							0				0				0	
	Right	89	1	73	0	89	73	1	93	1	75	0	93	1	75	0	93	1	75
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES			*North-South:*	284		*North-South:*	286			*North-South:*	418			*North-South:*	420			*North-South:*	420
			East-West:	370		*East-West:*	373			*East-West:*	387			*East-West:*	390			*East-West:*	390
			SUM:	654		*SUM:*	659			*SUM:*	805			*SUM:*	810			*SUM:*	810
VOLUME/CAPACITY *(V/C)* RATIO:				0.459			0.462				0.565				0.568				0.568
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.359			0.362				0.465				0.468				0.468
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.003

Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.003

Significant impacted? NO

Δ*v/c* after mitigation: 0.003

Fully mitigated? N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	**North-South Street:**	Broadway	**Year of Count:**	2018	**Ambient Growth: (%):**	1	**Conducted by:**	KOA Corp	**Date:** 12/19/18
4	**East-West Street:**	1st Street	**Projection Year:**	2021	**Peak Hour:**	wkdy PM	**Reviewed by:**	RL	**Project:** Broadway-1st Civic Center Park

No. of Phases				3				3				3				3				3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	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

		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	61	1	61	0	61	61	0	63	1	63	0	63	1	63	0	63	1	63
	Left-Through		0							0				0				0	
	Through	802	2	**354**	0	802	**355**	59	885	2	**386**	0	885	2	**387**	0	885	2	**387**
	Through-Right		1							1				1				1	
	Right	260	0	260	2	262	262	6	274	0	274	2	276	0	276	0	276	0	276
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	61	1	**61**	0	61	**61**	2	65	1	**65**	0	65	1	**65**	0	65	1	**65**
	Left-Through		0							0				0				0	
	Through	269	1	269	1	270	270	67	344	1	344	1	345	1	345	0	345	1	345
	Through-Right		0							0				0				0	
	Right	100	1	0	0	100	0	0	103	1	0	0	103	1	0	0	103	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	242	1	**242**	1	243	**243**	0	249	1	**249**	1	250	1	**250**	0	250	1	**250**
	Left-Through		0							0				0				0	
	Through	1067	2	534	10	1077	539	18	1117	2	559	10	1127	2	564	0	1127	2	564
	Through-Right		0							0				0				0	
	Right	38	1	8	1	39	9	0	39	1	8	1	40	1	9	0	40	1	9
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	32	1	32	1	33	33	10	43	1	43	1	44	1	44	0	44	1	44
	Left-Through		0							0				0				0	
	Through	788	2	**394**	3	791	**396**	30	842	2	**421**	3	845	2	**423**	0	845	2	**423**
	Through-Right		0							0				0				0	
	Right	137	1	107	0	137	107	1	142	1	110	0	142	1	110	0	142	1	110
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

	Existing Condition		Existing Plus Project		Future Condition w/o Project		Future Condition w/ Project		Future w/ Project w/ Mitigation	
CRITICAL VOLUMES	*North-South:*	415	*North-South:*	416	*North-South:*	451	*North-South:*	452	*North-South:*	452
	East-West:	636	*East-West:*	639	*East-West:*	670	*East-West:*	673	*East-West:*	673
	SUM:	1051	*SUM:*	1055	*SUM:*	1121	*SUM:*	1125	*SUM:*	1125
VOLUME/CAPACITY *(V/C)* RATIO:		0.738		0.740		0.787		0.789		0.789
***V/C* LESS ATSAC/ATCS ADJUSTMENT:**		0.638		0.640		0.687		0.689		0.689
LEVEL OF SERVICE (LOS):		B		B		B		B		B

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.002

Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.002

Significant impacted? NO

Δ*v/c* after mitigation: 0.002

Fully mitigated? N/A

Level of Service Workheet

(Circular 212 Method)

I/S #:	North-South Street:	Spring Street	Year of Count:	2018	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	12/19/18
5	East-West Street:	1st Street	Projection Year:	2021	Peak Hour:	SAT MD	Reviewed by:	RL	Project:	Broadway-1st Civic Center Park

No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	34	0	34	0	34	34	2	37	0	37	0	37	0	37	0	37	0	37
	Left-Through		1							1				1				1	
	Through	217	2	84	2	219	84	126	350	2	129	2	352	2	130	0	352	2	130
	Through-Right		0							0				0				0	
	Right	108	1	96	0	108	96	0	111	1	98	0	111	1	98	0	111	1	98
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	25	1	25	0	25	25	0	26	1	26	0	26	1	26	0	26	1	26
	Left-Through		0							0				0				0	
	Through	483	2	242	13	496	248	18	516	2	258	13	529	2	265	0	529	2	265
	Through-Right		0							0				0				0	
	Right	70	1	70	1	71	71	0	72	1	72	1	73	1	73	0	73	1	73
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	33	1	33	2	35	35	4	38	1	38	2	40	1	40	0	40	1	40
	Left-Through		0							0				0				0	
	Through	556	2	278	6	562	281	16	589	2	295	6	595	2	298	0	595	2	298
	Through-Right		0							0				0				0	
	Right	2	0	0	0	2	0	0	2	0	0	0	2	0	0	0	2	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

CRITICAL VOLUMES	*North-South:*	96	*North-South:*	96	*North-South:*	129	*North-South:*	130	*North-South:*	130
	East-West:	303	*East-West:*	306	*East-West:*	321	*East-West:*	324	*East-West:*	324
	SUM:	399	*SUM:*	402	*SUM:*	450	*SUM:*	454	*SUM:*	454
VOLUME/CAPACITY *(V/C)* RATIO:		0.280		0.282		0.316		0.319		0.319
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.180		0.182		0.216		0.219		0.219
LEVEL OF SERVICE (LOS):		A		A		A		A		A

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.002

Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.003

Significant impacted? NO

Δ*v/c* after mitigation: 0.003

Fully mitigated? N/A

Level of Service Worksheet

(Circular 212 Method)

I/S #: 5	**North-South Street:** Spring Street	**Year of Count:** 2018	**Ambient Growth: (%):** 1	**Conducted by:** KOA Corp	**Date:** 12/19/18
	East-West Street: 1st Street	**Projection Year:** 2021	**Peak Hour:** wkdy PM	**Reviewed by:** RL	**Project:** Broadway-1st Civic Center Park

