

**Initial Study and
Mitigated Negative Declaration**

**99th Street Wells
Filtration Plant Project**



Los Angeles Department of Water and Power
Environmental Affairs
111 North Hope Street, Room 1044
Los Angeles, California 90012

October 2017

CEQA Initial Study

99th Street Wells Filtration Plant Project

October 2017

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Acronyms and Abbreviations

AAQS	Ambient Air Quality Standards
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
BMP	Best Management Practice
BSA	biological survey area
CAAQS	California Ambient Air Quality Standards
CAP	criteria air pollutant
CAPCOA	California Air Pollution Control Officers Association
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH ₄	methane
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRHR	California Register of Historic Resources
CY	cubic yards
dBA	A-weighted decibel
Fe	iron
FTA	Federal Transit Administration
GHG	greenhouse gas emissions
kV	kilovolt
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAMC	Los Angeles Municipal Code
LAPD	Los Angeles Police Department
L _{eq}	community noise equivalent level
LOS	Level of service
LST	localized significance threshold
Mn	manganese
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO ₂	nitrogen dioxide
NO _x	nitrogen oxide
NPDES	National Pollution Discharge Elimination System
O ₃	ozone
Pb	lead
PF	Public Facilities
PM _{2.5}	fine particulate matter less than 2.5 microns in diameter
PM ₁₀	respirable particulate matter 10 microns in diameter or less
ROW	right-of-way
SCAQMD	South Coast Air Quality Management District
SO ₂	sulfur dioxide
SO _x	sulfur oxide
SRA	source receptor area

SWPPP	Stormwater Pollution Prevention Plan
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
V/C	volume-to-capacity
VOC	volatile organic compound

SECTION 1 PROJECT DESCRIPTION

1.1 Overview of the Project

The Los Angeles Department of Water and Power (LADWP) proposes to construct an iron and manganese (Fe/Mn) treatment facility directly adjacent to the existing 99th Street Wells Pumping Station in the Watts community of the City of Los Angeles. The proposed project is part of LADWP's program to ensure LADWP meets the United States Environmental Protection Agency (USEPA) National Secondary Drinking Water Regulations for Fe/Mn and maintain LADWP's reliability to serve groundwater. The proposed project would remove naturally occurring iron and manganese from the groundwater wells.

1.2 California Environmental Quality Act

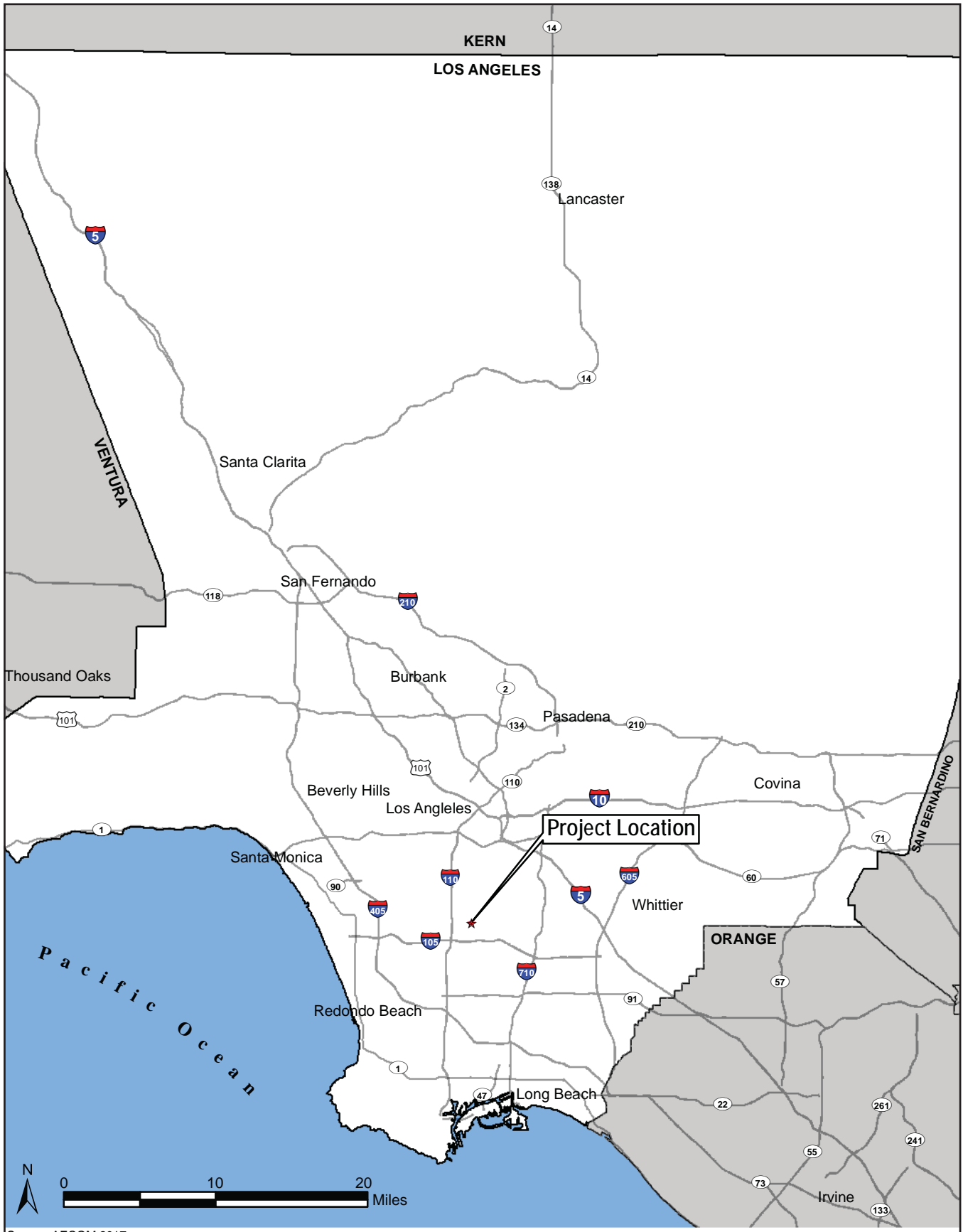
The California Environmental Quality Act (CEQA) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed project constitutes a project as defined by CEQA (California Public Resources Code Section 21000 et seq.). The CEQA Guidelines Section 15367 states that a "Lead Agency" is "the public agency which has the principal responsibility for carrying out or approving a project." Therefore, LADWP is the lead agency responsible for compliance with CEQA for the proposed project.

As lead agency for the proposed project, LADWP must complete an environmental review to determine if implementation of the proposed project would result in significant adverse environmental impacts. To fulfill the purpose of CEQA, an Initial Study has been prepared to assist in making that determination. Based on the nature and scope of the proposed project and the evaluation contained in the Initial Study environmental checklist (contained herein), LADWP, as the lead agency, has concluded that impacts caused by the proposed project are less than significant with incorporation of appropriate mitigation measures as defined herein.

1.3 Project Location and Setting

The proposed 99th Street Wells Filtration Plant Project would be located at 9880 Wadsworth Avenue, adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line Right-of-Way (ROW) in the Watts community of the City of Los Angeles (Figures 1 and 2). The project site is bound by Wadsworth Avenue to the west, 98th Street to the north, Clovis Avenue to the east, and the 99th Street Elementary School to the south. The project site is adjacent to residential single-family homes west of Wadsworth Avenue and to the north along 98th Street. The property is designated Public Facilities and zoned PF-1 (Public Facilities).

Currently, the existing approximately 24,800-square-foot 99th Street Wells Pumping Station Complex consists of a covered forebay, a pumping station, a chlorination station, a fluoridation station, a corrosion inhibitor building, an electrical industrial station, and underground pipelines (Figure 3). Four groundwater wells and an overhead 34.5 kilovolt (kV) distribution power line and overhead transmission lines (No. 23) are located just north of the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW.



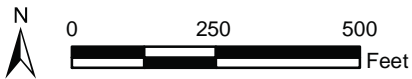
Source: AECOM 2017

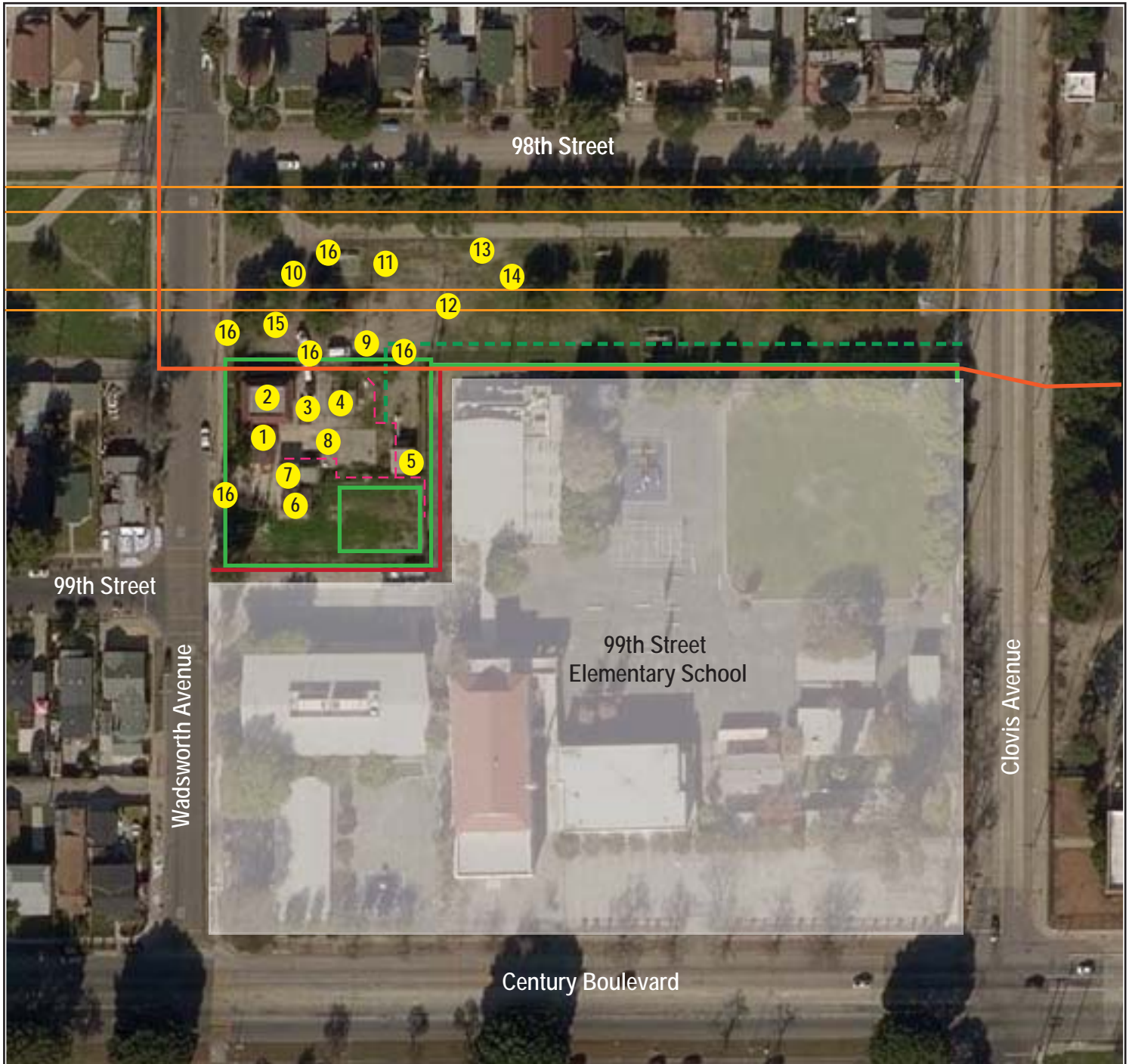
Figure 1
Regional Location



Source: Bing Maps 2017

— Project Site

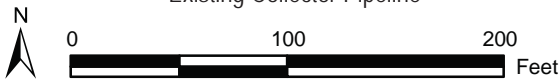




Source: Bing Maps 2017

- Existing Overhead Transmission Line No. 23
- Existing Overhead 34.5 kV Distribution Line
- Existing School Fence
- Future Chloramination Station and Existing Fence
- - - Chloramination Station Piping
- - - Existing Collector Pipeline

- 1** Building #1 (Old Pump Station)
- 2** Pump Station #2
- 3** Restroom
- 4** Industrial Station
- 5** Corrosion Inhibitor Building
- 6** Fluoridation Building
- 7** Chlorination Station
- 8** Forebay
- 9** Construction Office Trailer
- 10** Employee Parking
- 11** Steel Beams Storage
- 12** Piping Storage
- 13** Station Materials
- 14** Equipment Parking
- 15** Trailer and Guard Shack
- 16** Access Gates



The 99th Street Wells Chloramination Station project is currently in progress and is anticipated to continue until November 2018. This IS/MND only analyzes environmental impacts associated with the proposed 99th Street Wells Filtration Plant Project located adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW. The proposed project is a separate project from the chloramination station project.

1.4 Project Objectives

The objectives of the proposed project are to (1) ensure LADWP meets the USEPA National Secondary Drinking Water Regulations for iron and manganese and (2) maintain LADWP's reliability to serve groundwater to its customers. LADWP would meet these objectives through the construction of the necessary infrastructure to convey safe, reliable, and high quality potable water to customers in the South Los Angeles/Harbor portion of the City of Los Angeles.

1.5 Description of the Proposed Project

The proposed project would remove naturally occurring iron and manganese from the groundwater wells at the 99th Street Wells Field. The proposed project would reroute a 15-inch well collector line, install sand separators, packaged filtration units and a backwash system, and utilize on-site sodium hypochlorite generation at the 99th Street Wells chloramination station. The filtration plant would treat the groundwater supply for iron and manganese before it is further treated by the chloramination station for disinfection. The filtration plant would include a backwash reclaim system consisting of pumps, valves and controls, and reclaimed water tanks. The treatment process would involve sand separation, chemical oxidation, and filtration. The raw well water would first go through sand separators to remove excess sand. Sodium hypochlorite would then be injected to oxidize the iron and manganese and form a precipitate. The filters would then remove the iron and manganese precipitate and the filtered water would continue into the 99th Street Pumping Station forebay for chloramination disinfection. The treated water would then be pumped to the distribution system. During project operation, waste from the backwash system would be trucked out approximately four times a year.

The Fe/Mn treatment facility would be located northeast of the pumping station, directly north of the elementary school. The Fe/Mn treatment will consist of pressure vessels adjacent to reclamation tanks for backwash purposes. The collector line of the four wells would be realigned to enter the Fe/Mn filtration first, and then lead to the chloramination station located directly west of the school for disinfection with chloramine treatment. Additional fencing would be installed to secure the new facility. The fence would extend to the west, north and east boundaries of the LADWP Power System Transmission Line ROW. The southern portion of the concrete pad already has fencing. Figure 4 shows the proposed site plan.

Due to power line clearance requirements, the proposed project would require the relocation of existing 34.5 kV overhead power lines to be buried underground. The underground installation of the buried 34.5 kV power lines would begin northeast of the existing 99th Street Wells Pumping Station Complex at the LADWP transmission station on Clovis Avenue between Century Boulevard and 98th Street, head north along Clovis Avenue and 98th Street, then travel west along 98th Street, and then north along Wadsworth Avenue for a total length of approximately 1,180 feet (Figure 4). An approximately 2.5-foot wide by 7.5-foot deep trench would be excavated within the roadway that could be covered with metal plates during periods of the day when construction is not on-going. A cut and cover trenching technique would be used to install the underground electrical conduit. Once a segment of the electrical conduit has



been installed and concrete-encased, the trench would be backfilled with concrete slurry and returned to its original condition. Excess soil would be disposed of at an appropriate regional landfill. Electrical conduit installation would require on-street parking restrictions and closure of at least one lane of the roadway. On average, approximately 40 linear feet of electrical conduit would be installed per day.

The 99th Street Wells Pumping Station Complex uses the following general safety standards and controls for current operations and would continue to implement these safety standards and controls for the proposed project.

- In the event of a hydrogen gas leak, the sodium hypochlorite generation unit would turn off and the room ventilation fan would remain on. A second back-up emergency fan would also turn on to quickly vent the hydrogen gas outside. Additionally, upon detection of hydrogen gas, sensors would transmit both a local alarm and a remote alarm signal to a continuously-manned station.
- Intrusion alarms triggered by the building doors would be transmitted to a continuously-manned station.
- Security video cameras would be installed inside each room of the building and around the exterior of the building. Camera recordings would be transmitted to a continuously-manned station.
- All electrical safety systems would be equipped with back-up power via an emergency generator or battery.
- LADWP operators would be on stand-by 24 hours a day, 7 days a week, and would respond promptly to any alarm or emergency conditions.

1.7 Construction Schedule and Procedures

The proposed project would include two phases. The first phase would include the undergrounding of the power lines and is estimated to occur during summer when the elementary school is out of session between May 2018 and September 2018. The second phase would include the Fe/Mn treatment system installation and is anticipated to take approximately 325 working days or 15 months, estimated to begin in December 2018 and end in February 2020. Construction equipment, materials, and supplies for the proposed project would be delivered to the 99th Street Wells Pumping Station Complex. Vehicles required for project construction would include a digger derrick, backhoe, concrete trucks, large transport vehicles (for vault/dirt), and a crane.

Excavation at the project site would create truck trips for transferring the excavated material and removing the debris from the project site for off-site disposal. The project construction for both phases would create up to approximately 2,570 cubic yards (CY) of excavated material/debris. Additionally, approximately 800 CY of concrete would be delivered to the project site. Overall, approximately 350 total off-site truck trips may be required for excavation and concrete activities.

The construction phasing for the proposed project is detailed below in Table 1-1, Construction Phasing Assumptions.

Table 1-1 Construction Phasing Assumptions

	Phase 1: Underground Power Line Relocation	Phase 2: Installation of Fe/Mn Treatment System and Reroute of Collector Line
Length of construction	4-5 months	15 Months
# of Construction Equipment and Type	1-2 of the following: Backhoe, Excavator, Crane, Dump Truck, End Dump, Flatbed Truck, Water Truck, Towable Air Compressor, Cement Truck, Concrete Truck, Polecat Truck, Digger Derrick	1-2 of the following: Backhoe Loader, Compactor, Forklift, Man Lift, Crane, Truck Mounted Concrete pump, Cement Truck, Tracked Skid Steer, Dump Truck, Drill Rig, Excavator, Water Truck
# of Equipment & Deliveries Traveling To & From Project Site Per Day (Typical & Peak)*	Typical: 2 Peak: 5	Typical: 2 Peak: 5
Amount of Construction Debris Generated	1,070 CY	1,500 CY
# of Dump/Haul Truck Trips Per Day	6	6
# of Construction Workers (Typical & Peak)*	Typical: 5 Peak: 6	Typical: 4 Peak: 5

Generally, in accordance with the Noise Ordinance, construction activity would occur Mondays through Fridays from 7:00 a.m. to approximately 9:00 p.m. The sidewalk directly west and north of and adjacent to the project site would be temporarily closed for the duration of construction. Parking along this section would also be temporarily restricted for the duration of construction activities. A flag person would direct pedestrian and vehicular traffic whenever equipment goes in and out of the project site. The City of Los Angeles requires a construction worksite traffic control plan and safety program, consistent with federal and state requirements.

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 protect migratory nesting birds under the Migratory Bird Treaty Act (MBTA) and by California Fish and Game Code (CFGF) by initiating construction outside the nesting season (February 15 through September 15), to the greatest extent feasible, and by conforming to standard protocols of MBTA and CFGF requirements such as preconstruction surveys.
- The proposed project would implement Rule 403 dust control measures required by the South Coast Air Quality Management District (SCAQMD), which would include the following:
 1. Water shall be applied to exposed surfaces at least two times per day to prevent generation of dust plumes.
 2. The construction contractor shall utilize at least one of the following measures at each vehicle egress from the project site to a paved public road:
 - a. Install a pad consisting of washed gravel maintained in clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long;
 - b. Pave the surface extending at least 100 feet and at least 20 feet wide;

- c. Utilize a wheel shaker/wheel spreading device consisting of raised dividers at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages; or
 - d. Install a wheel washing system to remove bulk material from tires and vehicle undercarriages.
3. All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
4. Construction activity on exposed or unpaved dirt surfaces shall be suspended when wind speed exceeds 25 miles per hour.
5. Ground cover in disturbed areas shall be replaced in a timely fashion when work is completed in the area.
6. A community liaison shall be identified concerning on-site construction activity including resolution of issues related to PM₁₀ generation.
7. Non-toxic soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
8. Traffic speeds on all unpaved roads shall be limited to 15 miles per hour or less.
9. Streets shall be swept at the end of the day if visible soil is carried onto adjacent public paved roads. If feasible, water sweepers shall be used.
- The construction contractor would develop and implement an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) for construction activities. Erosion control and grading plans 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; and
 - Retaining sediment within the construction area.
 - Construction erosion control BMPs may include the following:
 - Temporary desilting basins;
 - Silt fences;
 - Gravel bag barriers;
 - Temporary soil stabilization with mattresses and mulching;
 - Temporary drainage inlet protection; and
 - Diversion dikes and interceptor swales.
- The proposed project would comply with the Regional Water Quality Control Board's National Pollution Discharge Elimination System (NPDES) Phase II Rule.
- Construction workers would utilize personal protection equipment, including noise-reducing ear protection, during construction activities.
- Residences and businesses near the power line relocation would be notified prior to the start of construction (e.g., via flyers) of lane closures and parking restrictions in their vicinity. The notices would include a telephone number for comments or questions related to construction activities.

- 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.

1.8 Required Permits 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:

City of Los Angeles Department of Water and Power

- Certification by the City of Los Angeles Board of Water and Power Commissioners that the environmental document was prepared in accordance with CEQA and other applicable codes and guidelines
- Approval by the City of Los Angeles Board of Water and Power Commissioners of the proposed project

City of Los Angeles Department of Public Works, Bureau of Engineering

- Industrial Waste Discharge Permit
- A-Permit for driveway replacement and/or sidewalk repairs
- Excavation Permit

City of Los Angeles Department of Building and Safety

- Grading Permit

California Department of Public Health

- Amended Water System Permit

State of California, Los Angeles Regional Water Quality Control Board

- National Pollution Discharge Elimination System Permit

California Department of Transportation

- Transportation Permit
- Approval of Traffic Management Plan
- Approval of temporary road closures

SECTION 2 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines to determine if the proposed project may have a significant effect on the environment.

CEQA INITIAL STUDY FORM

Project Title:

99th Street Wells Filtration Plant Project

Lead Agency Name and Address:

Los Angeles Department of Water and Power
Environmental Affairs
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Contact Person and Phone Number:

Jane Hauptman
Environmental Planning and Assessment
Los Angeles Department of Water and Power
(213) 367-0968

Project Sponsor's Name and Address:

Los Angeles Department of Water and Power
Water Engineering and Technical Services
111 North Hope Street
Los Angeles, CA 90012

Project Location:

The project area is located in the Watts community of South Los Angeles.

City Council District:

Districts 2 and 8

Neighborhood Council District:

Empowerment Congress Southeast Area Neighborhood Development Council

General Plan Designation:

The proposed 99th Street Wells Filtration Plant Project would be located at 9880 Wadsworth Avenue, adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line Right-of-Way (ROW) in the Watts community of the City of Los Angeles. The project site is bound by Wadsworth Avenue to the west, 98th Street to the north, Clovis Avenue to the east, and the 99th Street Elementary School to the south. The project site is adjacent to residential single-family homes west of Wadsworth Avenue and to the north along 98th Street. The property is designated Public Facilities and zoned PF-1. The properties adjacent to the proposed project include the following designations: Very Low Residential and Public Facilities.

Zoning:

The proposed project site is zoned PF-1 (Public Facilities). The properties surrounding the proposed project are zoned PF-1 and R1-1 (One Family Residential).

Description of Project:

The proposed project would construct an iron and manganese (Fe/Mn) treatment facility directly adjacent to the existing 99th Street Wells Pumping Station in the Watts community of the City of Los Angeles. The proposed project is part of LADWP's program to ensure LADWP meets the USEPA National Secondary Drinking Water Regulations for Fe/Mn and maintain LADWP's reliability to serve groundwater. The proposed project would remove naturally occurring iron and manganese from the groundwater wells.

Due to power line clearance requirements, the proposed project would require the relocation of existing 34.5 kilovolt (kV) overhead power lines to be buried underground. The underground installation of the buried 34.5 kV power lines would begin northeast of the existing 99th Street Wells Pumping Station Complex at the LADWP transmission station on Clovis Avenue between E Century Boulevard and 98th Street, head north along Clovis Avenue and 98th Street, then travel west along 98th Street, and then north along Wadsworth Avenue for a total length of approximately 1,180 feet (Figure 4).

Construction of the proposed project would include two phases. The first phase would include the undergrounding of the power lines and is estimated to occur during summer when the elementary school is out of session between May 2018 and September 2018. The second phase would include the Fe/Mn treatment system installation and is anticipated to take approximately 300 working days or 15 months, estimated to begin in December 2018 and end in February 2020.

Surrounding Land Uses and Setting:

The proposed project would be located at 9880 Wadsworth Avenue, adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line Right-of-Way, in the City of Los Angeles. The proposed project area would generally be bound by Wadsworth Avenue to the west, Century Boulevard to the south, Clovis Avenue to the east, and 98th Street to the north. The proposed project is located within the community of Watts. The proposed project abuts public facilities (elementary school) and residential (single family homes) uses.

Reviewing Agencies:

- City of Los Angeles Department of Public Works, Bureau of Engineering
- California Department of Public Health
- State of California, Los Angeles Regional Water Quality Control Board
- California Department of Transportation
- County Sanitation Districts of Los Angeles County

California Native American Tribe Consultation:

One Native American Tribe has requested consultation pursuant to Public Resources Code section 21080.3.1 and consultation has been completed with LADWP. Consultation included a discussion of the level of environmental review and potential adverse impacts to tribal cultural resources. Confidentiality has been maintained pursuant to Public Resources Code 21092.3(c). See Section XVII below for additional discussion.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the Environmental Impacts discussion in Section 3.

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an environmental impact report is required.
- I find that the proposed project may have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Jane Hauptman for
 Signature
 Charles C. Holloway
 Manager of Environmental Assessment and Planning
 Los Angeles Department of Water and Power

10-24-2017
 Date

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?				X
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c. Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson act contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?			X	

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d. Expose sensitive receptors to substantial pollutant concentrations?			X	
e. Create objectionable odors affecting a substantial number of people?			X	
IV. 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 Game or U.S. Fish and Wildlife Service?				X
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?			X	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?			X	

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d. Disturb any human remains, including those interred outside of dedicated cemeteries?			X	
VI. GEOLOGY AND SOILS. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b. Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill?			X	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
VII. GREENHOUSE GAS EMISSIONS: Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impacts on the environment?			X	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	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?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements?			X	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?			X	
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X	

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f. Otherwise substantially degrade water quality?			X	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				X
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j. Inundation by seiche, tsunami, or mudflow?				X
X. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?				X
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?				X
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
XI. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XII. 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?		X		
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				X
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
XIII. POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIV. 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?				X
ii) Police protection?				X
iii) Schools?				X
iv) Parks?				X
v) Other public facilities?				X
XV. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
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?				X

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC. Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				X
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e. Result in inadequate emergency access?				X
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	
XVII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?				X
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the 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.			X	
XVIII. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	

	Potentially Significant Impact	Less Than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e. Result in a determination by the wastewater treatment provider 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?				X
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g. Comply with federal, state, and local statutes and regulations related to solid waste?			X	
XIX. 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?			X	
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.			X	
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?			X	

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SECTION 3 ENVIRONMENTAL IMPACT ASSESSMENT

INTRODUCTION

The following discussion addresses impacts to various environmental resources per the Initial Study checklist questions contained in Appendix G of the CEQA Guidelines.

I. AESTHETICS

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact. The proposed project would not have an adverse effect on 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 from park lands, private and publicly owned sites, and public right-of-way.¹ The proposed project would be located at 9880 Wadsworth Avenue, adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW, in an urbanized and fully developed area within South Los Angeles. The views from vantage points adjacent to the project site would remain similar to existing conditions. Additionally, the Southeast Los Angeles Community Plan does not identify any official scenic vistas within or adjacent to the project area.² No impact to a scenic vista would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. Implementation of the proposed project would not damage scenic resources within a state scenic highway. No designated California Scenic Highways are located near the project site.³ Additionally, no Designated Scenic Highways in the Transportation Element of the City of Los Angeles General Plan are located near the project site.⁴ Therefore, no impact to scenic resources would occur.

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

Less Than Significant Impact. The proposed project involves the construction of a filtration plant adjacent to the existing 99th Street Wells Pumping Station Complex and within the LADWP Power System Transmission Line ROW, as well

¹ City of Los Angeles Department of City Planning, *City of Los Angeles General Plan, Conservation Element*, adopted September 26, 2001.

² City of Los Angeles Department of City Planning, *Southeast Los Angeles Community Plan*, adopted March 22, 2000.

³ State of California Department of Transportation. *State Scenic Highway Program*. Website: http://www.dot.ca.gov/hq/LandArch/scenic_highways, accessed May 22, 2017.

⁴ City of Los Angeles Department of City Planning, *City of Los Angeles General Plan, Transportation Element*, adopted September 8, 1999.

as the undergrounding of power lines. The project property is currently unfenced and contains grasses and weedy vegetation. The proposed filtration plant would be constructed at the area adjacent to the existing 99th Street Wells Pumping Station Complex. As a result, the entire project property would be fenced off from the public. The existing 34.5 kV overhead power lines would be removed and relocated underground along 98th Street. However, there would be no substantial change to the visual character or quality of the project site and its surroundings. It would remain a pumping station and continue to appear as a water system facility. The impact to visual character would be less than significant.

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

Less Than Significant Impact. Implementation of the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views. The proposed project would be constructed during daylight hours adjacent to the existing 99th Street Wells Pumping Station Complex. No nighttime lighting would be used during construction. Security lighting for the new building would be designed in conformance with all applicable codes and standards, requiring that lighting be focused and downward such that light spillover on adjacent properties would not occur. Further, the proposed new building materials would not be metallic or consist of a shiny material. Therefore, new sources of lighting and glare would not significantly affect the day or nighttime views in the area, and the impact would be less than significant impact.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:

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

No Impact. The project site is located in a fully urbanized portion of South Los Angeles and would be adjacent to the existing 99th Street Wells Pumping Station Complex and within the LADWP Power System Transmission Line ROW. The proposed project site is designated as Urban and Built-Up Land on the "Important Farmland in California" map prepared by the California Resources Agency pursuant to the Farmland Mapping and Monitoring Program.⁵ Thus, no part of the proposed project would be located on or near Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the proposed project would not convert farmland to a non-agricultural use, and no impact to farmland would occur.

⁵ State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping & Monitoring Program, *Important Farmland in California, 2008* map. Website: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/statewide/2008/fmmp2008_08_11.pdf, accessed May 22, 2017.

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

No Impact. As discussed in Section II(a) above, the proposed project would be located adjacent to the existing 99th Street Wells Pumping Station Complex and within the LADWP Power System Transmission Line ROW in a fully urbanized portion of South Los Angeles. Furthermore, the County of Los Angeles does not offer Williamson Act contracts.⁶ Therefore, the proposed project would not conflict with existing zoning or a Williamson Act contract. 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)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The proposed project would be located adjacent to the existing 99th Street Wells Pumping Station Complex and within the LADWP Power System Transmission Line ROW in a fully urbanized portion of South Los Angeles. No portion of the project site is zoned for or developed as forest land or timberland as defined in Public Resources Code Section 12220(g) and Government Code Section 4526, respectively.⁷ Therefore, the proposed project would not conflict with existing zoning for or cause a rezoning of forest or timberland. No impact would occur.

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

No Impact. The proposed project would be located adjacent to the existing 99th Street Wells Pumping Station Complex and within the LADWP Power System Transmission Line ROW in a fully urbanized portion of South Los Angeles. No portion of the project site is zoned or developed for a forest land use, and the proposed filtration plant would not be located within or adjacent to forest lands.⁸ Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

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?

No Impact. The proposed project would be located adjacent to the existing 99th Street Wells Pumping Station Complex and within the LADWP Power System Transmission Line ROW in a fully urbanized portion of South Los Angeles. The project site and adjacent properties are designated as “Urban and Built-Up Land;” no portion of the project site or surrounding area is identified as Prime Farmland,

⁶ State of California Department of Conservation, Division of Land Resource Protection, *Williamson Act Program – Basic Contract Provisions*. Website: http://www.conservation.ca.gov/dlrp/lca/basic_contract_provisions, accessed May 22, 2017.

⁷ City of Los Angeles Zoning Information and Map Access System (ZIMAS). Website: <http://zimas.lacity.org/>, accessed May 22, 2017.

⁸ Ibid.

Unique Farmland, or Farmland of Statewide Importance.⁹ Additionally, no forest lands exist on or adjacent to the project area. Therefore, the proposed project would not change the existing environment in a way that would result in the conversion of Farmland to non-agricultural use or forest land to non-forest use. No impact would occur.

III. AIR QUALITY

Potential impacts to air quality associated with the proposed project were determined from the calculations presented in the Air Quality Technical Output (see Appendix A).

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan (e.g., the SCAQMD Plan or Congestion Management Plan)?

Less Than Significant Impact. A significant impact would occur under this criterion if implementation of the proposed project:

- Resulted in an increase in the frequency or severity of existing air quality violations;
- Caused or contributed to new air quality violations;
- Delayed timely attainment of the air quality standards or interim emissions reductions specified in the applicable air quality plan; or
- Exceeded the underlying growth assumptions incorporated into the analysis of the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP).

The applicable air quality plan for the project area is the SCAQMD 2016 AQMP, which serves as a regulatory guide for improving regional air quality within the South Coast Air Basin (Basin) to meet the ambient air quality standards (AAQS). The Basin is a geographic region that covers 6,745 square miles, including all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The 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. The SCAQMD is responsible for air quality management, regulation, and enforcement for all stationary and mobile sources of air pollutant emissions within the Basin.

The Clean Air Act requires the USEPA to identify geographic portions of the country that consistently experience concentrations of criteria air pollutants (CAPs) above the National Ambient Air Quality Standards (NAAQS), which are ambient air thresholds established to protect public health and welfare, as well as the environment. NAAQS have been established by the USEPA for seven CAPs: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead (Pb). If measured concentrations of any CAP within a region are not consistently below the

⁹ State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping & Monitoring Program. *Important Farmland in California. 2008.* Website: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/statewide/2008/fmmp2008_08_11.pdf, accessed May 22, 2017.

applicable NAAQS for that pollutant, the region is designated as “non-attainment” of the NAAQS. A non-attainment area can only be reclassified after a period of three years demonstrating no concentrations exceeding the NAAQS.

Due to the continual recurrence of measured concentrations exceeding the NAAQS, the USEPA currently classifies the Los Angeles County portion of the Basin as a non-attainment area for O₃, PM_{2.5}, and Pb. The Pb violations are associated with the operation of two large lead-acid battery recycling facilities in eastern Los Angeles County, and a redesignation request for classification of attainment is currently pending. In addition to the federal designations, at the State level under the jurisdiction of the California Clean Air Act, the California Air Resources Board has designated the Los Angeles County portion of the Basin as a non-attainment area for O₃, PM₁₀, PM_{2.5}, and Pb. The California Ambient Air Quality Standards (CAAQS), which the California Air Resources Board uses as a basis for establishing its designations, are generally more stringent than the NAAQS and reflect the State’s ambitious efforts to improve air quality.

One component of the SCAQMD responsibility in managing regional air quality is preparing the AQMP, which demonstrates how emissions control strategies for sources within the Basin will achieve attainment of the NAAQS and CAAQS by a specific date. The AQMP is updated every four years, and the most recent publication is the 2016 AQMP, which focuses on reducing emissions of volatile organic compounds (VOC), nitrogen oxides (NO_x), and particulate matter to address the existing regional O₃, PM₁₀, and PM_{2.5} air quality violations. Development of the proposed project would conflict with implementation of the 2016 AQMP if it resulted in additional violations of the AAQS for O₃, PM₁₀, or PM_{2.5}, or caused or contributed to a new air quality violation. As discussed under Section III(b) below, construction of the proposed project would not generate sufficient quantities of air pollutants to potentially violate any AAQS, and future operations would not add any new substantial sources of air pollutants to the project site.

The proposed project could also conflict with implementation of the 2016 AQMP if it introduced disproportionate growth in population, housing, or employment that exceeded the underlying assumptions incorporated into forecasts developed for the 2016 AQMP. The proposed project does not include a residential component, and therefore, would not increase population or housing in the area. In addition, the proposed project would not increase employment upon completion of construction, and construction activities would be temporary in nature and not result in any additional long-term permanent employees. Furthermore, construction activities would be conducted pursuant to the requirements of SCAQMD Rule 402 (Public Nuisance) and Rule 403 (Fugitive Dust). Development of the proposed project is considered to be consistent with growth assumptions included in the AQMP, and would not conflict with the forecasting methodology.

Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality management plan. The impact would be less than significant.

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

Less Than Significant Impact. A project may result in a significant air quality impact under this criterion if project-related emissions would exceed federal, State, or regional standards or thresholds, or if project-related emissions would substantially contribute to an existing or projected air quality violation.

The SCAQMD has developed regionally-specific Air Quality Significance Thresholds to assess potential impacts that may result from construction and operation of proposed projects. Daily emissions VOC, NO_x, CO, sulfur oxide (SO_x), PM₁₀ and PM_{2.5} should be quantified and assessed on both regional and localized scales, in accordance with SCAQMD air quality analysis methodologies. The SCAQMD guidance includes quantitative mass daily thresholds for regional emissions generated by sources located on and off the project site combined, as well as localized emissions resulting from sources located only on the project site. The proposed project would potentially violate an air quality standard if construction activities or future operations resulted in maximum daily emissions of any regulated air pollutant exceeding the applicable SCAQMD mass daily thresholds shown in Table 3-1.

The regional emissions analysis includes all sources of air pollutants associated with construction and operation of the proposed project, including on-site sources (i.e. heavy duty construction equipment and fugitive dust generation during earth-moving activities) and off-site sources (i.e., mobile source emissions from vehicle travel and utility generation at remote facilities). The localized emissions analysis focuses only on emission sources situated on the project site, and emissions from these sources are compared to localized significance threshold (LST) values. The LST values were designed to prevent air quality violations by limiting emissions based on local emissions profiles and pollutant concentrations measured at the nearest ambient air quality monitoring site. The SCAQMD jurisdiction is divided into 38 Source Receptor Areas (SRAs), each with its own corresponding LST values.

Operation of the proposed project would not result in any new substantial stationary sources of air pollutants on the project site. Therefore, an operational LST analysis is not warranted. LST values for daily emissions of NO_x, CO, PM₁₀, and PM_{2.5} during construction activities are shown in Table 3-1 for a one-acre project site located in SRA 12 South Central Los Angeles County having sensitive receptors within a distance of 25 meters.

**Table 3-1 SCAQMD Air Quality Significance Thresholds –
Mass Daily Emissions**

Scenario	Mass Daily Emissions (pounds/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
CONSTRUCTION						
Regional	75	100	550	150	150	55
Localized	-	46	231	-	4	3
OPERATION						
Regional	55	55	550	150	150	55

SOURCE: Terry A. Hayes Associates, 2017.

Construction Emissions

Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the project site. Fugitive dust emissions would primarily result from site preparation (e.g., excavation and grading) activities. NO_x emissions would primarily result from the use of construction equipment and haul trucks. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the intensity of equipment use, the specific type of activity and, for dust, the prevailing weather conditions.

It is mandatory for all construction projects in the Basin to comply with SCAQMD Rule 403 for Fugitive Dust. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce PM_{2.5} and PM₁₀ emissions associated with construction activities by approximately 61 percent.

Daily emissions of regulated pollutants associated with construction activities and future operation of the proposed project were estimated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutants emissions for a variety of land use projects. The emissions factors and calculation methodologies contained in the CalEEMod program have been approved for use by the SCAQMD. The model contains data that are specific for the SCAQMD jurisdiction and Los Angeles County.

Construction assumptions were developed using a combination of specific details provided by the project team and CalEEMod default project parameters. The analysis was based on construction activity beginning in May 2018 and phased as follows:

- Installation of underground power lines: 100 days (approximately 4-5 months).
- Installation of Fe/Mn treatment system: 325 days (approximately 15 months).

The relocation of power lines is expected to take place during the summer break months of May to September while school is not in session. Installation of the treatment system is anticipated to begin in December 2018 and last for 15 months, ending in approximately February 2020. A typical construction day would require the use of two to three pieces of equipment, and maximum equipment activity intensity could require up to five pieces of equipment on rare occasion. As a conservative exercise, the emissions modeling in CalEEMod considered the maximum potential daily activity as the basis for analysis.

Installation of the underground power lines would generate approximately 1,070 cubic yards of displaced material to be removed and installation of the treatment system would generate the disposal of approximately 1,500 cubic yards of excavated material. The second phase of construction would also require approximately 800 cubic yards of concrete to be delivered to the site. It is assumed that no more than six export haul loads and five concrete deliveries would occur on a single day. Table 3-2 presents the maximum daily emissions of regulated pollutants that would be generated during construction of the proposed project.

Table 3-2 Estimated Daily Construction Emissions

Construction Phase Source Type	Daily Emissions (Pounds Per Day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Relocation of Power Lines						
On-Site Emissions	1.8	19.4	12.7	<0.1	1.0	0.9
Off-Site Emissions	0.2	4.0	1.4	<0.1	0.4	0.1
Total	2.0	23.4	14.1	<0.1	1.4	1.0
Installation of Fe/Mn Treatment System						
On-Site Emissions	0.9	11.2	10.2	<0.1	0.4	0.4
Off-Site Emissions	0.2	5.2	1.8	<0.1	2.7	0.7
Total	1.1	16.4	12.0	<0.1	3.2	1.1
Maximum Regional Total	2.0	23.4	14.1	<0.1	3.2	1.1
Regional Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Maximum Localized Total	-	19.4	12.7	-	1.0	0.9
Localized Significance Threshold ¹	-	46	231	-	4	3
Exceed Threshold?	-	No	No	-	No	No

SOURCE: Terry A. Hayes Associates Inc., 2017.