No. of Phases				3				3				3				3				3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	*NB--*	0	*SB--*	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	**EXISTING CONDITION**			**EXISTING PLUS PROJECT**			**FUTURE CONDITION W/O PROJECT**				**FUTURE CONDITION W/ PROJECT**				**FUTURE W/ PROJECT W/ MITIGATION**			
		Volume	**No. of Lanes**	**Lane Volume**	**Project Traffic**	**Total Volume**	**Lane Volume**	**Added Volume**	**Total Volume**	**No. of Lanes**	**Lane Volume**	**Added Volume**	**Total Volume**	**No. of Lanes**	**Lane Volume**	**Added Volume**	**Total Volume**	**No. of Lanes**	**Lane Volume**
NORTHBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	42	0	42	0	42	42	3	46	0	46	0	46	0	46	0	46	0	46
	Left-Through		1							1				1				1	
	Through	217	2	86	1	218	87	67	291	2	**112**	1	292	2	**113**	0	292	2	**113**
	Through-Right		0							0				0				0	
	Right	152	1	**105**	0	152	**105**	0	157	1	109	0	157	1	109	0	157	1	109
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	94	1	94	0	94	94	0	97	1	97	0	97	1	97	0	97	1	97
	Left-Through		0							0				0				0	
	Through	1154	2	**577**	10	1164	**582**	26	1215	2	**608**	10	1225	2	**613**	0	1225	2	**613**
	Through-Right		0							0				0				0	
	Right	133	1	133	1	134	134	0	137	1	137	1	138	1	138	0	138	1	138
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	54	1	**54**	1	55	**55**	10	66	1	**66**	1	67	1	**67**	0	67	1	**67**
	Left-Through		0							0				0				0	
	Through	829	2	415	4	833	417	40	894	2	447	4	898	2	449	0	898	2	449
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES		*North-South:*	105		*North-South:*	105			*North-South:*	112			*North-South:*	113			*North-South:*	113
			East-West:	631		*East-West:*	637			*East-West:*	674			*East-West:*	680			*East-West:*	680
			SUM:	736		*SUM:*	742			*SUM:*	786			*SUM:*	793			*SUM:*	793
	VOLUME/CAPACITY *(V/C)* RATIO:			0.516			0.521				0.552				0.556				0.556
	***V/C* LESS ATSAC/ATCS ADJUSTMENT:**			0.416			0.421				0.452				0.456				0.456
	LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.005

Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.004

Significant impacted? NO

Δ*v/c* after mitigation: 0.004

Fully mitigated? N/A

Moving Los Angeles Forward

Level of Service Worksheet

(Circular 212 Method)

I/S #:	**North-South Street:**	Judge John Aliso/San Pedro	**Year of Count:**	2018	**Ambient Growth: (%):**	1	**Conducted by:**	KOA Corp	**Date:**	12/19/18
6	**East-West Street:**	1st Street	**Projection Year:**	2021	**Peak Hour:**	SAT MD	**Reviewed by:**	RL	**Project:**	Broadway-1st Civic Center Park

	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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	100	0	**100**	0	100	**100**	2	105	0	105	0	105	0	105	0	105	0	105
	Left-Through		1							1				1				1	
	Through	184	0	203	2	186	204	44	234	0	**253**	2	236	0	**254**	0	236	0	**254**
	Through-Right		1							1				1				1	
	Right	121	0	203	0	121	204	41	166	0	253	0	166	0	254	0	166	0	254
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	25	0	25	4	29	29	13	39	0	**39**	4	43	0	**43**	0	43	0	**43**
	Left-Through		1							1				1				1	
	Through	146	0	**128**	8	154	**140**	41	191	0	173	8	199	0	185	0	199	0	185
	Through-Right		1							1				1				1	
	Right	60	0	128	8	68	140	14	76	0	173	8	84	0	185	0	84	0	185
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	51	1	51	9	60	60	16	69	1	69	9	78	1	78	0	78	1	78
	Left-Through		0							0				0				0	
	Through	387	2	**194**	3	390	**195**	1	400	2	**200**	3	403	2	**202**	0	403	2	**202**
	Through-Right		0							0				0				0	
	Right	124	1	124	1	125	125	1	129	1	129	1	130	1	130	0	130	1	130
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	40	1	**40**	3	43	**43**	44	85	1	**85**	3	88	1	**88**	0	88	1	**88**
	Left-Through		0							0				0				0	
	Through	245	1	148	0	245	150	2	254	1	160	0	254	1	163	0	254	1	163
	Through-Right		1							1				1				1	
	Right	50	0	50	5	55	55	14	66	0	66	5	71	0	71	0	71	0	71
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

		EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
CRITICAL VOLUMES	*North-South:*	228	240	292	297	297
	East-West:	234	238	285	290	290
	SUM:	462	478	577	587	587
VOLUME/CAPACITY *(V/C)* RATIO:		0.324	0.335	0.405	0.412	0.412
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.224	0.235	0.305	0.312	0.312
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project:	0.011
Significant impacted?	NO

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 Workheet

(Circular 212 Method)

I/S #:	North-South Street:	Judge John Aliso/San Pedro	Year of Count:	2018	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date: 12/19/18
6	East-West Street:	1st Street	Projection Year:	2021	Peak Hour:	wkdy PM	Reviewed by:	RL	Project: Broadway-1st Civic Center Park

	Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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	235	0	235	0	235	235	2	244	0	244	0	244	0	244	0	244	0	244
	Left-Through		1							1				1				1	
	Through	591	0	470	2	593	471	16	625	0	505	2	627	0	506	0	627	0	506
	Through-Right		1							1				1				1	
	Right	114	0	470	0	114	471	24	141	0	505	0	141	0	506	0	141	0	506
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	25	0	25	3	28	28	47	73	0	73	3	76	0	76	0	76	0	76
	Left-Through		1							1				1				1	
	Through	123	0	131	7	130	143	17	144	0	232	7	151	0	245	0	151	0	245
	Through-Right		1							1				1				1	
	Right	38	0	131	6	44	143	49	88	0	0	6	94	0	0	0	94	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	100	1	100	8	108	108	22	125	1	125	8	133	1	133	0	133	1	133
	Left-Through		0							0				0				0	
	Through	784	2	392	2	786	393	1	809	2	405	2	811	2	406	0	811	2	406
	Through-Right		0							0				0				0	
	Right	109	1	109	1	110	110	1	113	1	113	1	114	1	114	0	114	1	114
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	57	1	57	3	60	60	30	89	1	89	3	92	1	92	0	92	1	92
	Left-Through		0							0				0				0	
	Through	520	1	300	0	520	302	2	538	1	321	0	538	1	323	0	538	1	323
	Through-Right		1							1				1				1	
	Right	79	0	79	4	83	83	22	103	0	103	4	107	0	107	0	107	0	107
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

		Existing Condition	Existing Plus Project	Future Condition W/O Project	Future Condition W/ Project	Future W/ Project W/ Mitigation
CRITICAL VOLUMES	*North-South:*	495	499	578	582	582
	East-West:	449	453	494	498	498
	SUM:	944	952	1072	1080	1080
VOLUME/CAPACITY *(V/C)* RATIO:		0.662	0.668	0.752	0.758	0.758
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.562	0.568	0.652	0.658	0.658
LEVEL OF SERVICE (LOS):		A	A	B	B	B

REMARKS: *Scenario: Project Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.006

Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.006

Significant impacted? NO

Δ*v/c* after mitigation: 0.006

Fully mitigated? N/A

APPENDIX D
Construction Period Analysis
LOS Worksheets

LADOT
Moving Los Angeles Forward

Level of Service Workheet
(Circular 212 Method)