Note: ¹ Assumed a 1-acre project site and a 25-meter (82-foot) receptor distance.

As shown in Table 3-2, maximum daily emissions of air pollutants generated by construction activities would not exceed any applicable regional or localized significance threshold values established by the SCAQMD even under the most intense periods of equipment use. The threshold values were derived by the SCAQMD to ensure that air quality violations would not occur as a result of individual project implementation. Therefore, construction of the proposed project would not cause or contribute to an air quality violation and impacts would be less than significant under this criterion.

Operational Emissions

Regarding operational emissions, the proposed project would not involve any additional site staff or maintenance activities beyond existing operating conditions. Therefore, no impact to regional operational emissions would occur.

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

Less Than Significant Impact. The proposed project would not result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard. The proposed project and the whole of the Los Angeles metropolitan area are located within the Basin, which is characterized by relatively poor air quality. The Basin is currently classified as a federal and State non-attainment area for O₃, PM₁₀, PM_{2.5}, and near-field Pb and a federal attainment/maintenance area for CO. It is classified as a state attainment area for CO, and it currently meets the federal and State standards for NO₂, SO₂, and Pb.

Because the Basin is designated as a State and/or federal non-attainment air basin for O₃, PM₁₀ and PM_{2.5}, there is an ongoing regional cumulative impact associated with these pollutants. However, an individual project can emit these pollutants without significantly contributing to this cumulative impact depending on the magnitude of emissions. The SCAQMD has published guidance that generally the project-level thresholds may be used as an indicator defining if project emissions contribute to the regional cumulative impact. The use of the project-specific thresholds to determine a cumulative impact is acceptable for a project that is not constructed, by necessity, in conjunction with another project. The proposed project is not dependent on another project and the project-level thresholds have been deemed appropriate for assessing the cumulative impact.

As discussed under Section III(b) above, the proposed project would not generate air pollutant emissions that exceed the project-level thresholds. Therefore, the proposed project would not significantly contribute to cumulative regional emissions and impacts with regards to cumulatively considerable increases of non-attainment pollutants would remain less than significant.

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

Less Than Significant Impact. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The California Air Resources Board has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include: residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors located near the project site include the following land uses:

- 99th Street Elementary School adjacent to the south
- Residences on Wadsworth Avenue located approximately 50 feet to the west
- Residences on 98th Street located approximately 200 feet to the north
- Residences on Century Boulevard located approximately 500 feet to the south
- Will Rogers Memorial Park located approximately 1,300 feet to the southeast

The above sensitive receptors represent the nearest land uses with the potential to be impacted by substantial pollutant concentrations resulting from development of the proposed project. Additional sensitive receptors are located further from the project site in the surrounding community and would be less impacted by air emissions than the above sensitive receptors.

Construction activity would generate on-site pollutant emissions associated with equipment exhaust and fugitive dust. Table 3-2 shows the estimated localized emissions. Even under the day of maximum equipment activity, daily emissions would not exceed the SCAQMD localized significance thresholds. Average daily emissions throughout project construction would be of lesser magnitude than those shown in Table 3-2. The LST values were designed to prevent localized concentrations from exceeding levels that would be potentially harmful to public health and the environment. Additionally, installation of the underground power lines would occur in stages and the locations of equipment would vary over the course of phase completion, resulting in minimal emissions in the same place throughout the duration of the first phase. Therefore, the impact to sensitive receptors would be less than significant.

During operation, the potable water pumped through the existing 99th Street Wells Pumping Station would be preliminarily treated using a process to remove Fe and Mn prior to reaching the chloramination station. The collector line would be realigned to direct inflow to the Fe/Mn treatment system, which would consist of contained treatment towers arranged in series adjacent to several reclamation tanks for backwash purposes. The emissions associated with operation of the Fe/Mn treatment system would be negligible. Therefore, operation of the proposed project would result in a less than significant impact to sensitive receptors related to toxic air contaminant emissions.

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

Less Than Significant Impact. Potential sources that may emit odors during construction activities include equipment exhaust. Odors from these sources would be localized and generally confined to the immediate area surrounding the segment under construction. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Therefore, the odor impact during construction would be less than significant.

During operations, the Fe/Mn treatment system would be contained with no direct sources of emissions to the atmosphere. This system would prevent the escape of noxious odors. Therefore, the odor impact during operations would be less than significant.

IV. BIOLOGICAL RESOURCES

Potential impacts to biological resources associated with the proposed project were determined from the results presented in the Biological Technical Report Update Memo (see Appendix B).

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?**

No Impact. Sensitive plants include those listed as threatened or endangered, proposed for listing, or candidate for listing by the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) or those listed by the California Native Plant Society. Sensitive wildlife species are those species listed as threatened or endangered, proposed for listing, or candidate for listing by USFWS and/or CDFW, or considered special status by CDFW. Sensitive habitats are those that are regulated by USFWS, U.S. Army Corps of Engineers, and/or those considered sensitive by the CDFW.

The California Natural Diversity Database and the California Native Plant Society *Inventory of Rare and Endangered Plants* were reviewed for information on known occurrences of sensitive species and communities within a 10-mile radius of the project site; it included the Beverly Hills, Hollywood, Inglewood, Long Beach, Los Angeles, Redondo Beach, South Gate, Torrance, and Venice U.S. Geological Survey 7.5-minute topographic quadrangle maps.^{10,11} Based on the above literature review, 49 sensitive wildlife species, 61 sensitive plant species, and 7 sensitive plant communities were identified as having the potential to occur in the project region.

No suitable habitat for special-status wildlife species, special-status plant species, or sensitive natural communities occurs within the biological survey area (BSA). Due to the presence of urban developed habitats, the absence of any observations of special-status wildlife or plant species during the field survey, and familiarity with the habitat requirements for special-status wildlife and plant species known from the region, special-status wildlife and plant species are not expected to occur within the BSA.

Because the proposed project would involve construction of a filtration plant adjacent to the existing pumping station complex and within the LADWP Power System Transmission Line ROW and relocation of power lines within an existing street, there would be no direct impacts to sensitive plants, wildlife, or vegetation communities. Further, all construction staging would occur within the project site,

¹⁰ California Department of Fish and Wildlife (CDFW). 2017. California Natural Diversity Data Base (CNDDB). Full report for Inglewood, Beverly Hills, Long Beach, Los Angeles, Redondo Beach, South Gate, Torrance, Hollywood, and Venice Quadrangles. Generated May 26, 2017.

¹¹ California Native Plant Society (CNPS). 2017. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society. Sacramento, CA. Available at <http://www.rareplants.cnps.org/>. Accessed May 26, 2017.

such that no indirect impacts to native vegetation, sensitive plants, sensitive wildlife species, or sensitive vegetation communities.

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

No Impact. As discussed in Section IV(a) above, construction activities would occur entirely within an existing, fully urbanized portion of South Los Angeles. No native vegetation removal would occur, and there would be no direct or indirect impact to a riparian habitat or other sensitive natural community.

- 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?**

No Impact. As discussed in Section IV(a) above, construction activities would occur entirely within an existing, fully urbanized portion of South Los Angeles. No sensitive natural communities, including aquatic communities protected under the Clean Water Act (waters of the U.S.) or Section 1600 of the California Fish and Game Code (waters of the state) are present within the BSA. As such, no wetlands are located within or adjacent to the project site and there would be no impact to direct or indirect federally protected wetlands.

- 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/breeding sites?**

No Impact. 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 resources, thereby encouraging population growth and diversity. A viable wildlife migration corridor consists of more than a path between fragmented habitats. A wildlife migration corridor must also include adequate vegetative cover and food sources for transient species, as well as resident populations of less mobile animals to survive. They must be extensive enough to allow for large animals to pass relatively undetected, be free of obstacles, and lack any other distraction that may hinder wildlife passage such as lights or noise.

As discussed in Section IV(a) above, construction activities would occur entirely within an existing, fully urbanized portion of South Los Angeles. Therefore, the proposed project does not constitute a wildlife corridor, nor does it abut one. No native vegetation removal would occur and no water bodies would be affected. Therefore, there would be no impact to suitable nesting or migratory habitat. No impact would occur.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?**

No Impact. The proposed project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Construction of the proposed project would not require removal of trees under the protection of the City of Los Angeles Tree Protection Ordinance.¹² No impact to protected trees 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?**

No Impact. The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project site is not located within any Significant Ecological Areas or designated Critical Habitat. No regional habitat conservation plans or Natural Community Conservation Plans have been adopted within the project area.¹³ No impact would occur.

V. CULTURAL RESOURCES

Potential impacts to cultural resources associated with the proposed project were determined from the results presented in the Cultural and Tribal Cultural Resources Impact Analysis Memo (see Appendix C).

Would the project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?**

Less Than Significant Impact. The project area and a study area encompassing a 0.5-mile radius around the project site were examined for cultural resource investigations and previously recorded cultural resource sites. The archival research included a review of previously recorded archaeological site records and reports, historic site and property inventories, and historic maps including Sanborn Fire Insurance Maps.

The records search indicated that five cultural resources have been previously recorded within a 0.5-mile radius of the project site; however, these resources do not occur within the project site. No historic resources, landmarks, or monuments were recorded with the California State Historic Resources Inventory, California Historical Landmarks, or Los Angeles Historic Cultural Monument Register within the 0.5-mile radius of the project site.

Additionally, the project footprint and surrounding areas were surveyed for historic architectural resources that have the potential to be impacted by the proposed

¹² City of Los Angeles Municipal Code, Section 17.02.

¹³ County of Los Angeles, *General Plan, Significant Ecological Areas and Coastal Resource Areas*, October 2011.

project. No buildings or structures were observed within the project area. No contractor's marks were observed on any of the paved surfaces. Adjacent structures at the 99th Street Wells Pumping Complex and the 99th Street Elementary School complex have been evaluated and found not to be eligible for listing in either the California Register of Historic Resources (CRHR) or the National Register of Historic Places. Although greater than 45 years in age, they are not considered historical resources (see Appendix B). The resources do not meet the level of significance to meet CRHR criteria 1 through 4. Neither resource has specific associations with any historic 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 (Criterion 1); has specific associations with a person whose life was important to local, California, or national history (Criterion 2); embodies the distinctive characteristics of a type, period, or method of construction or represent the work of a master, or possess high artistic values (Criterion 3); or yield information important in the prehistory or history of the local area, California, or the nation (Criterion 4).

There are no significant historical resources within the Area of Potential Effects. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource, and the impact would be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?

Less Than Significant Impact. Review of previous investigations in the vicinity of the project site and of the prehistoric context for the area provides an understanding of the potential for encountering prehistoric sites in the project site. Additionally, subsequent land use helps determine whether archaeological remains have been preserved.

The project vicinity was previously used as ranchland since the Spanish period. The lands lay within the grazing area of Mission San Gabriel Arcángel, and not far from important routes to San Pedro. The location of the proposed project is in the vicinity of the first area land grant known as Rancho la Tajuata, or Tajuata. The land was ranched as part of Rancho la Tajuata as early as 1820. From 1926, the 99th Street Elementary School has existed just south of the property, and homes began to be developed nearby in the first quarter of the 20th century. A building appears on the site in 1937 topographic maps. As such, there is some potential to encounter archaeological resources associated with these historic uses within the project site.

Historically, Tajuata was known for its swamps, springs, and artesian wells. Rich soil and once abundant waters may have made this area desirable for indigenous peoples. However, currently, the water sources shown in historic maps of the 99th Street area are dried up or tamed, often to provide water for the City of Los Angeles. Prehistoric resources could be buried beneath the ground surface, especially in areas where development has included only minimal ground disturbance. The proposed building site is undeveloped and may hold intact prehistoric deposits, with the likelihood increasing with depth.

A cultural resources field survey of the project site was conducted on April 17, 2017. The survey of the study area did not result in the identification of any previously unknown archaeological resources.

Ground disturbance required for the construction of the proposed project is not expected to exceed approximately 7.5 feet in depth. Based on the results of the archival research and survey, there is low potential that archaeological resources would be encountered during ground disturbing activities for the proposed project. However, in the event archaeological resources are encountered during ground disturbing activities, LADWP would be required to contact a qualified archaeologist to evaluate and determine appropriate treatment for the resource in accordance with California Public Resource Code Section 21083.2(i). Work would be temporarily halted until the evaluation is completed. If any Native American cultural material is encountered within the project site, consultation with interested Native American parties would be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. Compliance with these existing regulations would ensure that impacts to archaeological resources would be less than significant.

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

Less Than Significant Impact. Consultation of the U.S. Geological Survey *Preliminary Geologic Map of the Los Angeles 30' x 60' Quadrangle, Southern California*¹⁴ shows that the project area consists of younger Quaternary Alluvium. The field visit did not reveal the presence of any local conditions that would contradict this assertion or require special consideration. These deposits are younger than 10,000 years old. Consequently, such deposits have a low probability of yielding fossils, including vertebrate fossils or other scientifically significant fossils. Excavation is not anticipated to exceed 7.5 feet in depth for any component of the proposed project, and therefore is not anticipated to disturb any other subsurface deposits or formations. The impact to paleontological resources would be less than significant.

d) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. No dedicated cemeteries or other places of human internment are known to exist within the project site. No evidence of human remains was observed on the surface during the survey within the project site. A Sacred Lands File search and Native American contact program were conducted for the proposed project. Although not expected, human remains could be encountered during construction. In the event that any human remains or related resources are discovered, such resources would be treated in accordance with state and local regulations and guidelines for disclosure, recovery, relocation, and preservation, as appropriate, including CEQA Guidelines Section 15064.5(e). Work in the immediate vicinity of the discovery would be suspended until the remains are

¹⁴ Yerkes, Robert F., and Russell H. Campbell (2005), 2005 Preliminary Geologic Map of the Los Angeles 30' x 60' Quadrangle, Southern California. U.S. Geological Survey Open-File Report 2005-1019. Available online: <http://pubs.usgs.gov/of/2005/1019/> Accessed June 2, 2017.

evaluated by the county coroner as to the nature of the remains. If the remains are determined to be of Native American origin, the Native American Heritage Commission would be contacted and a Most Likely Descendent identified pursuant to Public Resources Code Section 5097.98 and California Code of Regulations Section 15064.5. Compliance with existing regulations would ensure that impacts related to the discovery of human remains would be less than significant.

VI. GEOLOGY AND SOILS

Would the project:

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

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

Less Than Significant Impact. The proposed project would not expose people or structures to new adverse effects associated with rupture of a known earthquake fault. There are numerous known earthquake faults in the close proximity of the project site; however, the project site is not located within a City-designated fault rupture zone.¹⁵ The proposed filtration plant and power line relocation 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. Compliance with existing regulations would ensure a less than significant impact related to fault rupture.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The project site is located within the seismically active southern California region, and like all locations within the area, is subject to strong seismic ground shaking. However, as discussed in Section VI(a)(i) above, the proposed filtration plant and power line relocation 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?

Less Than Significant Impact. The project site is located within a City-designated liquefiable area and a state zone of liquefaction where historic occurrence of liquefaction, or local geological, geotechnical, and groundwater conditions indicate a potential for permanent ground displacements.^{16,17} However, the proposed project would be designed and constructed in

¹⁵ City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Alquist-Priolo Special Study Zones & Fault Rupture Study Areas Map*, September 1996.

¹⁶ City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Areas Susceptible to Liquefaction Map*, September 1996.

¹⁷ State of California Seismic Hazard Zones Map, Inglewood Quadrangle. March 25, 1999.

compliance with the latest version of the City of Los Angeles Building Code and other applicable federal, state, and local codes relative to liquefaction criteria. Compliance with existing regulations would ensure a less than significant impact related to seismic-related ground failure, including liquefaction.

iv) Landslides?

No Impact. The project site is not located within a City-designated hillside area.¹⁸ Further, construction of the proposed project would not be expected to increase the risk of landslides in the hillside areas. No impact related to landslides would occur.

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

Less Than Significant Impact. Construction activities would expose soils for a limited time, allowing for possible erosion. However, all excavation would comply with all applicable provisions of Chapter IX, Division 70 of the Los Angeles Municipal Code (LAMC), which addresses grading, excavation, and fill. During construction, transport of sediments from the project site by storm water runoff and winds would be prevented through the use of appropriate BMPs as discussed in Section 1.7 including the implementation of Rule 403 dust control measures as required by the SCAQMD. Additionally, LADWP would develop and implement a stormwater pollution prevention plan (SWPPP) for construction activities, in compliance with the latest National Pollutant Discharge Elimination System requirements for storm water discharges. The SWPPP would include erosion controls. Implementation of the required construction BMPs would ensure that soil erosion impacts would be less than significant.

No large areas of exposed soils subject to erosion would be created or affected by operation of the proposed project. Therefore, there would be no long-term impact related 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?

Less Than Significant Impact. 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 VI(a)(iii) and VI(a)(iv) above, the project site is located in an area identified as being at risk for liquefaction, but is not located within a designated hillside area. Nonetheless, 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.

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

¹⁸ City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Landslide Inventory & Hillside Areas Map*, September 1996.

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. Pumping of groundwater would continue within the 99th Street Wells Pumping Station. However, no increase in withdrawal is anticipated. The proposed project involves the treatment of pumped groundwater to filter out iron and manganese prior to distribution to the service area. Therefore, subsidence would not 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. 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. These building codes are designed to ensure safe construction. Compliance with existing regulations would ensure a less than significant impact.

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?

Less Than Significant Impact. 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 on-site geologic materials in the project area primarily consist of alluvium.¹⁹ Due to the mix of earth materials underlying the project site, these soils are not expected to be high clay-bearing, and expansion potential is considered low. Additionally, 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. Therefore, the proposed project would not create a substantial risk to life or property resulting from expansive soils, and the impact would be less than significant.

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

No Impact. The proposed project involves the construction of a filtration plant to remove naturally occurring iron and manganese from the groundwater supply distributed through the 99th Street Wells Pumping Station. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, no impact associated with the use of such systems would occur.

¹⁹ California Department of Conservation, *Seismic Hazard Zone Report for the Inglewood 7.5-Minute Quadrangle, Los Angeles County, California*, January 2006.

VII. GREENHOUSE GAS EMISSIONS

Potential impacts to greenhouse gas emissions associated with the proposed project were determined from the calculations presented in the Greenhouse Gases Technical Output (see Appendix A).

Would the project:

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less Than Significant Impact. Greenhouse gas (GHG) emissions refer to a group of emissions that are generally believed to affect global climate conditions. The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), keep the average surface temperature of the Earth close to 60 degrees Fahrenheit. Of all the GHGs, CO₂ is the most abundant gas that contributes to climate change through fossil fuel combustion. The other GHGs are less abundant, but have higher global warming potential than CO₂. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent mass of CO₂, denoted as CO₂e.

The SCAQMD has not approved a GHG significance threshold for the development of non-SCAQMD and non-industrial projects. The industrial projects significance threshold is based on the methodologies recommended by the California Air Pollution Control Officers Association (CAPCOA).²⁰ Based on the methodologies and assessments by CAPCOA, a significance threshold of 10,000 metric tons per year was used for this impact analysis. This significance threshold is the standard used by the Market Advisory Committee for inclusion in a GHG Cap and Trade System in California.

GHG emissions were estimated for equipment exhaust, truck trips, and worker commute trips. Construction of the proposed Fe/Mn treatment system is scheduled to be completed in approximately 15 months (December 2018 to February 2020). The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions, and recommends emissions for construction to be amortized over 30 years. As shown in Table 3-3, total GHG emissions during construction when assuming maximum daily activity throughout the entire duration would be approximately 427 MTCO₂e, or 214 MTCO₂e per year. Estimated GHG emissions would be less than the 10,000 metric tons of CO₂e per year quantitative significance threshold. Therefore, the GHG emissions impact would be less than significant during construction of the proposed project.

²⁰ California Air Pollution Control Officers Association. *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. January 2008.

Table 3-3 Estimated Greenhouse Gas Emissions from Project Construction

Source	Carbon Dioxide Equivalent (Metric Tons per Year)
Total Construction Emissions Maximum Daily Activity (427 MTCO ₂ e)	214
<i>SCAQMD Significance Threshold – Industrial Projects</i>	10,000
Exceed Threshold?	No

SOURCE: SCAQMD, 2015.

Regarding operational emissions, the proposed project would not involve any additional site staff or maintenance activities beyond existing operating conditions. Therefore, no impact to GHG emissions would occur during operation of the proposed project.

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

No Impact. As shown in Table 3-2 above, the proposed project would not generate significant construction emissions. In addition, the proposed project would not involve any additional site staff or maintenance activities beyond existing operating conditions. The proposed project would not conflict with any state or local climate change policy or regulation adopted for the purpose of reducing emissions of GHGs. Therefore, no impact would occur.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. 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 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; the transport of fuels, lubricating fluids, and solvents; and the removal of excavation material and debris. All storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control, the U.S. Environmental Protection Agency, the Occupational Safety & Health Administration, Los Angeles Fire Department (LAFD), and the Los Angeles County Health Department. The transport, use, and disposal of construction-related hazardous materials would occur in conformance 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 transport, storage, use, or disposal of hazardous materials. The treatment process would involve sand separation, chemical oxidation, and filtration. The raw well water would first go

through sand separators to remove excess sand. The sodium hypochlorite produced for the chloramination station using an electrolytic process would also be used to oxidize the iron and manganese to form a precipitate. The sodium hypochlorite would be generated on-site from salt and water and would not require additional salt deliveries. The filters would then remove the iron and manganese precipitate and the filtered water would continue into the 99th Street Pumping Station forebay for chloramination disinfection. The treated and disinfected water would then be pumped to the distribution system.

In the event of a leak or spill, LADWP would have emergency response plans set in place with LAFD. Compliance with applicable emergency response plans and implementation of general safety standards and controls would ensure impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant.

Therefore, project operation related to the use or transport of hazardous materials would pose a less than significant hazard to the public or the environment.

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?

Less Than Significant Impact. The project construction would not 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. As discussed in Section VIII(a) above, construction activities may involve limited transport, storage, use, or disposal of some hazardous materials, such as on-site fueling/servicing of construction equipment; the transport of fuels, lubricating fluids, and solvents; and the removal of excavation material and debris. Compliance with existing federal, state, and local regulations would ensure that construction impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be less than significant.

As discussed in Section VIII(a), long-term operation of the proposed project would involve the transport, storage, use, or disposal of hazardous materials. The treatment process would involve sand separation, chemical oxidation, and filtration. The raw well water would first go through sand separators to remove excess sand. Sodium hypochlorite, produced on-site using salt and water, would then be injected to oxidize the iron and manganese and form a precipitate. The filters would then remove the iron and manganese precipitate and the filtered water would continue into the 99th Street Pumping Station forebay for chloramination disinfection. The treated and disinfected water would then be pumped to the distribution system. Additionally, in the event of a leak or spill, LADWP would have emergency response plans and general safety standards and controls set in place with LAFD to minimize the risk for spills and exposure to sensitive receptors. Therefore, project operation related to reasonably foreseeable upset or accident conditions would pose a less than significant hazard to the public or the environment.

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

Less Than Significant Impact. The 99th Street Elementary School is located directly adjacent to the project site. As discussed in Section VIII(a) above, construction activities would involve limited transport, storage, use, and disposal of hazardous materials. However, as discussed, the transport, use, and disposal of construction-related hazardous materials would occur in conformance with all applicable federal, state, and local regulations governing such activities. Therefore, impacts related to the school would be less than significant.

Long-term operation of the proposed project would involve the transport, storage, use, or disposal of hazardous materials. As discussed in Section VIII(a), the treatment process would involve sand separation, chemical oxidation, and filtration. However, emergency response plans and general safety standards and controls would be set in place to minimize the risk for spills and exposure to sensitive receptors. Operational impacts related to the school would be less than significant.

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

Less Than Significant Impact. The project site is not listed on the Department of Toxic Substances Control's EnviroStor database of identified underground storage tanks, the State Water Resources Control Board's GeoTracker site, the Cortese list, or the U.S. Environmental Protection Agency's National Priorities List.^{21,22,23,24} These lists are compiled pursuant to Section 65962.5 of the Government Code. It is not anticipated that any underground storage tanks would be encountered or disturbed during construction activities. Therefore, implementation of the proposed project would not create a significant hazard to the public or the environment. 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?**

No Impact. The closest airports to the project site are the Compton/Woodley Airport, located 3.5 miles south of the project site, and the Hawthorne Municipal Airport, located 4.1 miles southwest of the project site.²⁵ Therefore, the proposed

²¹ California Department of Toxic Substances Control, *EnviroStor Database*. Website: <http://www.envirostor.dtsc.ca.gov/public/>, accessed June 2, 2017.

²² California State Water Resources Control Board, *GeoTracker Database*, Search by Map Location. Website: <http://geotracker.waterboards.ca.gov/>, accessed June 2, 2017.

²³ California Department of Toxic Substances Control, *DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List)*. Website: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed June 2, 2017.

²⁴ United States Environmental Protection Agency, *National Priorities List*, Search by Location. Website: <http://www.epa.gov/superfund/sites/query/queryhtm/nplmapsg.htm>, accessed June 2, 2017.

²⁵ Airnav.com, Airports search. Website: <http://www.airnav.com/airports/>, accessed June 2, 2017

project would not result in a safety hazard related to an airport for people residing or working in the project area. No impact would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project site is not located within the vicinity of a private airstrip.²⁶ The closest private airport is the Goodyear Blimp Base Airport, located 6 miles south of the project site. Therefore, the proposed project would not result in a safety hazard related to a private airport for people residing or working in the project area. No impact would occur.

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

Less Than Significant Impact. The proposed project would require the relocation of existing 34.5 kV overhead power lines to be buried underground. The underground installation of the buried 34.5 kV power lines would begin northeast of the existing 99th Street Wells Pumping Station Complex at the LADWP transmission station on Clovis Avenue between E Century Boulevard and 98th Street, head north along Clovis Avenue and 98th Street, then travel west along 98th Street, and then north along Wadsworth Avenue for a total length of approximately 1,180 feet (Figure 4). An approximately 2.5-foot wide by 7.5-foot deep trench would be excavated within the roadway that could be covered with metal plates during periods of the day when construction is not on-going. A cut and cover trenching technique would be used to install the underground electrical conduit. Once a segment of the electrical conduit has been installed and concrete encased, the trench would be backfilled with concrete slurry and returned to its original condition. Electrical conduit installation would require on-street parking restrictions and closure of at least one lane of the roadway. On average, approximately 40 linear feet of electrical conduit would be installed per day. LADWP would require approval of a Traffic Management Plan and temporary road closures from the California Department of Transportation. No road closures are anticipated. Impacts that would physically interfere with an adopted emergency response plan would be less than significant during project construction.

Prior to project operation, LADWP would revise the Emergency Response Plan and address emergency procedures associated with the proposed new facilities and operations to account for the change in on-site operations. Therefore, the long-term impact would be less than significant.

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?

Less Than Significant Impact. The project site is not located within a City-designated Mountain Fire District or Fire Buffer Zone.²⁷ However, it is located directly adjacent to LADWP's electrical transmission line, which is considered a

²⁶ Ibid.

²⁷ City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Selected Wildfire Hazard Areas Map*, September 1996.

selected wildland fire hazard in the City of Los Angeles. The 34.5 kV power line located adjacent to the transmission line would be removed and relocated underground. Additionally, LADWP would revise the Emergency Response Plan and address safety procedures associated with the proposed new facilities and operations. Implementation of the Emergency Response Plan would ensure that wildland fire impacts would be less than significant.

IX. HYDROLOGY AND WATER QUALITY

Would the project:

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

Less Than Significant Impact. The proposed project would not violate a water quality standard or waste discharge requirement. Construction activities, such as 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 receiving waters.

However, prior to the start of construction, LADWP would be required to obtain an NPDES Permit, issued by the State of California, Los Angeles Regional Water Quality Control Board and an Industrial Waste Discharge Permit from the City of Los Angeles Department of Public Works, Bureau of Engineering. One of the conditions of the permits is the development and the implementation of a SWPPP, which would identify structural and non-structural BMPs to be implemented during the construction phase. BMPs developed for the SWPPP 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, and retaining sediment within the construction area, as well as 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.

Therefore, operation of the proposed project would not violate any water quality standards or water discharge requirements.

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

Less Than Significant Impact. The proposed project would ensure LADWP meets the USEPA National Secondary Drinking Water Regulations for iron and manganese. Pumping of groundwater would continue within the 99th Street Wells Pumping Station. However, no increase in withdrawal is anticipated. The proposed

project would remove naturally occurring iron and manganese from the groundwater wells at the 99th Street Wells Field. The filtration plant would treat the groundwater supply for iron and manganese before it is further treated by the chloramination station for disinfection. Therefore, the impact to groundwater supply would be 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?**

Less Than Significant Impact. The proposed project would be located adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW. The proposed filtration plant would be built on a flat and undeveloped site.

Construction activities would temporarily increase the potential for erosion due to excavation. However, compliance with the SWPPP developed for the proposed project, which would include erosion control measures, would ensure a less than significant impact. Since the topography of the proposed project is flat and minimal in area, impacts related to erosion resulting from altered drainage patterns 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, which would result in flooding on- or off-site?**

Less Than Significant Impact. As discussed in Section IX(c) above, the project site would be located adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW. Construction of the proposed project would have a small footprint and would not substantially increase the amount of surface runoff. As discussed in Section IX(a) above, BMPs would be implemented to control runoff from the project site during construction. Therefore, flooding is not expected to occur on- or off-site as a result of the proposed project. Implementation of BMPs would ensure a less than significant impact.

- 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?**

Less Than Significant Impact. As discussed above, implementation of the proposed project would result in the removal of a minimal portion of the project site's permeable surface. However, the facility design would comply with the City of Los Angeles Standard Urban Stormwater Mitigation Plan regulations to manage storm water on-site. Thus, no substantial increase in the amount of runoff from the project site is anticipated.

Construction would require water, as necessary, to control fugitive dust. Fugitive dust emissions at the construction site would be controlled by water trucks equipped with spray nozzles. Construction water needs would generate minimal quantities of discharge water, which would drain into existing storm drains located

in the vicinity of the project site. BMPs would be identified in the SWPPP developed for the proposed project pursuant to the NPDES permit requirements to control runoff during construction. Thus, the proposed project would not create or contribute runoff which would exceed drainage system capacity, nor would it provide substantial additional sources of polluted runoff. The impact would be less than significant.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. The proposed project would remove naturally occurring iron and manganese from the groundwater wells at the 99th Street Wells Field. However, potential sources of contaminants that could potentially degrade water quality would include soil erosion and fuels for construction equipment. As discussed in Section IX(a) above, a SWPPP would be developed and implemented for the proposed project construction to prevent the degradation of water quality. Further, LADWP would design and construct the proposed project in accordance with existing local, state, and federal regulations and guidelines, including standards set by the California Department of Health Services. Implementation of BMPs and compliance with existing regulations would ensure a less than significant impact.

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?

No Impact. A 100-year flood is a flood defined as having a 1.0 percent chance of occurring in any given year. The project site is located within areas designated as Other Areas Zone X on the Federal Emergency Management Agency flood insurance rate maps. The Other Areas Zone X designation indicates areas determined to be outside the 0.2 percent annual chance floodplain.²⁸ Therefore, the project site is not known to experience flooding and is not anticipated to flood in the future. Further, the proposed project does not include a residential component; therefore, it would not place housing within a 100-year flood hazard area. No impact would occur.

h) Place within a 100-year flood area structures to impede or redirect flood flows?

No Impact. As discussed above, the project site is designated as Other Areas Zone X, which indicates the area is determined to be outside the 100-year floodplain.²⁹ No impact to flooding would occur.

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?

Less Than Significant Impact. The project site would be located within a City-designated inundation area.³⁰ However, the project site is located outside of an

²⁸ Federal Emergency Management Agency, Flood Insurance Rate Maps, Search by Street Address. Website: <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>, accessed June 2, 2017.

²⁹ Ibid.

existing floodplain and approximately two miles from the closest body of water. Therefore, flooding as a result of the failure of a levee or dam would be unlikely. The proposed project involves construction of a filtration plant within an existing pumping station complex. LADWP would construct the proposed project in compliance with existing federal, state, and local regulations. Additionally, no habitable structures are included as part of the proposed project. Therefore, implementation of the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam. The impact would be less than significant.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. Seiches are oscillations generated in enclosed bodies of water usually as a result of earthquake-related ground shaking. A seiche wave has the potential to overflow the sides of a containing basin to inundate adjacent or downstream areas. As discussed above, the project site would be located within a City-designated inundation area. However, seiches primarily cause damage to properties that are located in close proximity to a body of water. The distance between the project site and the closest body of water is approximately two miles. Thus, there is a decreased risk of a seiche resulting in damage to the proposed project. No impact would occur.

Tsunamis are large ocean waves caused by the sudden water displacement that results from an underwater earthquake, landslide, or volcanic eruption. Tsunamis affect low-lying areas along the coastline. The project site is not located within a designated Tsunami Hazard Area.³¹ No impact would occur.

As discussed in Section VI(a)(iv) above, no portion of the project site is not located within a City-designated hillside area. Therefore, the project site would not be subject to a landslide. No impact would occur.

X. LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. The proposed project would not physically divide an established community. The proposed project would be located adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW. No streets or sidewalks would be permanently closed as a result of the proposed project, and no separation of uses or disruption of access between land use types would occur. Therefore, the proposed project would not physically divide an established community, and no impact would occur.

³⁰ City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Inundation and Tsunami Hazard Areas Map*, September 1, 1996.

³¹ *Ibid.*

- 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?**

No Impact. The proposed project would be located adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line. The filtration plant would serve existing uses and would not conflict with the zoning or land use designations of such uses. Therefore, implementation of the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?**

No Impact. The proposed project would be located entirely within an existing urbanized area. There are no adopted habitat conservation plans that apply to the project area, nor is the proposed project located in or near any natural community conservation plan areas (refer to Section IV[f] above). Therefore, the proposed project would not conflict with any such plan. No impact would occur.

XI. MINERAL RESOURCES

Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No Impact. The proposed project is not located within a City-designated Mineral Resource Zone Area, which are areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.³² The project site is also not located near any oil wells, fields, or drilling areas designated by the City or the state.^{33,34} Therefore, implementation of the proposed project would not result in the loss of availability of known mineral resources that would be of value to the region and residents of the state. No impact would occur.

³² City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Areas Containing Significant Mineral Deposits* Map, September 1996.

³³ City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Oil Fields and Oil Drilling Areas* Map, September 1996.

³⁴ State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, DOGGR Well Finder Online Mapping System. Website: <https://maps.conservation.ca.gov/doggr/wellfinder/#close>, accessed June 9, 2017.

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?

No Impact. The project site is not delineated as a locally-important mineral resource recovery site on any City plans.³⁵ Further, as discussed in Section XI(a) above, no active oil wells exist on the project site. Therefore, implementation of the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site, and no impact would occur.

XII. NOISE

Would the project result in:

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

Less Than Significant Impact with Mitigation Incorporated. A significant impact would occur if the proposed project would expose persons to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or other applicable standards.

The City of Los Angeles 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, Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited) of the LAMC 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. Under certain conditions, the City may grant a waiver to allow limited construction activities to occur outside of the limits described above.

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 A-weighted decibel (dBA) noise level exceeding 75 dBA at a distance of 50 feet is prohibited when located within 500 feet of a residential zone. 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.

³⁵ City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, *Oil Field & Oil Drilling Areas Map*, September 1996.

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise- and vibration- sensitive and may warrant unique measures for protection from intruding noise. In addition, sensitive receptors can include commercial uses that depend on quiet environments, such as sound studios. Based on the LAMC standard, the potential for construction noise impacts in an urban environment is typically limited to within 500 feet of the project site. Sensitive receptors within 500 feet of the project site include the following:

- 99th Street Elementary School adjacent to the south
- Residences located along Clovis Avenue and 99th Street (underground power line relocation)
- Residences on Wadsworth Avenue located approximately 50 feet to the west
- Residences on 98th Street located approximately 200 feet to the north
- Holy Trinity Church located approximately 350 feet to the north
- Residences on Century Boulevard located approximately 500 feet to the south

The above sensitive receptors represent the nearest sensitive locations with the potential to be impacted by the proposed project. Additional sensitive receptors are located within 500 feet of the project site, but these receptors would be somewhat shielded from construction activity by the buildings immediately surrounding the project site. Construction activity would result in the loudest noise levels at sensitive land uses that have a direct line-of-sight to the ground level of the project site. This is because the first tier of buildings immediately surrounding the project site would act as a noise barrier to other sensitive receptors located beyond these buildings. Therefore, construction-related noise levels are only presented for receptors closest to the project site.

Existing Noise Levels

The existing noise environment is characterized by vehicular traffic on local roadways and noises typical of a dense urban area (e.g., sirens, horns, airplanes, etc). Noise monitoring locations were selected to be representative of the ambient environment in the project area. Ambient noise monitoring was performed using a SoundPro DL Sound Level Meter on August 13, 2013 between 11:10 a.m. and 4:10 p.m., and on May 17, 2017 between 10:10 a.m. and 11:40 a.m. As shown in Table 3-4 below, existing noise levels range from 55.6 to 66.6 dBA community noise equivalent level (L_{eq}) for 2013, and 61.1 to 68.9 dBA L_{eq} for 2017 on locations adjacent to the proposed project. The higher 2017 noise levels may be attributed to factors such as playground activity, traffic volumes, and construction activity occurring on Wadsworth Avenue.

Table 3-4 Existing Noise Levels

Noise Monitoring Location	2013 Noise Level (dBA, Leq)	2017 Noise Level (dBA, Leq)
858 East 99th Street	58.3	65.9
939 East 98th Street	55.6	61.1
1136 East Century Boulevard	66.6	68.9

SOURCE: Terry A. Hayes Associates, 2017.

Construction

Noise impacts from construction of the proposed project would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Construction activities typically require the use of numerous pieces of noise-generating equipment. Typical noise levels from various types of equipment that may be used during construction are listed in Table 3-5. Noise levels from individual pieces of equipment typically are between 67.7 and 79.4 dBA L_{eq} at 50 feet. Underground power line relocation would typically include equipment similar to a backhoe or front loader, polecat truck (similar to auger drill), as well as use of heavy trucks. Installation of the proposed Fe/Mn treatment system and rerouting of the collector line would typically include equipment similar to backhoes and trucks.

Table 3.5 Construction Equipment Noise Levels

Construction Equipment	Noise Level at 50 feet (dBA, Leq)
Auger Drill	77.4
Backhoe	73.6
Concrete Mixer Truck	74.8
Compactor	76.2
Compressor	73.7
Concrete Pump Truck	74.4
Crane	72.6
Drill Rig Truck	72.2
Dump Truck	72.5
Excavator	76.7
Flatbed Truck	70.3
Gradall	79.4
Man Lift	67.7

SOURCE: FHWA, *Roadway Construction Noise Model (RCNM)*, Version 1.1, 2008.

Construction equipment noise levels would exceed the 75 dBA at 50 feet noise limitation listed in Section 112.05 of the LAMC. However, construction noise levels are exempt from the 75 dBA noise threshold if all technically feasible noise attenuation measures are implemented. The project applicant would be required to implement mitigation measures N-1 through N-11, which are feasible measures to control noise levels, including installation of engine mufflers and noise blanket

barriers. According to the *L.A. CEQA Thresholds Guide*, engine mufflers would reduce equipment noise levels by at least 3 dBA. The other mitigation measures, while difficult to quantify, will assist in controlling construction noise.

Additional mitigation measures were considered to reduce noise levels but were determined to be infeasible. These include:

- Electric Equipment - Electric equipment would generate less noise than diesel equipment but is not widely available and the horsepower associated with electric equipment would not meet project requirements.
- Relocation - Removing the affected land uses from the construction zone would eliminate the impact. This measure would not be feasible due to the number of affected land uses and associated cost of relocation.

Implementation of mitigation measures N-1 through N-11 would reduce equipment engine noise levels, but not to below 75 dBA at 50 feet. With implementation of these feasible mitigation measures, construction activity would result in a less than significant construction noise impact.

The 99th Street Wells Chloramination Station project is currently in progress and is anticipated to continue until November 2018. Based on the proposed project schedule, construction of the underground distribution line could overlap with construction activities at the proposed Fe/Mn treatment facility. Construction for the Filtration Plant will not begin until the chloramination station project is completed. Impacts would not be significant with implementation of mitigation measures for both projects.

Operational Noise

Regarding operational noise, the proposed project would not involve any additional site staff or maintenance activities beyond existing operating conditions. Therefore, no noise impact would occur during operation of the proposed project.

Mitigation Measures

The proposed project would implement the following mitigation measures to control noise levels during construction:

- N-1** All construction equipment shall be properly maintained and equipped with mufflers and other suitable noise attenuation devices.
- N-2** LADWP shall endeavor to use rubber-tired equipment rather than track equipment. Noisy equipment shall be used only when necessary and shall be switched off when not in use.
- N-3** LADWP shall establish a public liaison for project construction that shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the

cause of the concern (e.g., starting too early, bad muffler, etc.) and shall work with LADWP to implement reasonable measures to address the concern.

- N-4** The construction contractor shall develop a construction schedule to ensure that the construction would be completed quickly to minimize the time that a sensitive receptor will be exposed to construction noise.
- N-5** Construction supervisors shall be informed of project-specific noise requirements, noise issues for sensitive land uses adjacent to the project, and/or equipment operations.
- N-6** Construction equipment shall be electric- and hydraulic-powered rather than diesel- and pneumatic-powered, as feasible.
- N-7** For construction of the Fe/Mn treatment facility, the construction contractor shall install a 12-foot high temporary barrier along the southern boundary of the construction site with the 99th Elementary School and the northern boundary of the Fe/Mn treatment facility construction site facing 98th Street. The acoustical barrier shall be constructed of material having a minimum surface weight of two pounds per square foot or greater, and a demonstrated Sound Transmission Class rating of 25 or greater as defined by American Society for Testing and Materials Test Method E90. The barrier shall be left in place until heavy-duty equipment would no longer be used at the project site.
- N-8** Prior to construction work, the public shall be notified of the location and dates of construction. Residents shall be kept informed of any changes to the schedule.
- N-9** LADWP shall coordinate with the site administrator for the 99th Elementary School. Coordination between the site administrator and LADWP shall continue on an as-needed basis while construction is occurring adjacent to these land uses to minimize potential disruption to the land uses.
- N-10** Construction activities are 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 increased nighttime noise levels.
- N-11** Phase 1 construction activities, which is the Underground Power Line Relocation, shall be completed during summer months while the 99th Elementary School is out of regular session.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. A significant impact would occur if the proposed project would cause excessive vibration levels. 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. The peak particle velocity is most frequently used to describe vibration impacts to buildings and is measured in inches per second.