I/S #: 2	**North-South Street:** Spring Street	**Year of Count:** 2018	**Ambient Growth: (%):** 1
	East-West Street: Temple Street	**Projection Year:** 2021	**Peak Hour:** wkdy AM
Conducted by: KOA Corp	**Date:** 6/29/18		
Reviewed by: IDH	**Project:** Broadway-1st Civic Center Park		

	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	56	1	28	0	56	28	0	58	1	29	0	58	1	29	0	58	1	29
	Through-Right		1							1				1				1	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	74	0	74	0	74	74	35	111	0	111	0	111	0	111	0	111	0	111
	Left-Through		1							1				1				1	
	Through	926	2	333	32	958	344	38	992	2	368	32	1024	2	378	0	1024	2	378
	Through-Right		0							0				0				0	
	Right	202	1	202	0	202	202	22	230	1	230	0	230	1	230	0	230	1	230
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	537	1	353	0	537	353	58	611	1	394	0	611	1	394	0	611	1	394
	Through-Right		1							1				1				1	
	Right	168	0	168	0	168	168	4	177	0	177	0	177	0	177	0	177	0	177
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	69	1	69	0	69	69	0	71	1	71	0	71	1	71	0	71	1	71
	Left-Through		0							0				0				0	
	Through	749	1	375	0	749	375	8	780	1	390	0	780	1	390	0	780	1	390
	Through-Right		1							1				1				1	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
CRITICAL VOLUMES — *North-South:*	333	344	368	378	378
East-West:	422	422	465	465	465
SUM:	755	766	833	843	843
VOLUME/CAPACITY (*V/C*) RATIO:	0.530	0.538	0.585	0.592	0.592
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.430	0.438	0.485	0.492	0.492
LEVEL OF SERVICE (LOS):	A	A	A	A	A

REMARKS: *Scenario: Construction Period Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.008
Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.007
Significant impacted? NO

∆*v/c* after mitigation: 0.007
Fully mitigated? N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Spring Street	Year of Count:	2018	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	6/29/18
2	East-West Street:	Temple Street	Projection Year:	2021	Peak Hour:	wkdy PM	Reviewed by:	IDH	Project:	Broadway-1st Civic Center Park

	EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2	NB-- 0 SB-- 0 EB-- 0 WB-- 2
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	96	1	49	0	96	49	0	99	1	50	0	99	1	50	0	99	1	50
	Through-Right		1							1				1				1	
	Right	1	0	1	0	1	1	0	1	0	1	0	1	0	1	0	1	0	1
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	55	0	55	0	55	55	24	81	0	81	0	81	0	81	0	81	0	81
	Left-Through		1							1				1				1	
	Through	400	2	152	2	402	152	66	478	2	186	2	480	2	187	0	480	2	187
	Through-Right		0							0				0				0	
	Right	118	1	118	0	118	118	20	142	1	142	0	142	1	142	0	142	1	142
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	877	1	470	0	877	470	53	957	1	513	0	957	1	513	0	957	1	513
	Through-Right		1							1				1				1	
	Right	62	0	62	0	62	62	4	68	0	68	0	68	0	68	0	68	0	68
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	46	1	46	0	46	46	0	47	1	47	0	47	1	47	0	47	1	47
	Left-Through		0							0				0				0	
	Through	919	1	460	0	919	460	49	996	1	498	0	996	1	498	0	996	1	498
	Through-Right		1							1				1				1	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

		EXISTING CONDITION	EXISTING PLUS PROJECT	FUTURE CONDITION W/O PROJECT	FUTURE CONDITION W/ PROJECT	FUTURE W/ PROJECT W/ MITIGATION
CRITICAL VOLUMES	North-South:	152	152	186	187	187
	East-West:	516	516	560	560	560
	SUM:	668	668	746	747	747
VOLUME/CAPACITY (V/C) RATIO:		0.469	0.469	0.524	0.524	0.524
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.369	0.369	0.424	0.424	0.424
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS: *Scenario: Construction Period Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.000

Significant impacted? NO

PROJECT IMPACT

Change in v/c due to project: 0.000

Significant impacted? NO

Δv/c after mitigation: 0.000

Fully mitigated? N/A

Moving Los Angeles Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Broadway	Year of Count:	2018	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	6/29/18
4	East-West Street:	1st Street	Projection Year:	2021	Peak Hour:	wkdy AM	Reviewed by:	IDH	Project:	Broadway-1st Civic Center Park

No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 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		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	58	1	**58**	0	58	**58**	0	60	1	**60**	0	60	1	**60**	0	60	1	**60**
	Left-Through		0							0				0				0	
	Through	287	2	141	0	287	141	46	342	2	164	0	342	2	164	0	342	2	164
	Through-Right		1							1				1				1	
	Right	137	0	137	0	137	137	9	150	0	150	0	150	0	150	0	150	0	150
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	58	1	58	0	58	58	0	60	1	60	0	60	1	60	0	60	1	60
	Left-Through		0							0				0				0	
	Through	349	1	**349**	0	349	**349**	42	402	1	**402**	0	402	1	**402**	0	402	1	**402**
	Through-Right		0							0				0				0	
	Right	238	1	201	0	238	201	0	245	1	207	0	245	1	207	0	245	1	207
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	75	1	**75**	0	75	**75**	0	77	1	**77**	0	77	1	**77**	0	77	1	**77**
	Left-Through		0							0				0				0	
	Through	573	2	287	0	573	287	28	618	2	309	0	618	2	309	0	618	2	309
	Through-Right		0							0				0				0	
	Right	55	1	26	0	55	26	0	57	1	27	0	57	1	27	0	57	1	27
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	115	1	115	0	115	115	3	121	1	121	0	121	1	121	0	121	1	121
	Left-Through		0							0				0				0	
	Through	1026	2	**513**	0	1026	**513**	9	1066	2	**533**	0	1066	2	**533**	0	1066	2	**533**
	Through-Right		0							0				0				0	
	Right	68	1	39	2	70	41	2	72	1	42	2	74	1	44	0	74	1	44
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

CRITICAL VOLUMES	*North-South:* 407	*North-South:* 407	*North-South:* 462	*North-South:* 462	*North-South:* 462
	East-West: 588	*East-West:* 588	*East-West:* 610	*East-West:* 610	*East-West:* 610
	SUM: 995	*SUM:* 995	*SUM:* 1072	*SUM:* 1072	*SUM:* 1072
VOLUME/CAPACITY *(V/C)* RATIO:	0.698	0.698	0.752	0.752	0.752
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.598	0.598	0.652	0.652	0.652
LEVEL OF SERVICE (LOS):	A	A	B	B	B

REMARKS: *Scenario: Construction Period Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.000

Significant impacted? NO

PROJECT IMPACT

Change in *v/c* due to project: 0.000

Significant impacted? NO

∆*v/c* after mitigation: 0.000

Fully mitigated? N/A

LADOT
Moving Los Angeles Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Broadway	Year of Count:	2018	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date: 6/29/18
4	East-West Street:	1st Street	Projection Year:	2021	Peak Hour:	wkdy PM	Reviewed by:	IDH	Project: Broadway-1st Civic Center Park