Construction

Construction activity can result in varying degrees of vibration, depending on the equipment and methods employed. Operation of construction equipment causes vibrations that spread through the ground and diminish in strength with distance. The primary source of construction vibration includes on-site haul trucks. Directional drilling and standard construction equipment (e.g., a large bulldozer) generate vibration levels of approximately 0.089 inches per second of peak particle velocity at 25 feet. Table 3-6 presents typical vibration levels for such equipment at 11 to 150 feet. Other equipment used during construction activity would generate less vibration than presented for drilling or a large bulldozer.

Table 3-6 Vibration Velocities for Construction Equipment

Distance from Equipment (feet)	Peak Particle Velocity (inches/second)
11	0.305
12	0.268
15	0.191
18	0.145
20	0.124
25	0.089
50	0.031
75	0.017
100	0.011
125	0.008
150	0.006

SOURCE: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006.

The Federal Transit Administration (FTA) has indicated that engineered concrete and masonry buildings (typical of residential and institutional buildings) can be exposed to vibration levels up to 0.3 inches per second. In accordance with Federal Transit Administration criteria, vibration is a function of the distance of the receiver from the vibration source (i.e., construction equipment or automobiles). As shown in Table 3-6, vibration dissipates rapidly with distance. It is estimated that construction-related building damage could occur when construction equipment would be located within 11 feet of residential or institutional buildings.

Heavy trucks can generate groundborne vibrations that vary depending on vehicle type, weight, and pavement conditions. The FTA has stated in the *Transit Noise and Vibration Impact Assessment* guidance document that vibration from rubber-tired vehicles is rarely perceptible, except under poor road conditions (e.g., potholes). Roadways near the project site are well maintained, and traffic vibration levels would not be perceptible by sensitive receptors. Based on field visits, vibration levels from adjacent roadways are not perceptible along the proposed project.

Underground Distribution Line. The first phase of the proposed project would include the undergrounding of the power lines and is estimated to take 4 to 5 months, which would occur mostly during the summer when school is not in session to minimize noise impacts. The underground installation of the buried 34.5 kV power lines would begin northeast of the existing 99th Street Wells Pumping Station Complex at the LADWP transmission station on Clovis Avenue between E Century Boulevard and 98th Street, head north along Clovis Avenue and 98th Street, then travel west along 98th Street, and then north along Wadsworth Avenue for a total length of approximately 1,180 feet (Figure 4). An approximately 2.5-foot wide by 7.5-foot deep trench would be excavated within the roadway that could be covered with metal plates during periods of the day when construction is not on-going.

Residences along 98th Street and Wadsworth Avenue would be the nearest structures to construction activity. Based on preliminary engineering, the closest residential structure would be approximately 25 feet from heavy equipment. The vibration level at this distance would be approximately 0.089 inches per second, which would be less than the 0.3 inches per second FTA impact criteria. Vibration levels at the elementary school would be less than 0.089 inches per second and there is no potential for building damage.

In addition, there would be no potential for vibration levels generated by equipment associated with the underground distribution line to generate a cumulative vibration with on-going activity at the 99th Street Wells Pumping Station. Activity at the pumping station would be located over 100 feet away from activity associated with the underground distribution line.

Fe/Mn Treatment Facility. The closest buildings to the treatment facility belong to the 99th Street Elementary School and are located approximately 18 feet from the construction fence line. All the adjacent residential buildings are located further from the project site than the elementary school. Vibration levels would be less than 0.145 inches per second at the elementary school, which would be less than the 0.3 inches per second FTA impact criteria.

In addition, there would be no potential for vibration levels generated by equipment associated with the underground distribution line to generate a cumulative vibration effect with on-going activity at the 99th Street Wells Pumping Station. It is anticipated that vibration-inducing activities at the pumping station would be finished before construction activity begins at the treatment station.

Operation

Regarding operational vibration, the proposed project would not involve any additional site staff or maintenance activities beyond existing operating conditions. The proposed project would not create new sources of vibration and no operational vibration impacts would occur.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. A significant impact would occur if the proposed project would cause a substantial permanent increase in noise levels above existing ambient levels. As discussed in Section XII(a) above, operation of the proposed project would create no new permanent sources of noise. The proposed project would not involve any additional site staff or maintenance activities beyond existing operating conditions. The proposed project would not create a substantial permanent increase in noise levels above existing ambient levels. Therefore, no impact would occur.

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

Less Than Significant Impact with Mitigation Incorporated. A significant impact would occur if the proposed project would result in a substantial temporary or periodic increase in ambient noise levels. As discussed in Section XII(a) above, construction activities would result in temporary increases in noise levels at the project site. With implementation of mitigation measures N-1 through N-11, construction noise impacts 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 expose people residing or working in the project area to excessive noise levels?

No Impact. A significant impact would occur if the proposed project would expose people residing or working in the project area to excessive noise levels from a public airport or public use airport. As the proposed project does not include a residential component, this analysis focuses on construction worker exposure to aircraft noise. The closest airports to the project site are the Compton/Woodley Airport and the Hawthorne Municipal Airport, located approximately four miles south and southwest of the project site. The airport noise contour map displays the Community Noise Equivalent Level (CNEL) out to 65 dBA.³⁶ The airport noise exposure contours demonstrates that the project site is located outside of the 65 dBA level; therefore, airport noise levels would be lower than construction noise level generated by construction equipment.³⁷ Therefore, no impacts related to exposing people working in the project area to excessive noise levels from a public airport or public use airport would occur.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. A significant impact would occur if the proposed project would expose people residing or working in the project area to excessive noise levels from a private airstrip. The project site is not located within 5 miles of a private airstrip (the closest private airport is the Goodyear Blimp Base Airport approximately 6 miles south of the project site). Noise levels generated at private airports are not audible

³⁶ CNEL is the average sound level over a 24 hour period, with a penalty of 5 dBA added between 7:00 p.m. and 10:00 p.m. and a penalty of 10 dBA added for the nighttime hours of 10:00 p.m. to 7:00 a.m.

³⁷ Los Angeles County Airport Land Use Commission, Airport Influence Area. Website: http://planning.lacounty.gov/assets/upl/project/aluc_airport-hawthorne.pdf, accessed May 11, 2017.

at the project site. Therefore, no impacts related exposing people residing or working in the project area to excessive noise levels from a private airstrip would occur.

XIII. POPULATION AND HOUSING

Would the project:

- a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

No Impact. The proposed project does not include construction or operation of any residential or commercial land uses, and therefore, would not result in a direct population increase from construction of new homes or businesses. The proposed project would construct a filtration plant to ensure LADWP meets the USEPA National Secondary Drinking Water Regulations for iron and manganese and maintains LADWP's reliability to serve groundwater to its customers. Therefore, the proposed project would not result in indirect population growth. No impact to population growth would occur.

- b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No Impact. All construction activity would occur adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW. The proposed project would not require the removal of existing housing. Therefore, implementation of the proposed project would not impact the number or availability of existing housing in the area, and would not necessitate the construction of replacement housing elsewhere. No impact would occur.

- c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No Impact. As discussed in Section XIII(b) above, construction would occur adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW. There are currently no residential uses on the project site and no persons would be displaced as a result of implementation of the proposed project. Construction of replacement housing would not be necessary, and no impact would occur.

XIV. PUBLIC SERVICES

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

- i) **Fire protection?**

No Impact. Fire protection services in the City are provided by LAFD. There are two LAFD Fire Stations located within one mile of the project site: Fire

Station 64 located at 118 West 108th Street, and Fire Station 65 located at 1801 East Century Boulevard. As the proposed project would serve existing customers; it would not generate population growth. Furthermore, no new habitable structures would be built as part of the proposed project. Therefore, construction and operation of the proposed project would not require the construction of additional fire protection services or facilities or expansion of existing facilities. No impact would occur.

ii) Police protection?

No Impact. The City of Los Angeles Police Department (LAPD) is the local law enforcement agency responsible for providing police protection services in the City. The closest LAPD Community Police Station is located at 145 West 108th Street and is within one mile of the project site. As previously stated, the proposed project would not generate population growth. Therefore, construction and operation of the proposed project would not require the construction of additional police protection services or facilities or expansion of existing police facilities. No impact would occur.

iii) Schools?

No Impact. The proposed project does not include development of any residential uses, and no increase in residential population would occur. No new students would be generated, and no increase in demand for local schools would result. Therefore, construction and operation of the proposed project would not require the construction of additional school facilities or expansion of existing facilities. No impact would occur.

iv) Parks?

No Impact. Residential developments typically have the greatest potential to result in impacts to parks since these types of developments generate a permanent increase in residential population. As previously stated, the proposed project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand for local and regional park facilities. Therefore, no impact to parks would occur.

v) Other public facilities?

No Impact. The proposed project does not include development of residential or commercial uses and would not increase the demand for other public facilities. The proposed project would not result in indirect population growth, which could increase demand for other public facilities. No impact to other public facilities would occur.

XV. RECREATION

Would the project:

- a) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

No Impact. The proposed project would construct a filtration plant adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW and relocate 34.5 kV power lines underground along 98th Street. Construction and operation of the proposed project would not generate new permanent residents that would increase the use of existing parks and recreational facilities. Therefore, substantial physical deterioration of these facilities would not occur or be accelerated with implementation of the proposed project. No impact would occur.

- b) **Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

No Impact. The proposed project does not include development of any residential uses and, thus, would not generate new permanent residents that would increase the demand for recreational facilities. Further, the proposed project would serve existing customers and would not promote or indirectly induce new development that would require the construction or expansion of recreational facilities. Therefore, no impact would occur.

XVI. TRANSPORTATION/TRAFFIC

Potential impacts to transportation and traffic associated with the proposed project were determined from the calculations presented in the Traffic Technical Output (see Appendix D).

Would the project:

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

Less Than Significant Impact. This section evaluates the existing and future (cumulative) traffic conditions surrounding the proposed project and potential impacts to the study roadway intersections associated with implementation of the proposed project. The analysis was based on methodologies acceptable to the City of Los Angeles Department of Transportation.

The Critical Movement Analysis Planning methodology for the analysis of traffic operating conditions at signalized intersections was used. The impact analysis for the signalized study intersection was based on operations during project construction and the application of volume-to-capacity (V/C) calculations and levels of service (LOS).

The Highway Capacity Manual unsignalized analysis methodology was used for the two unsignalized (stop-sign controlled) study intersections. The impact analysis for these locations was based on average delay per vehicle at the worst-case (side street) approach for the partially stop-controlled intersection of Clovis Avenue and 98th Street, and average approach delay for the all-way stop-controlled intersection of Wadsworth Avenue and Century Boulevard.

Critical Movement Analysis and Highway Capacity Manual level of service definitions are provided in Table 3-7.

Table 3-7 Level of Service Definitions

LOS	Interpretation	Signalized Intersection Volume to Capacity Ratio	Unsignalized Intersection Vehicle Average Delay (seconds)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000 - 0.600	< 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 - 0.700	> 10 and < 15
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 - 0.800	> 15 and < 25
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900	> 25 and < 35
E	Poor operation. Some long standing vehicular queues develop on critical approaches.	0.901 - 1.000	> 35 and < 50
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.	Over 1.000	> 50

SOURCE: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., and Interim Materials on Highway Capacity, NCHRP Circular 212.

Project trip generation was based on the project construction plan, with a peak number of on-site construction workers at six, a peak number of daily dump/haul truck trips at six, and a peak number of daily equipment/delivery truck trips at five.

Based on these inputs, construction of the proposed project was calculated to generate the following weekday peak hour trips. A Passenger Car Equivalency factor of 2.5 was used to increase the truck trips to a number of vehicles that would be comparable in speed and roadway capacity effects. A quarter of the daily trips were assumed to occur during each peak hour, to provide a conservative analysis:

- AM inbound: Six worker vehicles, three truck trips x 2.5 = 14
- AM outbound: Three truck trips x 2.5 = 8
- PM inbound: Three truck trips x 2.5 = 8
- PM outbound: Six worker vehicles, three truck trips x 2.5 = 14

The future traffic conditions without project peak construction traffic generated by the proposed project, including a conservative two percent growth rate per year for the three-year period between 2017 and 2020, are summarized in Table 3-8. The year 2020 will be the latest planned year for project construction activities.

The future traffic conditions with project peak construction traffic generated by the proposed project are summarized in Table 3-9.

Table 3-8 Future without Project Conditions – Intersection Level of Service

Study Intersections		Future without Project			
		AM Peak Hour		PM Peak Hour	
		V/C (x.xxx) or Delay (x.x)	LOS	V/C (x.xxx) or Delay (x.x)	LOS
1	Clovis Avenue and 98th Street	8.1	A	8.0	A
2	Wadsworth Avenue and Century Boulevard	20.8	C	28.6	D
3	Central Avenue and Century Boulevard	1.015	F	1.044	F

SOURCE: KOA Corporation, 2017.

Table 3-9 Future with Project Conditions – Intersection Level of Service

Study Intersections		Future with Project			
		AM Peak Hour		PM Peak Hour	
		V/C (x.xxx) or Delay (x.x)	LOS	V/C (x.xxx) or Delay (x.x)	LOS
1	Clovis Avenue and 98th Street	8.1	A	8.0	A
2	Wadsworth Avenue and Century Boulevard	22.3	C	30.8	D
3	Central Avenue and Century Boulevard	1.022	F	1.049	F

SOURCE: KOA Corporation, 2017.

As shown in Table 3-8 and Table 3-9, vehicle and truck trips associated with construction activities of the proposed project would result in temporary, localized increases in traffic volumes and therefore small increases in the volume-to-capacity ratios and average vehicle delay. Two of the study intersections would continue to operate at LOS D or better during the a.m. and p.m. peak hours.

The Central Avenue and Century Boulevard intersection is expected to operate at LOS F during both the a.m. and p.m. peak hours. Project construction would worsen operations within LOS F at that location, but not to an extent that would be considered significant under City of Los Angeles traffic impact guidelines. The guidelines define a 0.01 (one percent) increase as significant at LOS F. The construction-related increase at this intersection does not exceed these thresholds in either peak hour.

The sidewalk directly west of and adjacent to the project site would be temporarily closed to pedestrians for the duration of construction. Parking along this section would also be temporarily restricted for the duration of construction activities. A flag person would direct pedestrian and vehicular traffic whenever equipment goes in and out of the project site.

Additionally, as discussed in Section 1.7, LADWP would require a construction worksite traffic control plan and safety program, consistent with federal and state requirements, to further reduce any potential temporary construction impacts at the project site. Implementation of the required construction BMP would ensure that impacts associated with performance of the circulation system would be less than significant.

Operation

Operation of the proposed project would not cause any substantial increase in traffic in relation to the existing traffic load and capacity of the street system. Following completion of construction, waste from the backwash system would be trucked out approximately four times a year during project operation. Therefore, the proposed project would result in less than significant permanent impacts to traffic.

- 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?**

No Impact. Project-related traffic impacts would occur during construction activities only. No traffic impacts would occur during operation of the proposed project. The County of Los Angeles Congestion Management Program level of significance thresholds are not intended to be applied to construction activities. As such, the proposed project would not exceed the significant impact thresholds defined by the County's Congestion Management Program. The proposed project would not generate any new measurable and regular vehicle trips during project operation, and no impact would occur.

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

No Impact. The proposed project would not result in a change in air traffic patterns. Construction and operation of the proposed project would not generate air traffic. Further, the proposed project would not include any high-rise structures that could act as a hazard to aircraft navigation. No impact 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)?

No Impact. The proposed project would be constructed adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW and within local roadways; however, associated work areas would be minimal in size.

The proposed project would require the relocation of existing overhead power lines, which would be buried underground. The underground installation of the buried 34.5 kV power lines would begin northeast of the existing 99th Street Wells Pumping Station Complex at the LADWP transmission station on Clovis Avenue between Century Boulevard and 98th Street, head north along Clovis Avenue and 98th Street, then travel west along 98th Street, and then north along Wadsworth Avenue for a total length of approximately 1,180 feet (Figure 4). An approximately 2.5-foot wide by 7.5-foot deep trench would be excavated within the roadway that could be covered with metal plates during periods of the day when construction is not on-going.

Worksite traffic control plans would be generated to properly route traffic around the trenching/installation activities work area within the roadway. Outside of the active work area, the roadways would operate as normal, and the work area would not be established for the entire length of the installed line. Therefore, no impact related to an increase in hazards due to a design feature or incompatible uses would occur.

e) Result in inadequate emergency access?

No Impact. It is anticipated that roadway lane closures associated with the electrical line installation would be limited in size, in terms of work areas and associated lane closures. All other construction and operational activity would occur within the project site. Additionally, LADWP would require approval of a Traffic Management Plan and temporary road closures from the California Department of Transportation. No road closures are anticipated during project construction. Therefore, no impact to roadways would occur that would result in inadequate emergency access.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact. The proposed project would be constructed adjacent to the existing 99th Street Wells Pumping Station Complex within the LADWP Power System Transmission Line ROW. Additionally, construction within adjacent roadways for the project electrical line installation would not affect public transit, bicycle, or pedestrian facilities.

No changes to the existing roadways or use of roadways would occur. However, the sidewalk directly west of and adjacent to the project site would be temporarily closed for the duration of construction. Parking along this section would also be temporarily restricted for the duration of construction activities. A flag person would direct pedestrian and vehicular traffic whenever equipment goes in and out of the project site. A construction worksite traffic control plan and safety program, consistent with federal and state requirements would be prepared to further reduce any potential temporary construction impacts at the project site. Implementation of the required construction BMP would ensure that impacts would be less than significant.

Operation of the proposed project would not cause any changes related to public transit, bicycle, or pedestrian facilities. Therefore, no operational impacts would occur.

XVII. TRIBAL CULTURAL RESOURCES

Would the project:

- a) Cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?**

No Impact. As discussed in Section V(a), no resources eligible for listing were identified within the project area. A records search identified no resources which are listed or eligible for listing in the California Register of Historical Resources or a local register which could be identified as tribal cultural resources associated with the project site. A Sacred Land File search conducted by the Native American Heritage Commission did not result in the identification of any documented sacred lands within 0.5 miles of the proposed project. However, there is a low potential that archaeological resources which could be identified as tribal cultural resources may be encountered during ground disturbing activities for the proposed project. If any Native American cultural material is encountered within the project site, consultation with interested Native American parties will be conducted to apprise them of any such findings and solicit any comments they may have regarding the appropriate treatment and disposition of the resources. 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.

- b) Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1?**

Less Than Significant Impact. As discussed in Section XVII(a) above, no tribal cultural resources were identified within the project area. Additionally, LADWP has conducted Assembly Bill 52 consultation with Native American Tribe contacts that either requested notification of all LADWP projects or were provided by the Native American Heritage Commission as tribes culturally or traditionally affiliated with the project area. If any Native American cultural material is encountered within the

project site, consultation with interested Native American parties will be conducted to apprise them of any such findings and solicit any comments they may have regarding the appropriate treatment and disposition of the resources. Therefore, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource, and the impact would be less than significant.

XVIII. UTILITIES AND SERVICE SYSTEMS

Would the project:

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

Less Than Significant Impact. The proposed project would remove naturally occurring iron and manganese from the groundwater wells at the 99th Street Wells Field to ensure LADWP meets the USEPA National Secondary Drinking Water Regulations for iron and manganese. As discussed above, a SWPPP would be prepared for the proposed project that would specify appropriate BMPs to control runoff from the project site during construction. Additionally, any wastewater discharged by the proposed project must comply with NPDES requirements. Construction activities would comply with all applicable wastewater treatment requirements of the Regional Water Quality Control Board. Therefore, implementation of the required BMP would ensure that the construction impact to water quality would be less than significant.

During project operation, waste from the backwash system would be trucked out approximately four times a year. As discussed in Section IX(e), the facility design would comply with the City of Los Angeles Standard Urban Stormwater Mitigation Plan regulations to manage storm water on-site. Therefore, the long-term impact to water quality 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?

Less Than Significant Impact. The proposed project would remove naturally occurring iron and manganese from the groundwater wells at the 99th Street Wells Field to ensure LADWP meets the USEPA National Secondary Drinking Water Regulations for iron and manganese. No new or expanded water or wastewater treatment facilities would be required due to implementation of the proposed project. The construction and operational impacts resulting from the proposed project 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?**

Less Than Significant Impact. The proposed project would remove naturally occurring iron and manganese from the groundwater wells at the 99th Street Wells Field to ensure LADWP meets the USEPA National Secondary Drinking Water Regulations for iron and manganese. As discussed in Section IX(e) above, implementation of the proposed project would result in the removal of a minimal portion of the project site's permeable surface. Thus, no substantial increase in the amount of runoff from the project site is anticipated, and the proposed project would not require or result in the construction or expansion of additional storm water drainage facilities. The impact would be less than significant.

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

No Impact. Local groundwater supplies have historically been an integral part of the water supply for the City of Los Angeles. LADWP is entitled to extract 15,000 acre-feet per year of groundwater from the Central Basin. The proposed project would remove naturally occurring iron and manganese from the groundwater wells at the 99th Street Wells Field to ensure LADWP meets the USEPA National Secondary Drinking Water Regulations for iron and manganese. The proposed project would not change the amount of groundwater extraction at the 99th Street Pumping Station beyond LADWP's existing entitlements. No new water supplies would be required to serve the project site. Therefore, no impact to water supply would occur.

- e) **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

No Impact. Wastewater that is produced on-site would be collected and conveyed through the waste line to the existing site sewer line for the 99th Street Wells Pumping Station Complex. No increase in wastewater generation is anticipated as a result of the proposed project. Therefore, no additional demand for wastewater treatment would be required. No impact to wastewater treatment capacity would occur.

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

Less Than Significant Impact. Construction activities would generate construction waste, such as excavation debris. As discussed in Section 1.7, 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. These measures would minimize the amount of construction debris generated by the proposed project that would need to be disposed of in an area landfill. Any non-recyclable and hazardous construction waste generated would be disposed of at a landfill approved to accept such materials. Project operation would be similar to the existing activities currently occurring at the 99th Street Wells

Pumping Station Complex. No additional sources of solid waste are anticipated due to the filtration plant. The long-term impact would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. As discussed in Section XVII(f) above, construction debris would be recycled or disposed of according to local and regional standards. All materials would be handled and disposed of in accordance with existing local, state, and federal regulations. Compliance with existing regulations would ensure a less than significant impact.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact. The proposed project would construct a filtration plant within an existing urbanized LADWP pumping station complex and relocate power lines underground in South Los Angeles. No suitable habitat for special-status wildlife species, special-status plant species, or sensitive natural communities occurs within the project area. Due to the presence of urban developed habitats and the absence of special-status species during the field survey, sensitive wildlife and plant species and sensitive vegetation communities are not expected to occur. Only weedy vegetation and grasses would be removed during construction. Therefore, no impact to biological resources would occur.

As discussed in Section V(a) above, two buildings within the project vicinity were determined to be 45 years of age or older. However, neither the 99th Street Wells Pumping Station or the 99th Street Elementary School meet the criteria to be eligible for listing on the California Register of Historic Resources (see Appendix B). The resources do not meet the level of significance to meet CRHR criteria 1 through 4. Neither resource has specific associations with any historic 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 (Criterion 1); has specific associations with a person whose life was important to local, California, or national history (Criterion 2); embodies the distinctive characteristics of a type, period, or method of construction or represent the work of a master, or possess high artistic values (Criterion 3); or yield information important in the prehistory or history of the local area, California, or the nation (Criterion 4). Impacts to historical resources would be less than significant.

- b) Does the project have environmental effects that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

Less Than Significant Impact. As discussed in Section III(c) above, the proposed project is located within the Los Angeles County portion of the South Coast Air Basin, which is designated a non-attainment area for O₃, PM₁₀, and PM_{2.5}. In order to maintain attainment status of the South Coast Air Basin and comply with the State Implementation Plan, the SCAQMD has developed project-level thresholds of significance for criteria pollutants. The proposed project would not generate regional construction emissions in excess of the SCAQMD thresholds. Therefore, no cumulatively considerable impact would occur during construction. The proposed project does not include an operational component beyond existing operating conditions. Therefore, no cumulatively considerable air quality impact would occur during operations.

As discussed in Section VII(a) above, GHG emissions contribute to the global condition known as the greenhouse effect. Because this issue is by its very nature cumulative, the California Air Resources Board established a threshold of significance and climate reduction strategies. The proposed project would generate short-term emissions of GHGs during construction. However, these emissions would be far less than the thresholds of significance. The cumulative impact would be less than significant.

As discussed in Sections XII(c) and XII(d) above, the proposed project would not require additional site staff or maintenance activities. Therefore, there would be no permanent or temporary increase in ambient noise levels, and the proposed project would not result in a cumulatively considerable noise impact.

As discussed in Section XVI(a) above, the cumulative traffic analysis considered the addition of background traffic growth and other proposed projects combined with project construction traffic. Construction activities would result in less than significant impacts on project area roadways.

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

Less Than Significant Impact. The analysis presented in this document does not identify any environmental effects with the potential to adversely impact humans. The proposed project is limited in scope and impacts would predominantly be temporary in nature driven by construction activities. As such, the proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, the impact would be less than significant.

SECTION 4 LIST OF PREPARERS

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APPENDIX A

AIR QUALITY/GREENHOUSE GASES

TECHNICAL OUTPUT

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

LADWP 99th Street Wells Filtration Plant Project
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.57	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2020
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

Project Characteristics - LADWP Project

Land Use - Approximate LADWP plant plot size.

Construction Phase - LADWP Schedule

Off-road Equipment - Maximum Inventory

Off-road Equipment - Maximum Inventory

Trips and VMT - LADWP trips extrapolated from maximum of 5 concrete deliveries and 6 export haul trips per day.

5 deliveries = 10 one-way trips/day.

6 loads = 12 one-way haul trips/day. $12 \times 100 = 1,200$ & $12 \times 325 = 3,900$.

Grading - LADWP Import/Export

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403.

Energy Use -

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	325.00
tblGrading	MaterialExported	0.00	1,070.00
tblGrading	MaterialExported	0.00	1,500.00
tblGrading	MaterialImported	0.00	800.00
tblLandUse	LotAcreage	0.00	0.57
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblTripsAndVMT	HaulingTripNumber	0.00	1,200.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,900.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	13.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	12.00

2.0 Emissions Summary

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.0209	23.4021	14.1531	0.0384	2.7055	0.9672	3.1741	0.6754	0.9064	1.1074	0.0000	3,907.4020	3,907.4020	0.8500	0.0000	3,928.6522
2019	1.0333	14.9630	11.8179	0.0351	0.4477	0.4072	0.8548	0.1212	0.3754	0.4966	0.0000	3,578.3498	3,578.3498	0.7782	0.0000	3,597.8057
2020	0.9814	13.9730	11.7309	0.0349	1.4492	0.3684	1.8176	0.3670	0.3395	0.7066	0.0000	3,518.0468	3,518.0468	0.7759	0.0000	3,537.4443
Maximum	2.0209	23.4021	14.1531	0.0384	2.7055	0.9672	3.1741	0.6754	0.9064	1.1074	0.0000	3,907.4020	3,907.4020	0.8500	0.0000	3,928.6522

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.0209	23.4021	14.1531	0.0384	2.7050	0.9672	3.1736	0.6753	0.9064	1.1073	0.0000	3,907.4020	3,907.4020	0.8500	0.0000	3,928.6522
2019	1.0333	14.9630	11.8179	0.0351	0.4472	0.4072	0.8544	0.1211	0.3754	0.4965	0.0000	3,578.3498	3,578.3498	0.7782	0.0000	3,597.8057
2020	0.9814	13.9730	11.7309	0.0349	1.4488	0.3684	1.8172	0.3670	0.3395	0.7065	0.0000	3,518.0468	3,518.0468	0.7759	0.0000	3,537.4443
Maximum	2.0209	23.4021	14.1531	0.0384	2.7050	0.9672	3.1736	0.6753	0.9064	1.1073	0.0000	3,907.4020	3,907.4020	0.8500	0.0000	3,928.6522

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

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	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	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
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

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	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	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
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

	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
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	Power Lines Relocation	Site Preparation	5/7/2018	9/21/2018	5	100	Relocate power lines underground.
2	Treatment System Installation	Site Preparation	12/3/2018	2/28/2020	5	325	Install Fe/Mn treatment system.

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Power Lines Relocation	Air Compressors	1	8.00	78	0.48
Power Lines Relocation	Bore/Drill Rigs	1	8.00	221	0.50
Power Lines Relocation	Cranes	1	8.00	231	0.29
Power Lines Relocation	Excavators	1	8.00	158	0.38
Power Lines Relocation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Treatment System Installation	Aerial Lifts	1	8.00	63	0.31
Treatment System Installation	Bore/Drill Rigs	1	8.00	221	0.50
Treatment System Installation	Excavators	1	8.00	158	0.38
Treatment System Installation	Rough Terrain Forklifts	1	8.00	100	0.40
Treatment System Installation	Skid Steer Loaders	1	8.00	65	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Power Lines Relocation	5	12.00	0.00	1,200.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Treatment System Installation	5	12.00	10.00	3,900.00	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

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

3.2 Power Lines Relocation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2100e-003	0.0000	1.2100e-003	1.8000e-004	0.0000	1.8000e-004			0.0000			0.0000
Off-Road	1.8254	19.4168	12.6982	0.0274		0.9510	0.9510		0.8910	0.8910		2,732.5771	2,732.5771	0.7695		2,751.8151
Total	1.8254	19.4168	12.6982	0.0274	1.2100e-003	0.9510	0.9522	1.8000e-004	0.8910	0.8911		2,732.5771	2,732.5771	0.7695		2,751.8151

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	0.1221	3.9299	0.8581	9.5600e-003	0.2098	0.0150	0.2248	0.0575	0.0144	0.0719		1,033.1558	1,033.1558	0.0752		1,035.0347
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	0.0734	0.0554	0.5967	1.4200e-003	0.1341	1.2000e-003	0.1353	0.0356	1.1000e-003	0.0367		141.6691	141.6691	5.3300e-003		141.8024
Total	0.1955	3.9853	1.4549	0.0110	0.3439	0.0162	0.3602	0.0931	0.0155	0.1086		1,174.8249	1,174.8249	0.0805		1,176.8371

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

3.2 Power Lines Relocation - 2018

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					4.7000e-004	0.0000	4.7000e-004	7.0000e-005	0.0000	7.0000e-005			0.0000			0.0000
Off-Road	1.8254	19.4168	12.6982	0.0274		0.9510	0.9510		0.8910	0.8910	0.0000	2,732.577 1	2,732.577 1	0.7695		2,751.815 1
Total	1.8254	19.4168	12.6982	0.0274	4.7000e-004	0.9510	0.9514	7.0000e-005	0.8910	0.8910	0.0000	2,732.577 1	2,732.577 1	0.7695		2,751.815 1

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	0.1221	3.9299	0.8581	9.5600e-003	0.2098	0.0150	0.2248	0.0575	0.0144	0.0719		1,033.155 8	1,033.155 8	0.0752		1,035.034 7
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	0.0734	0.0554	0.5967	1.4200e-003	0.1341	1.2000e-003	0.1353	0.0356	1.1000e-003	0.0367		141.6691	141.6691	5.3300e-003		141.8024
Total	0.1955	3.9853	1.4549	0.0110	0.3439	0.0162	0.3602	0.0931	0.0155	0.1086		1,174.824 9	1,174.824 9	0.0805		1,176.837 1

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

3.3 Treatment System Installation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	1.2000e-004	0.0000	1.2000e-004			0.0000			0.0000
Off-Road	0.8806	11.2230	10.1571	0.0218		0.4436	0.4436		0.4081	0.4081		2,187.3041	2,187.3041	0.6809		2,204.3275
Total	0.8806	11.2230	10.1571	0.0218	8.0000e-004	0.4436	0.4444	1.2000e-004	0.4081	0.4082		2,187.3041	2,187.3041	0.6809		2,204.3275

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	0.1221	3.9299	0.8581	9.5600e-003	2.5065	0.0150	2.5215	0.6212	0.0144	0.6356		1,033.1558	1,033.1558	0.0752		1,035.0347
Vendor	0.0479	1.2284	0.3683	2.5700e-003	0.0640	8.7700e-003	0.0728	0.0184	8.3900e-003	0.0268		274.1499	274.1499	0.0198		274.6444
Worker	0.0734	0.0554	0.5967	1.4200e-003	0.1341	1.2000e-003	0.1353	0.0356	1.1000e-003	0.0367		141.6691	141.6691	5.3300e-003		141.8024
Total	0.2434	5.2136	1.8232	0.0136	2.7047	0.0250	2.7297	0.6752	0.0239	0.6991		1,448.9748	1,448.9748	0.1003		1,451.4815

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

3.3 Treatment System Installation - 2018

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					3.1000e-004	0.0000	3.1000e-004	5.0000e-005	0.0000	5.0000e-005			0.0000			0.0000
Off-Road	0.8806	11.2230	10.1571	0.0218		0.4436	0.4436		0.4081	0.4081	0.0000	2,187.3041	2,187.3041	0.6809		2,204.3275
Total	0.8806	11.2230	10.1571	0.0218	3.1000e-004	0.4436	0.4439	5.0000e-005	0.4081	0.4082	0.0000	2,187.3041	2,187.3041	0.6809		2,204.3275

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	0.1221	3.9299	0.8581	9.5600e-003	2.5065	0.0150	2.5215	0.6212	0.0144	0.6356		1,033.1558	1,033.1558	0.0752		1,035.0347
Vendor	0.0479	1.2284	0.3683	2.5700e-003	0.0640	8.7700e-003	0.0728	0.0184	8.3900e-003	0.0268		274.1499	274.1499	0.0198		274.6444
Worker	0.0734	0.0554	0.5967	1.4200e-003	0.1341	1.2000e-003	0.1353	0.0356	1.1000e-003	0.0367		141.6691	141.6691	5.3300e-003		141.8024
Total	0.2434	5.2136	1.8232	0.0136	2.7047	0.0250	2.7297	0.6752	0.0239	0.6991		1,448.9748	1,448.9748	0.1003		1,451.4815

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

3.3 Treatment System Installation - 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					8.0000e-004	0.0000	8.0000e-004	1.2000e-004	0.0000	1.2000e-004			0.0000			0.0000
Off-Road	0.8079	10.0309	10.1119	0.0217		0.3848	0.3848		0.3540	0.3540		2,150.1973	2,150.1973	0.6803		2,167.2048
Total	0.8079	10.0309	10.1119	0.0217	8.0000e-004	0.3848	0.3856	1.2000e-004	0.3540	0.3541		2,150.1973	2,150.1973	0.6803		2,167.2048

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	0.1156	3.7244	0.8366	9.4200e-003	0.2487	0.0137	0.2625	0.0671	0.0132	0.0802		1,019.8196	1,019.8196	0.0742		1,021.6738
Vendor	0.0433	1.1589	0.3385	2.5400e-003	0.0640	7.5000e-003	0.0715	0.0184	7.1700e-003	0.0256		271.2771	271.2771	0.0191		271.7535
Worker	0.0665	0.0488	0.5310	1.3800e-003	0.1341	1.1600e-003	0.1353	0.0356	1.0700e-003	0.0366		137.0557	137.0557	4.7100e-003		137.1736
Total	0.2254	4.9321	1.7060	0.0133	0.4469	0.0224	0.4693	0.1211	0.0214	0.1425		1,428.1524	1,428.1524	0.0979		1,430.6009

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

3.3 Treatment System Installation - 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					3.1000e-004	0.0000	3.1000e-004	5.0000e-005	0.0000	5.0000e-005			0.0000			0.0000
Off-Road	0.8079	10.0309	10.1119	0.0217		0.3848	0.3848		0.3540	0.3540	0.0000	2,150.1973	2,150.1973	0.6803		2,167.2048
Total	0.8079	10.0309	10.1119	0.0217	3.1000e-004	0.3848	0.3851	5.0000e-005	0.3540	0.3541	0.0000	2,150.1973	2,150.1973	0.6803		2,167.2048

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	0.1156	3.7244	0.8366	9.4200e-003	0.2487	0.0137	0.2625	0.0671	0.0132	0.0802		1,019.8196	1,019.8196	0.0742		1,021.6738
Vendor	0.0433	1.1589	0.3385	2.5400e-003	0.0640	7.5000e-003	0.0715	0.0184	7.1700e-003	0.0256		271.2771	271.2771	0.0191		271.7535
Worker	0.0665	0.0488	0.5310	1.3800e-003	0.1341	1.1600e-003	0.1353	0.0356	1.0700e-003	0.0366		137.0557	137.0557	4.7100e-003		137.1736
Total	0.2254	4.9321	1.7060	0.0133	0.4469	0.0224	0.4693	0.1211	0.0214	0.1425		1,428.1524	1,428.1524	0.0979		1,430.6009

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

3.3 Treatment System Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	1.2000e-004	0.0000	1.2000e-004			0.0000			0.0000
Off-Road	0.7755	9.3709	10.1297	0.0218		0.3510	0.3510		0.3229	0.3229		2,106.3944	2,106.3944	0.6813		2,123.4257
Total	0.7755	9.3709	10.1297	0.0218	8.0000e-004	0.3510	0.3518	1.2000e-004	0.3229	0.3231		2,106.3944	2,106.3944	0.6813		2,123.4257

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	0.1074	3.4952	0.8126	9.3100e-003	1.2503	0.0112	1.2615	0.3129	0.0107	0.3236		1,009.3129	1,009.3129	0.0725		1,011.1240
Vendor	0.0372	1.0635	0.3074	2.5200e-003	0.0640	5.0900e-003	0.0691	0.0184	4.8700e-003	0.0233		269.4491	269.4491	0.0180		269.8995
Worker	0.0613	0.0435	0.4812	1.3300e-003	0.1341	1.1200e-003	0.1353	0.0356	1.0300e-003	0.0366		132.8905	132.8905	4.1900e-003		132.9952
Total	0.2059	4.6022	1.6012	0.0132	1.4484	0.0174	1.4658	0.3669	0.0166	0.3835		1,411.6524	1,411.6524	0.0947		1,414.0187

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

3.3 Treatment System Installation - 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					
Fugitive Dust					3.1000e-004	0.0000	3.1000e-004	5.0000e-005	0.0000	5.0000e-005			0.0000			0.0000
Off-Road	0.7755	9.3709	10.1297	0.0218		0.3510	0.3510		0.3229	0.3229	0.0000	2,106.3944	2,106.3944	0.6813		2,123.4257
Total	0.7755	9.3709	10.1297	0.0218	3.1000e-004	0.3510	0.3513	5.0000e-005	0.3229	0.3230	0.0000	2,106.3944	2,106.3944	0.6813		2,123.4257

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	0.1074	3.4952	0.8126	9.3100e-003	1.2503	0.0112	1.2615	0.3129	0.0107	0.3236		1,009.3129	1,009.3129	0.0725		1,011.1240
Vendor	0.0372	1.0635	0.3074	2.5200e-003	0.0640	5.0900e-003	0.0691	0.0184	4.8700e-003	0.0233		269.4491	269.4491	0.0180		269.8995
Worker	0.0613	0.0435	0.4812	1.3300e-003	0.1341	1.1200e-003	0.1353	0.0356	1.0300e-003	0.0366		132.8905	132.8905	4.1900e-003		132.9952
Total	0.2059	4.6022	1.6012	0.0132	1.4484	0.0174	1.4658	0.3669	0.0166	0.3835		1,411.6524	1,411.6524	0.0947		1,414.0187

4.0 Operational Detail - Mobile

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

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	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
Unmitigated	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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

	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	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-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	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Winter

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

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

Equipment Type	Number
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11.0 Vegetation

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Annual

LADWP 99th Street Wells Filtration Plant Project
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.57	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2020
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Annual

Project Characteristics - LADWP Project

Land Use - Approximate LADWP plant plot size.

Construction Phase - LADWP Schedule

Off-road Equipment - Maximum Inventory

Off-road Equipment - Maximum Inventory

Trips and VMT - LADWP trips extrapolated from maximum of 5 concrete deliveries and 6 export haul trips per day.

5 deliveries = 10 one-way trips/day.

6 loads = 12 one-way haul trips/day. $12 \times 100 = 1,200$ & $12 \times 325 = 3,900$.

Grading - LADWP Import/Export

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403.