	Existing Condition	Existing Plus Project	Future Condition w/o Project	Future Condition w/ Project	Future w/ Project w/ Mitigation
No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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	63	1	63	0	63	1	63	0	63	1	63
	Left-Through		0							0				0				0	
	Through	802	2	**354**	0	802	**354**	59	885	2	**386**	0	885	2	**386**	0	885	2	**386**
	Through-Right		1							1				1				1	
	Right	260	0	260	0	260	260	6	274	0	274	0	274	0	274	0	274	0	274
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	61	1	**61**	0	61	**61**	2	65	1	**65**	0	65	1	**65**	0	65	1	**65**
	Left-Through		0							0				0				0	
	Through	269	1	269	0	269	269	67	344	1	344	0	344	1	344	0	344	1	344
	Through-Right		0							0				0				0	
	Right	100	1	0	0	100	0	0	103	1	0	0	103	1	0	0	103	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	242	1	**242**	0	242	**242**	0	249	1	**249**	0	249	1	**249**	0	249	1	**249**
	Left-Through		0							0				0				0	
	Through	1067	2	534	0	1067	534	18	1117	2	559	0	1117	2	559	0	1117	2	559
	Through-Right		0							0				0				0	
	Right	38	1	8	0	38	8	0	39	1	8	0	39	1	8	0	39	1	8
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	32	1	32	0	32	32	10	43	1	43	0	43	1	43	0	43	1	43
	Left-Through		0							0				0				0	
	Through	788	2	**394**	0	788	**394**	30	842	2	**421**	0	842	2	**421**	0	842	2	**421**
	Through-Right		0							0				0				0	
	Right	137	1	107	32	169	139	1	142	1	110	32	174	1	142	0	174	1	142
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

	Existing Condition	Existing Plus Project	Future Condition w/o Project	Future Condition w/ Project	Future w/ Project w/ Mitigation
CRITICAL VOLUMES *North-South:*	415	415	451	451	451
East-West:	636	636	670	670	670
SUM:	1051	1051	1121	1121	1121
VOLUME/CAPACITY (V/C) RATIO:	0.738	0.738	0.787	0.787	0.787
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.638	0.638	0.687	0.687	0.687
LEVEL OF SERVICE (LOS):	B	B	B	B	B

REMARKS: *Scenario: Construction Period Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.000

Significant impacted? NO

PROJECT IMPACT

Change in v/c due to project: 0.000

Significant impacted? NO

Δv/c after mitigation: 0.000

Fully mitigated? N/A

LADOT
Moving Los Angeles Forward

Level of Service Worksheet
(Circular 212 Method)

I/S #: 5	North-South Street: Spring Street	Year of Count: 2018	Ambient Growth: (%): 1	Conducted by: KOA Corp	Date: 6/29/18
	East-West Street: 1st Street	Projection Year: 2021	Peak Hour: wkdy AM	Reviewed by: IDH	Project: Broadway-1st Civic Center Park

No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	102	0	102	0	102	102	0	105	0	105	0	105	0	105	0	105	0	105
	Left-Through		1							1				1				1	
	Through	864	2	322	0	864	322	42	932	2	346	0	932	2	346	0	932	2	346
	Through-Right		0							0				0				0	
	Right	272	1	246	32	304	278	0	280	1	253	32	312	1	285	0	312	1	285
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	52	1	52	0	52	52	0	54	1	54	0	54	1	54	0	54	1	54
	Left-Through		0							0				0				0	
	Through	582	2	291	0	582	291	37	637	2	319	0	637	2	319	0	637	2	319
	Through-Right		0							0				0				0	
	Right	183	1	183	0	183	183	0	189	1	189	0	189	1	189	0	189	1	189
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	80	1	80	0	80	80	3	85	1	85	0	85	1	85	0	85	1	85
	Left-Through		0							0				0				0	
	Through	887	2	444	0	887	444	14	928	2	464	0	928	2	464	0	928	2	464
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES			*North-South:*	322		*North-South:*	322			*North-South:*	346			*North-South:*	346			*North-South:*	346
			East-West:	496		*East-West:*	496			*East-West:*	518			*East-West:*	518			*East-West:*	518
			SUM:	818		*SUM:*	818			*SUM:*	864			*SUM:*	864			*SUM:*	864
VOLUME/CAPACITY (V/C) RATIO:				0.574			0.574				0.606				0.606				0.606
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.474			0.474				0.506				0.506				0.506
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS: *Scenario: Construction Period Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.000
Significant impacted? NO

PROJECT IMPACT

Change in v/c due to project: 0.000
Significant impacted? NO

Δv/c after mitigation: 0.000
Fully mitigated? N/A

LADOT
Moving Los Angeles Forward

Level of Service Worksheet
(Circular 212 Method)

I/S #: 5	North-South Street: Spring Street	Year of Count: 2018	Ambient Growth: (%): 1	Conducted by: KOA Corp	Date: 6/29/18
	East-West Street: 1st Street	Projection Year: 2021	Peak Hour: wkdy PM	Reviewed by: IDH	Project: Broadway-1st Civic Center Park

No. of Phases	3	3	3	3	3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	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	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	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	42	0	42	0	42	42	3	46	0	46	0	46	0	46	0	46	0	46
	Left-Through		1							1				1				1	
	Through	217	2	86	0	217	86	67	291	2	**112**	0	291	2	**112**	0	291	2	**112**
	Through-Right		0							0				0				0	
	Right	152	1	**105**	2	154	**107**	0	157	1	109	2	159	1	111	0	159	1	111
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	94	1	94	0	94	94	0	97	1	97	0	97	1	97	0	97	1	97
	Left-Through		0							0				0				0	
	Through	1154	2	**577**	0	1154	**577**	26	1215	2	**608**	0	1215	2	**608**	0	1215	2	**608**
	Through-Right		0							0				0				0	
	Right	133	1	133	0	133	133	0	137	1	137	0	137	1	137	0	137	1	137
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	54	1	**54**	0	54	**54**	10	66	1	**66**	0	66	1	**66**	0	66	1	**66**
	Left-Through		0							0				0				0	
	Through	829	2	415	0	829	415	40	894	2	447	0	894	2	447	0	894	2	447
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	

		Existing Condition	Existing Plus Project	Future Condition w/o Project	Future Condition w/ Project	Future w/ Project w/ Mitigation
CRITICAL VOLUMES	*North-South:*	105	107	112	112	112
	East-West:	631	631	674	674	674
	SUM:	736	738	786	786	786
VOLUME/CAPACITY (V/C) RATIO:		0.516	0.518	0.552	0.552	0.552
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.416	0.418	0.452	0.452	0.452
LEVEL OF SERVICE (LOS):		A	A	A	A	A

REMARKS: *Scenario: Construction Period Analysis*

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.002
Significant impacted? NO

PROJECT IMPACT

Change in v/c due to project: 0.000
Significant impacted? NO
Δv/c after mitigation: 0.000
Fully mitigated? N/A

Department of Recreation and Parks

City of Los Angeles

Bureau of Engineering Environmental Management Group

MITIGATION MONITORING PROGRAM

FOR

1ST & BROADWAY CIVIC CENTER PARK PROJECT

SCH NO. 2019011002

W.O. E1907807

PREPARED BY CITY OF LOS ANGELES BUREAU OF ENGINEERING

MARCH 2019

Mitigation Monitoring Program:

The California Environmental Quality Act (CEQA) requires public agencies to adopt a reporting or monitoring program for the changes to the project that have been adopted to mitigate or avoid significant effects on the environment (Public Resources Code Section 21081.6). The program must be adopted by the public agency at the time findings are made regarding the project. The State CEQA Guidelines allow public agencies to choose whether its program will monitor mitigation, report on mitigation, or both (14 CCR Section 15097(c)). This mitigation monitoring program contains the elements required by CEQA for the 1st & Broadway Civic Center Park Project.