Energy Use -

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	325.00
tblGrading	MaterialExported	0.00	1,070.00
tblGrading	MaterialExported	0.00	1,500.00
tblGrading	MaterialImported	0.00	800.00
tblLandUse	LotAcreage	0.00	0.57
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblOffRoadEquipment	PhaseName		Treatment System Installation
tblTripsAndVMT	HaulingTripNumber	0.00	1,200.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,900.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	13.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	12.00

2.0 Emissions Summary

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Annual

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					
2018	0.1123	1.3477	0.8323	2.3000e-003	0.0449	0.0533	0.0981	0.0115	0.0499	0.0614	0.0000	212.6044	212.6044	0.0459	0.0000	213.7521
2019	0.1337	1.9653	1.5381	4.6000e-003	0.0574	0.0531	0.1105	0.0156	0.0490	0.0645	0.0000	425.6278	425.6278	0.0919	0.0000	427.9249
2020	0.0209	0.3024	0.2516	7.5000e-004	0.0306	7.9200e-003	0.0385	7.7500e-003	7.3000e-003	0.0150	0.0000	68.9465	68.9465	0.0151	0.0000	69.3239
Maximum	0.1337	1.9653	1.5381	4.6000e-003	0.0574	0.0533	0.1105	0.0156	0.0499	0.0645	0.0000	425.6278	425.6278	0.0919	0.0000	427.9249

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					
2018	0.1123	1.3477	0.8323	2.3000e-003	0.0447	0.0533	0.0980	0.0115	0.0499	0.0614	0.0000	212.6042	212.6042	0.0459	0.0000	213.7519
2019	0.1337	1.9653	1.5381	4.6000e-003	0.0573	0.0531	0.1104	0.0156	0.0490	0.0645	0.0000	425.6275	425.6275	0.0919	0.0000	427.9246
2020	0.0209	0.3024	0.2516	7.5000e-004	0.0305	7.9200e-003	0.0385	7.7300e-003	7.3000e-003	0.0150	0.0000	68.9465	68.9465	0.0151	0.0000	69.3239
Maximum	0.1337	1.9653	1.5381	4.6000e-003	0.0573	0.0533	0.1104	0.0156	0.0499	0.0645	0.0000	425.6275	425.6275	0.0919	0.0000	427.9246

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	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
Percent Reduction	0.00	0.00	0.00	0.00	0.20	0.00	0.11	0.11	0.00	0.03	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	5-7-2018	8-6-2018	0.8331	0.8331
2	8-7-2018	11-6-2018	0.4165	0.4165
3	11-7-2018	2-6-2019	0.3933	0.3933
4	2-7-2019	5-6-2019	0.5076	0.5076
5	5-7-2019	8-6-2019	0.5234	0.5234
6	8-7-2019	11-6-2019	0.5243	0.5243
7	11-7-2019	2-6-2020	0.5118	0.5118
8	2-7-2020	5-6-2020	0.1175	0.1175
		Highest	0.8331	0.8331

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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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	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
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

LADWP 99th Street Wells Filtration Plant Project - Los Angeles-South Coast County, Annual

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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	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
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

	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
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	Power Lines Relocation	Site Preparation	5/7/2018	9/21/2018	5	100	Relocate power lines underground.
2	Treatment System Installation	Site Preparation	12/3/2018	2/28/2020	5	325	Install Fe/Mn treatment system.

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Power Lines Relocation	Air Compressors	1	8.00	78	0.48
Power Lines Relocation	Bore/Drill Rigs	1	8.00	221	0.50
Power Lines Relocation	Cranes	1	8.00	231	0.29
Power Lines Relocation	Excavators	1	8.00	158	0.38
Power Lines Relocation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Treatment System Installation	Aerial Lifts	1	8.00	63	0.31
Treatment System Installation	Bore/Drill Rigs	1	8.00	221	0.50
Treatment System Installation	Excavators	1	8.00	158	0.38
Treatment System Installation	Rough Terrain Forklifts	1	8.00	100	0.40
Treatment System Installation	Skid Steer Loaders	1	8.00	65	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Power Lines Relocation	5	12.00	0.00	1,200.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Treatment System Installation	5	12.00	10.00	3,900.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Power Lines Relocation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0913	0.9708	0.6349	1.3700e-003		0.0476	0.0476		0.0446	0.0446	0.0000	123.9476	123.9476	0.0349	0.0000	124.8202
Total	0.0913	0.9708	0.6349	1.3700e-003	6.0000e-005	0.0476	0.0476	1.0000e-005	0.0446	0.0446	0.0000	123.9476	123.9476	0.0349	0.0000	124.8202

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3.2 Power Lines Relocation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0200e-003	0.2004	0.0413	4.8000e-004	0.0103	7.4000e-004	0.0111	2.8300e-003	7.1000e-004	3.5400e-003	0.0000	47.3257	47.3257	3.3400e-003	0.0000	47.4091
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	3.3200e-003	2.8400e-003	0.0306	7.0000e-005	6.5700e-003	6.0000e-005	6.6300e-003	1.7500e-003	6.0000e-005	1.8000e-003	0.0000	6.5328	6.5328	2.5000e-004	0.0000	6.5389
Total	9.3400e-003	0.2032	0.0719	5.5000e-004	0.0169	8.0000e-004	0.0177	4.5800e-003	7.7000e-004	5.3400e-003	0.0000	53.8585	53.8585	3.5900e-003	0.0000	53.9481

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					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0913	0.9708	0.6349	1.3700e-003		0.0476	0.0476		0.0446	0.0446	0.0000	123.9475	123.9475	0.0349	0.0000	124.8201
Total	0.0913	0.9708	0.6349	1.3700e-003	2.0000e-005	0.0476	0.0476	0.0000	0.0446	0.0446	0.0000	123.9475	123.9475	0.0349	0.0000	124.8201

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3.2 Power Lines Relocation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0200e-003	0.2004	0.0413	4.8000e-004	0.0103	7.4000e-004	0.0111	2.8300e-003	7.1000e-004	3.5400e-003	0.0000	47.3257	47.3257	3.3400e-003	0.0000	47.4091
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	3.3200e-003	2.8400e-003	0.0306	7.0000e-005	6.5700e-003	6.0000e-005	6.6300e-003	1.7500e-003	6.0000e-005	1.8000e-003	0.0000	6.5328	6.5328	2.5000e-004	0.0000	6.5389
Total	9.3400e-003	0.2032	0.0719	5.5000e-004	0.0169	8.0000e-004	0.0177	4.5800e-003	7.7000e-004	5.3400e-003	0.0000	53.8585	53.8585	3.5900e-003	0.0000	53.9481

3.3 Treatment System Installation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3000e-004	0.0000	1.3000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2500e-003	0.1178	0.1067	2.3000e-004		4.6600e-003	4.6600e-003		4.2900e-003	4.2900e-003	0.0000	20.8350	20.8350	6.4900e-003	0.0000	20.9972
Total	9.2500e-003	0.1178	0.1067	2.3000e-004	1.3000e-004	4.6600e-003	4.7900e-003	2.0000e-005	4.2900e-003	4.3100e-003	0.0000	20.8350	20.8350	6.4900e-003	0.0000	20.9972

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3.3 Treatment System Installation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2600e-003	0.0421	8.6800e-003	1.0000e-004	0.0257	1.6000e-004	0.0259	6.3800e-003	1.5000e-004	6.5300e-003	0.0000	9.9384	9.9384	7.0000e-004	0.0000	9.9559
Vendor	4.9000e-004	0.0132	3.7000e-003	3.0000e-005	6.6000e-004	9.0000e-005	7.5000e-004	1.9000e-004	9.0000e-005	2.8000e-004	0.0000	2.6530	2.6530	1.8000e-004	0.0000	2.6576
Worker	7.0000e-004	6.0000e-004	6.4200e-003	2.0000e-005	1.3800e-003	1.0000e-005	1.3900e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.3719	1.3719	5.0000e-005	0.0000	1.3732
Total	2.4500e-003	0.0558	0.0188	1.5000e-004	0.0278	2.6000e-004	0.0280	6.9400e-003	2.5000e-004	7.1900e-003	0.0000	13.9633	13.9633	9.3000e-004	0.0000	13.9866

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					5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2500e-003	0.1178	0.1067	2.3000e-004		4.6600e-003	4.6600e-003		4.2900e-003	4.2900e-003	0.0000	20.8350	20.8350	6.4900e-003	0.0000	20.9972
Total	9.2500e-003	0.1178	0.1067	2.3000e-004	5.0000e-005	4.6600e-003	4.7100e-003	1.0000e-005	4.2900e-003	4.3000e-003	0.0000	20.8350	20.8350	6.4900e-003	0.0000	20.9972

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3.3 Treatment System Installation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2600e-003	0.0421	8.6800e-003	1.0000e-004	0.0257	1.6000e-004	0.0259	6.3800e-003	1.5000e-004	6.5300e-003	0.0000	9.9384	9.9384	7.0000e-004	0.0000	9.9559
Vendor	4.9000e-004	0.0132	3.7000e-003	3.0000e-005	6.6000e-004	9.0000e-005	7.5000e-004	1.9000e-004	9.0000e-005	2.8000e-004	0.0000	2.6530	2.6530	1.8000e-004	0.0000	2.6576
Worker	7.0000e-004	6.0000e-004	6.4200e-003	2.0000e-005	1.3800e-003	1.0000e-005	1.3900e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.3719	1.3719	5.0000e-005	0.0000	1.3732
Total	2.4500e-003	0.0558	0.0188	1.5000e-004	0.0278	2.6000e-004	0.0280	6.9400e-003	2.5000e-004	7.1900e-003	0.0000	13.9633	13.9633	9.3000e-004	0.0000	13.9866

3.3 Treatment System Installation - 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					1.3000e-004	0.0000	1.3000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1054	1.3090	1.3196	2.8400e-003		0.0502	0.0502		0.0462	0.0462	0.0000	254.5567	254.5567	0.0805	0.0000	256.5702
Total	0.1054	1.3090	1.3196	2.8400e-003	1.3000e-004	0.0502	0.0503	2.0000e-005	0.0462	0.0462	0.0000	254.5567	254.5567	0.0805	0.0000	256.5702

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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	0.0149	0.4956	0.1053	1.2400e-003	0.0319	1.7700e-003	0.0337	8.6100e-003	1.7000e-003	0.0103	0.0000	121.9421	121.9421	8.6000e-003	0.0000	122.1571
Vendor	5.5200e-003	0.1541	0.0422	3.4000e-004	8.2200e-003	9.7000e-004	9.1900e-003	2.3700e-003	9.3000e-004	3.3000e-003	0.0000	32.6334	32.6334	2.1800e-003	0.0000	32.6879
Worker	7.8400e-003	6.5400e-003	0.0711	1.8000e-004	0.0172	1.5000e-004	0.0173	4.5600e-003	1.4000e-004	4.7000e-003	0.0000	16.4956	16.4956	5.7000e-004	0.0000	16.5098
Total	0.0282	0.6563	0.2185	1.7600e-003	0.0573	2.8900e-003	0.0602	0.0155	2.7700e-003	0.0183	0.0000	171.0711	171.0711	0.0114	0.0000	171.3548

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					5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1054	1.3090	1.3196	2.8400e-003		0.0502	0.0502		0.0462	0.0462	0.0000	254.5564	254.5564	0.0805	0.0000	256.5699
Total	0.1054	1.3090	1.3196	2.8400e-003	5.0000e-005	0.0502	0.0503	1.0000e-005	0.0462	0.0462	0.0000	254.5564	254.5564	0.0805	0.0000	256.5699

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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	0.0149	0.4956	0.1053	1.2400e-003	0.0319	1.7700e-003	0.0337	8.6100e-003	1.7000e-003	0.0103	0.0000	121.9421	121.9421	8.6000e-003	0.0000	122.1571
Vendor	5.5200e-003	0.1541	0.0422	3.4000e-004	8.2200e-003	9.7000e-004	9.1900e-003	2.3700e-003	9.3000e-004	3.3000e-003	0.0000	32.6334	32.6334	2.1800e-003	0.0000	32.6879
Worker	7.8400e-003	6.5400e-003	0.0711	1.8000e-004	0.0172	1.5000e-004	0.0173	4.5600e-003	1.4000e-004	4.7000e-003	0.0000	16.4956	16.4956	5.7000e-004	0.0000	16.5098
Total	0.0282	0.6563	0.2185	1.7600e-003	0.0573	2.8900e-003	0.0602	0.0155	2.7700e-003	0.0183	0.0000	171.0711	171.0711	0.0114	0.0000	171.3548

3.3 Treatment System Installation - 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					
Fugitive Dust					1.3000e-004	0.0000	1.3000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.2015	0.2178	4.7000e-004		7.5500e-003	7.5500e-003		6.9400e-003	6.9400e-003	0.0000	41.0841	41.0841	0.0133	0.0000	41.4163
Total	0.0167	0.2015	0.2178	4.7000e-004	1.3000e-004	7.5500e-003	7.6800e-003	2.0000e-005	6.9400e-003	6.9600e-003	0.0000	41.0841	41.0841	0.0133	0.0000	41.4163

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3.3 Treatment System Installation - 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	2.2800e-003	0.0766	0.0169	2.0000e-004	0.0263	2.4000e-004	0.0265	6.5800e-003	2.3000e-004	6.8100e-003	0.0000	19.8862	19.8862	1.3900e-003	0.0000	19.9208
Vendor	7.8000e-004	0.0233	6.3100e-003	6.0000e-005	1.3500e-003	1.1000e-004	1.4600e-003	3.9000e-004	1.0000e-004	4.9000e-004	0.0000	5.3412	5.3412	3.4000e-004	0.0000	5.3497
Worker	1.1900e-003	9.6000e-004	0.0106	3.0000e-005	2.8300e-003	2.0000e-005	2.8500e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.6351	2.6351	8.0000e-005	0.0000	2.6372
Total	4.2500e-003	0.1009	0.0338	2.9000e-004	0.0305	3.7000e-004	0.0309	7.7200e-003	3.5000e-004	8.0700e-003	0.0000	27.8624	27.8624	1.8100e-003	0.0000	27.9076

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					5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.2015	0.2178	4.7000e-004		7.5500e-003	7.5500e-003		6.9400e-003	6.9400e-003	0.0000	41.0841	41.0841	0.0133	0.0000	41.4163
Total	0.0167	0.2015	0.2178	4.7000e-004	5.0000e-005	7.5500e-003	7.6000e-003	1.0000e-005	6.9400e-003	6.9500e-003	0.0000	41.0841	41.0841	0.0133	0.0000	41.4163

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3.3 Treatment System Installation - 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	2.2800e-003	0.0766	0.0169	2.0000e-004	0.0263	2.4000e-004	0.0265	6.5800e-003	2.3000e-004	6.8100e-003	0.0000	19.8862	19.8862	1.3900e-003	0.0000	19.9208
Vendor	7.8000e-004	0.0233	6.3100e-003	6.0000e-005	1.3500e-003	1.1000e-004	1.4600e-003	3.9000e-004	1.0000e-004	4.9000e-004	0.0000	5.3412	5.3412	3.4000e-004	0.0000	5.3497
Worker	1.1900e-003	9.6000e-004	0.0106	3.0000e-005	2.8300e-003	2.0000e-005	2.8500e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.6351	2.6351	8.0000e-005	0.0000	2.6372
Total	4.2500e-003	0.1009	0.0338	2.9000e-004	0.0305	3.7000e-004	0.0309	7.7200e-003	3.5000e-004	8.0700e-003	0.0000	27.8624	27.8624	1.8100e-003	0.0000	27.9076

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	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	0.0000	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
Unmitigated	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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas 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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

APPENDIX B

BIOLOGICAL RESOURCES

TECHNICAL MEMO

June 2, 2017
Jane Hauptman
Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012

Subject: Biological Technical Report Update, 99th Street Wells Filtration Plant Project, City of Los Angeles, California

1. INTRODUCTION

This memo report provides an assessment of potential impacts to biological resources upon implementation of the proposed 99th Street Wells Filtration Plant Project (filtration plant project). Construction of the project will be developed in coordination with construction of the previously proposed 99th Street Chloramination Project (chloramination project) and occurs at the same facility, the Los Angeles Department of Water and Power's (LADWP) 99th Street Wells Pumping Station (99th Street facility) in the Watts community of the City of Los Angeles. A description and assessment of the chloramination project was presented in a Biological Technical Report¹ (BTR) prepared in 2016 in support of an Initial Study/Mitigated Negative Declaration prepared by LADWP for the chloramination project, in accordance with the California Environmental Quality Act (CEQA). This report is included as Attachment C.

Under the filtration plant project, LADWP proposes to construct an iron (Fe) and manganese (Mn) treatment station directly adjacent to the 99th Street facility. The filtration plant project is part of LADWP's program to ensure LADWP meets U.S. EPA National Secondary Drinking Water Regulations for iron and manganese and maintain LADWP's reliability to serve groundwater to its customers. The proposed filtration plant would remove naturally occurring Fe and Mn from groundwater pumped at the 99th Street facility.

A regional location map (Figure 1), project vicinity map (Figure 2), and existing site plan (Figure 3) are provided in Attachment A.

2. PROJECT DESCRIPTION

The chloramination project, currently underway, will install equipment and structures needed to facilitate on-site sodium hypochlorite generation, ammonization, injection, and monitoring to address federal requirements on chlorine disinfection. A new single-story, 2,400 square foot chloramination station is under construction in the southeast portion of the 99th Street facility. New piping is being installed within the facility and below ground. All construction activities under the chloramination station project would occur within the existing facility, with construction staging, storage, and parking occurring just outside the facility to the north, within an adjacent electrical transmission corridor.

¹ AECOM. 2016. Biological Technical Report. 99th Street Wells Chloramination Project, City of Los Angeles, California. Prepared for Los Angeles Department of Water and Power. June 29.

As introduced above, the current proposed project would remove naturally occurring Fe and Mn from the groundwater wells at the 99th Street Wells Field. The proposed project would reroute a 15-inch well collector line, install sand separators, packaged filtration units and a backwash system, and utilize on-site sodium hypochlorite generation at the new chloramination station that is under construction. The filtration plant would treat the groundwater supply for iron and manganese before it is further treated by the chloramination station for disinfection. The filtration plant would include a backwash reclaim system consisting of pumps, valves and controls, and two reclaim water tanks. The treatment process would involve sand separation, chemical oxidation, and filtration. The raw well water would first go through sand separators to remove excess sand. Sodium hypochlorite would then be injected to oxidize the iron and manganese and form a precipitate. The filters would then remove the iron and manganese precipitate and the filtered water would continue into the 99th Street Pumping Station forebay for chloramination disinfection. The treated and disinfected water would then be pumped to the distribution system.

The Fe/Mn treatment station would be located northeast of the pumping station, directly north of the elementary school (Figure 4, Attachment A). The Fe/Mn treatment towers would be vertical structures, estimated to be approximately 11-feet in height, arranged in series adjacent to two to three reclamation tanks for backwash purposes. The collector line of the four wells would be realigned to enter the Fe/Mn filtration first, and then lead to the chloramination station located directly west of the school for disinfection with chloramine treatment. Additional fencing would be installed to secure the new station. The fence would extend approximately 10- to 15-feet from the west, north and east boundaries of the 160-foot by 21-foot concrete pad. The southern portion of the concrete pad already has fencing. Figure 4 shows the proposed site plan.

Due to horizontal powerline clearance requirements, the proposed project would require the relocation of existing 34.5 kilovolt (kV) overhead power lines to be buried underground. The underground installation of the buried 34.5 kV power lines would begin north of the 99th Street facility at the LADWP transmission station along Clovis Avenue and 98th Street and travel west along 98th Street, then north along Wadsworth Avenue approximately 50-feet for a total length of approximately 1,180-feet. An approximately 2-foot wide by 2.5-foot deep trench would be excavated within the roadway that could be covered with metal plates during periods of the day when construction is not on-going. A cut and cover trenching technique would be used to install the underground electrical conduit. Once a segment of the electrical conduit has been installed and concrete encased, the trench would be backfilled with concrete slurry and returned to its original condition. Excess soil would be disposed of at an appropriate regional landfill. Electrical conduit installation would require on-street parking restrictions and closure of at least one lane of the roadway. On average, approximately 40 linear feet of electrical conduit would be installed per day.

3. METHODS FOR ASSESSING BIOLOGICAL RESOURCES

A new review of relevant regional databases for special-status biological resources in the vicinity of the 99th Street facility was conducted as an update to the database search presented in the BTR. As completed for the BTR, a search of the U.S. Geological Survey's (USGS) 7.5-minute Inglewood, California quadrangle, on which the project occurs, and the surrounding eight quadrangles was made of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB)² and the California Native Plant Society's (CNPS) on-line inventory³. The U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) on-line review⁴ was also queried for special-status species, sensitive natural communities, and protected areas known from the project vicinity. The results of these updated database searches are discussed in Section 5 and included in Attachment B.

A field survey of the 99th Street facility and surrounding area was conducted by AECOM biologist Art Popp on May 4, 2016 to document existing biological resources in the project area in preparation of the BTR. Conditions in the project area remain unchanged and as a result, no additional field survey of the 99th Street facility was conducted. The assessment presented in this memo report for the filtration plant project is based on the field survey conducted in 2016 and the new database review.

During the 2016 survey, vegetation communities and land cover types, and plant and wildlife species found within the 99th Street facility plus a 500-foot survey buffer around the site, combined the Biological Survey Area (BSA) or area of potential effect (APE), were surveyed and noted. The transmission corridor and residential homes to the north, 99th Street Elementary School to the south and east, and residential single-family homes to the west of the project site occur within the 500-foot survey buffer assessed in the BTR. A buffer around the project site was surveyed in order to capture potential indirect effects to biological resources from implementation of the chloramination project. Indirect effects could include elevated noise and dust levels, soil compaction, and increased human activity within the BSA. A 500-foot survey buffer is standard for capturing potential indirect impacts from a project on biological resources. It is anticipated that indirect impacts beyond 500 feet would be diffuse and would not significantly impact biological resources.

4. EXISTING CONDITIONS

As presented in the BTR, vegetation and land cover types present within the 99th Street facility and surrounding area includes only urban developed areas. Urban developed lands are areas that have been altered by clearing and construction activities to support

² California Department of Fish and Wildlife (CDFW). 2017. California Natural Diversity Data Base (CNDDDB). Full report for Inglewood, Beverly Hills, Long Beach, Los Angeles, Redondo Beach, South Gate, Torrance, , and Venice Quadrangles. Generated May 26, 2017.

³ California Native Plant Society (CNPS). 2017. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society. Sacramento, CA. Available at <http://www.rareplants.cnps.org/>. Accessed May 26, 2017.

⁴ U.S. Fish and Wildlife Service (USFWS). 2017. Information for Planning and Conservation. Available at <https://ecos.fws.gov/ipac/>. Accessed May 26, 2017.

man-made structures such as buildings, roads, parking lots, and sidewalks, which often include associated landscaped areas or undeveloped areas with ruderal vegetation. The BSA analyzed in the BTR, which generally encompasses the BSA for the filtration plant project contains buildings, roadways, and other paved areas; no natural vegetation communities are present. Since the 99th Street facility occurs in a heavily urbanized area, similar conditions exist in all directions beyond the 500-foot survey buffer.

4.1 Vegetation Communities/Land Cover Types

Non-native ornamental trees, shrubs, flowers, and herbaceous annual plants typical of urban development were observed during the field survey. Plant species documented during the field survey included: cheeseweed (*Malva parviflora*), London rocket (*Sisymbrium irio*), goosefoot (*Chenopodium* spp.), bristly ox tongue (*Helminthotheca echinoides*), prickly lettuce (*Lactuca serriola*), erodium (*Erodium cicutarium*), yellow clover (*Melilotus officinalis*), Russian thistle (*Salsola tragus*), barley (*Hordeum murinum*), spurge (*Euphorbia* sp.), amaranth (*Amaranthus* sp.), unidentifiable brome grasses (*Bromus* spp.), Johnson grass (*Sorghum halepense*), fountain grass (*Pennisetum setaceum*), passion flower (*Passiflora* sp.), morning glory (*Ipomoea* sp.), ornamental juniper trees and shrubs (*Juniperus* sp.), and bottlebrush trees (*Callistemon* sp.). Additionally, jacaranda (*Jacaranda* sp.), pine (*Pinus* sp.), elm (*Ulmus* sp.), and Canary island date palm (*Phoenix canariensis*) trees were observed in the 500-foot survey buffer. No special-status plant species were observed during the survey.

4.2 Wildlife

Wildlife observed during the field survey within the BSA were species typical of developed urban areas and included rock dove (*Columba livia*), song sparrow (*Melospiza melodia*), Northern mockingbird (*Mimus polyglottos*) and common raven (*Corvus corax*). No bird breeding or nesting activities were observed in the BSA during the field survey; however, ornamental trees occurring within the BSA may provide suitable habitat for nesting birds. No special-status wildlife species were observed during the survey.

4.3 Wildlife Corridor

Due to the highly developed urban setting of the 99th Street facility and surrounding area, a wildlife corridor does not coincide with the BSA. Birds and other wildlife may utilize the electric transmission corridor for localized movement; however, it is likely not a significant movement corridor for wildlife.

5. SPECIAL-STATUS SPECIES

5.1 Special-Status Plant Species

Special-status plant species include those listed as Endangered, Threatened, Rare or those species proposed for listing by the US Fish and Wildlife Service (USFWS) under

the federal Endangered Species Act (FESA), listed by CDFW under the California Endangered Species Act (CESA), and listed by the CNPS.^{5,6,7} The CNPS inventory is sanctioned by the CDFW and serves essentially as the list of candidate plant species for state listing. CNPS's California Rare Plant Ranks (CRPR) 1B and 2 species are considered eligible for state listing as endangered or threatened.

A total of 59 plant species were identified from searches conducted in 2016 of the CNDDDB, CNPS, and IPaC to have historically been recorded from the project region. An assessment for the potential of these plant species to occur in the BSA is presented in the BTR and concludes that habitat within the BSA is not suitable for any special-status plant species due to the urban development nature of the project area.

Two new special-status plant species were identified during updated database reviews (Attachment B), resulting in a total of 61 special-status plant species known from the project region. Neither species is listed under FESA or CESA. The status, habitat requirements, and potential of these two species to occur in the BSA are presented in Table 1 below. Information on the other 59 species remains unchanged from the 2016 assessment and is included in the BTR (Attachment C).

Table 1.
Additional Special-Status Plant Species
Identified During an Updated Database Review

Common Name Scientific Name	Status¹	General Habitat Description	Suitable Habitat Within BSA	Potential for Occurrence in the BSA
decumbent goldenbush <i>Isocoma menziesii</i> var. <i>decumbens</i>	Federal: None State: None CRPR: 1B.2	Often sandy or disturbed areas within chaparral and coastal scrub. Occurs between 10-135 meters (35-445 feet). Blooms April- November.	No	Not expected. Potentially suitable habitat for this species is absent.
Santa Catalina Island desert-thorn <i>Lycium brevipes</i> var. <i>hassei</i>	Federal: None State: None CRPR 1B.2	Coastal bluff scrub and coastal scrub. Occurs between 65- 300 meters (215-985 feet). Blooms June- August.	No	Not expected. Potentially suitable habitat for this species is absent.

⁵ 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).

⁶ 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).

⁷ Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 *et seq.*).

- ¹ Federal, State, and Other Status Designations.
California Native Plant Society's 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

No suitable habitat for special-status plant species occurs within the BSA. Due to the presence of urban developed habitats, the absence of any observations of special-status plant species during the field survey, and familiarity with the habitat requirements for special-status plant species known from the region, special-status plant species are not expected to occur within the BSA.

5.2 Special-Status Wildlife Species

Special-status wildlife species include those listed by the USFWS under FESA and by CDFW under CESA.⁸ USFWS officially lists 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 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 (CFGC) Section 3503. Many other species are considered by CDFW to be California Species of Special Concern (SSC) and others are on a CDFW Watch List (WL). The CNDDDB tracks species within California for which there is conservation concern, including many that are not formally listed, and assigns them a CNDDDB Rank. Although CDFW SSC and WL species and species that are tracked by the CNDDDB but not formally listed are afforded no official legal status, they may receive special consideration during the environmental review process. CDFW further classifies some species as "Fully Protected" (FP), indicating that the species may not be taken or possessed except for scientific purposes, under special permit from CDFW. Additionally, CFGC 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 CDFW.

A total of 47 wildlife species were identified during a review conducted in 2016 of the CNDDDB and IPaC to have historically been recorded from the project region. An assessment for the potential of these wildlife species to occur in the BSA is presented in

⁸ California Department of Fish and Wildlife. 2017. California Natural Diversity Database (CNDDDB). Special Animals List. April. 65 pp.

the BTR and concludes that habitat within the BSA is not suitable for any special-status wildlife species due to the urban development nature of the project area.

Two new special-status wildlife species were identified during updated reviews of the CNDDDB and IPaC databases (Attachment B), resulted in a total of 49 wildlife species known from the project region. The status, habitat requirements, and potential of these two species to occur in the BSA are presented in Table 2 below. Information on the other 47 species remains unchanged from the 2016 assessment and is included in the BTR (Attachment C).

Table 2.
Additional Special-Status Wildlife Species Identified During
an Updated Database Review

Common Name Scientific Name	Status¹	General Habitat Description	Suitable Habitat Within BSA	Potential for Occurrence in the BSA
southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	Federal: None State: None CDFW: WL	Common resident of sparse, mixed chaparral and coastal scrub habitats. Frequents relatively steep, often rocky hillsides with grass and forb patches; also grassy slopes without shrub, if rock outcrops are present.	No	Not expected. Potentially suitable habitat for this species is absent.
California glossy snake <i>Arizona elegans occidentalis</i>	Federal: None State: None CDFW: SSC	Common throughout southern California, especially in desert habitats. Also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grassland habitats.	No	Not expected. Potentially suitable habitat for this species is absent.

Although common bird species protected under the MBTA and CFGC may utilize ornamental trees in the BSA for nesting, no suitable habitat for special-status wildlife species occurs within the BSA. Due to the presence of urban developed habitats, the absence of any observations of special-status wildlife species during the field survey, and familiarity with the habitat requirements for special-status wildlife species known from the region, special-status wildlife species are not expected to occur within the BSA.

6. SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are those that are designated as rare in the region by the CNDDDB, support special-status plant or wildlife species, or receive regulatory protection (i.e., Section 404 of the Clean Water Act (CWA) and/or Sections 1600 et seq. of the CFGC). Rare communities are given the highest inventory priority^{9,10}. A total of seven sensitive natural vegetation communities were identified during a search conducted in 2016 of the CNDDDB to have historically been recorded from the Inglewood and surrounding eight quadrangles, including California Walnut Woodland, Southern Coast Live Oak Riparian Forest, Southern Coastal Bluff Scrub, Southern Coastal Salt Marsh, Southern Dune Scrub, Southern Sycamore Alder Riparian Woodland, and Walnut Forest. No new sensitive natural communities were identified during an updated search of the CNDDDB.

No sensitive natural communities, including aquatic communities protected under the CWA (waters of the U.S.) or Section 1600 of the CFGC (waters of the state) are present within the BSA.

7. APPLICABLE REGULATIONS

As referenced in some of the previous sections, several regulations and standards have been established by federal, state, and local agencies to protect and conserve biological resources. The project's compliance with the regulations and standards listed below were assessed.

Federal Regulations and Standards:

- *Federal Endangered Species Act (FESA)*
- *Migratory Bird Treaty Act (MBTA)*
- *Clean Water Act (CWA)*
- *Magnuson-Stevens Fishery Conservation and Management Act*
- *Protection of Wetlands – Executive Order Numbers 11990 and 12608*
- *Wild and Scenic Rivers Act*
- *Coastal Zone Management Act*

⁹ Holland, R. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, The Resources Agency. 156 pp.

¹⁰ California Department of Fish and Game (CDFG). 2010. List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base. Natural Heritage Division. The Resources Agency. Available at <http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf> Accessed May 2017.

State Regulations and Standards

- *California Fish and Game Code (CFGC)*
- *Porter-Cologne Water Quality Control Act*
- *California Environmental Quality Act (CEQA)*

Local Regulations and Standards

- *Significant Ecological Areas (SEA) Program*
- *City of Los Angeles Tree Ordinance*

The project is not anticipated to conflict with any of these regulations and standards and many are not applicable to the project. This memo report is being prepared in support of compliance with CEQA, and LADWP will adhere to standard protocols regarding the avoidance and minimization of potential project impacts to protected migratory birds to comply with the MBTA.

8. IMPACTS ON BIOLOGICAL RESOURCES

Biological resources may be either directly or indirectly impacted by a project. Direct and indirect impacts may be either permanent or temporary in nature. These impact categories are defined below.

- **Direct:** Any alteration, physical disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Examples include clearing vegetation, encroaching into wetlands or a stream, and the loss of individual species and/or their habitats.
- **Indirect:** As a result of project-related activities, biological resources may also be affected in a manner that is ancillary to physical impacts. Examples include elevated noise and dust levels, soil compaction, increased human activity, decreased water quality, and the introduction of invasive wildlife (domestic cats and dogs) and plants.
- **Permanent:** All impacts that result in the long-term or irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources. Permanent impacts of the project include construction of the proposed Fe/Mn filtration system. Construction of the building would occur within an urban developed areas consisting of bare ground and ruderal vegetation, and as a result would not be considered significant.
- **Temporary:** Any impacts considered to have reversible impacts on biological resources can be viewed as temporary. Examples include temporary direct impacts during excavation for construction of the proposed filtration plant and

trenching for the electrical conduit. Temporary impacts would occur at the staging area where project equipment and materials would be temporarily stored within previously-disturbed areas. Upon project completion, these areas would be returned to former use and condition. Temporary impacts have not been quantified. All impacts would occur within previously-disturbed areas consisting of the 99th Street facility and electrical transmission corridor where buildings, paved surfaces, and areas of bare ground or ruderal vegetation occur, and as a result would not be considered significant. Temporary indirect impacts include the generation of fugitive dust and noise during construction.

The potential direct and indirect impacts from construction and operations activities to vegetation, wildlife, special-status plant and wildlife species, sensitive natural communities, and wildlife movement corridors for the chloramination project are presented in the BTR. It concludes that the project would have no significant impact on any of these resources, except potentially migratory nesting birds protected under the MBTA and by CFGC. However, by initiating construction outside the nesting season (February 15 through September 15), to the greatest extent feasible, and by conforming to standard protocols of MBTA and CFGC requirements such as preconstruction surveys, and implementation of the Best Management Practices (BMP) and noise and air quality mitigation measures presented in Chapter 9, impacts to wildlife within the project site would be avoided and no impact would occur.

Conclusions of no significant impact to biological resources, other than potentially migratory nesting birds as discussed above, are assumed for the proposed filtration plant project.

9. MITIGATION MEASURES

The proposed project would implement the following noise mitigation measures during construction as stated in the IS/MND. The proposed project would also implement Rule 403 dust control measures required by the South Coast Air Quality Management District (SCAQMD).

- N-1** All construction equipment shall be properly maintained and equipped with mufflers and other suitable noise attenuation devices.
- N-2** LADWP shall endeavor to use rubber-tired equipment rather than track equipment. Noisy equipment shall be used only when necessary and shall be switched off when not in use.
- N-3** LADWP shall ensure that all stockpiling and vehicle staging areas are located away from noise-sensitive receivers.
- N-4** LADWP shall establish a public liaison for project construction that shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad

muffler, etc.) and shall work with LADWP to implement reasonable measures to address the concern.

- N-5** The construction contractor shall develop a construction schedule to ensure that the construction would be completed quickly to minimize the time a sensitive receptor will be exposed to construction noise.
- N-6** Construction supervisors shall be informed of project-specific noise requirements, noise issues for sensitive land uses adjacent to the project, and/or equipment operations.
- N-7** Construction equipment shall be electric- and hydraulic-powered rather than diesel and pneumatic powered, as feasible.
- N-8** For construction of the Fe/Mn Treatment Station, the construction contractor shall install a 12-foot high temporary barrier along the southern boundary of the construction site with the 99th Elementary School and the northern boundary of the Fe/Mn Treatment Station construction site facing 98th Street. The acoustical barrier shall be constructed of material having a minimum surface weight of two pounds per square foot or greater, and a demonstrated Sound Transmission Class rating of 25 or greater as defined by American Society for Testing and Materials Test Method E90. The barrier shall be left in place until heavy-duty equipment would no longer be used at the Project site.
- N-9** Prior to construction work, the public shall be notified of the location and dates of construction. Residents shall be kept informed of any changes to the schedule.
- N-10** LADWP shall coordinate with the site administrator for the 99th Elementary School. Coordination between the site administrator and LADWP shall continue on an as-needed basis while construction is occurring adjacent to these land uses to minimize potential disruption to the land uses.
- N-11** Construction activities are 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 increased nighttime noise levels.

10. CONCLUSIONS

No direct or indirect impacts to special-status plant species are anticipated, as none were observed during the field survey and the BSA lacks suitable habitat for such species. As a result, impacts to special-status plants are not anticipated and would not be significant.

No special-status wildlife species were observed during the field survey and potentially suitable habitat for them is absent; however, birds protected by the MBTA and CFGC have the potential to occur and nest in the BSA. Potential direct impacts to these species

Ms. Jane Hauptman
Los Angeles Department of Water and Power
June 2, 2017
Page 12

or their nests could occur during the use or transport of project equipment or materials, on which common birds may nest. Potential indirect impacts are associated with noise, dust, vibration, and increased human activity, which could cause individuals to change their behavior and move out of the area. With adherence to standard protocols and requirements of the MBTA and CFGC and implementation of the noise mitigation measures presented in Chapter 6 and air quality BMPs, disturbance of these species would be avoided and no impacts to special-status wildlife species and nesting birds would occur.

Construction and operation of the project would not directly affect a wildlife movement corridor, as the BSA does not serve as a wildlife movement corridor.

Construction of the project would not result in impacts to sensitive natural communities or jurisdictional waters of the U.S. and state as they are not present in the BSA. As a result, impacts to sensitive natural communities would not occur.

Should you have any questions or comments regarding this memo, or if additional information is required, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Arthur Popp". The signature is written in a cursive, flowing style.

Arthur Popp
Senior Biologist | Project Manager

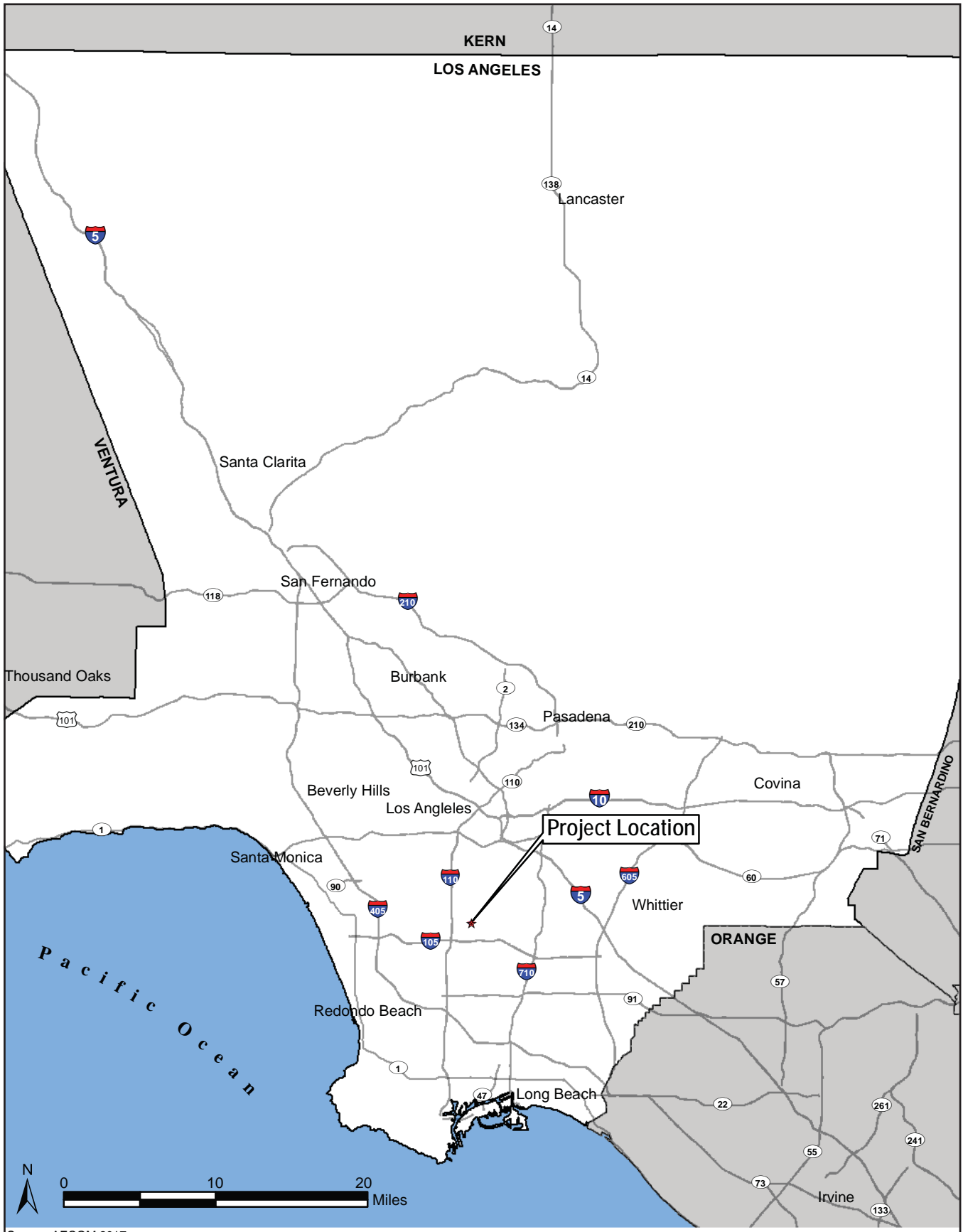
Enc:

Attachment A: Project Figures

Attachment B: Results of Data Base Searches (CNDDDB, CNPS, IPaC)

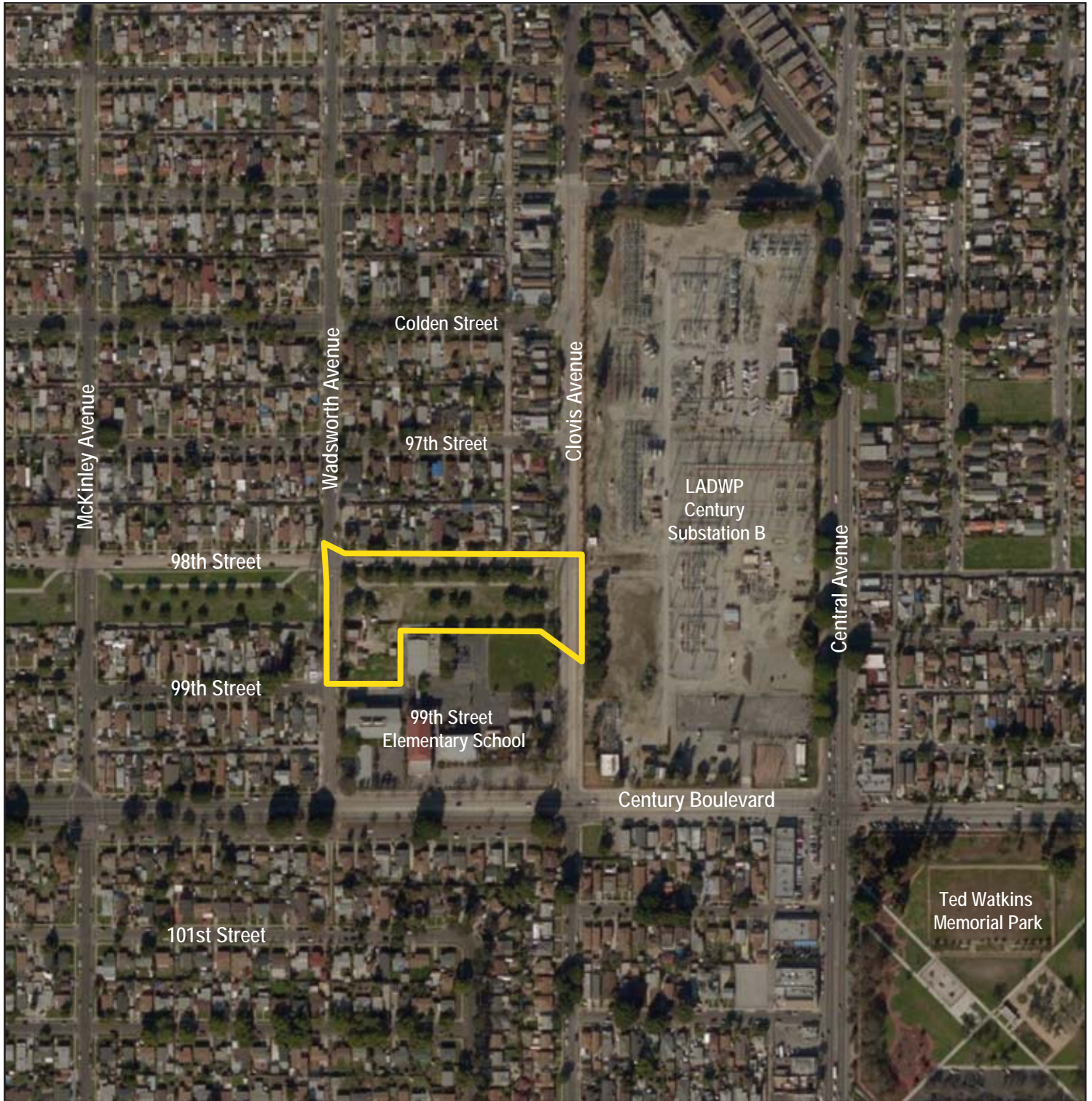
Attachment C: 2016 Biological Technical Report, 99th Street Wells Chloramination
Project, City of Los Angeles, California

ATTACHMENT A
FIGURES



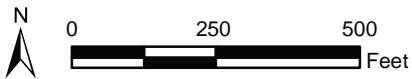
Source: AECOM 2017

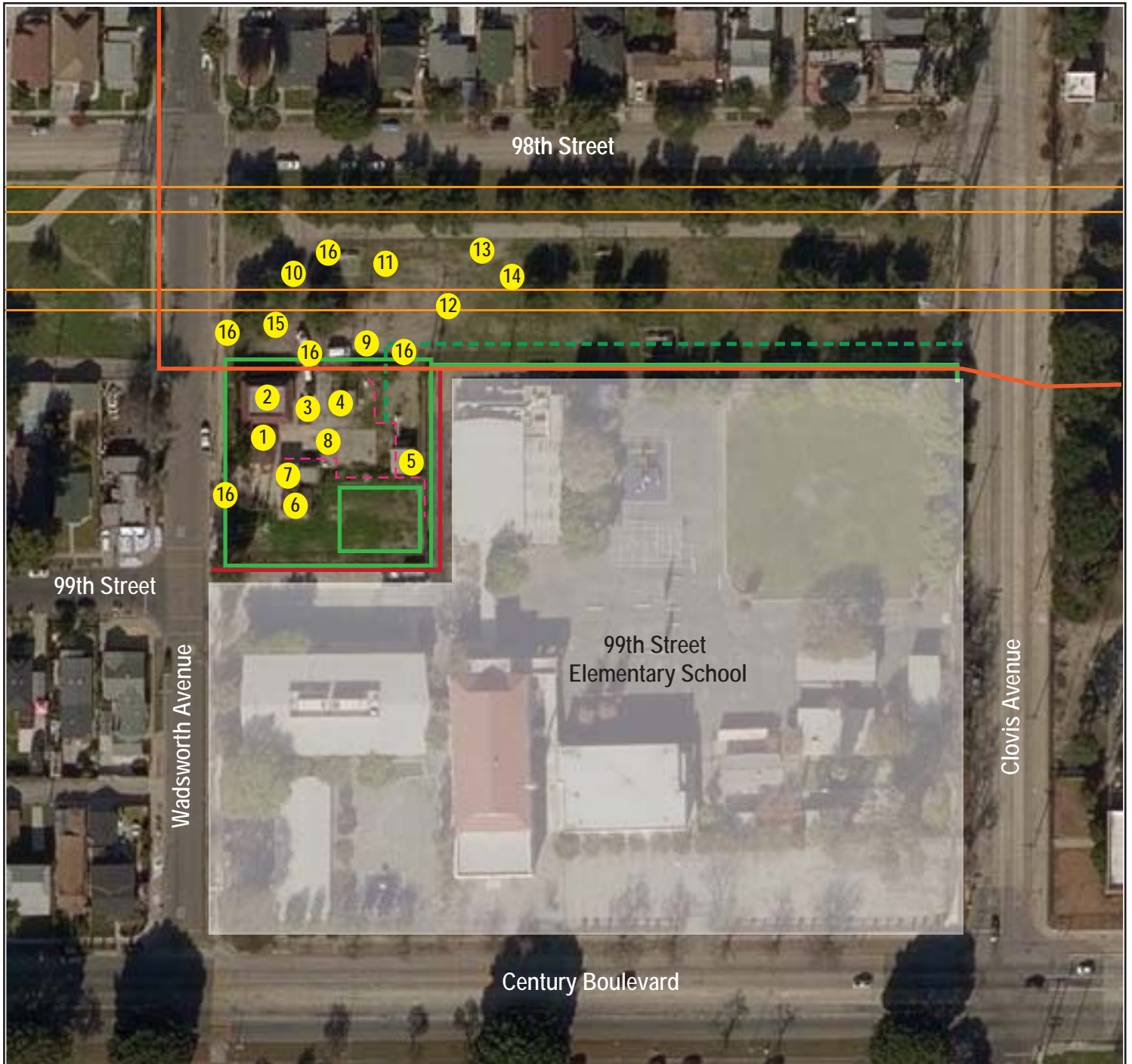
Figure 1
Regional Location



Source: Bing Maps 2017

— Project Site

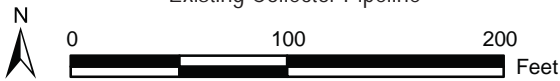


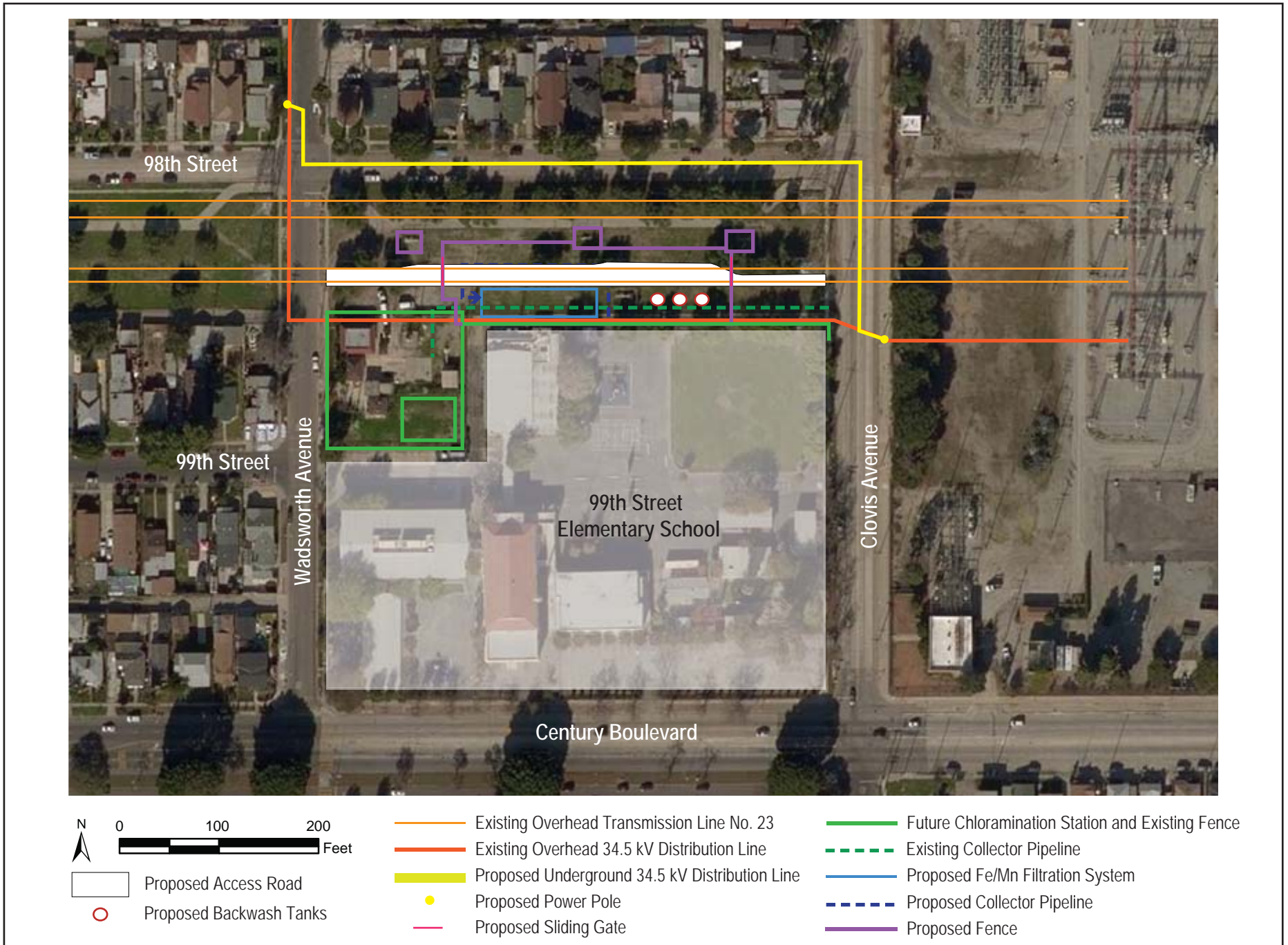


Source: Bing Maps 2017

- Existing Overhead Transmission Line No. 23
- Existing Overhead 34.5 kV Distribution Line
- Existing School Fence
- Future Chloramination Station and Existing Fence
- - - Chloramination Station Piping
- - - Existing Collector Pipeline

- 1** Building #1 (Old Pump Station)
- 2** Pump Station #2
- 3** Restroom
- 4** Industrial Station
- 5** Corrosion Inhibitor Building
- 6** Fluoridation Building
- 7** Chlorination Station
- 8** Forebay
- 9** Construction Office Trailer
- 10** Employee Parking
- 11** Steel Beams Storage
- 12** Piping Storage
- 13** Station Materials
- 14** Equipment Parking
- 15** Trailer and Guard Shack
- 16** Access Gates





99th Street Wells Filtration Plant Project

Figure 4
Proposed Site Plan

ATTACHMENT B

**Results of Data Base Searches of the
California Natural Diversity Data Base (CNDDDB)
California Native Plant Society (CNPS)
Information for Planning and Conservation (IPaC)**



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Hollywood (3411813) OR Beverly Hills (3411814) OR Inglewood (3311883) OR Long Beach (3311872) OR Los Angeles (3411812) OR Redondo Beach (3311874) OR South Gate (3311882) OR Torrance (3311873) OR Venice (3311884))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
<i>Anniella pulchra pulchra</i> silvery legless lizard	ARACC01012	None	None	G3G4T3T4Q	S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Aphanisma blitoides</i> aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
<i>Arenaria paludicola</i> marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
<i>Arizona elegans occidentalis</i> California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
<i>Astragalus brauntonii</i> Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
<i>Astragalus pycnostachyus var. lanosissimus</i> Ventura Marsh milk-vetch	PDFAB0F7B1	Endangered	Endangered	G2T1	S1	1B.1
<i>Astragalus tener var. titi</i> coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atriplex coulteri</i> Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
<i>Atriplex pacifica</i> south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
<i>Atriplex parishii</i> Parish's brittle scale	PDCHE041D0	None	None	G1G2	S1	1B.1
<i>Atriplex serenana var. davidsonii</i> Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
<i>Brennania belkini</i> Belkin's dune tabanid fly	IIDIP17010	None	None	G1G2	S1S2	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>California macrophylla</i> round-leaved filaree	PDGER01070	None	None	G3?	S3?	1B.2
<i>California Walnut Woodland</i> California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
<i>Calochortus plummerae</i> Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
<i>Calystegia felix</i> lucky morning-glory	PDCON040P0	None	None	GHQ	SH	3.1
<i>Carolella busckana</i> Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
<i>Centromadia parryi ssp. australis</i> southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
<i>Chaenactis glabriuscula var. orcuttiana</i> Orcutt's pincushion	PDAST20095	None	None	G5T1T2	S1	1B.1
<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
<i>Chenopodium littoreum</i> coastal goosefoot	PDCHE091Z0	None	None	G2	S2	1B.2
<i>Chloropyron maritimum ssp. maritimum</i> salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
<i>Chorizanthe parryi var. fernandina</i> San Fernando Valley spineflower	PDPGN040J1	Proposed Threatened	Endangered	G2T1	S1	1B.1
<i>Cicindela gabbii</i> western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
<i>Cicindela hirticollis gravida</i> sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
<i>Cicindela latesignata latesignata</i> western beach tiger beetle	IICOL02113	None	None	G2G4T1T2	S1	
<i>Cicindela senilis frosti</i> senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Coelus globosus</i> globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
<i>Danaus plexippus pop. 1</i> monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
<i>Dithyrea maritima</i> beach spectaclepod	PDBRA10020	None	Threatened	G1	S1	1B.1
<i>Dudleya multicaulis</i> many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Dudleya virens ssp. insularis</i> island green dudleya	PDCRA040S2	None	None	G3?T3	S3	1B.2
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eryngium aristulatum var. parishii</i> San Diego button-celery	PDAP10Z042	Endangered	Endangered	G5T1	S1	1B.1
<i>Eucosma henei</i> Henne's eucosman moth	IILEM0R390	None	None	G1	S1	
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Euphilotes battoides allyni</i> El Segundo blue butterfly	IILEPG201B	Endangered	None	G5T1	S1	
<i>Glaucopsyche lygdamus palosverdesensis</i> Palos Verdes blue butterfly	IILEPG402A	Endangered	None	G5T1	S1	
<i>Helianthus nuttallii ssp. parishii</i> Los Angeles sunflower	PDAST4N102	None	None	G5TH	SH	1A
<i>Horkelia cuneata var. puberula</i> mesa horkelia	PDR0S0W045	None	None	G4T1	S1	1B.1
<i>Isocoma menziesii var. decumbens</i> decumbent goldenbush	PDAST57091	None	None	G3G5T2T3	S2	1B.2
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Lepidium virginicum var. robinsonii</i> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<i>Lycium brevipes var. hassei</i> Santa Catalina Island desert-thorn	PDSOL0G0N0	None	None	G5T1Q	S1	3.1
<i>Microtus californicus stephensi</i> south coast marsh vole	AMAFF11035	None	None	G5T1T2	S1S2	SSC
<i>Nama stenocarpa</i> mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
<i>Nasturtium gambelii</i> Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
<i>Navarretia fossalis</i> spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
<i>Nemacaulis denudata var. denudata</i> coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
<i>Nyctinomops macrotis</i> big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
<i>Onychobaris langei</i> Lange's El Segundo Dune weevil	IICOL4W010	None	None	G1	S1	
<i>Orcuttia californica</i> California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
<i>Panoquina errans</i> wandering (=saltmarsh) skipper	IILEP84030	None	None	G4G5	S2	
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
<i>Pelecanus occidentalis californicus</i> California brown pelican	ABNFC01021	Delisted	Delisted	G4T3	S3	FP
<i>Pentachaeta lyonii</i> Lyon's pentachaeta	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
<i>Perognathus longimembris pacificus</i> Pacific pocket mouse	AMAFD01042	Endangered	None	G5T1	S1	SSC
<i>Phacelia stellaris</i> Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<i>Polioptila californica californica</i> coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
<i>Potentilla multijuga</i> Ballona cinquefoil	PDR0S1B120	None	None	GX	SX	1A
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
<i>Quercus dumosa</i> Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
<i>Rhaphiomidas terminatus terminatus</i> El Segundo flower-loving fly	IIDIP05022	None	None	G1T1	S1	
<i>Ribes divaricatum var. parishii</i> Parish's gooseberry	PDGRO020F3	None	None	G4TX	SX	1A
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Sidalcea neomexicana</i> Salt Spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Siphoteles bicolor mohavensis</i> Mohave tui chub	AFCJB1303H	Endangered	Endangered	G4T1	S1	FP
<i>Socalchemmis gertschi</i> Gertsch's socalchemmis spider	ILARAU7010	None	None	G1	S1	
<i>Sorex ornatus salicornicus</i> southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
<i>Southern Coast Live Oak Riparian Forest</i> Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
<i>Southern Coastal Bluff Scrub</i> Southern Coastal Bluff Scrub	CTT31200CA	None	None	G1	S1.1	
<i>Southern Coastal Salt Marsh</i> Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
<i>Southern Dune Scrub</i> Southern Dune Scrub	CTT21330CA	None	None	G1	S1.1	
<i>Southern Sycamore Alder Riparian Woodland</i> Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
<i>Sternula antillarum browni</i> California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
<i>Suaeda esteroa</i> estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
<i>Symphyotrichum defoliatum</i> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<i>Symphyotrichum greatae</i> Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Trigonoscuta dorothea dorothea</i> Dorothy's El Segundo Dune weevil	IICOL51021	None	None	G1T1	S1	
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
<i>Walnut Forest</i> Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 99

California Native Plant Society Inventory Results

Query Criteria: Inglewood, Beverly Hills, Hollywood, Long Beach, Los Angeles, Rondo Beach, South Gate, Torrance, and Venice Quadrangles

Scientific Name	Common Name	California Rare Plant Rank	State Listing (CDFW)	Federal Listing (USFWS)
<i>Abronia maritima</i>	red sand-verbena	4.2	None	None
<i>Aphanisma blitoides</i>	aphanisma	1B.2	None	None
<i>Arenaria paludicola</i>	marsh sandwort	1B.1	SE	FE
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	1B.1	None	FE
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura marsh milk-vetch	1B.1	SE	FE
<i>Astragalus tener</i> var. <i>titi</i>	coastal dunes milk-vetch	1B.1	SE	FE
<i>Atriplex coulteri</i>	Coulter's saltbush	1B.2	None	None
<i>Atriplex pacifica</i>	South Coast saltscale	1B.2	None	None
<i>Atriplex parishii</i>	Parish's brittlescale	1B.1	None	None
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's saltscale	1B.2	None	None
<i>California macrophylla</i>	round-leaved filaree	1B.2	None	None
<i>Calochortus catalinae</i>	Catalina mariposa lily	4.2	None	None
<i>Calochortus plummerae</i>	Plummer's mariposa lily	4.2	None	None
<i>Calystegia felix</i>	lucky morning-glory	3.1	None	None
<i>Calystegia peirsonii</i>	Peirson's morning-glory	4.2	None	None
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	3	None	None
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	1B.1	None	None
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	1B.1	None	None
<i>Chenopodium littoreum</i>	coastal goosefoot	1B.2	None	None
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	1B.2	SE	FE
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	1B.1	SE	FC
<i>Cistanthe maritima</i>	seaside cistanthe	4.2	None	None
<i>Clinopodium mimuloides</i>	monkey-flower savory	4.2	None	None
<i>Convolvulus simulans</i>	small-flowered morning-glory	4.2	None	None
<i>Deinandra paniculata</i>	paniculate tarplant	4.2	None	None
<i>Dichondra occidentalis</i>	western dichondra	4.2	None	None
<i>Dithyrea maritima</i>	beach spectaclepod	1B.1	ST	None
<i>Dudleya multicaulis</i>	many-stemmed dudleya	1B.2	None	None
<i>Dudleya virens</i> ssp. <i>insularis</i>	island green dudleya	1B.2	None	None
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	1B.1	SE	FE
<i>Erysimum suffrutescens</i>	suffrutescent wallflower	4.2	None	None
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	1A	None	None
<i>Hordeum intercedens</i>	vernal barley	3.2	None	None
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	1B.1	None	None
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	1B.2	None	None
<i>Juglans californica</i>	Southern California black walnut	4.2	None	None
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	4.2	None	None
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	1B.1	None	None

Scientific Name	Common Name	California Rare Plant Rank	State Listing (CDFW)	Federal Listing (USFWS)
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	4.3	None	None
<i>Leptosyne maritima</i>	sea dahlia	2B.2	None	None
<i>Lycium brevipes</i> var. <i>hassei</i>	Santa Catalina Island desert-thorn	3.1	None	None
<i>Nama stenocarpa</i>	mud nama	2B.2	None	None
<i>Nasturtium gambelii</i>	Gambel's water cress	1B.1	ST	FE
<i>Navarretia fossalis</i>	spreading navarretia	1B.1	None	FT
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	1B.1	None	None
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	1B.2	None	None
<i>Orcuttia californica</i>	California Orcutt grass	1B.1	SE	FE
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	1B.1	SE	FE
<i>Phacelia hubbyi</i>	Hubby's phacelia	4.2	None	None
<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	south coast branching phacelia	3.2	None	None
<i>Phacelia stellaris</i>	Brand's star phacelia	1B.1	None	None
<i>Potentilla multijuga</i>	Ballona cinquefoil	1A	None	None
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	2B.2	None	None
<i>Quercus dumosa</i>	Nuttall's scrub oak	1B.1	None	None
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	2B.2	None	None
<i>Suaeda esteroa</i>	estuary seablite	1B.2	None	None
<i>Suaeda taxifolia</i>	woolly seablite	4.2	None	None
<i>Symphotrichum defoliatum</i>	San Bernardino aster	1B.2	None	None
<i>Symphotrichum greatae</i>	Greata's aster	1B.3	None	None

California Native Plant Society, Rare Plant Program. 2017. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 26 May 2017].

IPaC

U.S. Fish & Wildlife Service

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 are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service.

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.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Poliophtila californica californica</i> There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Western Snowy Plover <i>Charadrius alexandrinus nivosus</i> There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/8035	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 Act².

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service

3. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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>
- Conservation measures for birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data <http://www.birdscanada.org/birdmon/default/datasummaries.jsp>

The migratory birds species listed below are species of particular conservation concern (e.g. [Birds of Conservation Concern](#)) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the [AKN Histogram Tools](#) and [Other Bird Data Resources](#). To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Allen's Hummingbird <i>Selasphorus sasin</i> https://ecos.fws.gov/ecp/species/9637	Breeding

Bald Eagle	<i>Haliaeetus leucocephalus</i> https://ecos.fws.gov/ecp/species/1626	Wintering
Bell's Vireo	<i>Vireo bellii</i> https://ecos.fws.gov/ecp/species/9507	Breeding
Black Oystercatcher	<i>Haematopus bachmani</i> https://ecos.fws.gov/ecp/species/9591	Year-round
Brewer's Sparrow	<i>Spizella breweri</i> https://ecos.fws.gov/ecp/species/9291	Year-round
Burrowing Owl	<i>Athene cunicularia</i> https://ecos.fws.gov/ecp/species/9737	Year-round
Cactus Wren	<i>Campylorhynchus brunneicapillus</i> https://ecos.fws.gov/ecp/species/8834	Year-round
Calliope Hummingbird	<i>Stellula calliope</i> https://ecos.fws.gov/ecp/species/9526	Migrating
Costa's Hummingbird	<i>Calypte costae</i> https://ecos.fws.gov/ecp/species/9470	Year-round
Fox Sparrow	<i>Passerella iliaca</i>	Wintering
Lawrence's Goldfinch	<i>Carduelis lawrencei</i> https://ecos.fws.gov/ecp/species/9464	Year-round
Least Bittern	<i>Ixobrychus exilis</i> https://ecos.fws.gov/ecp/species/6175	Year-round
Lesser Yellowlegs	<i>Tringa flavipes</i> https://ecos.fws.gov/ecp/species/9679	Wintering

Lewis's Woodpecker	<i>Melanerpes lewis</i> https://ecos.fws.gov/ecp/species/9408	Wintering
Long-billed Curlew	<i>Numenius americanus</i> https://ecos.fws.gov/ecp/species/5511	Wintering
Marbled Godwit	<i>Limosa fedoa</i> https://ecos.fws.gov/ecp/species/9481	Wintering
Mountain Plover	<i>Charadrius montanus</i> https://ecos.fws.gov/ecp/species/3638	Wintering
Nuttall's Woodpecker	<i>Picoides nuttallii</i> https://ecos.fws.gov/ecp/species/9410	Year-round
Oak Titmouse	<i>Baeolophus inornatus</i> https://ecos.fws.gov/ecp/species/9656	Year-round
Olive-sided Flycatcher	<i>Contopus cooperi</i> https://ecos.fws.gov/ecp/species/3914	Breeding
Peregrine Falcon	<i>Falco peregrinus</i> https://ecos.fws.gov/ecp/species/8831	Wintering
Red Knot	<i>Calidris canutus</i> ssp. <i>roselaari</i> https://ecos.fws.gov/ecp/species/8880	Wintering
Red-crowned Parrot	<i>Amazona viridigenalis</i> https://ecos.fws.gov/ecp/species/9022	Year-round
Rufous Hummingbird	<i>selasphorus rufus</i> https://ecos.fws.gov/ecp/species/8002	Migrating
Rufous-crowned Sparrow	<i>Aimophila ruficeps</i> https://ecos.fws.gov/ecp/species/9718	Year-round

Short-billed Dowitcher <i>Limnodromus griseus</i> https://ecos.fws.gov/ecp/species/9480	Wintering
Short-eared Owl <i>Asio flammeus</i> https://ecos.fws.gov/ecp/species/9295	Wintering
Snowy Plover <i>Charadrius alexandrinus</i>	Breeding
Western Grebe <i>Aechmophorus occidentalis</i> https://ecos.fws.gov/ecp/species/6743	Wintering
Yellow Warbler <i>Dendroica petechia</i> ssp. <i>brewsteri</i> https://ecos.fws.gov/ecp/species/3230	Breeding

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAA/NCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#). The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the [Northeast Ocean Data Portal](#), which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The [Avian Knowledge Network \(AKN\)](#) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest, survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the [Migratory Bird Programs AKN Histogram Tools](#) webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

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 NOAANCCOS [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project](#) webpage.

Facilities

Wildlife refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES 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 tubercid 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.

Not for
consultation

ATTACHMENT C

**Biological Technical Report, 2016
99th Street Wells Chloramination Project
City of Los Angeles, California**

BIOLOGICAL TECHNICAL REPORT

99th STREET WELLS CHLORAMINATION PROJECT CITY OF LOS ANGELES, CALIFORNIA



Prepared for:

Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, California 90012

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July 2016

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BIOLOGICAL TECHNICAL REPORT

**99th STREET WELLS CHLORAMINATION PROJECT
CITY OF LOS ANGELES, CALIFORNIA**

Prepared for:

Los Angeles Department of Water and Power
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Los Angeles, California 90012
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July 2016

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CHAPTER 1.0 INTRODUCTION

The Los Angeles Department of Water and Power (LADWP) proposes to construct a chloramination station within the 99th Street Wells Pumping Station in the Watts community of the City of Los Angeles. The proposed project is part of LADWP's program to comply with the federal Stage 2 Disinfectants and Disinfection Byproducts Rule (DDBPR) through a system-wide conversion from chlorination to chloramination of the in-City potable water supply. The chloramination station would combine a liquid ammonium sulfate (LAS) solution with sodium hypochlorite to form chloramines to disinfect the groundwater supply distributed by the 99th Street Wells Pumping Station complex. The proposed project would include the installation of all necessary equipment and structures needed to facilitate on-site sodium hypochlorite generation, ammonization, injection, and monitoring. The chloramination station would be a single-story structure of approximately 2,400 square feet (0.06-acre) designed in a style similar to the existing facilities. The piping would be located below the ground and would not be visible following the completion of construction.

This biological technical report was prepared in support of an Initial Study/Mitigated Negative Declaration, in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. and the State CEQA Guidelines, California Code of Regulations Section 15000 et seq. It is also intended to support of a State of California State Water Resources Control Board (SWRCB) Clean Water State Revolving Fund Water Recycling Funding Program (SRF) application.

1.1 PROJECT LOCATION

The proposed 99th Street Wells Chloramination Station project (project) would be located within the existing 99th Street Wells Pumping Station complex property, which is located at 9880 Wadsworth Avenue, in the Green Meadows community of the City of Los Angeles. The 24,800 square foot (0.57-acre) pumping station complex is located at the intersection of Wadsworth Avenue and 99th Street. The project site occurs within the far east-central portion of the U.S. Geological Survey's (USGS) 7.5-minute Inglewood, California quadrangle in Section 32 of Township 2 South, Range 13 West, and lies at approximately 120 feet above mean sea level (amsl).

The project site is bound by Wadsworth Avenue to the west, an LADWP Power System property to the north that includes electric transmission towers, and the 99th Street Elementary School to the east and south. The project site is adjacent to residential single-family homes west of

Wadsworth Avenue. Project Regional and Location Maps are provided as Figure 1-1 and Figure 1-2, respectively.

Currently the pumping station complex consists of groundwater wells, a covered forebay, a pumping station, a chlorination station, a fluoridation station, a corrosion inhibitor building, an electrical industrial station, and underground pipelines (Figure 1-3). The property is designated Public Facilities and zoned PF-1.

1.2 PROJECT PURPOSE

The project is a critical capital improvement project and important water infrastructure investment that will maintain water quality and water supply reliability. The project also ensures compliance with more stringent federal regulatory requirements regarding disinfection by products such as total trihalomethanes and haloacetic acids were set under the federal Stage 2 DDBPR. As such, the DDBPR requires compliance monitoring and requires the City of Los Angeles's entire distribution system to meet the maximum contaminant levels of 80 micrograms per liter of trihalomethanes and 60 micrograms per liter of haloacetic acids. Conversion to chloramine disinfection by the controlled feed of LAS with sodium hypochlorite into the water supply would ensure the reduction of trihalomethanes and other byproducts produced by traditional chlorine disinfection. In addition to improved water quality, the City-wide conversion to chloramines would improve the reliability of the water supply by allowing the use of Metropolitan Water District of Southern California supplies without restrictions due to issues associated with disinfectant blending. This project is one of several water system improvements required for the City-wide conversion to chloramine disinfection.

1.3 DESCRIPTION OF PROPOSED PROJECT

The new chloramination facility would be constructed within the LADWP-owned 99th Street Wells Pumping Station complex and would include all necessary equipment and structures needed for chloramine disinfection of the groundwater supply. The new station would include LAS equipment, an on-site sodium hypochlorite generation system, and chemical injection equipment. Two closed, non-pressurized 2,750 gallon cross-linked high-density polyethylene (HDPE) plastic tanks would store the LAS inside the chloramination building. The station would be constructed in an undeveloped, grassy area in the southeast corner of the project site. The station would be a single-story structure of a similar style as the existing facilities. The piping would be located below ground and would not be visible following the completion of construction. Additional fencing would be installed to secure the new station.

The potable groundwater pumped through the 99th Street Wells Pumping Station would be disinfected by applying two treatment chemicals, 0.8 percent sodium hypochlorite and 40 percent LAS, to create chloramines. LAS is a stable, non-toxic, non-volatile, non-flammable, odorless chemical. The station would employ a food-grade type of 40 percent LAS, which has a National Sanitation Foundation 60 approval and is American Water Works Association-certified. The benefit of using LAS is that it has a low vapor pressure and in the event of a spill or leak, the ammonia would stay in solution and not off-gas or cause ammonia fumes or vapors to go into the air. It also means an ammonia safety scrubber is not needed inside the chloramination station in the event of a spill or leak to remove any ammonia fumes or vapors released inside the station. Because of its inherently safe qualities, LAS is not subject to regulation under the California Accidental Release Prevention program.

The station's LAS supply would be trucked in, but the station's sodium hypochlorite supply would be generated on-site from salt using a process called on-site sodium hypochlorite generation. On-site generation would eliminate the need for external, weekly deliveries and bulk storage of 12.5 percent sodium hypochlorite. Due to the elimination of bulk deliveries of sodium hypochlorite and the reduced sodium hypochlorite concentration of 0.8 percent, the new station would provide for greater safety. During the on-site generation of 0.8 percent sodium hypochlorite, the hydrogen gas byproduct would be continuously diluted with fresh air by forced air ventilation blowers and vented outside at a concentration of less than 1.5 parts per million. The trucked in LAS and the generated sodium hypochlorite would be stored in a storage tanks and injected into the well collector line as needed. The LAS and sodium hypochlorite systems would be housed in separate rooms of the station and kept isolated from each other. The sodium hypochlorite would be stored in a closed, non-pressurized, 9,100 gallon HDPE plastic tank equipped with automatic tank level monitoring with low and high level alarms and shut-off, an overflow pipe, and a spill containment area. LAS would be stored in two closed, non-pressurized, 2,750 gallon cross-linked HDPE plastic tanks equipped with automatic tank level monitoring with low and high level alarms and shut-off, an overflow pipe, and a spill containment area. The total LAS storage capacity would be approximately 5,500 gallons. LAS and sodium hypochlorite would be injected into the water supply via two separate peristaltic metering pumps, chlorinated polyvinyl chloride (CPVC) plastic piping, and diffuser injection systems. Together, LAS and sodium hypochlorite would produce the needed chloramine residual to meet federally-mandated water quality standards in the service area.

The chloraminated groundwater supply would then be pumped by the 99th Street Wells Pumping Station into the 386-foot service zone system. The groundwater pumping rate would range from 1.0 to 10.9 cubic feet per second. At a maximum flow rate of 10.9 cubic feet per second, the maximum sodium hypochlorite usage would be approximately 3.3 gallons per minute (4,740 gallons per day), and LAS usage would be 53 gallons per day. LAS from the residual chemical

analyzer and water softening system would be collected and discharged to the existing public sewer on Wadsworth Avenue.

As previously discussed, the sodium hypochlorite required for this facility would be generated on-site using salt and water. As such the only chemical deliveries during project operation would be approximately 4 deliveries a year of LAS in an LAS tanker. A total of 90 tons of salt requiring approximately 9 deliveries a year would be delivered to the project site. A maximum of twenty tons of salt would be stored on site. The LAS will be delivered by the vendor. LAS would be stored in the two 2,750 gallon cross-linked HDPE plastic tanks during project operation. The above ground LAS piping would be CPVC and the buried ammonia piping would be double-contained. Both the LAS and salt would be delivered during normal weekday work hours. Currently, 12.5 percent sodium hypochlorite solution is delivered to the project site every week. These deliveries would cease.

In the event of a LAS leak or spill occurring outside during filling of the LAS tank, LAS would be diverted into the containment area inside the building. Prior to filling, operators are to ensure that valves at the catch basin are positioned so that potential leaks would flow into the containment area inside the building.

In the event of a hydrogen gas leak, the sodium hypochlorite generation unit would turn off and the room ventilation fan would remain on. A second back-up emergency fan would also turn on to quickly vent the hydrogen gas outside. Additionally, upon detection of hydrogen gas, sensors would transmit both a local alarm and a remote alarm signal to a continuously-manned station.

In addition, the following general safety standards and controls would be implemented for the proposed project:

- Intrusion alarms triggered by the building doors would be transmitted to a continuously-manned station.
- Security video cameras would be installed inside each room of the building and around the exterior of the building. Camera recordings would be transmitted to a continuously-manned station.
- All electrical safety systems would be equipped with back-up power via an emergency generator or battery.
- LADWP operators would be on stand-by 24 hours a day, 7 days a week, and would respond promptly to any alarm or emergency conditions.

1.4 CONSTRUCTION SCHEDULE AND PROCEDURES

Construction of the proposed project is anticipated to begin in spring 2016 and take approximately two years to complete, concluding in spring/summer 2018. The proposed 99th Street Wells Chloramination Station is expected to be operational by summer 2018.

To accomplish all the elements of the proposed project, the delivery of construction equipment, materials, and supplies to the 99th Street Wells Pumping Station complex would be required. Vehicles required for the project construction would include backhoes, grader, compactor, concrete truck, drill rig, excavators, crane, front end loader, forklifts, and water trucks. Recurrent deliveries would include material and components required for the chloramination station construction, pipe segments for new water line connections, and concrete for various elements of the project.

Ground-disturbing activities for the proposed project would include excavation of the areas for the construction of the chloramination building and installation of new pipelines. The chloramination station would be 40 feet by 60 feet (0.06 acre), with an excavation area of 53.5 feet by 74.5 feet, and would require a maximum depth of 9 feet. Pipes would require trenching approximately 1 foot wide by 3 feet deep and total approximately 755 feet. The underground electrical conduits would require trenching approximately 3 feet wide by 4 feet deep and total approximately 308 feet. Chloramination station construction would create up to approximately 1,700 cubic yards (CY) of excavated material and approximately 130 CY of debris. Additionally, approximately 300 CY of concrete would be delivered to the project site.

The project's staging area would be located in the electrical transmission corridor that lies just north of the pump station complex (Figure 1-3). It would include space for employee parking and equipment and materials storage. The staging area would be enclosed by fencing. The construction trailer would be located in the northeast corner of the fenced pump station complex. Ornamental trees within the proposed staging area would not be removed as a part of this project.

The construction phasing for the proposed project is detailed below in Table 1-1, Construction Phasing Assumptions.

Table 1-1 Construction Phasing Assumptions

	<u>Phase 1: Site Preparation</u>	<u>Phase 2: Construction of Chloramination Station and Installation of Piping</u>
Length of construction	6 weeks	30 months
# of Construction Equipment and Type	2 (excludes dump trucks and flatbed trailers) back hoe, loader and water truck	3 concrete pump, cement truck, crane, compactor, dump truck, soldier piles, ABI machine (soldier pile installer), drill rig, excavator, water truck, forklifts
# of Equipment & Deliveries Traveling To & From Project Site Per Day (Typical & Peak)*	Typical: 1 Peak: 2 (includes flatbed trailers, water trucks)	Typical: 2 Peak: 8 (ready-mix trucks)
Amount of Construction Debris Generated	50 CY	1,700 CY of soil, 80 CY of debris
# of Dump/Haul Truck Trips Per Day	1	25
# of Construction Workers (Typical & Peak)*	Typical: 4 Peak: 5	Typical: 8 Peak: 20

* Peak construction activities would occur over a three-day period during the concrete pouring for the building.

Generally, in accordance with the Noise Ordinance, construction activity would occur Mondays through Fridays from 7:00 a.m. to approximately 9:00 p.m. The sidewalk directly west of and adjacent to the project site would be temporarily closed for the duration of construction. Parking along this section would also be temporarily restricted for the duration of construction activities. A flag person would direct pedestrian and vehicular traffic whenever equipment goes in and out of the project site. The City of Los Angeles requires a construction worksite traffic control plan and safety program, consistent with federal and state requirements.

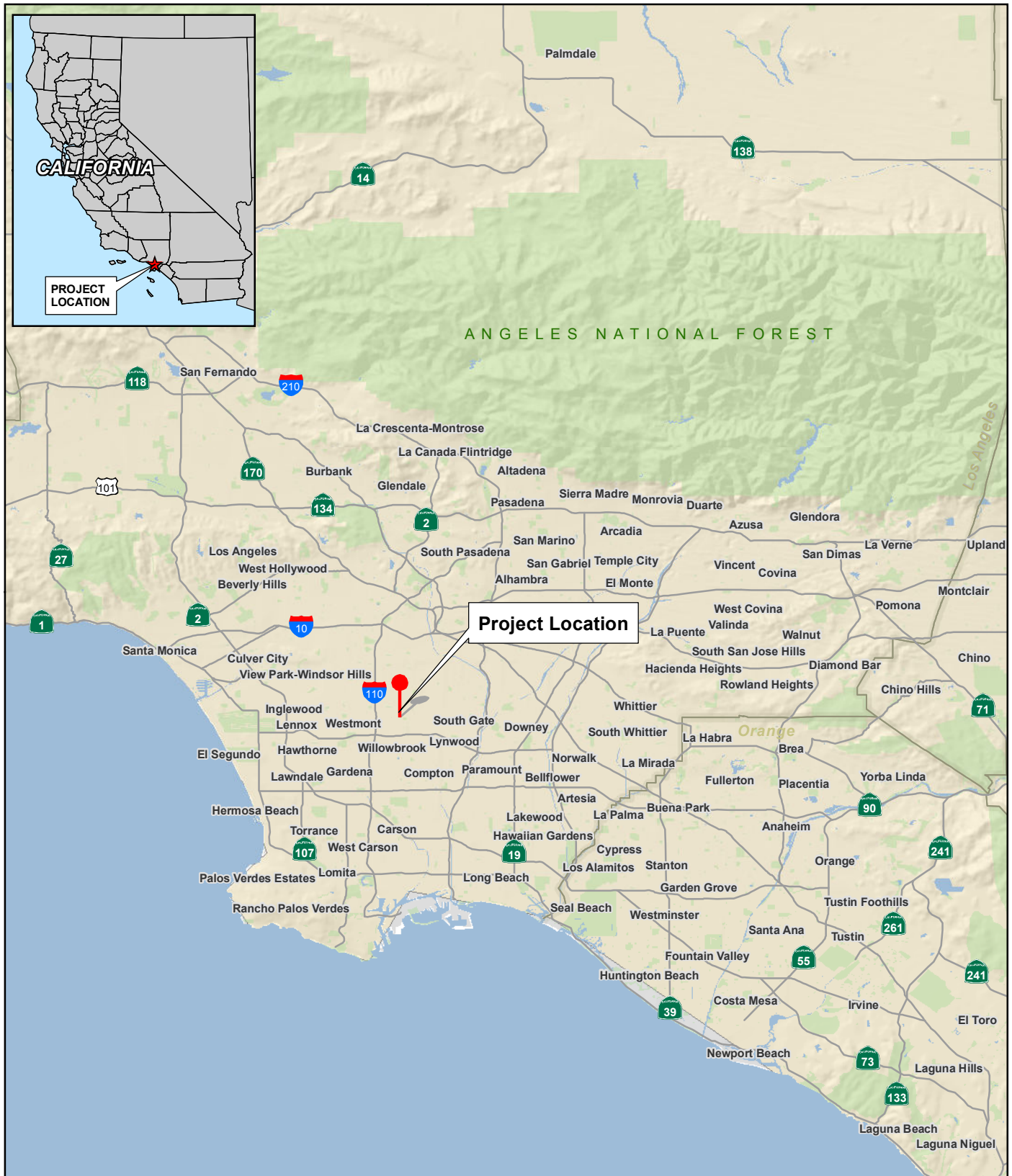
LADWP will initiate construction outside of the nesting season (February 15 through September 15), to the extent feasible, and will adhere to standard protocols of the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) requirements, such as preconstruction surveys.