A. Location

The Project site is located at the northeast corner of 1st Street and Broadway in the Civic Center area of downtown Los Angeles. The address is at 126 N. Broadway, Los Angeles, California 90012. The Project site is generally bound by Los Angeles County's Grand Park adjacent on the north, Spring Street on the east, 1st Street on the south, and Broadway on the west. The Project site is currently a vacant dirt lot that is fenced in to restrict access. The area immediately surrounding the Project site is completely urbanized and developed with Grand Park and a Los Angeles County courthouse to the north, the Los Angeles City Hall and City Hall Park to the east, the Los Angeles Police Department Headquarters to the southeast, office buildings and the Times Mirror building (formerly the Los Angeles Times building) to the south, the Los Angeles Federal Courthouse to the southwest, and the Los Angeles Law Library to the west.

B. Purpose

The primary objectives of the proposed Project are:

- Transform the vacant lot to a park which will provide a much needed open space for the community to enjoy;
- Provide additional dining options for the park users and surrounding patrons; and
- Create a world-class iconic park at the center of Los Angeles’ Civic Center area.

C. Description

The proposed Project would include the development of a 1.96-acre vacant lot into an open space public park located in the Civic Center area of downtown Los Angeles, which is the result of a design competition previously initiated by the City. The proposed Project would incorporate a two-story restaurant building complex with rooftop access within the northwest corner of the park; trees and green spaces for public enjoyment, numerous seating areas, 16 decorative canopies to provide shade and lighting throughout the park, public art features, new hardscaping and landscaped areas, and bioswales or other treatment best management practices (BMPs).

The proposed approximately 19,200-square-foot restaurant building complex would include space for concessionaires to operate all concepts in the facility. The new building would include a rooftop patio and bar, an upscale restaurant, an approximately 1,380-square-foot café with a food service window to serve outdoor patrons, and an approximately 1,500-square-foot outdoor beer garden attached to the two-story structure. A portion of the ground level floor of the restaurant building would be externally shaped into a tiered sitting area with a capacity to seat up to 60 park patrons at a time, and would be shaded by cantilevering above. Rooftop access would be available with an approximately 450-square-foot bar, an approximately 1,330-square-foot dining and lounge area for restaurant patrons, and an approximately 1,260-square-foot public space. A loading zone would be provided on the north side of the building and Project site for use in routine restaurant operations. Public restrooms would be provided on the first floor of the restaurant building and at the rooftop. Figure 6 shows the proposed Project site plan.

The proposed Project would remove one magnolia tree from the public sidewalk adjacent to the Project site along Broadway. The removed tree would be replaced with the proposed Project along Spring Street.

During construction of the project, BMPs would be implemented in order to prevent any contamination from water runoff entering into storm drains. Specifically, the contractor will implement a storm water pollution plan (SWPPP) which is mandated by the State of California and the City of Los Angeles to prevent contaminant from escaping the construction site. The proposed Project would include a bioswale system that would allow water infiltration into the ground.

The proposed Project would include a bicycle parking area, outdoor seating areas, planting of a variety of plants and trees for public enjoyment, walking pathways and passive recreational uses, and new lighting.

Programming for the proposed Project would potentially include art exhibit events, concessionaire-sponsored events, and RAP-sponsored events. Approximately 4 or 5 art exhibit events and up to 40 concessionaire-sponsored events would occur annually. Ten concessionaire-sponsored events are anticipated for each for the 4 restaurant spaces in the new building. These events may include corporate events, fundraisers, and weddings. In addition, approximately 12 RAP-sponsored events are anticipated to be held annually, which include events organized by City representatives or officials. Other events to be held at the proposed Project would be identified by the City at a later date.

As previously mentioned, the Project site is located adjacent to the existing Grand Park, which is owned by the County of Los Angeles, and would operate separately. RAP would operate and maintain the proposed Project.

No parking spaces are currently provided at the Project site. Parking spaces are also not included with the proposed Project. According to the Los Angeles Municipal Code, 21 parking spaces would be required for the restaurant uses proposed. As such, a parking variance would be required and will be obtained to implement the proposed Project. Existing parking facilities within walking distance and public transportation are readily available in the project area for patrons to utilize. The restaurant operators could lease parking spaces from local parking lots or structures in the area to provide nearby parking for restaurant patrons. The proposed Project would also include bicycle parking areas on-site, to provide additional modes of access to the project area. The proposed Project would be designed in compliance with the Americans with Disabilities Act (ADA).

The hours of operation for the restaurant building complex would be 7:00 a.m. to 12:00 a.m. on Monday through Thursday, and 8:00 a.m. to 1:00 a.m. on Friday through Sunday. The park’s hours of operation would be 5:30 a.m. to 10:30 p.m., in accordance with Los Angeles Municipal Code Section 63.44 and associated ordinances.

DESIGN PHASE					
Impact	**Mitigation Measure**	**Implementation Responsibility**	**Implementation Vehicle**	**Enforcement Responsibility**	**Record of Implementation**
GEOLOGY AND SOILS					
Impacts related to seismic-related ground failure and liquefaction during construction.	**GEO-1**: The proposed Project grading and foundation plans and specifications shall implement the recommendations presented in the *Geotechnical Investigation Report First and Broadway Park*. The proposed Project plans and specifications shall also be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the recommendations.	Project Engineer	Project Plans and Specifications	Project Manager	Project Plans and Specifications
TRANSPORTATION AND TRAFFIC					
Potential to impact transit, pedestrian, and bicycle facilities during construction.	**TRA-1**: Prior to the start of construction, BOE shall coordinate with LADOT to prepare a Traffic Management Plan (TMP), which would include the following aspects: • The TMP shall be prepared by a registered traffic or civil engineer, as appropriate, based on City of Los Angeles permit guidelines. Methods to inform the public regarding project construction and associated roadway and/or lane closures shall be implemented as part of the TMP. • Additional measures to be incorporated into the TMP to improve traffic flow and ensure bicyclist and pedestrian safety shall include the following: o Project phasing, truck routes, construction worker parking areas, worksite truck entrance/exit locations shall be detailed. o Truck drivers shall be required to maintain roadway speeds of 25 miles per hour or lower while traveling through the downtown	Project Engineer	Project Plans and Specifications	Project Manager	Final Traffic Management Plan submitted to the City of Los Angeles Department of Transportation
		Project Manager	Public Outreach	Bureau of Contract Administration	Bureau of Contract Administration Records

	area. o Truck drivers shall be reminded on an ongoing basis and required throughout construction activities to pay close attention to traffic laws and pedestrian and bicyclist safety, especially at site construction access points. Use of flagmen shall be required if truck ingress/egress points will overlap with active pedestrian sidewalks or bicycle lanes. Methods for spacing of both inbound and outbound haul truck shall be included to avoid caravanning of trucks on downtown roadways and queuing at intersections.				