As discussed in the Initial Study/Mitigated Negative Declaration (IS/MND), 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 comply with the Regional Water Quality Control Board's National Pollution Discharge Elimination System Phase II Rule.
- Construction workers would utilize personal protection equipment, including noise-reducing ear protection, during construction activities.
- Residences and businesses near the pipeline alignment would be notified prior to the start of construction (e.g., via flyers) of lane closures and parking restrictions in their vicinity. The notices would include a telephone number for comments or questions related to construction activities.
- 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.

In addition, air quality and noise mitigation measures to be implemented during construction were provided in the IS/MND. These air quality and noise mitigation measures are presented in Chapter 6 would avoid and minimize potential impacts to biological resources.

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Project Location

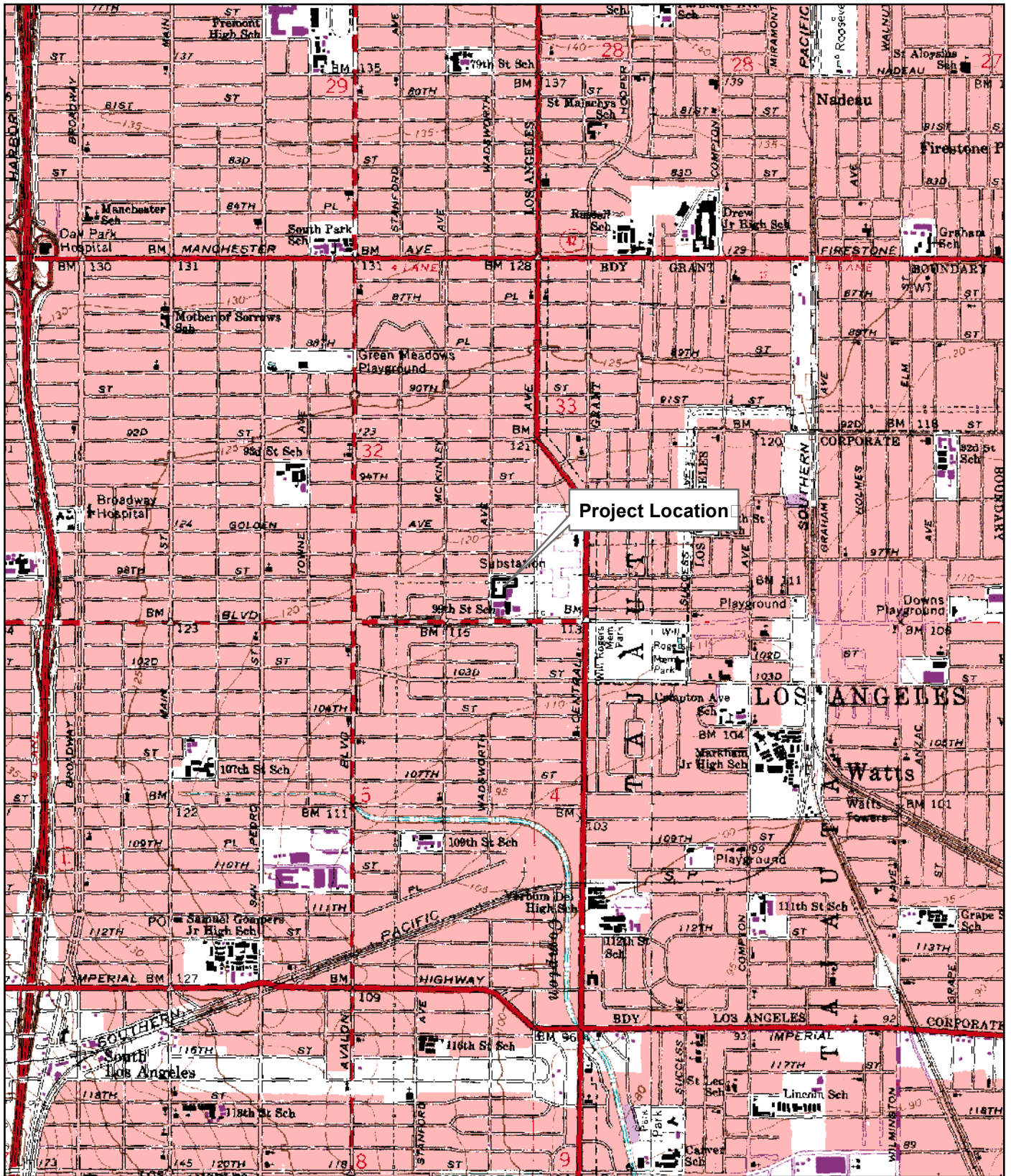


Figure 1-1
Regional Location

99th Street
Chloramination Station



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Source: USGS Southgate and Inglewood 7.5 Minute Quad

 Project Site

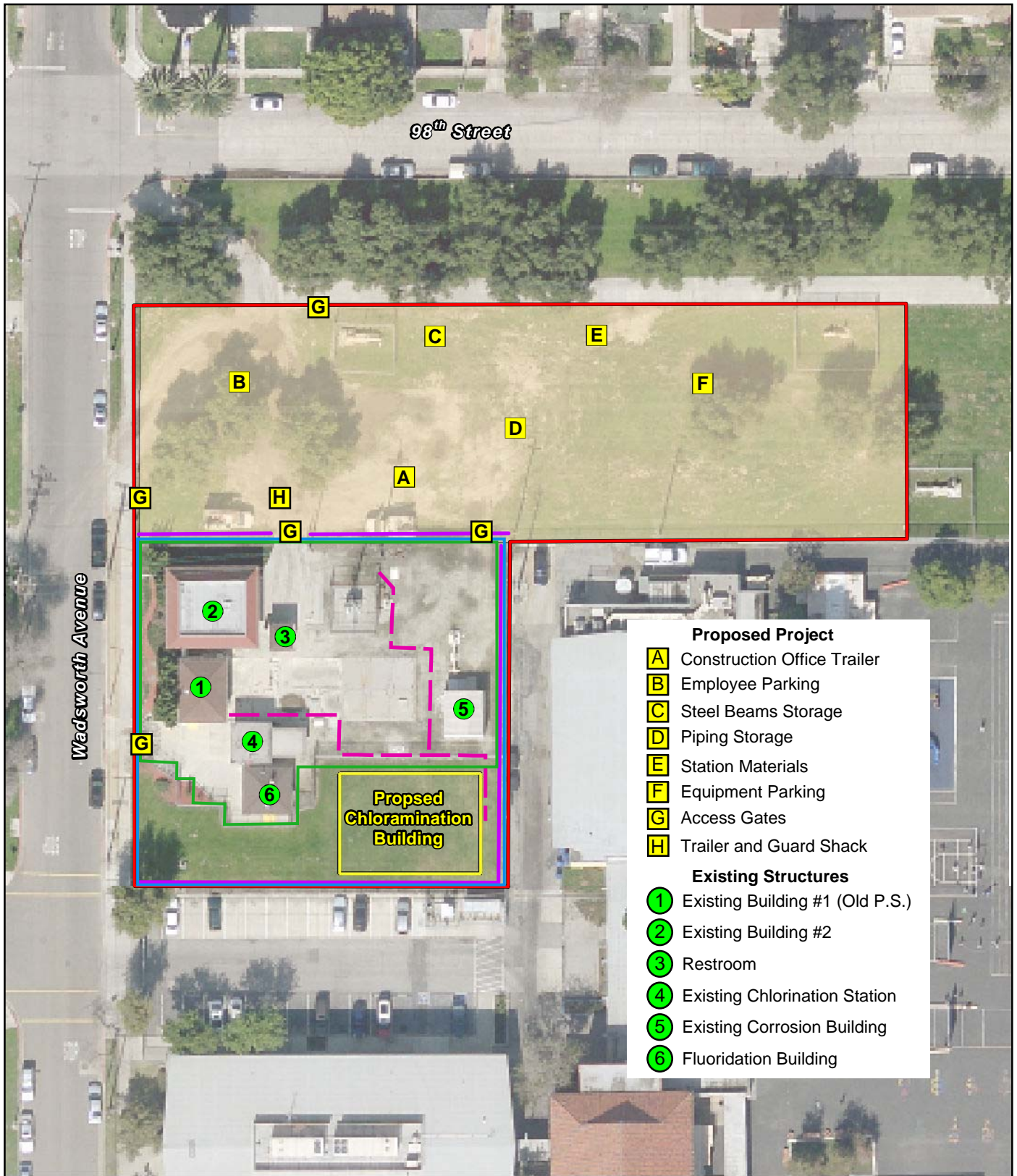
Figure 1-2
Location Map

99th Street
Chloramination Station



0 2,000
Feet

AECOM



- Proposed Project**
- A** Construction Office Trailer
 - B** Employee Parking
 - C** Steel Beams Storage
 - D** Piping Storage
 - E** Station Materials
 - F** Equipment Parking
 - G** Access Gates
 - H** Trailer and Guard Shack
- Existing Structures**
- 1** Existing Building #1 (Old P.S.)
 - 2** Existing Building #2
 - 3** Restroom
 - 4** Existing Chlorination Station
 - 5** Existing Corrosion Building
 - 6** Fluoridation Building

- Proposed Pipes
- Proposed Sound Wall
- Proposed Chloramination Station
- Construction Staging Area
- Project Site
- Existing Fence
- Proposed Fence



0 60 Feet

**Figure 1-3
Project Map**

**99th Street
Chloramination Station**



CHAPTER 2.0

EXISTING BIOLOGICAL CONDITIONS

2.1 FIELD SURVEY AND DATABASE REVIEW

Prior to conducting a field survey, California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS) special-status species and sensitive community occurrence databases were reviewed for the project vicinity. These sources are cited in relevant sections of this report. AECOM biologist Art Popp conducted a survey of the project site on May 4, 2016 to document existing biological resources in the project area. This report presents results of the survey and background review and is intended as an evaluation of on-site habitat types and an assessment of the potential for occurrence of special-status plant and wildlife species. This report was prepared by Ms. Vanessa Tucker and Mr. Popp. Resumes are included in Appendix A.

Vegetation communities and land cover types, and plant and wildlife species found within the project site plus a 500-foot survey buffer around the site combined the Biological Survey Area (BSA), or area of potential effect (APE), were surveyed and noted for the purposes of this technical report (Figure 2-1). The transmission corridor and residential homes to the north, 99th street Elementary School to the south and east, and residential single-family homes to the west of the project site fall within the 500-foot survey buffer. A 500-foot buffer around the project site was selected in order to capture potential indirect effects to biological resources from implementation of the project. Indirect effects could include elevated noise and dust levels, soil compaction, and increased human activity within the BSA. A 500-foot survey buffer is standard for capturing potential indirect impacts from a project on biological resources. It is anticipated that indirect impacts beyond 500 feet would be defuse and would not significantly impact biological resources.

Land cover types and plant and wildlife species beyond the BSA were also noted, although not recorded for purposes of this report. Binoculars were utilized to scan for evidence of wildlife activity and for potential avian nest sites outside the BSA. Seasonal, species-specific botanical and wildlife surveys were not conducted as part of this evaluation. Observations of existing conditions made during the field survey would not necessarily rule out some special-status species; however, based on the field survey and assessment, special-status plant and wildlife species are not expected to occur in the BSA. Photographs of existing structures and land cover types within the BSA are presented in Appendix B.

2.2 VEGETATIVE COMMUNITIES/LAND COVER TYPES

Vegetation and land cover types observed within the BSA during the field survey indicate the presence of only urban developed areas with ornamental and ruderal vegetation. No natural vegetation communities are present in the BSA.

Urban developed lands are areas that have been altered by clearing and construction activities to support man-made structures such as buildings, roads, parking lots, and sidewalks, which often include associated landscaped areas or undeveloped areas with ruderal vegetation. Vegetation within the BSA consists of non-native ornamental trees, shrubs, flowers, and herbaceous annual plants typical of undeveloped urban sites. Plant species observed in the project site during the survey included: cheeseweed (*Malva parviflora*), London rocket (*Sisymbrium irio*), goosefoot (*Chenopodium spp.*), bristly ox tongue (*Helminthotheca echioides*), prickly lettuce (*Lactuca serriola*), erodium (*Erodium cicutarium*), yellow clover (*Melilotus officinalis*), Russian thistle (*Salsola tragus*), barley (*Hordeum murinum*), spurge (*Euphorbia sp.*), amaranth (*Amaranthus sp.*), unidentifiable brome grass (*Bromus spp.*), Johnson grass (*Sorghum halepense*), fountain grass (*Pennisetum setaceum*), passion flower (*Passiflora sp.*), morning glory (*Ipomoea sp.*), ornamental juniper trees and shrubs (*Juniperus sp.*), and bottlebrush trees (*Callistemon sp.*). Additionally, jacaranda (*Jacaranda sp.*), pine (*Pinus sp.*), elm (*Ulmus sp.*), and Canary island data palm (*Phoenix canariensis*) trees were observed in the 500-foot survey buffer.

2.3 WILDLIFE SPECIES

Four bird species were detected during the site visit, including rock dove (*Columba livia*), song sparrow (*Melospiza melodia*), Northern mockingbird (*Mimus polyglottos*) and common raven (*Corvus corax*). No bird breeding or nesting activities were observed in the BSA during the field survey. However, ornamental trees located within the BSA may provide suitable habitat for nesting birds. The survey was conducted at a time when many passerine bird species in southern California are beginning, or are yet to begin breeding and nesting activities. No other wildlife species were observed during the survey.

2.4 WILDLIFE MOVEMENT CORRIDORS

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, agricultural lands, or highways. Habitat fragments can isolate species populations by limiting migration, foraging, and



breeding opportunities. Isolation of populations can have many harmful impacts and may contribute significantly to local species extinction.

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 animals to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development. Wildlife migration corridors are essential in geographically diverse settings, and especially in urban settings, for the sustainability of healthy and diverse animal communities. At a minimum, corridors promote colonization of habitat and genetic variability by connecting fragments of like habitat and help sustain individual species distributed in and among habitat fragments. They are also important features for dispersal, seasonal migration, foraging, and breeding.

Due to the highly developed urban location of the project site and no natural open space nearby, a wildlife corridor is not present at this location. Birds and other wildlife may utilize the electric transmission corridor for localized movement; however, it is likely not a significant movement corridor for wildlife.

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-  Biological Study Area (500-ft Buffer)
-  Project Site



0 400 Feet

Figure 4
Project Site and
Biological Study Area

99th Street
Chloramination Station



CHAPTER 3.0

SPECIAL-STATUS BIOLOGICAL RESOURCES

The California Natural Diversity Data Base (CNDDDB) (CDFW 2016a) and the CNPS on-line Inventory of Rare and Endangered Plants of California (CNPS 2016) were reviewed for the most recent distribution information for special-status plant and wildlife species and sensitive natural communities within the Inglewood and surrounding eight quadrangles, including Beverley Hills, Hollywood, Long Beach, Los Angeles, Redondo Beach, South Gate, Torrance and Venice quadrangles. The USFWS Information for Planning and Conservation (IPac) (USFWS 2016) on-line database was also reviewed for special-status species, sensitive natural communities, and protected areas known from the project vicinity. The results of these database searches are included in Appendix C.

Additionally, information on special-status plant and wildlife species was compiled through a review of:

- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2016b)
- Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2016c)
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2016d)
- Special Animals List (CDFW 2016e)

3.1 SPECIAL-STATUS PLANTS

Special-status plant species include those listed as Endangered, Threatened, Rare or those species proposed for listing by the USFWS under the federal Endangered Species Act (FESA) and by CDFW under the California Endangered Species Act (CESA) (CDFW 2016b). The CNPS inventory is sanctioned by the CDFW and serves essentially as the list of candidate plant species for state listing. CNPS's California Rare Plant Ranks (CRPR; formerly CNPS List) 1B and 2 species are considered eligible for state listing as endangered or threatened.

Seventeen plant species known from the Inglewood and surrounding eight quadrangles are federally and/or state-listed as threatened, endangered, rare, or candidates for listing, including:

- aphanisma (*Aphanisma blitoides*), federal and state-listed endangered
- marsh sandwort (*Arenaria paludicola*), federally and state-listed endangered
- Braunton's milk-vetch (*Astragalus brauntonii*), federally-listed endangered

- Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), federally and state-listed endangered
- coastal dunes milk-vetch (*Astragalus tener* var. *titi*), federally and state-listed endangered
- south coast saltscale (*Atriplex pacifica*), federally and state-listed endangered
- Nevin's barberry (*Berberis nevinii*), federally and state-listed endangered
- salt marsh bird's-beak (*Chloropyron maritimum* spp. *maritimum*), federally and state-listed endangered
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), federal candidate for listing and state-listed endangered
- monkey-flower savory (*Clinopodium mimuloides*), federal candidate for listing and state-listed endangered
- western dichondra (*Dichondra occidentalis*), federally and state-listed endangered
- beach spectaclepod (*Dithyrea maritima*), state-listed threatened
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*), federally and state-listed endangered
- Gambel's water cress (*Nasturtium gambelii*), federally-listed endangered, state-listed threatened
- spreading navarretia (*Navarretia fossalis*), federally-listed endangered, state-listed threatened
- California Orcutt grass (*Orcuttia californica*), federally and state-listed endangered
- Brand's star phacelia (*Phacelia stellaris*) federal candidate for listing

A total of 59 special-status plant species were identified from searches of the CNDDDB and the CNPS on-line inventory to have historically been recorded from the Inglewood and surrounding eight quadrangles, and from a search of IPaC for the project area. These species, their status, habitat requirements, and potential to occur within the BSA are provided in Appendix D, Table A. No historical records of special-status plant species and no USFWS-designated critical habitat for plants listed under the FESA coincide with the BSA.

No suitable habitat for special-status plant species occurs within the BSA. Due to the presence of urban developed habitats, the absence of any observations of special-status plant species during the field survey, and familiarity with the habitat requirements for special-status plant species known from the region, no special-status plant species are expected to occur within the BSA.

3.2 SPECIAL-STATUS WILDLIFE

Special-status wildlife species include those listed as Endangered, Threatened, or those species proposed for listing by the USFWS under FESA and CDFW under CESA (CDFW 2016d).

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 (CFG) Section 3503. Many other species are considered by CDFW to be California species of special concern (SSC), listed in Remsen (1978), Williams (1986) and CDFW (2016e), and others are on a CDFW Watch List (WL) (CDFW 2016e). The CNDDDB tracks species within California for which there is conservation concern, including many that are not formally listed, and assigns them a CNDDDB Rank (CDFW 2016e). Although SSC and WL species, and species that are tracked by the CNDDDB, but not formally listed, are afforded no official legal status, they may receive special consideration during the CEQA review process.

CDFW further classifies some species under the following categories: "Fully Protected", "Protected birds" (CDFW Code §3511), "Protected mammals" (CDFW Code §4700), "Protected amphibian" (CDFW Code §5050 and Chapter 5, §41), "Protected reptile" (CDFW Code §5050 and Chapter 5, §42), and "Protected fish" (CDFW Code §5515). The designation "Protected" indicates that a species may not be taken or possessed except under special permit from CDFW; "Fully Protected" indicates that a species can be taken for scientific purposes by permit only (CDFW 2016e). CDFW Code §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 express authorization is obtained from CDFW. Additionally, USFWS has designated a number of migratory nongame birds as Birds of Conservation Concern (BCC) (USFWS 2008). This is the most recent effort by USFWS to identify migratory birds that, without conservation actions, are likely to become candidates for listing under FESA. Twenty-eight BCC are included in the IPaC list generated for the project vicinity (see Appendix C).

Sixteen wildlife species known from the Inglewood and surrounding eight quadrangles are federally and/or state-listed as threatened, endangered, or as candidates for listing, including:

- El Segundo blue butterfly (*Euphilotes battoides allyni*), federally-listed endangered
- Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*), federally-listed endangered
- Riverside fairy shrimp (*Streptocephalus woottoni*), federally-listed endangered
- Mohave tui chub (*Siphateles bicolor mohavensis*), federally and state-listed endangered
- tricolored blackbird (*Agelaius tricolor*), state-listed endangered

- Swainson's hawk (*Buteo swainsoni*), state-listed threatened
- western snowy plover (*Charadrius alexandrinus nivosus*), federally-listed threatened
- western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), federally-listed threatened and state-listed endangered
- southwestern willow flycatcher (*Empidonax traillii extimus*), federally and state-listed endangered
- California black rail (*Laterallus jamaicensis coturniculus*), state-listed threatened
- Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), state-listed endangered
- coastal California gnatcatcher (*Polioptila californica californica*), federally-listed threatened
- bank swallow (*Riparia riparia*), state-listed threatened
- California least tern (*Sternula antillarum browni*), federally and state-listed endangered
- least Bell's vireo (*Vireo bellii pusillus*), federally and state-listed endangered
- Pacific pocket mouse (*Perognathus longimembris pacificus*), federally-listed endangered

A total of 47 special-status wildlife species were identified from the CNDDDB search to have historically been recorded from the Inglewood and surrounding eight quadrangles and from a search of IPaC for the project area. These species, their status, habitat requirements, and potential to occur within the BSA are provided in Appendix D, Table B. No historical records of special-status wildlife species and no USFWS-designated critical habitat for wildlife listed under the FESA coincide with the BSA.

Although birds protected under the MBTA and CFGC may utilize ornamental trees in the BSA for nesting, no suitable habitat for special-status wildlife species occurs within the BSA. Due to the presence of urban developed habitats, the absence of any observations of special-status wildlife species during the field survey, and familiarity with the habitat requirements for special-status wildlife species known from the region, no special-status wildlife species are expected to occur within the BSA.

3.3 SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are those that are designated as rare in the region by the CNDDDB, support special-status plant or wildlife species, or receive regulatory protection (i.e., Section 404 of the Clean Water Act (CWA) and/or Sections 1600 et seq. of the CFGC). Rare communities are given the highest inventory priority (Holland 1986; CDFG 2010). Based on a review of the CNDDDB (CDFW 2016a), seven sensitive vegetative communities have been recorded within the Inglewood and surrounding eight quadrangles, including Southern Coastal Bluff Scrub,

California Walnut Woodland, Southern Coast Live Oak Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Coastal Salt Marsh, Walnut Forest, Southern Dune scrub.

No sensitive natural communities, including aquatic communities protected under the CWA (waters of the U.S.) or Section 1600 of the CFCG (waters of the state) are present within the BSA.

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CHAPTER 4.0

APPLICABLE REGULATIONS

As discussed in some of the previous chapters, several regulations have been established by federal, state, and local agencies to protect and conserve biological resources. The descriptions below provide an overview of agency regulations that may be applicable to the resources that occur within the Project components and regulations that require an analysis per requirements of the SRF Environmental Package application. The final determination of whether permits are required is made by the regulating agencies.

4.1 FEDERAL REGULATIONS AND STANDARDS

Federal Endangered Species Act (FESA)

Enacted in 1973, FESA provides for the conservation of threatened and endangered species and their ecosystems (United States Code [U.S.C.] Title 16, Chapter 35, Sections 1531–1544). The FESA prohibits the “take” of threatened and endangered species except under certain circumstances and only with authorization from USFWS through a permit under Section 4(d), 7 or 10(a) of the FESA. “Take” under the FESA is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

Formal consultation under Section 7 of the FESA would be required if the project had the potential to affect a federally-listed species that has been detected within or adjacent to the BSA. No federally-listed species are anticipated to be affected by the project as habitat potentially suitable for such species does not occur within the BSA; therefore, formal consultation is not required.

Migratory Bird Treaty Act (MBTA)

Congress passed the MBTA in 1918 to prohibit the kill or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA (U.S.C. Title 16, Chapter 7, Subchapter II, Sections 703–712). The prohibition applies to birds included in the respective international conventions between the United States and Great Britain, the United States and Mexico, the United States and Japan, and the United States and Russia.

No permit is issued under the MBTA. LADWP will adhere to standard protocols of the MBTA.

Clean Water Act (CWA)

Under Section 404 of the CWA, the U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged or fill material into jurisdictional waters of the U.S., which include those waters listed in 33 CFR 328.3 (Definitions) (U.S.C. Title 33, Chapter 26, Sections 101–607). 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 CWA. RWQCB is the state agency in charge of issuing a CWA Section 401 water quality certification or waiver.

Wetlands or other waters of the U.S. do not occur within the BSA.

Magnuson-Stevens Fishery Conservation and Management Act

Under the purview of the National Oceanic and Atmospheric Association’s National Marine Fisheries Service (NMFS), amendments in 1996 to the Magnuson-Stevens Fishery Conservation and Management Act set forth a number of mandates for NMFS, Regional Fishery Management Councils, and federal action agencies to identify and protect important marine and anadromous fish habitat. The Councils, with assistance from NMFS, are required to delineate Essential Fish Habitat (EFH) in fishery management plans for all managed species. EFH is defined to include “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (in the 1997 Interim Final Rule [62 Fed. Reg. 66551, Section 600.10 Definitions]). Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include historic areas if appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem; and “spawning, breeding, feeding, or growth to maturity” covers a species’ full life cycle (PFMC 2013).

The project is located within an urbanized area of the City of Los Angeles and does not include or is connected to any EFH.

Protection of Wetlands – Executive Order Numbers 11990 and 12608

Under this Executive Order (EO) issued May 24, 1977 and amended by EO 12608, Federal agencies must provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands (42 CFR 26961; 3 CFR 1977 Comp., p. 121). Each agency, to the extent permitted by law, must avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: there is no practical alternative to such construction; the proposed action

includes all practical measures to minimize harm to wetlands that may result from such use. In making this finding the head of the agency may take into account economic, environmental and other pertinent factors. Each agency must also provide opportunity for early public review of any plans or proposals for new construction in wetlands (FedCenter 2015).

The project is not located in wetlands or other waters of the U.S.

Wild and Scenic Rivers Act

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection (NWSRS 2016).

The project is not located within the watershed of a wild and scenic river.

Coastal Zone Management Act

The U.S. Congress recognized the importance of meeting the challenge of continued growth in the coastal zone by passing the Coastal Zone Management Act in 1972 (Public Law 109-58; 16 U.S.C. 1451 et seq.). This act, administered by NOAA, provides for the management of the nation's coastal resources, including the Great Lakes. The goal is to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone."

The project is not located in the City of Los Angeles Coastal Zone or the State Coastal Zone.

4.2 STATE REGULATIONS AND STANDARDS

California Fish and Game Code (CFGC)

The CFGC regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as impacts to natural resources such as wetlands and waters of the state. It includes the California Endangered Species Act (CESA) (Sections 2050–2115) and SAA regulations (Section 1600 et seq.).

Wildlife “take” is defined by CDFW as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Protection extends to the animals, dead or alive, and all their body parts. Section 2081 of CESA allows CDFW to issue an incidental take permit for state-listed threatened or endangered species, should the proposed Project have the potential to “take” a state-listed species that has been detected within or adjacent to the Project. Certain criteria are required under CESA prior to the issuance of such a permit, including the requirement that impacts of the take are minimized and fully mitigated.

The project does not coincide with waters of the state and as a result, issuance of an SAA would not be required for this project. No state-listed species are anticipated to be affected by the project as habitat potentially suitable for such species does not occur within the BSA, and as a result, a permit under Section 2081 is not anticipated for the project.

Porter-Cologne Water Quality Control Act

Under Section 13000 et seq., of the Porter-Cologne Act, RWQCB is the agency that regulates discharges of waste and fill material within any region that could affect a water of the state (CWC 13260[a]), (including wetlands and isolated waters) as defined by CWC Section 13050(e).

A permit under Porter-Cologne is not required as project activities will not coincide with waters of the state.

California Environmental Quality Act¹

CEQA requires that biological resources be considered when assessing the environmental impacts resulting from proposed actions. CEQA does not specifically define what constitutes an “adverse effect” on a biological resource. Instead, lead agencies are charged with determining what specifically should be considered an impact.

An IS/MND has been prepared for the project in compliance with CEQA.

¹ PRC Section 21000 et seq. and the State CEQA Guidelines, California Code of Regulations, Section 15000 et seq.

4.3 LOCAL REGULATIONS AND STANDARDS

Significant Ecological Areas (SEA) Program

Los Angeles County first began to inventory biotic resources and identify important areas of biological diversity in the 1970s. Today, the primary mechanism used by the County to conserve biological diversity is a planning overlay called Significant Ecological Areas (SEA) designated in the County's General Plan Conservation/Open Space Element. Together, the General Plan overlays and a SEA conditional use permit (CUP) process are referred to as the SEA Program. SEAs are ecologically important land and water systems that support valuable habitat for plants and animals, often integral to the preservation of rare, threatened, or endangered species and the conservation of biological diversity in Los Angeles County. While SEAs are not preserves, they are areas where Los Angeles County deems it important to facilitate a balance between development and resource conservation.

The BSA does not occur within an SEA.

City of Los Angeles Tree Ordinance

Section 17.02 of the Los Angeles Municipal Code (LAMC) protects the following southern California native tree species, which measure 4 inches or more in cumulative diameter, 4.5 feet above the ground level at the base of the tree:

- a) Oak trees, including Valley Oak (*Quercus lobata*) and California Live Oak (*Quercus agrifolia*), or any tree of the oak genus indigenous to California but excluding Scrub Oak (*Quercus dumosa*);
- b) Southern California Black Walnut (*Juglans californica* var. *californica*);
- c) Western Sycamore (*Plantanus racemosa*)
- d) California Bay (*Umbellularia californica*)

Relocation or removal of any protected trees is prohibited without a permit or exemption from the Board of Public Works or its designated office or employee. Removal includes any act which would cause a protected tree to die, including but not limited to acts which inflict damage upon the root system or other part of the tree by fire, application of toxic substances, operation of equipment or machinery, or by changing the natural grade of land by excavation or filling in the drip line area around the trunk of the tree.

Trees protected under this tree ordinance are not present in the project site, and as a result, no protected trees will be removed during project construction.

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CHAPTER 5.0 IMPACTS ON BIOLOGICAL RESOURCES

Biological resources may be either directly or indirectly impacted by a project. Direct and indirect impacts may be either permanent or temporary in nature. These impact categories are defined below.

Direct: Any alteration, physical disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Examples include clearing vegetation, loss of individual species and/or their habitats, and encroaching into wetlands or a river.

Indirect: As a result of project-related activities, biological resources may also be affected in a manner that is ancillary to physical impacts. Examples include elevated noise and dust levels, soil compaction, increased human activity, decreased water quality, and the introduction of invasive wildlife (domestic cats and dogs) and plants.

Permanent: All impacts that result in the long-term or irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources. Permanent impacts of the project include construction of the proposed 40-foot by 60-foot (0.06-acre) chloramination station. Construction of the building would occur within an urban developed areas consisting of bare ground and ruderal vegetation, and as a result would not be considered significant.

Temporary: Any impacts considered to have reversible impacts on biological resources can be viewed as temporary. Examples include temporary direct impacts during excavation for construction of the proposed chloramination station and trenching for the pipelines and electrical conduits. Temporary impacts would occur at the staging area where project equipment and materials would be temporarily stored within previously-disturbed areas. Upon project completion, these areas would be returned to former use and condition. Temporary impacts have not been quantified. All impacts would occur within previously-disturbed areas consisting of the pump station complex and electrical transmission corridor where buildings, paved surfaces, and areas of bare ground or ruderal vegetation occur, and as a result would not be considered significant. Temporary indirect impacts include the generation of fugitive dust and noise during construction.

Impacts on biological resources due to construction activities and subsequent operations are described in this chapter. Potential direct and indirect impacts from construction and operations

activities to vegetation, wildlife, special-status plant and wildlife species, sensitive natural communities, and wildlife movement corridors are presented in the following sections.

5.1 VEGETATION

5.1.1 Construction

5.1.1.1 Vegetation Communities

Project construction would impact urban developed land covers. The new 2,400 square-foot (0.06-acre) chloramination building and associated piping would be installed in areas consisting of disturbed vegetation communities dominated by non-native species. As a result, impacts would not be considered significant.

Indirect impacts to vegetation communities outside the project site could include the accumulation of fugitive dust, and the colonization of nonnative, invasive plant species. Other indirect impacts could include an increase in the amount of compacted or modified surfaces that, if not controlled, could increase the potential for surface runoff, increased erosion, and sediment deposition within vegetation beyond the project's footprint. No native vegetation communities exist outside the project site and vegetation present in the BSA already consists primarily of non-native species. With adherence to standard protocols and requirements of the MBTA and CFGC and implementation of the mitigation measures presented in Chapter 6, indirect impacts to vegetation communities outside the project site would be avoided and no impact would occur.

5.1.1.2 Special-Status Plant Species

Individual special-status plant species could be damaged or destroyed from crushing or trampling during construction activities; however, project construction would occur in urban developed areas unsuitable for special-status species. No federal or state-listed plant species were observed on-site, nor is potentially suitable habitat for protected plant species present within the BSA. In addition, erosion control measures to control surface runoff, erosion, and sedimentation outside of the project site would be implemented during construction. As a result, no direct or indirect impacts to special-status plant species would occur.

5.1.2 Operations

Operations and routine maintenance of the chloramination station would be conducted within a previously-disturbed urban developed area, most of which consists of buildings, paved surfaces

and areas of bare ground or ruderal vegetation. As a result impacts to vegetation communities and special-status plant species during operation and maintenance of the project would not occur.

5.2 WILDLIFE

5.2.1 Construction

Project construction could potentially affect wildlife and wildlife habitat, including construction-related noise disturbance and disruption of movement and potential wildlife mortality. Short-term impacts of construction on wildlife resources would result from wildlife avoidance of the immediate construction zone. Noise and other disturbances caused by heavy equipment and construction crews may cause wildlife to move away from the construction zone. Species with limited mobility or that occupy burrows within the construction zone could be crushed during project activities.

No federal or state-listed wildlife species were identified during the field survey; however, birds protected by the MBTA and CFGC have the potential to nest within the BSA. LADWP will initiate construction outside of the nesting season (February 15 through September 15), to the greatest extent feasible, and will conform to standard protocols of MBTA and CFGC requirements. With adherence to standard protocols and requirements of the MBTA and CFGC and implementation of the noise and air quality mitigation measures presented in Chapter 6, impacts to wildlife within the project site would be avoided and no impact would occur.

5.2.1.1 Birds

Raptors

No special-status raptor species were observed during the survey and potentially suitable habitat for special-status raptor species is not present. However, raptors protected by the MBTA and CFGC have the potential to nest in ornamental trees located within the BSA. LADWP will initiate construction outside of the nesting season (February 15 through September 15), to the greatest extent feasible, and will conform to standard protocols of MBTA and CFGC requirements. With adherence to standard protocols and requirements of the MBTA and CFGC and implementation of the noise and air quality mitigation measures presented in Chapter 6, direct impacts to special-status raptor species during project implementation would not occur.

Construction noise may indirectly affect raptor species if they are present in the vicinity, causing them to change their behavior and move out of the area. Sound walls will be installed on perimeter fencing along the north, east, and south sides of the pump station complex to reduce

the diffusion of construction noise into the surrounding neighborhood. However, if raptors are detected nesting in the vicinity of the project prior or during construction and appear to be affected by construction noise, further noise-reduction measures may need to be implemented to reduce construction noise levels to acceptable levels, or work discontinued until the young have fledged. LADWP will initiate construction outside of the nesting season (February 15 through September 15), to the greatest extent feasible, and will conform to standard protocols of MBTA and CFGC requirements. With adherence to standard protocols and requirements of the MBTA and CFGC and implementation of the noise and air quality mitigation measures presented in Chapter 6, indirect impacts to special-status raptor species during project implementation would not occur.

Nesting Birds

Birds protected by the MBTA and CFGC have the potential to nest in the BSA, utilizing ornamental trees in the survey buffer, or man-made structures in the project site. No trees or structures would be removed as part of the project and as a result, direct impacts to nesting birds are not anticipated to occur.

Indirect impacts to nesting birds within the vicinity of the project site could occur as a result of noise, increased human presence, and vibrations resulting from construction activities. Disturbances related to construction could result in increased nestling mortality due to nest abandonment or decreased feeding frequency. LADWP will initiate construction outside of the nesting season (February 15 through September 15), to the greatest extent feasible, and will conform to standard protocols of MBTA and CFGC requirements. With adherence to standard protocols and requirements of the MBTA and CFGC and implementation of the noise and air quality mitigation measures presented in Chapter 6, impacts to nesting birds are not anticipated.

5.2.1.2 Mammals

Although no special-status mammal species are expected to occur within the BSA, large trees that may provide potentially suitable roosting habitat for bats occur within the BSA. Potentially suitable colonial roosting sites do not occur within the BSA, as caves are absent and large suitable structures are absent in the project vicinity. Additionally, no trees potentially suitable for roosting bats would be removed during construction. As a result, direct impacts to bats would not occur.

Indirect impacts to special-status bats roosting within the vicinity of the project could occur as a result of noise, increased human presence, and vibrations resulting from construction activities. Disturbances related to construction could result in displacement from daytime roosts. Disruption

of night-time roosts is not anticipated as construction will not occur during dusk or evening hours. By adhering to the mitigation measures presented in Chapter 6, indirect impacts to bats would not occur.

5.2.2 Operations

Impacts during operations and routine maintenance would be limited; however, wildlife could be affected by human presence, noise, and fugitive dust. Impacts are expected to be minimal, short term, and in most cases would not directly affect wildlife. Activities would generally be conducted from paved surfaces or bare ground. As a result, impacts to special status wildlife species would not occur during operation and maintenance of the chloramination station.

5.3 SENSITIVE NATURAL COMMUNITIES

5.3.1 Construction

No sensitive natural communities, including waters of the U.S. or waters of the state, occur within the BSA. As a result, no direct impacts to a sensitive natural community would occur during implementation of the project.

Indirect impacts to sensitive natural communities during construction could include the accumulation of fugitive dust and noise, increase of surface runoff, increase of erosion, and increase of sediment deposition within vegetation beyond the project footprint. However, no sensitive natural communities are present in the BSA and as a result, indirect impacts to natural communities would not occur.

5.3.2 Operation

Operation and routine maintenance of the project would not coincide with any natural vegetation communities. As a result, direct and indirect impacts during operation and routine maintenance of the chloramination station to sensitive natural communities would not occur.

5.4 WILDLIFE MOVEMENT CORRIDOR

5.4.1 Construction

No wildlife movement corridors are present in the BSA therefore no direct or indirect impacts to a movement corridor would occur during construction.

5.4.2 Operation

No wildlife movement corridors are present in the BSA; therefore, no direct or indirect impacts to a movement corridor would occur during operation and maintenance of the chloramination station.

CHAPTER 6.0

MITIGATION MEASURES

The proposed project would implement the following air quality and noise mitigation measures during construction as stated in the IS/MND:

AQ-1 The proposed project would implement Rule 403 dust control measures required by the SCAQMD, which would include the following:

- a. Water would be applied to exposed surfaces at least two times per day to prevent generation of dust plumes.
- b. The construction contractor would utilize at least one of the following measures at each vehicle egress from the project site to a paved public road:
 - i. Install a pad consisting of washed gravel maintained in clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long;
 - ii. Pave the surface extending at least 100 feet and at least 20 feet wide;
 - iii. Utilize a wheel shaker/wheel spreading device consisting of raised dividers at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages; or
 - iv. Install a wheel washing system to remove bulk material from tires and vehicle undercarriages.
- c. All haul trucks hauling soil, sand, and other loose materials would be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
- d. Construction activity on exposed or unpaved dirt surfaces would be suspended when wind speed exceeds 25 miles per hour (mph).
- e. Ground cover in disturbed areas would be replaced in a timely fashion when work is completed in the area.

- f. Identify a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation.
- g. Apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- h. Traffic speeds on all unpaved roads to be limited to 15 mph or less.
- i. Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads. If feasible, use water sweepers with reclaimed water.

AQ-2 The proposed project would implement the following air quality mitigation to further reduce emissions experienced by the adjacent elementary school during construction:

- a. LADWP would use equipment and vehicle engines which are maintained in good condition and in proper tune per manufacturers' specifications.
- b. LADWP would require the construction contractor to use electricity from power poles rather than temporary gasoline or diesel power generators, as feasible.
- c. LADWP would prohibit heavy-duty trucks from idling in excess of five minutes, both on- and off-site, as feasible.
- d. LADWP would require construction parking to be configured such that it minimizes traffic interference.
- e. LADWP would coordinate with administrators at the 99th Elementary School to minimize student exposure to air pollution during periods of heavy construction activity (e.g., excavation).

NOI-1 All construction equipment would be properly maintained and equipped with mufflers and other suitable noise attenuation devices.

NOI-2 The construction contractor would use rubber-tired equipment rather than track equipment. Noisy equipment would be used only when necessary and would be switched off when not in use.

- NOI-3** The construction contractor would ensure that all stockpiling and vehicle staging areas are located as far away from noise-sensitive receivers as possible.
- NOI-4** LADWP would establish a public liaison for project construction that would be responsible for addressing public concerns about construction activities, including excessive noise. The liaison would determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and would work with LADWP to implement reasonable measures to address the concern.
- NOI-5** The construction contractor would develop a construction schedule to ensure that the construction would be completed quickly to minimize the time a sensitive receptor would be exposed to construction noise.
- NOI-6** Construction supervisors would be informed of project-specific noise requirements, noise issues for sensitive land uses adjacent to the project site, and/or equipment operations.
- NOI-7** The construction contractor would install a 12-foot high temporary barrier along the northern, eastern, and southern property lines. The acoustical barrier would be constructed of material having a minimum surface weight of two pounds per square foot or greater, or a demonstrated Sound Transmission Class rating of 25 or greater as defined by American Society for Testing and Materials Test Method E90. The barrier would be required during the excavation and site preparation phases of construction.
- NOI-8** Prior to construction work, the public would be notified of the location and dates of construction. Residents would be kept informed of any changes to the schedule.
- NOI-9** LADWP would coordinate with the designated contact for the 99th Elementary School. Coordination between the school contact and LADWP would continue on an as-needed basis while construction is occurring adjacent to these land uses to minimize potential disruption to the land uses.

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CHAPTER 7.0 CONCLUSIONS

No direct or indirect impacts to special-status plant species are anticipated, as none were observed during the field survey and the BSA lacks suitable habitat for such species. As a result, impacts to special-status plants are not anticipated and would not be significant.

No special-status wildlife species were observed during the field survey and potentially suitable habitat for them is absent; however, birds protected by the MBTA and CFGC have the potential to occur and nest in the BSA. Potential direct impacts to these species or their nests could occur during the use or transport of project equipment or materials, on which common birds may nest. Potential indirect impacts are associated with noise, dust, vibration, and increased human activity, which could cause individuals to change their behavior and move out of the area. With adherence to standard protocols and requirements of the MBTA and CFGC and implementation of the noise and air quality mitigation measures presented in Chapter 6, disturbance of these species would be avoided and no impacts to special-status wildlife species and nesting birds would occur.

Construction and operation of the project would not directly affect a wildlife movement corridor, as the BSA does not serve as a wildlife movement corridor.

Construction of the project would not result in impacts to sensitive natural communities or jurisdictional waters of the U.S. and state as they are not present in the BSA. As a result, impacts to sensitive natural communities would not occur.

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CHAPTER 8.0 REFERENCES

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APPENDIX A

Resumes of Key Personnel

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Arthur Popp
Biologist/Project Manager**Education**

M.S., Forestry, Fisheries and Wildlife, University of Nebraska, Lincoln, NE, 1993
B.S., Biology, Nebraska Wesleyan University, Lincoln, NE 1991

Additional Training/Accreditation

California Rapid Assessment Methodology (CRAM) for Wetlands
Surface Water Ambient Monitoring Program (SWAMP)
California Environmental Quality Act (CEQA) Basics and Refresher Workshop
Range Safety Officer, U.S. Marine Corps Base Camp Pendleton

Arthur Popp's qualifications as a biologist and project manager include 20+ years of experience as a botanist and aquatic ecologist. Mr. Popp has experience in conducting general vegetation surveys, focused surveys for sensitive plant species, aquatic bioassessments, and wetland determinations. He has assisted clients in understanding and complying with regulations that govern impacts to sensitive biological resources and provided options that may avoid or minimize such impacts, permitted the activities that propose impacts, and coordinate mitigation projects that satisfy both the client and regulatory agencies. Mr. Popp also has experience with pre- and post-project natural resource monitoring, including assessments of stream habitats and macroinvertebrate community composition, and natural vegetation communities.

Mr. Popp's experience in the consulting field involves designing, conducting, and managing projects for private landowners, utility companies, municipalities, regulatory agencies, and non-profit resource conservation groups. He has served as project manager and led efforts on utility, transportation, and renewable resource development projects, and habitat restoration projects. He has overseen projects from field surveys and technical reports through the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. He also has experience preparing Biological Assessments for submittal to the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

Project Experience**City of Los Angeles Department of Public Works, Bureau of Engineering (BOE), Mt. Lee Pumping Station and Pipeline Project, Los Angeles, CA**

As biological resource lead, conducted field survey and prepared biological technical report to support BOE's efforts to comply with the California Environmental Quality Act (CEQA). [04/2015 – 06/2015]

BOE, Rancho Cienega Sports Complex Project, Los Angeles, CA

As biological resource lead, prepared the biological resources section of the proposed project's CEQA documents. Proposed project includes new sports facilities and renovation of existing facilities at the Rancho Cienega Sports Complex [08/2015 – 10/15]

Los Angeles County Department of Public Works (LACDPW), State Route 126/Commerce Center Drive Interchange Project, Los Angeles County, CA

Project Manager for protocol biological resource surveys, pre-construction surveys, Workers Environmental Awareness Program training, and environmental compliance monitoring in support of project construction. Conduct field surveys, prepare reports, and perform various project management functions. [02/2013 – Present]

Los Angeles Department of Water and Power (LADWP), Silver Lake Reservoir Nesting Bird Surveys and Monitoring, Los Angeles, CA

Project Manager for nesting bird surveys and monitoring efforts during construction activities at Silver Lake Reservoir. Survey and monitoring efforts are focused on a great blue heron rookery on-site. Conduct surveys for great blue heron and other nesting birds, monitor great blue heron nests during construction, prepare monthly monitoring reports, and perform various project management functions. [02/2015 – Present]

Water Replenishment District of Southern California, Groundwater Reliability Improvement Project, Los Angeles, CA

As biological resource lead, conducted field surveys, prepared biological technical report, and assisted with preparation of the biological resource section of Environmental Impact Report prepared for this groundwater recharge project. Proposed project includes construction of a water treatment plant and recycled water conveyance pipelines. [01/2013 – Present]

LADWP, Los Angeles Groundwater Replenishment Project, Los Angeles, CA

As biological resource lead, conducted field surveys, prepared biological technical report, and assist with preparation of the biological resource section of the Environmental Impact Report being prepared for this groundwater recharge project. Proposed project includes construction of a water treatment plant and recycled water conveyance pipelines. [11/2013 – Present]

LACDPW, Big Rock Creek Road Improvements, Los Angeles County, CA

Project manager for biological field surveys and monitoring activities for a road improvement project on Big Rock Creek Road in the Angeles National Forest. Conducted field surveys for and prepared a Biological Assessment and Evaluation report for the project, and oversaw and coordinated biological monitoring during road improvement construction. [04/2012 – Present]

LADWP, Lakeside Recreation Complex Environmental Impact Report, Los Angeles, CA

As biological resource lead, conducted biological resource field survey and prepared a biological resource technical report in support of the Environmental Impact Report prepared for the proposed Lakeside Recreation Complex. [10/2010 – 9/2012]

U.S. Army Corps of Engineers (ACOE), Los Angeles District, Supplemental Environmental Assessment (SEA)/Environmental Impact Report (EIR) Addendum for Reach 9, Phases 4, 5A, 5B, and BNSF Bridge, Orange and Riverside Counties, CA

Project manager for the preparation of a Draft SEA/EIR Addendums for four flood protection projects proposed for construction in Reach 9 of the Santa Ana River. Prepared sections of the SEA/EIR Addendums and integrated sections written by other team members into the draft document. Also oversaw reconnaissance-level biological surveys of the project sites. Also prepared a 401(b)(1) Evaluation to be appended to SEA/EIR Addendum. [04/2014 – 03/2015]

ACOE, Los Angeles District, Supplemental Environmental Assessments (SEA)/Environmental Impact Report (EIR) Addendums for the California Institution for Women Dike and the Yorba Slaughter Dike Projects, San Bernardino County, CA

Project manager for the preparation of two SEA/EIR Addendums for two flood protection dike structures proposed for construction in the Prado Basin. Prepared sections of the SEA/EIR Addendums and integrated sections written by other team members into the draft and final documents. Also oversaw biological resource assessment surveys of the project sites and preparation of a biological technical report. [06/2010 – 08/2013]

California Department of Transportation (Caltrans) District 11 and City of San Diego, West Mission Bay Drive Bridge Replacement Project, San Diego, CA

As biological resource lead, prepared the Natural Environment Study (NES) and Essential Fish Habitat and Marine Mammal Protection Act assessments for the bridge replacement project in coordination with Caltrans and City of San Diego. Also assisted in the preparation of a Biological Assessment for submittal to the U.S. Fish & Wildlife Service, and initial compensatory mitigation planning for project impacts. [02/2010 – 10/2013]

San Diego Gas & Electric (SDG&E), Biological On-Call Services for San Diego County, San Diego, CA

Task manager for field surveys and environmental documentation for operations and maintenance projects proposed by SDG&E on Marine Corps Base Camp Pendleton (MCBCP). Conducted and coordinated field surveys and construction monitoring at SDG&E project sites and prepared and reviewed environmental documents and monitoring reports for submittal to MCBCP. Obtained clearance for surveys in restricted areas on MCBCP and coordinated project efforts with MCBCP personnel and SDG&E engineers and biologists. [04/2009 – Present]

Port of Long Beach, Pier S Marine Terminal & Back Channel Improvements, Long Beach, CA

Reviewed project plans and associated technical reports, and assisted with preparation of the Environmental Impact Statement/ Environmental Impact Report for the construction of a new marine terminal at Pier S with rail access and Back Channel improvements. [09/2010 – 09/2013]

Vanessa Tucker

Wildlife Biologist

Education

B.S., Biological Science, concentration in Biodiversity, Ecology and Conservation. California State University Fullerton, Fullerton, CA

Additional Training/Accreditation

- California Tiger Salamander Ecology Workshop, Laguna de Santa Rosa Foundation, March 2015
- Rare Pond Species Survey Techniques Workshop, Laguna de Santa Rosa, March 2015
- Western Burrowing Owl survey and handling techniques, Elkhorn Slough Coastal Training, August 2014
- 40 Hour HAZWOPER, May 2014
- Flat-tailed Horned Lizard Survey and Handling, May 2013
- Southwestern Willow Flycatcher Workshop, Southern Sierra Research Station, May 2013
- Mojave Desert Tortoise Survey Techniques, Desert Tortoise Council, November, 2012
- Natural Resources Seminars in Botany, Herpetology and Ornithology, College of the Desert, Palm Desert, 2012
- DPV2 Construction Monitoring Training and WEAP class, January 2012
- A-Star Helicopter Safety Training, March 2013
- Adult, infant & child C.P.R. with A.E.D. First Responder First Aid, June 2014
- Wilderness First Aid Certification, July 2010
- B3 Helicopter/Airplane Safety Certification. U.S. Forest Service, February 2010

Professional History

AECOM
2016 – Present

ETIC Engineering
2014-2016

Chambers Group, Inc.
2014

CH2M HILL
2012-2013

Vanessa Tucker has 4 years of experience as a wildlife biologist and construction monitor. She has experience in conducting habitat assessments, focused surveys for sensitive species, nesting birds surveys and invasive species control. She has assisted authorized biologists in surveying for California desert tortoise, flat-tailed horned lizard and burrowing owl. She has four years of experience reinforcing environmental compliance measures on high profile projects in Southern California.

Project Experience

Atkinson and Walsh Joint Venture, SR-91 Corridor Improvement Project, Orange and Riverside Counties, CA

As biologist, monitored vegetation removal during the nesting bird season to ensure compliance with the migratory bird treaty act. Conducted nesting bird surveys in accordance to the nesting bird mitigation and monitoring plan. Monitored construction activities to prevent project delays. Conducted clearance sweeps before the crew arrived to ensure no nesting birds or special status species were located within the project area. Observed active nests during construction to prevent nest failure. Prepared daily field reports. [4/2016 - Present].

Southern California Gas Company, Pipeline Safety Enhancement Project, Orange County, Los Angeles and Ventura Counties, CA

As biologist, conducted pre-construction surveys for nesting birds and sensitive species and monitored construction activities during the replacement and testing of pipeline throughout Southern California on private and public lands. Conducted water, soil and material sampling for environmental hazards. Trained staff on proper field survey techniques and sampling techniques. Held daily environmental awareness trainings for new personnel coming onto the project. Advised construction crew on proper placement of best management practices around the construction site. Created daily field reports as well as survey result technical memorandums. [Prior to AECOM; 05/2014-03/2016]

Southern California Edison, Tehachapi Renewable Transmission Project, Orange County, CA

As biologist, conducted site inspections of active and inactive sites to ensure environmental compliance during the construction of energy

transmission towers in Orange County areas. Project sites were located on private and public lands. Documented and reported non-compliance issues to construction management. [Prior to AECOM; 01/2015-06/2015]

Kiewit, I-405 Sepulveda Pass Widening, Los Angeles, CA

As biologist, monitored vegetation removal during the nesting bird season to ensure compliance with the migratory bird treaty act. Conducted nesting bird surveys in accordance to the nesting bird mitigation and monitoring plan. Monitored construction activities during day and night shifts to prevent project delays. Conducted clearance sweeps before the crew arrived to ensure no nesting birds or special status species were located within the project area. Observed active nests during construction to prevent nest failure. Prepared daily field reports as well as nesting bird survey results reports. [Prior to AECOM; 02/2014 – 05/2014]

Southern California Edison, Devers to Palo Verde 2, Riverside County, CA

As biologist, conducted daily pre-construction clearance sweeps for biological resources, nesting bird surveys, nest monitoring, and bmp inspections on active sites during the installation of energy transmission towers in Palm Springs area. Participated in numerous nesting bird surveys and desert tortoise present and absence surveys with authorized biologists. Worked in remote areas of the San Bernardino National Forest that were only accessible by helicopter. Managed a highly active fly zone where helicopter activities occurred to ensure only authorized personnel had access to site. Trained new workers on desert tortoise detection and environmental awareness and compliance. Managed the nesting bird database to ensure all 400+ tower site locations were in compliance and up to date. [Prior to AECOM; 01/2012-06/2013]

Picacho Gold Recovery Project, Imperial County, CA

As biologist, conducted presence and absence surveys with authorized biologists for the federally listed desert tortoise (*Gopherus agassizii*) in support of the re-opening of a mine located in Picacho State Recreation Area in California. [Prior to AECOM; 03/2015]

Imperial Valley Solar Project, Imperial County, CA

As biologist, assisted senior biologist in monitoring nests and surveying for burrowing owls in the project impacted areas in Imperial County. [Prior to AECOM; 3/2014]

Burrtec, Landfill Expansion Project, Imperial County, CA

As biologist, conducted flat-tailed horned lizard clearance surveys for 40 acres of land that was planned to be converted into a landfill in Imperial County. [Prior to AECOM; 7/2013]

West Maui Mountains Watershed Partnership, Invasive Species Control and Conservation Efforts, Maui, HI

As biological field technician, controlled feral animal and invasive plant populations located in the west Maui mountains preserve

working for a non-profit. Worked in remote locations only accessible by helicopter and camped for a week at a time in extreme conditions. Conducted aerial surveys by helicopter for the detection of ungulate disturbance and the presence of highly invasive plants. Built fence to prevent new ungulates from entering the west Maui mountains preserve. Surveyed for native plant population as well as non-native plant pollutions along transects on individual ridgelines. Built cement barriers to deter motorcyclists from entering the preserve and eroding existing ungulate trails and introducing new invasive plants to the preserve. Scouted remote rivers and streams for new plant invasions. Held monthly public outreach events to encourage the local community to participate in invasive species removals. [Prior to AECOM; 12/2009-05/2011].

APPENDIX B
Site Photographs
May 4, 2016

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Photo 1: East-facing view of the location for the proposed chloramination station (black-dashed line).



Photo 2: Northwest-facing view of the location for the proposed chloramination station (black-dashed line).

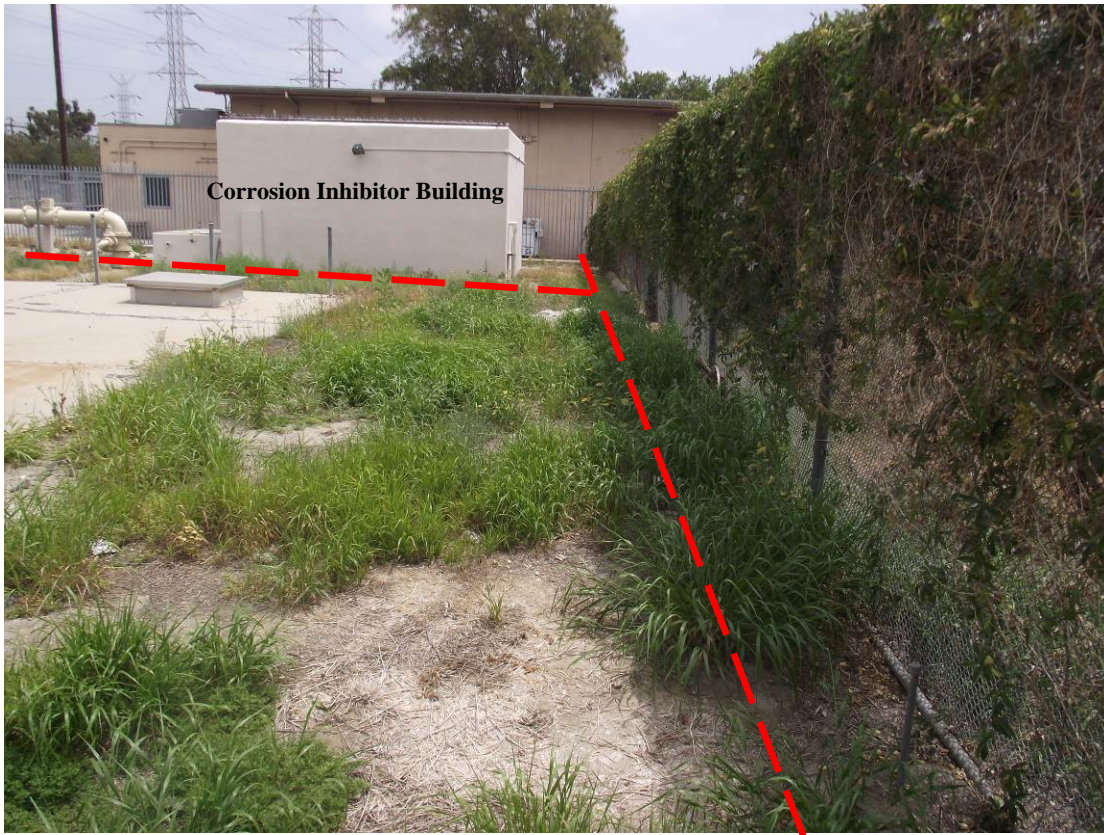


Photo 3: East-facing view of area where new piping will be installed (red-dashed line).



Photo 4: East-facing view of existing chloramination building at left and fluoridation building at right.



Photo 5: West-facing view of existing structures with proposed pipeline alignment (red-dashed line).



Photo 6: Northwest-facing view of existing structures with proposed pipeline alignment (red-dashed line).



Photo 7: East-facing view of proposed staging area.



Photo 8: West-facing view of proposed staging area.

APPENDIX C

**Results of Database Searches of the
California Natural Diversity Data Base (CNDDB)
California Native Plant Society (CNPS)
Information for Planning and Conservation (IPaC)**

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad is (Beverly Hills (3411814) or Hollywood (3411813) or Inglewood (3311883) or Long Beach (3311872) or Los Angeles (3411812) or Redondo Beach (3311874) or South Gate (3311882) or Torrance (3311873) or Venice (3311884))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	None	G2G3	S1S2	SSC
<i>Anniella pulchra pulchra</i> silvery legless lizard	ARACC01012	None	None	G3G4T3T4Q	S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Aphanisma blitoides</i> aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
<i>Arenaria paludicola</i> marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	ARACJ02143	None	None	G5T3T4	S2S3	
<i>Astragalus brauntonii</i> Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
<i>Astragalus pycnostachyus var. lanosissimus</i> Ventura Marsh milk-vetch	PDFAB0F7B1	Endangered	Endangered	G2T1	S1	1B.1
<i>Astragalus tener var. titi</i> coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atriplex coulteri</i> Coulter's saltbush	PDCHE040E0	None	None	G3	S2	1B.2
<i>Atriplex pacifica</i> south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
<i>Atriplex parishii</i> Parish's brittle scale	PDCHE041D0	None	None	G1G2	S1	1B.1
<i>Atriplex serenana var. davidsonii</i> Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
<i>Brennania belkini</i> Belkin's dune tabanid fly	IIDIP17010	None	None	G1G2	S1S2	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>California macrophylla</i> round-leaved filaree	PDGER01070	None	None	G3?	S3?	1B.2
<i>California Walnut Woodland</i> California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	



Selected Elements by Scientific Name
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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Calochortus plummerae</i> Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
<i>Calystegia felix</i> lucky morning-glory	PDCON040P0	None	None	GHQ	SH	3.1
<i>Carolella busckana</i> Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
<i>Centromadia parryi ssp. australis</i> southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
<i>Chaenactis glabriuscula var. orcuttiana</i> Orcutt's pincushion	PDAST20095	None	None	G5T1T2	S1	1B.1
<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G3T3	S2	SSC
<i>Chenopodium littoreum</i> coastal goosefoot	PDCHE091Z0	None	None	G2	S2	1B.2
<i>Chloropyron maritimum ssp. maritimum</i> salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
<i>Chorizanthe parryi var. fernandina</i> San Fernando Valley spineflower	PDPGN040J1	Candidate	Endangered	G2T1	S1	1B.1
<i>Cicindela gabbii</i> western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
<i>Cicindela hirticollis gravida</i> sandy beach tiger beetle	IICOL02101	None	None	G5T2	S1	
<i>Cicindela latesignata latesignata</i> western beach tiger beetle	IICOL02113	None	None	G2G4T1T2	S1	
<i>Cicindela senilis frosti</i> senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Coelus globosus</i> globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
<i>Danaus plexippus pop. 1</i> monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
<i>Dithyrea maritima</i> beach spectaclepod	PDBRA10020	None	Threatened	G1	S1	1B.1
<i>Dudleya multicaulis</i> many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
<i>Dudleya virens ssp. insularis</i> island green dudleya	PDCRA040S2	None	None	G3?T3	S3	1B.2
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC



Selected Elements by Scientific Name
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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery	PDAP10Z042	Endangered	Endangered	G5T1	S1	1B.1
<i>Eucosma hennei</i> Henne's eucosman moth	IILEM0R390	None	None	G1	S1	
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Euphilotes battoides allyni</i> El Segundo blue butterfly	IILEPG201B	Endangered	None	G5T1	S1	
<i>Glaucopsyche lygdamus palosverdesensis</i> Palos Verdes blue butterfly	IILEPG402A	Endangered	None	G5T1	S1	
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	PDAST4N102	None	None	G5TH	SH	1A
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Lateralus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<i>Microtus californicus stephensi</i> south coast marsh vole	AMAFF11035	None	None	G5T1T2	S1S2	SSC
<i>Nama stenocarpa</i> mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
<i>Nasturtium gambelii</i> Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
<i>Navarretia fossalis</i> spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
<i>Nemacaulis denudata</i> var. <i>denudata</i> coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
<i>Nyctinomops macrotis</i> big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
<i>Onychobaris langei</i> Lange's El Segundo Dune weevil	IICOL4W010	None	None	G1	S1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Orcuttia californica</i> California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
<i>Panoquina errans</i> wandering (=saltmarsh) skipper	IILEP84030	None	None	G4G5	S2	
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	
<i>Pelecanus occidentalis californicus</i> California brown pelican	ABNFC01021	Delisted	Delisted	G4T3	S3	FP
<i>Pentachaeta lyonii</i> Lyon's pentachaeta	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
<i>Perognathus longimembris pacificus</i> Pacific pocket mouse	AMAFD01042	Endangered	None	G5T1	S1	SSC
<i>Phacelia stellaris</i> Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<i>Polioptila californica californica</i> coastal California gnatcatcher	ABPBJ08081	Threatened	None	G3T2	S2	SSC
<i>Potentilla multijuga</i> Ballona cinquefoil	PDR0S1B120	None	None	GX	SX	1A
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
<i>Quercus dumosa</i> Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
<i>Rhaphiomidas terminatus terminatus</i> El Segundo flower-loving fly	IIDIP05022	None	None	G1T1	S1	
<i>Ribes divaricatum var. parishii</i> Parish's gooseberry	PDGRO020F3	None	None	G4TH	SH	1A
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Sidalcea neomexicana</i> Salt Spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
<i>Siphateles bicolor mohavensis</i> Mohave tui chub	AFCJB1303H	Endangered	Endangered	G4T1	S1	FP
<i>Socalchemmis gertschi</i> Gertsch's socialchemmis spider	ILARAU7010	None	None	G1	S1	
<i>Sorex ornatus salicornicus</i> southern California saltmarsh shrew	AMABA01104	None	None	G5T1?	S1	SSC
<i>Southern Coast Live Oak Riparian Forest</i> Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
<i>Southern Coastal Bluff Scrub</i> Southern Coastal Bluff Scrub	CTT31200CA	None	None	G1	S1.1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Dune Scrub Southern Dune Scrub	CTT21330CA	None	None	G1	S1.1	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
<i>Sternula antillarum browni</i> California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
<i>Suaeda esteroa</i> estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
<i>Symphotrichum defoliatum</i> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<i>Symphotrichum greatae</i> Greata's aster	PDASTE80U0	None	None	G3	S3	1B.3
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Trigonoscuta dorothea dorothea</i> Dorothy's El Segundo Dune weevil	IICOL51021	None	None	G1T1	S1	
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 95

California Native Plant Society Inventory Results

Query Criteria: Inglewood, Beverly Hills, Hollywood, Long Beach, Los Angeles, Redondo Beach, South Gate, Torrance, and Venice Quadrangles

Scientific Name	Common Name	California Rare Plant Rank	State Listing (CDFW)	Federal Listing (USFWS)
<i>Abronia maritima</i>	red sand-verbena	4.2	None	None
<i>Aphanisma blitoides</i>	aphanisma	1B.2	None	None
<i>Arenaria paludicola</i>	marsh sandwort	1B.1	SE	FE
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	1B.1	None	FE
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura marsh milk-vetch	1B.1	SE	FE
<i>Astragalus tener</i> var. <i>titi</i>	coastal dunes milk-vetch	1B.1	SE	FE
<i>Atriplex coulteri</i>	Coulter's saltbush	1B.2	None	None
<i>Atriplex pacifica</i>	South Coast saltscale	1B.2	None	None
<i>Atriplex parishii</i>	Parish's brittlescale	1B.1	None	None
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's saltscale	1B.2	None	None
<i>California macrophylla</i>	round-leaved filaree	1B.2	None	None
<i>Calochortus catalinae</i>	Catalina mariposa lily	4.2	None	None
<i>Calochortus plummerae</i>	Plummer's mariposa lily	4.2	None	None
<i>Calystegia felix</i>	lucky morning-glory	3.1	None	None
<i>Calystegia peirsonii</i>	Peirson's morning-glory	4.2	None	None
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	3	None	None
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	1B.1	None	None
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	1B.1	None	None
<i>Chenopodium littoreum</i>	coastal goosefoot	1B.2	None	None
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	1B.2	SE	FE
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	1B.1	SE	FC
<i>Cistanthe maritima</i>	seaside cistanthe	4.2	None	None
<i>Clinopodium mimuloides</i>	monkey-flower savory	4.2	None	None
<i>Convolvulus simulans</i>	small-flowered morning-glory	4.2	None	None
<i>Deinandra paniculata</i>	paniculate tarplant	4.2	None	None
<i>Dichondra occidentalis</i>	western dichondra	4.2	None	None
<i>Dithyrea maritima</i>	beach spectaclepod	1B.1	ST	None
<i>Dudleya multicaulis</i>	many-stemmed dudleya	1B.2	None	None
<i>Dudleya virens</i> ssp. <i>insularis</i>	island green dudleya	1B.2	None	None
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	1B.1	SE	FE
<i>Erysimum insulare</i>	island wallflower	1B.3	None	None
<i>Erysimum suffrutescens</i>	suffrutescent wallflower	4.2	None	None
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	1A	None	None
<i>Hordeum intercedens</i>	vernal barley	3.2	None	None
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	1B.1	None	None
<i>Juglans californica</i>	Southern California black walnut	4.2	None	None
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	4.2	None	None
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	1B.1	None	None

Scientific Name	Common Name	California Rare Plant Rank	State Listing (CDFW)	Federal Listing (USFWS)
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	4.3	None	None
<i>Leptosyne maritima</i>	sea dahlia	2B.2	None	None
<i>Nama stenocarpa</i>	mud nama	2B.2	None	None
<i>Nasturtium gambelii</i>	Gambel's water cress	1B.1	ST	FE
<i>Navarretia fossalis</i>	spreading navarretia	1B.1	None	FT
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	1B.1	None	None
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	1B.2	None	None
<i>Orcuttia californica</i>	California Orcutt grass	1B.1	SE	FE
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	1B.1	SE	FE
<i>Phacelia hubbyi</i>	Hubby's phacelia	4.2	None	None
<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	south coast branching phacelia	3.2	None	None
<i>Phacelia stellaris</i>	Brand's star phacelia	1B.1	None	FC
<i>Potentilla multijuga</i>	Ballona cinquefoil	1A	None	None
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	2B.2	None	None
<i>Quercus dumosa</i>	Nuttall's scrub oak	1B.1	None	None
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	2B.2	None	None
<i>Suaeda esteroa</i>	estuary seablite	1B.2	None	None
<i>Suaeda taxifolia</i>	woolly seablite	4.2	None	None
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	1B.2	None	None
<i>Symphyotrichum greatae</i>	Greata's aster	1B.3	None	None

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

California Rare Plant Rank

1A: Plants presumed extinct in California
1B: Plants rare, threatened, or endangered in CA and elsewhere
2: Plants rare, threatened, or endangered in CA, but more common elsewhere
3: Plants more information is needed for
4: Plants of limited distribution – a watch list
0.1: Seriously threatened in CA
0.2: Fairly endangered in CA
0.3: Not very endangered in CA

California Native Plant Society, Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 07 March 2016].

99th Street Wells Chloramination Station Project

IPaC Trust Resources Report

Generated March 07, 2016 03:20 PM MST, IPaC v3.0.0

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



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U.S. Fish & Wildlife Service

IPaC Trust Resources Report



NAME

99th Street Wells Chloramination
Station Project

LOCATION

Los Angeles County, California

DESCRIPTION

9880 Wadsworth Avenue, City of Los
Angeles

IPAC LINK

[https://ecos.fws.gov/ipac/project/
LRPAH-7CF5Z-CIHFD-GDABF-WFPC14](https://ecos.fws.gov/ipac/project/LRPAH-7CF5Z-CIHFD-GDABF-WFPC14)



U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[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 either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

Coastal California Gnatcatcher *Polioptila californica californica* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B08X

Western Snowy Plover *Charadrius alexandrinus nivosus* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B07C

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.^[1] There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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>
- Conservation measures for birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php>

The following species of migratory birds could potentially be affected by activities in this location:

Allen's Hummingbird <i>Selasphorus sasin</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0LI	Bird of conservation concern
Bald Eagle <i>Haliaeetus leucocephalus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008	Bird of conservation concern
Bell's Vireo <i>Vireo bellii</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JX	Bird of conservation concern
Black Oystercatcher <i>Haematopus bachmani</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0KJ	Bird of conservation concern

Brewer's Sparrow <i>Spizella breweri</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HA	Bird of conservation concern
Burrowing Owl <i>Athene cunicularia</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0NC	Bird of conservation concern
Cactus Wren <i>Campylorhynchus brunneicapillus</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FZ	Bird of conservation concern
Costa's Hummingbird <i>Calypte costae</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JE	Bird of conservation concern
Fox Sparrow <i>Passerella iliaca</i> Season: Wintering	Bird of conservation concern
Lawrence's Goldfinch <i>Carduelis lawrencei</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0J8	Bird of conservation concern
Least Bittern <i>Ixobrychus exilis</i> Year-round	Bird of conservation concern
Lesser Yellowlegs <i>Tringa flavipes</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MD	Bird of conservation concern
Lewis's Woodpecker <i>Melanerpes lewis</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HQ	Bird of conservation concern
Long-billed Curlew <i>Numenius americanus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S	Bird of conservation concern
Marbled Godwit <i>Limosa fedoa</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JL	Bird of conservation concern
Mountain Plover <i>Charadrius montanus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B078	Bird of conservation concern
Nuttall's Woodpecker <i>Picoides nuttallii</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HT	Bird of conservation concern

Oak Titmouse <i>Baeolophus inornatus</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ	Bird of conservation concern
Olive-sided Flycatcher <i>Contopus cooperi</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN	Bird of conservation concern
Peregrine Falcon <i>Falco peregrinus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU	Bird of conservation concern
Red-crowned Parrot <i>Amazona viridigenalis</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0GO	Bird of conservation concern
Rufous-crowned Sparrow <i>Aimophila ruficeps</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MX	Bird of conservation concern
Short-billed Dowitcher <i>Limnodromus griseus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JK	Bird of conservation concern
Short-eared Owl <i>Asio flammeus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD	Bird of conservation concern
Snowy Plover <i>Charadrius alexandrinus</i> Season: Breeding	Bird of conservation concern
Western Grebe <i>aechmophorus occidentalis</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA	Bird of conservation concern
Yellow Warbler <i>dendroica petechia</i> ssp. <i>brewsteri</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EN	Bird of conservation concern
Red Knot <i>Calidris canutus</i> ssp. <i>roselaari</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G6	Bird of conservation concern

Wildlife refuges and fish hatcheries

There are no refuges or fish hatcheries in 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](#).

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 tubercid 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.

There are no wetlands in this location

APPENDIX D

Table A. Regional Special-Status Plant Species and Sensitive Natural Communities

Table B. Regional Special-Status Wildlife Species

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Table A. Regional Special-Status Plant Species and Natural Vegetation Communities¹

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
PLANTS				
red sand-verbena <i>Abronia maritima</i>	Federal: None State: None CRPR: 4.2	Coastal sand dunes. Occurs between 0-100 meters (0-328 feet). Blooms February – November.	Absent	Not expected. Potentially suitable habitat for this species is absent.
aphanisma <i>Aphanisma blitoides</i>	Federal: FE State: SE CRPR: 1B.2	Sandy or gravelly habitats in coastal bluff scrub, coastal dunes and coastal scrub. Occurs between 1-305 meters (3-1,000 feet). Blooms February – June.	Absent	Not expected. Potentially suitable habitat for this species is absent.
marsh sandwort <i>Arenaria paludicola</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Braunton’s milk-vetch <i>Astragalus brauntonii</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Ventura Marsh milk-vetch <i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent and the project site occurs outside the known elevation range of this species.
coastal dunes milk-vetch <i>Astragalus tener</i> var. <i>titi</i>	Federal: FE State: SE CRPR: 1B.1	Often vernal mesic areas in sandy coastal bluff scrub, coastal dunes, and mesic coastal prairie. Occurs between 1-50 meters (3-165 feet). Blooms March-May.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Coulter’s saltbush <i>Atriplex coulteri</i>	Federal: None State: None CRPR: 1B.2	Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub and valley and foothill grassland. Occurs between 3-460 meters (10-1,510 feet). Blooms March – October.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
south coast saltscale <i>Atriplex pacifica</i>	Federal: FE State: SE CRPR: 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub and playas. Occurs between 0-140 meters (0-460 feet). Blooms March – October.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Parish’s brittlescale <i>Atriplex parishii</i>	Federal: None State: None CRPR: 1B.1	Alkaline chenopod scrub, playas, and vernal pools. Occurs between 25-1,900 meters (80-6,230 feet). Blooms June-October.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Davidon’s saltscale <i>Atriplex serenana</i> var. <i>dauidsonii</i>	Federal: None State: None CRPR: 1B.2	Coastal bluff scrub and coastal scrub. Prefer alkaline soil. Between 10-200 meters (30-660 feet). Blooms April-October.	Absent	Not expected. Potentially suitable habitat for this species is absent.
round-leaved filaree <i>California</i> <i>macrophylla</i>	Federal: None State: None CRPR: 1B.2	Cismontane woodland, valley and foothill grassland. Occurs between 15-1,200 meters (50-3,940 feet). Blooms March-May.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Catalina mariposa lily <i>Calochortus</i> <i>catalinae</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Plummer’s mariposa-lily <i>Calochortus</i> <i>plummerae</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent and the project site occurs outside the known elevation range of this species.
lucky morning- glory <i>Calystegia felix</i>	Federal: None State: None CRPR: 3.1	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
Peirson's morning glory <i>Calystegia peirsonii</i>	Federal: None State: None CRPR: 4.2	Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland. Occurs between 30-1,500 meters (100-4,920 feet). Blooms April-June.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Lewis' evening primrose <i>Camissoniopsis lewisii</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
southern tarplant <i>Centromadia parryi</i> ssp. <i>australis</i>	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	Absent	Not expected. Potentially suitable habitat for this species is absent.
Orcutt's pincushion <i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Federal: None State: None CRPR: 1B.1	Coastal bluff sandy scrub and coastal dunes. Occurs between 0-100 meters (0-328 feet). Blooms January – August.	Absent	Not expected. Potentially suitable habitat for this species is absent.
coastal goosefoot <i>Chenopodium littoreum</i>	Federal: None State: None CRPR: 1B.2	Coastal dunes. Occurs between 10-30 meters (33-100 feet). Blooms April – August.	Absent	Not expected. Potentially suitable habitat for this species is absent.
salt marsh bird's-beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	Federal: FE State: SE CRPR: 1B.2	Coastal dunes and coastal salt marshes and swamps. Occurs between 0-30 meters (0-100 feet). Blooms May-October.	Absent	Not expected. Potentially suitable habitat for this species is absent.
San Fernando Valley spineflower <i>Chorizanthe parryi</i> var. <i>fernandina</i>	Federal: FC State: SE CRPR: 1B.1	Sandy coastal scrub and valley and foothill grasslands. Occurs 150-1,220 meters (490-4,000 feet). Blooms April - July	Absent	Not expected. Potentially suitable habitat for this species is absent and the project site occurs outside the known elevation range of this species.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
seaside cistanthe <i>Cistanthe maritima</i>	Federal: None State: None CRPR: 4.2	Prefers sandy habitats. Coastal bluff scrub, coastal scrub and valley and foothill grassland. Occurs between 5-300 meters (15-980 feet). Blooms February – August.	Absent	Not expected. Potentially suitable habitat for this species is absent.
monkey-flower savory <i>Clinopodium mimuloides</i>	Federal: FC State: SE CRPR: 4.2	Found in streambanks, mesic. Chaparral and north coast coniferous forest. Occurs between 305-1800 meters (1,000-5,910 feet). Blooms June – October.	Absent	Not expected. Potentially suitable habitat for this species is absent and the project site occurs outside the known elevation range of this species.
small-flowered morning-glory <i>Convolvulv simulans</i>	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	Absent	Not expected. Potentially suitable habitat for this species is absent.
paniculate tarplant <i>Deinandra paniculata</i>	Federal: None State: None CRPR: 4.2	Found in usually vernal mesic, sometimes sandy habitat. Coastal scrub, valley and foothill grassland and vernal pools. Occurs between 25-940 meters (80-3,088 feet). Blooms March - November.	Absent	Not expected. Potentially suitable habitat for this species is absent.
western dichondra <i>Dichondra occidentalis</i>	Federal: None State: ST CRPR: 4.2	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Occurs between 50- 500 meters (165-1640 feet). Blooms January – July.	Absent	Not expected. Potentially suitable habitat for this species is absent.
beach spectaclepod <i>Dithyrea maritima</i>	Federal: None State: ST CRPR: 1B.1	Coastal dunes and sandy coastal scrub. Occurs between 3-50 meters (10-160 feet). Blooms March-May.	Absent	Not expected. Potentially suitable habitat for this species is absent.
many-stemmed dudleya <i>Dudleya multicaulis</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
island green dudleya <i>Dudleya virens</i> ssp. <i>insularis</i>	Federal: None State: None CRPR: 1B.2	Prefers rocky habitats. Coastal bluff scrub and coastal scrub. Occurs between 5-300 meters (15- 980 feet). Blooms April – June.	Absent	Not expected. Potentially suitable habitat for this species is absent.
San Diego button- celery <i>Eryngium</i> <i>aristulatum</i> var. <i>parishii</i>	Federal: SE State: FE CRPR: 1B.1	Coastal scrub, valley and foothill grassland and vernal pools. Occurs between 20- 620 meters (65-2,030 feet). Blooms April – June.	Absent	Not expected. Potentially suitable habitat for this species is absent.
island wallflower <i>Erysimum insulare</i>	Federal: None State: None CRPR: 1B.3	Coastal bluff scrub and coastal dunes. Occurs between 0-300 meters (0-980 feet). Blooms March – July.	Absent	Not expected. Potentially suitable habitat for this species is absent.
suffrutescent wallflower <i>Erysimum</i> <i>suffrutescens</i>	Federal: None State: None CRPR: 4.2	Coastal bluff scrub, chaparral, coastal dunes, and coastal scrub. Occurs between 0-150 meters (0-490 feet). Blooms January – August.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Los Angeles sunflower <i>Helianthus nuttallii</i> ssp. <i>parishii</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
vernal barley <i>Hordeum</i> <i>intercedens</i>	Federal: None State: None Other: 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	Absent	Not expected. Potentially suitable habitat for this species is absent.
mesa horkelia <i>Horkelia cuneata</i> ssp. <i>puperula</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent and the project site occurs outside the known elevation range of this species.
Southern California black walnut <i>Juglans californica</i>	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	Absent	Not expected. Potentially suitable habitat for natural individuals of this species is absent; however, it may occur as an ornamental landscape tree.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
southwestern spiny rush <i>Juncus acutus</i> ssp. <i>leopoldii</i>	Federal: None State: None CRPR: 4.2	Coastal dunes, meadows and alkaline seeps, marshes and swamps. Occurs between 3- 900 meters (10-2,950 feet). Blooms March – June.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Coulter’s goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CRPR: 1B.1	Coastal salt marshes, playas, and vernal pools. Occurs between 1-1,220 meters (3- 4,000 feet). Blooms February-June.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Robinson’s pepper-grass <i>Lepidium</i> <i>virginicum</i> var. <i>robinsonii</i>	Federal: None State: None CRPR: 4.3	Chaparral and coastal scrub. Occurs between 1-885 meters (3-2,900 feet). Blooms January-July.	Absent	Not expected. Potentially suitable habitat for this species is absent.
sea dahlia <i>Leptosyne</i> <i>maritima</i>	Federal: None State: None CRPR: 2B.2	Coastal bluff scrub and coastal scrub. Occurs between 5-150 meters (16- 492 feet). Blooms March – May.	Absent	Not expected. Potentially suitable habitat for this species is absent.
mud nama <i>Nama stenocarpa</i>	Federal: None State: None CRPR: 2B.2	Marshes and swamps; lake margins and riverbanks). Occurs between 5-500 meters (15-1,640 feet). Blooms January-July.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Gambel’s water cress <i>Nasturtium</i> <i>gambelii</i>	Federal: FE State: ST CRPR: 1B.1	Freshwater or brackish marshes and swamps. Occurs between 5-330 meters (15- 1,080 feet). Blooms April- October.	Absent	Not expected. Potentially suitable habitat for this species is absent.
spreading navarretia <i>Navarretia fossalis</i>	Federal: FE State: ST CRPR: 1B.1	Chenopod scrub, marshes and swamps, playas and vernal pools. Occurs between 30-655 meters (100-2,150 feet). Blooms April – June.	Absent	Not expected. Potentially suitable habitat for this species is absent.
prostrate vernal pool navarretia <i>Navarretia</i> <i>prostrata</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
coast woolly-heads <i>Nemacaulis</i> <i>denudata</i> var. <i>denudata</i>	Federal: None State: None CRPR: 1B.2	Coastal dunes. Occurs between 0-100 meters (0-330 feet). Blooms April – September.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
California orcutt grass <i>Orcuttia californica</i>	Federal: FE State: SE CRPR: 1B.1	Vernal pools. Occurs between 15-660 meters (50-2,160 feet). Blooms April-August.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Lyon's pentachaeta <i>Pentachaeta lyonii</i>	Federal: FE State: SE CRPR: 1B.1	Chaparral, coastal scrub and valley and foothill grasslands. Occurs between 30-690 meters (100-2,260 feet). February – August.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Hubby's phacelia <i>Phacelia hubbyi</i>	Federal: None State: None CRPR: 4.2	Prefers gravelly, rocky, or talus sites in chaparral, coastal scrub, and valley and foothill grasslands. Occurs between 0-1,000 meters (0-3,280 feet). Blooms April-July.	Absent	Not expected. Potentially suitable habitat for this species is absent.
South coast branching phacelia <i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	Federal: None State: None CRPR: 3.2	Prefers sandy, sometimes rocky habitats. Chaparral, coastal dunes, coastal scrub, and marshes and swamps. Occurs between 5-300 meters (15-980 feet). Blooms March – August.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Brand's star phacelia <i>Phacelia stellaris</i>	Federal: FC State: None CRPR: 1B.1	Coastal dunes and coastal scrub. Occurs between 1-400 meters (3-1,310 feet). Blooms March-June.	Absent	Not expected. Potentially suitable habitat for this species is absent.
ballona cinquefoil <i>Pontetilla multijuga</i>	Federal: None State: None CRPR: 1A	Meadows and seeps (brackish). Occurs between 0-2 meters (0-7 feet). Blooms June-August.	Absent	Not expected. Potentially suitable habitat for this species is absent and the project site occurs outside the known elevation range of this species.
white rabbit-tobacco <i>Pseudognaphalium leucocephalum</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Nuttall's scrub oak <i>Quercus dumosa</i>	Federal: None State: None CRPR: 1B.1	Prefers sandy or clay loam sites in closed-cone coniferous forest, chaparral, and coastal scrub. Occurs between 15-400 meters (50-1,310 feet). Blooms February-August.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
Parish's gooseberry <i>Ribes divaricatum</i> var. <i>parishii</i>	Federal: None State: None CRPR: 1A	Riparian woodland. Occurs between 65-300 meters (215- 980 feet). Blooms February- April.	Absent	Not expected. Potentially suitable habitat for this species is absent and the project site occurs outside the known elevation range of this species.
salt spring checkerbloom <i>Sidalcea</i> <i>neomexicana</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
estuary seablite <i>Suaeda esteroa</i>	Federal: None State: None CRPR: 1B.2	Marshes and swamps. Occurs between 0-5 meters (0-15 feet). Blooms May-January.	Absent	Not expected. Potentially suitable habitat for this species is absent.
woolly seablite <i>Suaeda taxifolia</i>	Federal: None State: None CRPR: 4.2	Coastal bluff scrub, coastal dunes, marshes and swamps on the margins of coastal salt. Occurs between 0-50 meters (0-165 feet). Blooms January-December.	Absent	Not expected. Potentially suitable habitat for this species is absent.
San Bernardino aster <i>Symphotrichum</i> <i>defoliatum</i>	Federal: None State: None CRPR: 1B.2	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Greata's aster <i>Symphotrichum</i> <i>greatae</i>	Federal: None State: None CRPR: 1B.3	Mesic sites in broad-leaved 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.	Absent	Not expected. Potentially suitable habitat for this species is absent and the project site occurs outside the known elevation range of this species.
SENSITIVE NATURAL COMMUNITIES				
Southern Coastal Bluff Scrub	CNDDB			Not expected. This sensitive community is not present within the BSA.
California Walnut Woodland	CNDDB			Not expected. This sensitive community is not present within the BSA.