CONSTRUCTION PHASE					
Impact	**Mitigation Measure**	**Implementation Responsibility**	**Implementation Vehicle**	**Enforcement Responsibility**	**Record of Implementation**
BIOLOGICAL RESOURCES					
Disturbance of existing biological resources, flora, fauna, and/or habitat.	**BIO-1**: Exterior building improvements shall occur outside of the nesting season (February 15 through September 15). If avoidance of exterior construction work within this time period is not feasible, the following additional measures shall be employed: • A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. All nests found shall be recorded. • If construction activities must occur within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a weekly basis and the construction activity shall be postponed until the biologist determines that the nest is no longer active. If the recommended nest avoidance zone is not feasible, the qualified biologist shall determine whether an exception is possible and obtain concurrence from the appropriate resource agency before construction work can resume within the avoidance buffer zone. All work shall cease within the avoidance buffer zone until either agency concurrence is obtained or the biologist determines that the adults and young are no longer reliant on the nest site.	Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records

CONSTRUCTION PHASE					
Impact	**Mitigation Measure**	**Implementation Responsibility**	**Implementation Vehicle**	**Enforcement Responsibility**	**Record of Implementation**
CULTURAL RESOURCES					
Potential to impact archaeological resources.	**CULT-1**: A qualified archeological monitor shall be present on-site during all ground-disturbing activities, including, but not limited to, excavation, grading, and installation of utilities. The on-site archaeological monitor shall conduct worker training prior to the initiation of ground-disturbing activity in order to inform workers of the types of resources that may be encountered and apprise them of appropriate handling of such resources. If any prehistoric archaeological sites are encountered within the project area, consultation with interested Native American parties shall be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. A cultural resources monitoring and mitigation plan (CRMMP) shall be developed in order to outline monitoring protocols. The CRMMP shall identify key personnel and describe coordination, monitoring, and reporting responsibilities. Monitoring shall be completed by, or under the direction of, an archaeologist who meets Secretary of the Interior's Standards. The archaeological monitor shall have the authority to redirect construction equipment in the event that potential archaeological resources are encountered. If archaeological resources are encountered, work in the vicinity of the discovery shall halt until appropriate treatment or further investigation of the resource is determined by a qualified archaeologist in accordance with the provisions of CEQA Guidelines Section	Project Engineer	Project Plans and Specifications	Project Manager	Final Monitoring Report Submitted to South Coast Information Center (SCCIC)
		Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records

CONSTRUCTION PHASE					
Impact	**Mitigation Measure**	**Implementation Responsibility**	**Implementation Vehicle**	**Enforcement Responsibility**	**Record of Implementation**
	15064.5.				
Potential to impact paleontological resources.	**CULT-2**: Prior to the start of construction, a Qualified Paleontologist shall be retained to prepare and present a paleontological worker's environmental awareness program to all earth-moving personnel and their supervisors. The training shall inform construction personnel of the potential for fossil discoveries, types of fossils that may be encountered, and procedures to follow if potential fossils are unearthed at the Project site. In the event of unanticipated fossil discoveries by construction personnel, work shall be halted within 50 feet of the discovery until the Qualified Paleontologist can evaluate the discovery. If the discovery is determined to be significant, the Qualified Paleontologist shall develop the appropriate plan (e.g., documentation, salvage, fossil preparation and identification, curation, and monitoring) in consultation with the City of Los Angeles RAP and BOE.	Project Engineer	Project Plans and Specifications	Project Manager	Final Monitoring Report Submitted to the Los Angeles County Natural History Museum
		Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records
Potential to impact Native American Resources.	**CULT-3**: A trained Native American consultant or consultants shall be engaged to monitor ground-disturbing activities. The consultant or consultants shall be selected from the interested Native American parties who consulted on the project. This monitoring shall occur on an as-needed basis as determined by BOE in consultation with interested tribes, and shall be intended to ensure that Native American concerns are taken into account during the construction process. The Native American consultant shall report findings to BOE or its archaeological consultant, which will	Project Engineer	Project Plans and Specifications	Project Manager	Final Monitoring Report Submitted to South Coast Information Center (SCCIC)
		Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records

CONSTRUCTION PHASE					
Impact	**Mitigation Measure**	**Implementation Responsibility**	**Implementation Vehicle**	**Enforcement Responsibility**	**Record of Implementation**
	disseminate the information to the consulting Native American parties. The Native American parties identified by the NAHC shall be consulted regarding the treatment and final disposition of any materials of Native American origin found during the course of the project, if any, and will assist BOE in determining whether these materials constitute tribal cultural resources.				
GEOLOGY AND SOILS					
Impacts related to seismic-related ground failure and liquefaction during construction.	**GEO-2**: All grading, excavation, and construction of foundations should be performed under the observation and testing of a qualified Geotechnical Engineer during the following stages: • Site grading; • Excavation activities; • Construction of building foundations and footings; • Any other ground disturbing activities; and • When any unusual or unexpected geotechnical conditions are encountered.	Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records
NOISE					
Potential to increase noise levels in areas immediately adjacent to the construction site.	**NOI-1**: Construction equipment shall be properly maintained and equipped with mufflers.	Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records
	NOI-2: Grading and construction equipment shall use rubber-tired equipment rather than metal-tracked equipment.	Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records
	NOI-3: Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to	Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration

CONSTRUCTION PHASE					
Impact	**Mitigation Measure**	**Implementation Responsibility**	**Implementation Vehicle**	**Enforcement Responsibility**	**Record of Implementation**
	maintain performance.				Records
	NOI-4: The public shall be notified in advance of the location and dates of construction hours and activities.	Project Manager	Public Outreach	Bureau of Contract Administration	Bureau of Contract Administration Records
	NOI-5: Construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to noise impacts associated with construction.	Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records
	NOI-6: A Noise Disturbance Coordinator shall be established by the construction contractor and will be responsible for responding to local complaints about construction noise. The Noise Disturbance Coordinator shall determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the Noise Disturbance Coordinator.	Project Manager	Public Outreach	Bureau of Contract Administration	Bureau of Contract Administration Records
	NOI-7: The Noise Disturbance Coordinator shall coordinate with the site administrator of the Los Angeles Law Library to avoid disruptions to normal operations.	Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records
	NOI-8: An eight-foot barrier constructed out of manufactured noise attenuating materials (e.g., soundproof panels instead of plywood) shall be erected on the western side of the Project site between the Los Angeles Law Library and construction activities. These barriers shall be capable of reducing noise	Construction Contractor	Construction Contract	Bureau of Contract Administration	Bureau of Contract Administration Records

<table>
<tr><th colspan="6">CONSTRUCTION PHASE</th></tr>
<tr><th>Impact</th><th>Mitigation Measure</th><th>Implementation Responsibility</th><th>Implementation Vehicle</th><th>Enforcement Responsibility</th><th>Record of Implementation</th></tr>
<tr><td></td><td>levels by at least nine decibels as described in the material specification sheet provided by the manufacturer.</td><td></td><td></td><td></td><td></td></tr>
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FORM GEN. 160 (Rev. 11-02)

CITY OF LOS ANGELES
INTERDEPARTMENTAL CORRESPONDENCE

Date: April 1, 2019

To: Cathie Santo Domingo, P.E., Superintendent
Department of Recreation and Parks (RAP)

From: Jan Green Rebstock, Environmental Supervisor II
Environmental Management Group, Bureau of Engineering (BOE)

Subject: 1st and Broadway Civic Center Park (Project) – California Environmental Quality Act (CEQA) Initial Study/ Mitigated Negative Declaration (IS/MND)

The proposed Project is located in the Civic Center area of downtown Los Angeles, with Grand Park and a Los Angeles County courthouse to the north; the Los Angeles City Hall and City Hall Park to the east; the Los Angeles Police Department Headquarters to the southeast; office buildings and the Times Mirror building (formerly the Los Angeles Times building) to the south; the Los Angeles Federal Courthouse to the southwest; and, the Los Angeles Law Library to the west.

The proposed Project would include the development of a 1.96-acre vacant lot into an open space public park, with trees and green spaces for public enjoyment, numerous seating areas, 16 decorative canopies to provide shade and lighting throughout the park, public art features, new hardscaping and landscaped areas, and bioswales or other storm-water treatment best management practices (BMPs). It would also incorporate a two-story restaurant building complex with rooftop access that would accommodate a café, a beer garden, a restaurant, and a viewing deck and bar lounge on the roof terrace.

Construction would last for approximately two years from late 2019 to late 2021.

The proposed Project will be operated and maintained by RAP. At this stage, programming would potentially include art exhibit events, concessionaire-sponsored events, and RAP-sponsored events. Approximately 4 or 5 art exhibit events and up to 40 concessionaire-sponsored events would occur annually. Ten concessionaire-sponsored events are anticipated for each for the 4 restaurant spaces in the new building. These events may include corporate events, fundraisers, and weddings. In addition, approximately 12 RAP-sponsored events are anticipated to be held annually, which include events organized by City representatives or officials. Other events would be identified by the City at a later date.

The Draft IS/MND analyzed potential impacts from construction activities and operations of the project on the 19 environmental resource areas included in the Appendix G of the CEQA Guidelines and found that significant impacts could occur on the following areas.

Biological Resources

The existing magnolia and ficus trees may provide suitable nesting habitat for birds protected under the Migratory Birds Treaty Act. Furthermore, the magnolia tree may be removed during construction. As such, direct impacts to suitable nesting habitat could occur. Additionally, noise and dust generated during construction could indirectly impact nesting birds by causing them to avoid the area during construction (Section 4.a. and Section 4.d of CEQA Guidelines, Appendix G: Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status or interfere with the movement of any native resident or migratory fish or wildlife).

Cultural resources

1) The proposed Project includes rough grading, utility installations, landscaping and hardscaping, construction of buildings, and installation of other park structures that may have direct impacts on subsurface archaeological resources encountered during construction (Section 5.b. of CEQA Guidelines, Appendix G: Adverse change in the significance of an archaeological resource).

2) Although proposed Project excavation activities will occur in an area covered by a 13- to 15-foot-thick layer of low paleontological potential artificial fill, there is a potential risk to uncover previously unknown resources (Section 5.c. of CEQA Guidelines, Appendix G: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature).

3) No formal cemeteries are known to exist within the Project site. However, the Project site has been determined by the Native American Heritage Commission (NAHC) to be potentially sensitive related to Native American resources (Section 5.c. of CEQA Guidelines, Appendix G: Disturb any human remains, including those interred outside of formal cemeteries).

Geology and soils

The Project site is located within a state- and City-designated liquefaction area and could expose people or structures to potential substantial adverse effects, during an earthquake (Section 6.a.iii. of CEQA Guidelines, Appendix G: Seismic-related ground failure, including liquefaction).

Noise

The noise and vibration study for the proposed Project determined that unmitigated noise levels during construction of the proposed Project would typically exceed the allowable noise level stated in the Los Angeles Municipal Code (Section 12.a. and Section 12.d. of CEQA Guidelines, Appendix G: 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 and temporary increase of noise levels in the vicinity, above noise levels existing without the project).

Transportation/Traffic

Lane closures during construction of the proposed Project would result in temporary impacts to transit, pedestrian, and bicycle facilities (Section 16.f. of CEQA Guidelines, Appendix G: Conflict with adopted policies, plans, or programs supporting alternative transportation such as bus turnouts and bicycle racks).

The Draft IS/MND determined that all environmental impacts could be mitigated to a level less than significant with the application of mitigation measures. Please refer to Table 1 (attached) for a summary of the mitigation measures required.

The City published the Draft IS/MND for a 30-day review period on January 3, 2019. The stakeholder mailing list included 22 relevant agencies and organizations and 34 property owners in the vicinity. A public hearing was held on January 15, 2019 to review the Draft IS/MND and receive comments. Three comment letters were received, two related to the potential site contamination with hazardous materials and one related to the proposed Project's impact on state transportation facilities.

A Final IS/MND has been prepared that includes responses to the comment letters received. The Final IS/MND also includes modifications to the Draft IS/MND related to clarifications for the permits and approvals required for the proposed Project. No on-site parking is provided by the proposed Project as existing public facilities and public transportation located within walking distance from the Project site would be available to the park patrons, including Metro Red and Purple Lines subway services, Metro buses, Foothill Transit, and other bus lines. The parking variance previously identified in the Draft IS/MND is no longer required per the Los Angeles City Charter Section 591. No new issues were raised. Both the Draft IS/MND and Final IS/MND have been posted on BOE's website at the following link, pending adoption by the Board of Recreation and Park Commissioners: https://eng.lacity.org/1st-and-broadway-civic-center-park-project.

Should you have questions or concerns regarding the content of the Draft and Final IS/MND for the proposed Project, please contact Talmage Jordan of BOE's Environmental Management Group at (213) 485-5754 or Talmage.Jordan@lacity.org.

MEM:tmj
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Attached: Table 1, Summary of Mitigation Measures for the Proposed 1st and Broadway Civic Center Project

cc: Neil Drucker, BOE
Paul Tseng, BOE
Nur Malhis, BOE
Talmage Jordan, BOE
Paul Davis, RAP
Elena Maggioni, RAP
Sean Phan, RAP

Table 1: Summary of Mitigation Measures for Proposed 1st and Broadway Civic Center Project

DESIGN PHASE	
Impact	**Mitigation Measure**
GEOLOGY AND SOILS	
Impacts related to seismic-related ground failure and liquefaction during construction.	**GEO-1**: The proposed Project grading and foundation plans and specifications shall implement the recommendations presented in the *Geotechnical Investigation Report First and Broadway Park*. The proposed Project plans and specifications shall also be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the recommendations.
TRANSPORTATION AND TRAFFIC	
Potential to impact transit, pedestrian, and bicycle facilities during construction.	**TRA-1**: Prior to the start of construction, BOE shall coordinate with LADOT to prepare a Traffic Management Plan (TMP), which would include the following aspects: • The TMP shall be prepared by a registered traffic or civil engineer, as appropriate, based on City of Los Angeles permit guidelines. Methods to inform the public regarding project construction and associated roadway and/or lane closures shall be implemented as part of the TMP. • Additional measures to be incorporated into the TMP to improve traffic flow and ensure bicyclist and pedestrian safety shall include the following: o Project phasing, truck routes, construction worker parking areas, worksite truck entrance/exit locations shall be detailed. o Truck drivers shall be required to maintain roadway speeds of 25 miles per hour or lower while traveling through the downtown area. o Truck drivers shall be reminded on an ongoing basis and required throughout construction activities to pay close attention to traffic laws and pedestrian and bicyclist safety, especially at site construction access points. Use of flagmen shall be required if truck ingress/egress points will overlap with active pedestrian sidewalks or bicycle lanes. Methods for spacing of both inbound and outbound haul truck shall be included to avoid caravanning of trucks on downtown roadways and queuing at intersections.

Table 1: Summary of Mitigation Measures for Proposed 1st and Broadway Civic Center Project

CONSTRUCTION PHASE	
Impact	**Mitigation Measure**
BIOLOGICAL RESOURCES	
Disturbance of existing biological resources, flora, fauna, and/or habitat.	**BIO-1**: Exterior building improvements shall occur outside of the nesting season (February 15 through September 15). If avoidance of exterior construction work within this time period is not feasible, the following additional measures shall be employed: • A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. All nests found shall be recorded. • If construction activities must occur within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a weekly basis and the construction activity shall be postponed until the biologist determines that the nest is no longer active. If the recommended nest avoidance zone is not feasible, the qualified biologist shall determine whether an exception is possible and obtain concurrence from the appropriate resource agency before construction work can resume within the avoidance buffer zone. All work shall cease within the avoidance buffer zone until either agency concurrence is obtained or the biologist determines that the adults and young are no longer reliant on the nest site.
CULTURAL RESOURCES	
Potential to impact archaeological resources.	**CULT-1**: A qualified archeological monitor shall be present on-site during all ground-disturbing activities, including, but not limited to, excavation, grading, and installation of utilities. The on-site archaeological monitor shall conduct worker training prior to the initiation of ground-disturbing activity in order to inform workers of the types of resources that may be encountered and apprise them of appropriate handling of such resources. If any prehistoric archaeological sites are encountered within the project area, consultation with interested Native American parties shall be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. A cultural resources monitoring and mitigation plan (CRMMP) shall be developed in order to outline monitoring protocols. The CRMMP shall identify key personnel and describe coordination, monitoring, and reporting responsibilities. Monitoring shall be completed by, or under the direction of, an archaeologist who meets Secretary of the Interior's Standards. The archaeological monitor shall have the authority to redirect construction equipment in the event that potential archaeological resources are encountered. If archaeological resources are encountered, work in the vicinity of the discovery shall halt until appropriate treatment or further investigation of the resource is determined by a qualified archaeologist in accordance with the provisions of CEQA Guidelines Section 15064.5.
Potential to impact paleontological resources.	**CULT-2**: Prior to the start of construction, a Qualified Paleontologist shall be retained to prepare and present a paleontological worker's environmental awareness program to all earth-moving personnel and their supervisors. The training shall inform construction personnel of the potential for fossil discoveries, types of fossils that may be encountered, and procedures to follow if potential fossils are unearthed at the Project site. In the event of unanticipated fossil discoveries by construction personnel, work shall be halted within 50 feet of the discovery until the Qualified Paleontologist can evaluate the discovery. If the discovery is determined to be significant, the Qualified Paleontologist shall develop the appropriate plan (e.g., documentation, salvage, fossil preparation and identification, curation, and monitoring) in consultation with the City of Los Angeles RAP and BOE.

Table 1: Summary of Mitigation Measures for Proposed 1st and Broadway Civic Center Project

CONSTRUCTION PHASE	
Impact	**Mitigation Measure**
Potential to impact Native American Resources.	**CULT-3**: A trained Native American consultant or consultants shall be engaged to monitor ground-disturbing activities. The consultant or consultants shall be selected from the interested Native American parties who consulted on the project. This monitoring shall occur on an as-needed basis as determined by BOE in consultation with interested tribes, and shall be intended to ensure that Native American concerns are taken into account during the construction process. The Native American consultant shall report findings to BOE or its archaeological consultant, which will disseminate the information to the consulting Native American parties. The Native American parties identified by the NAHC shall be consulted regarding the treatment and final disposition of any materials of Native American origin found during the course of the project, if any, and will assist BOE in determining whether these materials constitute tribal cultural resources.
GEOLOGY AND SOILS	
Impacts related to seismic-related ground failure and liquefaction during construction.	**GEO-2**: All grading, excavation, and construction of foundations should be performed under the observation and testing of a qualified Geotechnical Engineer during the following stages: • Site grading; • Excavation activities; • Construction of building foundations and footings; • Any other ground disturbing activities; and • When any unusual or unexpected geotechnical conditions are encountered.
NOISE	
Potential to increase noise levels in areas immediately adjacent to the construction site.	**NOI-1**: Construction equipment shall be properly maintained and equipped with mufflers.
	NOI-2: Grading and construction equipment shall use rubber-tired equipment rather than metal-tracked equipment.
	NOI-3: Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.
	NOI-4: The public shall be notified in advance of the location and dates of construction hours and activities.
	NOI-5: Construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to noise impacts associated with construction.
	NOI-6: A Noise Disturbance Coordinator shall be established by the construction contractor and will be responsible for responding to local complaints about construction noise. The Noise Disturbance Coordinator shall determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the Noise Disturbance Coordinator.
	NOI-7: The Noise Disturbance Coordinator shall coordinate with the site administrator of the Los Angeles Law Library to avoid disruptions to normal operations.
	NOI-8: An eight-foot barrier constructed out of manufactured noise attenuating materials (e.g., soundproof panels instead of plywood) shall be erected on the western side of the Project site between the Los Angeles Law Library and construction activities. These barriers shall be capable of reducing noise levels by at least nine decibels as described in the material specification sheet provided by the manufacturer.