Common Name <i>Scientific Name</i>²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
Southern Coast Live Oak Riparian Forest	CNDDDB			Not expected. This sensitive community is not present within the BSA.
Southern Sycamore Alder Riparian Woodland	CNDDDB			Not expected. This sensitive community is not present within the BSA.
Southern Coastal Salt Marsh	CNDDDB			Not expected. This sensitive community is not present within the BSA.
Walnut Forest	CNDDDB			Not expected. This sensitive community is not present within the BSA.
Southern Dune Scrub	CNDDDB			Not expected. This sensitive community is not present within the BSA.

¹ Special-Status species known from the CNDDDB and CNPS to occur on the Inglewood, Beverly Hills, Hollywood, Long Beach, Los Angeles, Redondo Beach, South Gate, Torrance, and Venice quadrangles.

² Nomenclature for special-status plant species conforms to CNPS.

³ Sensitivity Status Codes

<u>Federal</u>	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
<u>State</u>	ST - State Threatened under the California Endangered Species Act SE - State Endangered under the California Endangered Species Act
<u>CRPR</u>	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
<u>CNDDDB</u>	California Department of Fish and Wildlife (CDFW) Tracked by CDFW in the CNDDDB

⁴ General Habitat Descriptions from CNPS (2016).

⁵ Potential for each species to occur within the BSA is based on the following criteria:

- Present: Species was observed in or immediately adjacent to the BSA during the field survey, or survey conducted within the past five years.

- High: Habitat (including soils and elevation factors) and known historical range for the species occurs in the BSA and a known occurrence has been recorded from within five miles within the past 30 years.
- Moderate: Habitat for the species occurs in the BSA and a known occurrence exists from between five and ten miles of the BSA, within the past 30 years.
- Low: Limited habitat for the species occurs in the BSA and a known occurrence is from greater than 10 miles from the BSA or over 30 years old, or habitat to support the species is of marginal quantity or quality. A low potential to occur is also assigned when focused surveys for a species have been conducted numerous times within the past 10 years without positive results.
- Not Expect: Beyond those factors listed for Low Potential, the species is easily identifiable throughout the year and was not observed, or specific habitat requirements are not found within or adjacent to the BSA.

Historical occurrence information from CDFW (2016a).

Table B. Regional Special-Status Wildlife Species¹

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
Invertebrates				
Crotch bumble bee <i>Bombus crotchii</i>	Federal: None State: None Other: CNDDDB	Occurs at relatively warm and dry sites, including the inner Coast Range of California and the margins of the Mojave Desert	Absent	Not expected. Potentially suitable habitat for this species is absent.
Belkin's dune tabanid fly <i>Brennania belkini</i>	Federal: None State: None Other: CNDDDB	Native to California. Found on sand dunes from northern California to Baja California.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Busck's gallmoth <i>Carolella busckana</i>	Federal: None State: None Other: CNDDDB	Found in Southern California. On wing from November to February.	Absent	Not expected. Potentially suitable habitat for this species is absent.
western tidal-flat tiger beetle <i>Cicindela gabbii</i>	Federal: None State: None Other: CNDDDB	Salty coastal habitats including salt marshes, tidal flats and beaches. Range from Ventura, California to Baja California. Burrows into sand or soil.	Absent	Not expected. Potentially suitable habitat for this species is absent.
sandy beach tiger beetle <i>Cicindela hirticollis gravida</i>	Federal: None State: None Other: CNDDDB	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco bay to Northern Mexico. Inhabits clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	Absent	Not expected. Potentially suitable habitat for this species is absent.
western beach tiger beetle <i>Cicindela latestignata latesignata</i>	Federal: None State: None Other: CNDDDB	Coastal habitats. Found in Los Angeles, Orange and San Diego counties.	Absent	Not expected. Potentially suitable habitat for this species is absent.
senile tiger beetle <i>Cicindela senilis frosti</i>	Federal: None State: None Other: CNDDDB	Inhabits coastal sand dune habitats, from Bodega Head in Sonoma County, south to Ensenada, Mexico. Found in fore dunes and sand hummocks, burrowing beneath the sand surface. Most common beneath dune vegetation.	Absent	Not expected. Potentially suitable habitat for this species is absent.
globose dune beetle <i>Coelus globosus</i>	Federal: None State: None Other: CNDDDB	Prefers fore dunes, sand hummocks, may sometimes be present on back dunes along the coast. Burrows in soil or sand.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
monarch butterfly-California overwintering population <i>Danaus plexippus</i> pop. 1	Federal: None State: None Other: CNDDDB	Winter roosts occur along California coast from Mendocino County, south to Baja California, Mexico. Roosts in wind-protected tree groves such as eucalyptus, Monterey pine, and cypress with nectar and water sources nearby.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Henne's eucosma moth <i>Eucosma hennei</i>	Federal: None State: None Other: CNDDDB	Found on sand dunes with native vegetation in both open areas of sand and dense shrubs. Caterpillar stage found on phacelia species. Range from coastal Ventura county and coastal Orange county.	Absent	Not expected. Potentially suitable habitat for this species is absent.
El Segundo blue butterfly <i>Euphilotes battoides allyni</i>	Federal: FE State: None Other: CNDDDB	Inhabits the El Segundo sand dunes. Entire life cycle dependent on host plant seacliff buckwheat (<i>Eriogonum parvifolium</i>).	Absent	Not expected. Potentially suitable habitat for this species is absent.
Palos Verdes blue butterfly <i>Glaucopteryx lygdamus palosverdesensis</i>	Federal: FE State: None Other: CNDDDB	Dependent on two larval hostplants, Santa Barbara milkvetch (<i>Astragalus trichopodus</i> var. <i>lonchus</i>) and deerweed (<i>Lotus scoparius</i>). Found in the Palos Verdes peninsula and seaward side of the Palos Verdes Hills.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Lange's El Segundo dune weevil <i>Onychobaris langei</i>	Federal: None State: None Other: CNDDDB	Endemic to El Segundo sand dunes.	Absent	Not expected. Potentially suitable habitat for this species is absent.
wandering (=saltmarsh) skipper <i>Panoquina errans</i>	Federal: None State: None Other: CNDDDB	Found in salt marshes. Larvae feed on salt grass (<i>Distichlis spicata</i>). Reside in Southern California.	Absent	Not expected. Potentially suitable habitat for this species is absent.
El Segundo flower-loving fly <i>Rhaphiomidas terminatus terminatus</i>	Federal: None State: None Other: CNDDDB	Found on Palos Verdes peninsula in the upper Malaga sand dune. Spend most of lifecycle underground with adults emerging for only two weeks.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
Gertsch's socialchemmis spider <i>Socalchemmis gertschi</i>	Federal: None State: None Other: CNDDDB	Inhabits sage scrub, chaparral, oak woodland, and coniferous forest, generally in rocky outcrops or talus slopes in non-arid climates. Known only from Brentwood and Topanga Canyon.	Absent	Not expected. Potentially suitable habitat for this species is absent and project components do not occur near known populations of this species.
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	Federal: FE State: None Other: CNDDDB	Lives in vernal pools of at least 30 centimeters in depth, from January through March. Found in Riverside and San Diego counties. Also found in northern Baja California.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Dorothy's El Segundo Dune weevil <i>Trigonoscuta dorothea dorothea</i>	Federal: None State: None Other: CNDDDB	Found on El Segundo sand dunes.	Absent	Not expected. Potentially suitable habitat for this species is absent.
California brackish water snail (=mimic tryonia) <i>Tryonia imitator</i>	Federal: None State: None Other: CNDDDB	Prefers coarse brackish sediments at the mouths of creeks, streams and rivers of southern California.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Fish				
Mohave tui chub <i>Siphateles bicolor mohavensis</i>	Federal: FE State: SE Other: None	Native to the Mojave river. Found in modified refuge sites in San Bernardino County.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Reptiles				
silvery legless lizard <i>Anniella pulchra pulchra</i>	Federal: None State: None Other: SSC	Sandy or loose loamy soils under sparse vegetation. Prefers soils with high moisture content.	Absent	Not expected. Potentially suitable habitat for this species is absent.
coastal western whiptail <i>Aspidoscelis tigris stejnegeri</i>	Federal: None State: None Other: CNDDDB	Found in deserts and semiarid areas with sparse vegetation and open areas. Also in woodland and riparian areas. Substrate may be firm soils, sandy, or rocky.	Absent	Not expected. Potentially suitable habitat for this species is absent.
western pond turtle <i>Emys marmorata pallida</i>	Federal: None State: None Other: SSC	Inhabits permanent or nearly permanent bodies of water in many habitat types, below 6,000 feet (1,830 meters). This species requires basking sites such as partially submerged logs, vegetation mats, or open mud banks. Also needs suitable nesting sites.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
coast horned lizard <i>Phrynosoma blainvillii</i>	Federal: None State: None Other: SSC	Inhabits coastal sage scrub and chaparral in arid and semiarid climates. Prefers friable, rocky, or shallow sandy soils.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Birds				
tricolored blackbird <i>Agelaius tricolor</i>	Federal: None State: SE Other: BCC, SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate and foraging area with insect prey within a few kilometers of the colony.	Absent	Not expected. Potentially suitable habitat for this species is absent.
burrowing owl <i>Athene cunicularia</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Swainson's hawk <i>Buteo swainsoni</i>	Federal: None State: ST Other: BCC	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Absent	Not expected. Potentially suitable habitat for this species is absent.
western snowy plover <i>Charadrius alexandrinus nivosus</i>	Federal: FT State: None Other: BCC, SSC	Breeds on beaches from southern Washington to southern Baja California, Mexico. In coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries.	Absent	Not expected. Potentially suitable habitat for this species is absent.
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Federal: FT State: SE Other: BCC	Nests in riparian forest along broad, lower flood-bottoms of larger river systems. Prefers riparian jungles or willow, often mixed with cottonwoods, with a lower story of blackberry, nettles, or wild grape.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
southwestern willow flycatcher <i>Empidonax traillii extimus</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
California black rail <i>Laterallus jamaicensis coturniculus</i>	Federal: None State: ST Other: CDFW FP, BCC	High coastal marshes, freshwater marshes along the lower Colorado river. Favors areas with pickleweed, bulrushes and salt grass. Nests along the edge of the marsh on a mat of dead grasses.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Belding's savannah sparrow <i>Passerculus sandwichensis beldingi</i>	Federal: None State: SE	Year round resident of coastal salt marshes. A subspecies of savannah sparrow. Associated with dense pickleweed (<i>Salicornia virginica</i>). Nest in semi-colonies.	Absent	Not expected. Potentially suitable habitat for this species is absent.
California brown pelican <i>Pelecanus occidentalis californicus</i>	Federal: None State: None Other: CDFW FP	Found near shores of bays, lagoons, rivers and shrub wetlands. Breeds along the pacific coast of central California to southern California and the islands off of Baja California.	Absent	Not expected. Potentially suitable habitat for this species is absent.
coastal California gnatcatcher <i>Poliptila californica californica</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
bank swallow <i>Riparia riparia</i>	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.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name Scientific Name²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/ Absent in The BSA	Potential for Occurrence in the BSA⁵
California least tern <i>Sternula antillarum browni</i>	Federal: FE State: SE Other: CDFW FP	Found along the California coast from San Francisco to Baja California. Nest in colonies on open beaches.	Absent	Not expected. Potentially suitable habitat for this species is absent
least Bell's vireo <i>Vireo bellii pusillus</i>	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).	Absent	Not expected. Potentially suitable habitat for this species is absent.
Mammals				
pallid bat <i>Antrozous palidus</i>	Federal: None State: None Other: SCC, 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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
western mastiff bat <i>Eumops perotis californicus</i>	Federal: None State: None Other: SCC, 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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
silver-haired bat <i>Lasionycteris noctivagans</i>	Federal: None State: None Other: CNDDDB, WBWG-M	Common, but erratic in abundance. During spring and fall migrations the silver-haired bat may be found anywhere in California. Primarily a coastal and montane forest dweller feeding over streams, ponds, and open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes and rarely under rocks. Needs drinking water.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name <i>Scientific Name</i> ²	Status ³	General Habitat Description ⁴	Potentially Suitable Habitat Present/Absent in The BSA	Potential for Occurrence in the BSA ⁵
hoary bat <i>Lasiurus cinereus</i>	Federal: None State: None Other: CNDDDB, 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.	Absent	Not expected. Potentially suitable habitat for this species is absent
south coast marsh vole <i>Microtus californicus stephensi</i>	Federal: None State: None Other: SCC	Tidal marshes in Los Angeles, Orange and Southern Ventura Counties.	Absent	Not expected. Potentially suitable habitat for this species is absent.
pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	Federal: None State: None Other: SCC	Found in rugged canyons, high cliffs, and rock outcroppings in semiarid landscapes. Diet includes lepidopterans and hymenopterans. Distributed from California to Arizona to New Mexico.	Absent	Not expected. Potentially suitable habitat for this species is absent.
big free-tailed bat <i>Nyctinomops macrotis</i>	Federal: None State: None Other: SCC, 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.	Absent	Not expected. Potentially suitable habitat for this species is absent.
Pacific pocket mouse <i>Perognathus longimembris pacificus</i>	Federal: FE State: None Other: SCC	Coastal sage scrub, coastal dunes, coastal strand, and river alluvium habitats. Distributed from Los Angeles county to San Diego county. Nocturnal granivore.	Absent	Not expected. Potentially suitable habitat for this species is absent.
southern California saltmarsh shrew <i>Sorex ornatus salicornicus</i>	Federal: None State: None Other: SCC	Found in a variety of wetland habitats such as <i>Salicornia</i> marshes and dense willow (<i>Salix spp.</i>) and bulrush (<i>Scirpus sp.</i>) thickets. Nest in sites located above high tide.	Absent	Not expected. Potentially suitable habitat for this species is absent.

Common Name <i>Scientific Name</i>²	Status³	General Habitat Description⁴	Potentially Suitable Habitat Present/Absent in The BSA	Potential for Occurrence in the BSA⁵
American badger <i>Taxidea taxus</i>	Federal: None State: None Other: SCC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Absent	Not expected. Potentially suitable habitat for this species is absent.

¹ Special-Status species known from the CNDDDB to occur on the Inglewood, Beverly Hills, Hollywood, Long Beach, Los Angeles, Redondo Beach, South Gate, Torrance, and Venice quadrangles.

² Nomenclature for special-status wildlife conforms to CNDDDB

³ Sensitivity Status Codes

<u>Federal</u>	FT - Federally Threatened under Federal Endangered Species Act (FESA) FE - Federally Endangered under FESA
<u>State</u>	ST - State Threatened under California Endangered Species Act (CESA) SE - State Endangered under CESA SC - State Candidate for listing under CESA
<u>Other</u>	BCC - Designated as a Bird of Conservation Concern by US Fish & Wildlife Service SSC - Designated as a Species of Special Concern by California Fish & Wildlife (CDFW) CNDDDB - Tracked by CDFW in the California Natural Diversity Data Base or considered locally sensitive WBWG-H - Designated by the Western Bat Working Group (WBWG 2015) as High Priority - species that are imperiled or are at high risk of imperilment WBWG-M - Designated by the WBWG (2015) 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 Description from CNDDDB (CDFW 2016a).

⁵ Potential for each species to occur within the BSA is based on the following criteria:

- Present: Species was observed in or immediately adjacent to the BSA during the field survey, or survey conducted within the past five years.
- High: Habitat (including soils and elevation factors) and known historical range for the species occurs in the BSA and a known occurrence has been recorded from within five miles within the past 30 years.
- Moderate: Habitat for the species occurs in the BSA and a known occurrence exists from between five and ten miles of the BSA, within the past 30 years.
- Low: Limited habitat for the species occurs in the BSA and a known occurrence is from greater than 10 miles from the BSA or over 30 years old, or habitat to support the species is of marginal quantity or quality. A low potential to occur is also assigned when focused surveys for a species have been conducted numerous times within the past 10 years without positive results.
- Not Expect: Beyond those factors listed for Low Potential, the species is easily identifiable throughout the year and was not observed, or specific habitat requirements are not found within or adjacent to the BSA.

Historical occurrence information from CDFW (2016a).

APPENDIX C

CULTURAL RESOURCES

TECHNICAL MEMO

Memorandum

To	Kathalyn Tung (AECOM)	Page	1 of 8
Subject	99th Street Iron and Manganese (Fe/Mn) Treatment Station Project Cultural and Tribal Cultural Resources Impact Analysis		
From	Marc A. Beherec, Ph.D., RPA		
Date	May 2, 2017		

The Los Angeles Department of Water and Power (LADWP) proposes to construct an iron and manganese (Fe/Mn) treatment station directly adjacent to the 99th Street Wells Pumping Station in the Watts community of the City of Los Angeles. The proposed project is part of LADWP's program to ensure LADWP meets the U.S. EPA National Secondary Drinking Water Regulations for Fe/Mn and maintain LADWP's reliability to serve groundwater. The proposed project would remove naturally occurring iron and manganese from the groundwater wells.

The 99th Street Wells Pumping Station is located at 9880 Wadsworth Avenue in the Watts community of the City of Los Angeles. It is located at the intersection of Wadsworth Avenue and 99th Street. The proposed project area is located within streets and a utilities corridor adjacent to this property. The project site is roughly bounded by Wadsworth Avenue to the west, the northern sidewalk of 98th Street to the north, and 99th Street Elementary School to the south, and Clovis Avenue to the east. Streets within which utilities will be relocated include Clovis Avenue, Wadsworth Avenue, and 98th Street. The project site is located on the following U.S. Geological Survey (USGS) 7.5-minute quadrangle map: Inglewood (USGS 1981a). The project site is in Section 32 of Township 2 South, Range 13 West.

The majority of the project area has been extensively studied during the planning phases of the 99th Street Wells Pumping Station project. In 2013, AECOM was retained by the City of Los Angeles Department of Water and Power (LADWP) to conduct a Phase I cultural resources investigation to identify potential impacts to cultural resources in compliance with the California Environmental Quality Act for the 99th Street Wells Pumping Station project (Gibson et al. 2013). Subsequently, LADWP contracted AECOM to review its original study in order to comply with the more rigorous standards of "CEQA-Plus." Resources identified in the original report were evaluated for inclusion on the NRHP (Beherec 2016). That study found that there were no historic properties within the Area of Potential Effect (APE), and that the project would have no effect on historic properties (Beherec 2016).

This memo reports on an analysis of potential impacts to historic architecture, archaeological resources, and tribal cultural resources by the construction of the proposed iron and manganese (Fe/Mn) treatment station.

PROPOSED PROJECT

The proposed project would remove naturally occurring iron and manganese from the groundwater wells at the 99th Street Wells Field. The proposed project would reroute a 15-inch well collector line, install sand separators, packaged filtration units and a backwash system, and utilize on-site sodium hypochlorite generation at the new 99th Street Wells chloramination station. The filtration plant would treat the groundwater supply for iron and manganese before it is further treated by the chloramination station for disinfection. The filtration plant would include a backwash reclaim system consisting of pumps, valves and controls, and two reclaim water tanks.

The Fe/Mn treatment station would be located northeast of the pumping station, directly north of the 99th Street Elementary School. The Fe/Mn treatment towers would be vertical structures, estimated to be approximately 11-feet in height, arranged in series adjacent to two to three reclamation tanks for backwash purposes. The collector line of the four wells would be realigned to enter the Fe/Mn filtration first, and then lead to the chloramination station located directly west of the school for disinfection with chloramine treatment. Additional fencing would be installed to secure the new station. The fence would extend approximately 10- to 15-feet from the west, north and east boundaries of the 160-foot by 21-foot concrete pad. The Figure shows the proposed site plan.

Due to horizontal powerline clearance requirements, the proposed project would require the relocation of existing 34.5 kilovolt (kV) overhead power lines to be buried underground. The underground installation of the buried 34.5 kV power lines would begin north of the 99th Street Wells Pumping Station Complex at the LADWP transmission station along Clovis Avenue and 98th Street and travel west along 98th Street, then north along Wadsworth Avenue approximately 50-feet for a total length of approximately 1,180-feet (see Figure). An approximately 2-foot wide by 2.5-foot deep trench would be excavated within the roadway that could be covered with metal plates during periods of the day when construction is not on-going. A cut and cover trenching technique would be used to install the underground electrical conduit. Once a segment of the electrical conduit has been installed and concrete encased, the trench would be backfilled with concrete slurry and returned to its original condition. Excess soil would be disposed of at an appropriate regional landfill. On average, approximately 40 linear feet of electrical conduit would be installed per day.

REPORT OF FINDINGS

Archaeological Records Search

On April 27, 2017, AECOM archaeologist Marc A. Beherec, Ph.D., RPA, conducted a records search at the SCCIC housed at California State University, Fullerton. The research focused on the identification of previously recorded cultural resources within a 0.5-mile radius of the proposed project footprint. The archival research involved review of cultural resources site records, historic maps, and historic site and building inventories. The NRHP database and listings for the California State Historic Resources Inventory (HRI), and the California Historical Landmarks (CHL) Register were examined to determine whether any resources in this radius were listed in or had been determined eligible for these registers. The California Point of Historical Interest (CPHI), the California Register of Historical Resources (CRHR), and the City of Los Angeles Historic-Cultural Monuments also were reviewed for resources located within 0.5-miles of the project area.

The records search revealed that five cultural resources investigations were previously conducted within a 0.5-mile radius of the project site (Table 1). Two of these investigations are the results of a cultural resources records search and site visit, and the remaining three are survey reports. None of these investigations overlap the project area.

Table 1. Previous Surveys Conducted within 0.5 Mile of the Project

Author	Report # (LA-)	Description	Date
Anderson, Katherine, and Mathew Gonzalez	12800	Los Angeles Department of Public Works Stairway and Walkway Lighting Unit 7 Project (W.O. L1250078), City of Los Angeles, California, Historic and Archaeological Resources Survey and Evaluation	2014
Bonner, Wayne H.	8798	Cultural Resources Records Search and Site Visit Results for T-mobile Candidate LA03253b (Friendly Friendship Baptist Church), 10101 South Avalon Boulevard, Los Angeles, Los Angeles County, California	2006
Bonner, Wayne H. and Kathleen Crawford	9508	Cultural Resources Records Search and Site Visit Results for T-mobile Candidate LA03253C (Friendly Friendship 2), 10101 South Avalon Boulevard, Los Angeles, Los Angeles County California	2008
King, Phil V.	8955	Final Report for Year Three Historical and Cultural Resources Survey of Los Angeles: Sylmar, Watts, Crenshaw, and Vermont/Slauson	1983
Wood, Catherine M. and Mark C. Robinson	7691	Archaeological Survey Report for the Imani Fe East and West Project 10345 S. Central Avenue and 10408-10424 S. Central Avenue, Los Angeles, California	2006

In addition to these reports, AECOM prepared two cultural resource impact evaluations for related projects which have not yet been filed with the SCCIC. These are *Cultural Resources Assessment: 99th Street Wells Chloramination Station, Watts, City of Los Angeles, California* (Gibson et al. 2013) and *99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations* (Beherec 2016).

The records search indicated that five cultural resources have been previously recorded within 0.5 mile of the project site. All three are historic built resources (Table 2). None of these resources are located within the project area.

Table 2. Previously Recorded Resources within 0.5 Mile of the Project Site

Permanent Trinomial (CA-LAN-)	P-Number (P-19-)	Description	Date Recorded/ Updated	NRHP/CRHR Eligibility
None	188983	The Boulder Dam – Los Angeles 287.5 kV Transmission Line	08/02/1999; 08/2008	Nominated for NR; listed on CR

Permanent Trinomial (CA-LAN-)	P-Number (P-19-)	Description	Date Recorded/Updated	NRHP/CRHR Eligibility
None	190948	Zamora Walkway	07/03/2014	Contributor to a district determined eligible for NR by consensus through Section 106 process. Listed in the CR.
None	190949	Paul R. Williams/Parkside Manor Historic District	NA	Found eligible for CR and NR
None	192305	99th Street Elementary School	07/23/2013	Found not eligible for either CR or NR
None	192306	99th Street Wells Pumping Station	07/23/2013	Found not eligible for either CR or NR

P-19-188983

This resource is the 40-mile segment of the Boulder Dam – Los Angeles 287.5 kV Transmission Line and the Century Receiving Station situated within Los Angeles County. The transmission line consists of two parallel electrical transmission circuits carried on steel lattice towers running approximately 270 miles from the Hoover Dam to Century Receiving Station in Watts. The resource is less than 0.25 mile directly east of the project site. The Boulder Dam – Los Angeles 287.5 kV Transmission Line was determined eligible for inclusion in the NRHP in 1999 under Criteria A and C and its eligibility remained the same when it was reassessed in 2008. The closest portion of this resource, the Century Receiving Station, is located outside approximately 0.09-mile west of the area.

P-19-190948

This resource is the Zamora Walkway. The walkway is an approximately 5-foot-wide and 240-foot-long concrete pedestrian extension of Zamora Avenue constructed ca. 1947 by the Rayden Building Company. The walkway was found eligible for inclusion in the CRHR and the NRHP in 2014 as a contributing feature to the Paul R. Williams/Parkside Manor Historic District, described under P-19-190949, below.

P-19-190949

This resource is the Paul R. Williams/Parkside Manor Historic District. The district consists of approximately five north-south residential blocks and six east-west residential blocks bordered generally by Central Avenue on the west, Compton Avenue on the east, 103rd Street on the north, and 107th Street on the south. The district was developed as a planned residential neighborhood by

the Rayden Building Company, which purchased the property from the County of Los Angeles in 1944. The district has been found eligible for the NRHP under Criteria A and C. This resource is located approximately 0.35-mile southeast of the area.

P-19-192305

This is the 99th Street Elementary School complex. The complex consists of several buildings. Three of these are historic in age, and were constructed between 1927 and 1972. AECOM recorded and evaluated this building complex and determined it not to be eligible for listing on either the CRHR or the NRHP (Beherec 2016; Gibson et al. 2013). This resource is located adjacent to the project area.

P-19-192306

This resource is the 99th Street Wells Pumping Station complex. The complex contains six buildings and two other structures. One of these buildings was constructed about 1948, while the remainder of the complex was constructed post-1972, AECOM recorded and evaluated this building complex and determined it not to be eligible for listing on either the CRHR or the NRHP (Beherec 2016; Gibson et al. 2013). This resource is located adjacent to the project area.

In addition to the documented built resources, a marginal note on the SCCIC's South Gate 7.5' Topographic Map adjacent to the 0.5-mile study area reads, "Possibile vicinity of HA'UTNGA." Ha'utnga, or Huutnga, is a Gabrielino place name. As discussed in our earlier cultural report (Gibson et al. 2013: 13), ethnographic evidence indicates that a site named Huutnga existed on property belonging to the Lugo family. Among other holdings, the Lugos possessed Rancho San Antonio, the western boundary of which lay approximately 1.6-mile east of the projec area. It is not clear if the SCCIC map's annotator intended to place Huutnga at this specific location, which is within 0.5-mile of the project area, or merely somewhere on the South Gate 7.5' Topographic Map. The closest mapped prehistoric or ethnohistoric site documented in the SCCIC archive is CA-LAN-0385, located more than 1.8-mile from the project area.

None of the cultural resources identified during the records search could be characterized as a tribal cultural resource. No tribal cultural resources have been identified within 0.5-mile of the project area.

California State Historic Resources Inventory

The California Office of Historic Preservation's HRI was examined for properties facing the project area. No resources are listed facing the project area.

California Historical Landmarks

A listing of CHLs identified no historic landmarks within 0.5 mile of the project site.

Los Angeles Historic-Cultural Monument Register

A search of the LAHCM register did not identify any historic monuments previously recorded within 0.5 mile of the project.

Historic Maps

The project area as it appears in historic USGS topographic maps and other maps is described in detail in our analysis of the 99th Street Chloramination Station Project (Gibson et al. 2013). In addition to what is related therein, the SCCIC now offers digitized General Land Office (GLO) maps of

the project vicinity. The only available GLO map at the SCCIC shows no buildings, sites, or structures within or near the project area (GLO 1873).

Archaeological and Built Environment Survey

On April 27, 2017, Marc A. Beherec, Ph.D., RPA, conducted an intensive pedestrian survey of the project area. The archaeological survey focused on the identification of any surface evidence of archaeological materials in the project footprint. The pedestrian survey encompassed the areas that would be disturbed by the project. All unpaved and undeveloped portions of the site were walked in transects of 15 meters or less. In addition, the project footprint and surrounding areas were surveyed for historic architectural resources that have the potential to be impacted by the project. The road surfaces to be impacted by the proposed project were walked and checked for historic contractor's pavement stamps. Resources that were or appeared to be 45 years or older and have the potential to be impacted, directly or indirectly by project activities, were to have been recorded with digital photographs and evaluated under criteria for listing in the CRHR.

The archaeological survey yielded negative results. The majority of the proposed project area is paved over or covered in imported gravel. The proposed Fe/Mn filtration system location and proposed fence location are currently a contractor's yard for the related 99th Street Chloramination Station Project (Gibson et al. 2013; Beherec 2016). These areas are covered in imported gravel and could not be accessed; however, they were surveyed for the Chloramination Station Project with negative results. The proposed distribution line location and the southeast powerpole location lie in streets and sidewalks and are likewise paved over. The vicinity of the northwest powerpole location includes unpaved but landscaped right-of-way segments. Visibility in the unpaved areas here was approximately 25%. These areas were examined with negative results.

The historic building and structure survey also yielded negative results. No buildings or structures were observed within the project area. No contractor's marks were observed on any of the paved surfaces. Adjacent structures at the 99th Street Wells complex and the 99th Street Elementary School complex have been evaluated and found not to be eligible for listing in either the CRHR or the NRHP. Although greater than 45 years in age, they are not considered historical resources.

MANAGEMENT RECOMMENDATIONS

Historic Architectural Resources Recommendations

Two historic architectural resources that are 45 years old or older stand adjacent to the project area. However, both have been previously evaluated and found not to be eligible for listing in either the CRHR or NRHP. The proposed project will not have an impact on significant historical resources. No further work is recommended concerning historic architectural resources.

Archaeological Recommendations

Based on the results of the archival research and survey, there is low potential that archaeological resources will be encountered during ground disturbing activities for the proposed project. If archaeological resources are encountered during ground disturbing activities, LADWP will contact a qualified archaeologist to evaluate and determine appropriate treatment for the resource in accordance with California Public Resource Code (PRC) Section 21083.2(i). If any archaeological resources are encountered during ground-disturbing activities, work will be temporarily halted in the

vicinity of the find and the archaeologist will be called to the project site to examine and evaluate the resource in accordance with the provisions of CEQA.

Tribal Cultural Resources Recommendations

A tribal cultural resource is 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: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The records search identified no resources which are listed or eligible for listing on the CRHR or a local register which could be identified as tribal cultural resources. However, there is a low potential that archaeological resources which could be identified as tribal cultural resources may be encountered during ground disturbing activities for the proposed project. If any Native American cultural material is encountered within the project site, consultation with interested Native American parties will be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources.

If human remains are discovered, work in the immediate vicinity of the discovery will be suspended and the Los Angeles County Coroner contacted. If the remains are deemed Native American in origin, the Coroner will contact the NAHC and identify a Most Likely Descendant (MLD) pursuant to Public Resources Code 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.

In addition, LADWP is conducting ongoing tribal consultation as mandated by CEQA to identify and address Native American concerns.

References Cited

Beherec, Marc A.

2016 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations. Memo prepared by AECOM for Los Angeles Department of Water and Power.

Gibson, Heather, Marc Beherec, M.K. Meiser, and Linda Kry

2013 *Cultural Resources Assessment, 99th Street Wells Chloramination Station, Watts, City of Los Angeles, California*. Report prepared by AECOM for Los Angeles Department of Water and Power.

General Land Office

1873 Township 3 South, Range No. 13 West. Document on file, South Central Coastal Information Center,

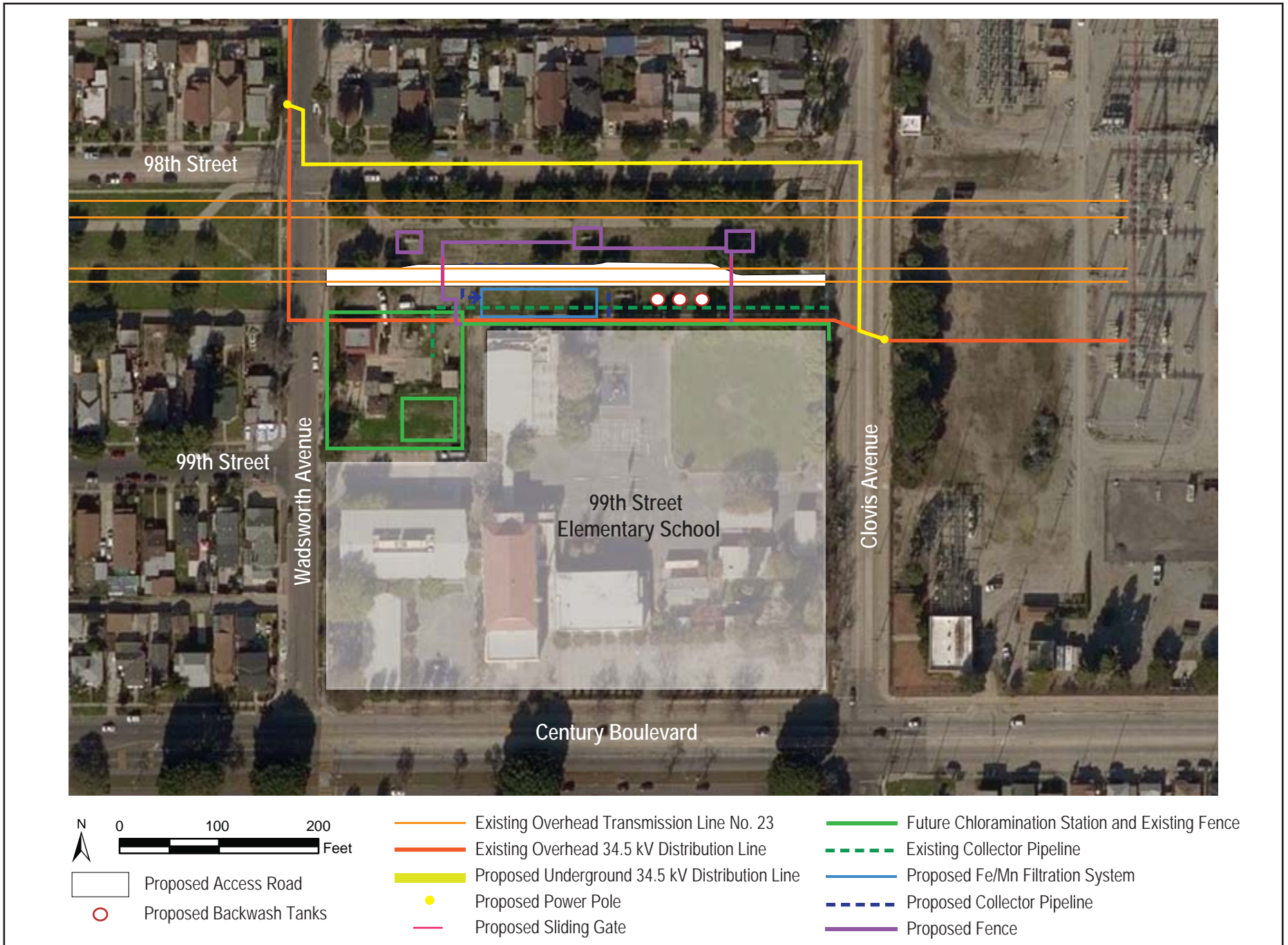
United States Geologic Survey (USGS)

1981a Inglewood 7.5' Quadrangle. Reston, VA: U.S. Department of the Interior.

1981b South Gate 7.5' Quadrangle. Reston, VA: U.S. Department of the Interior.

Attachment:

Figure. Proposed Site Plan.



99th Street Wells Filtration Plant Project

Figure 4
Proposed Site Plan

**CULTURAL RESOURCES ASSESSMENT
99TH STREET WELLS CHLORAMINATION STATION, WATTS,
CITY OF LOS ANGELES, CALIFORNIA**



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July 2016

U.S.G.S. Quadrangles: Inglewood, South Gate
Acreage: 0.6 acres

Keywords: *Gabrielino*, Tajuata, Rancho Tajuata, Watts, 99th Street Elementary School, 99th Street Wells Pumping Station

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EXECUTIVE SUMMARY

AECOM was retained by the City of Los Angeles Department of Water and Power (LADWP) to conduct a Phase I cultural resources investigation to identify potential impacts to cultural resources in compliance with the California Environmental Quality Act for the 99th Street Wells Chloramination Station project. LADWP proposes to build a chloramination station within the existing 99th Street Wells Pumping Station in the Watts community of the City of Los Angeles. The proposed project is part of LADWP's program to comply with the federal Stage 2 Disinfection and Disinfectants Byproducts Rule through a systemwide conversion from chlorination to chloramination of the in-City potable water supply. The chloramination station would combine a liquid ammonium sulfate (LAS) solution with sodium hypochlorite to form chloramines to disinfect the groundwater supply distributed by the 99th Street Wells Pumping Station complex. The proposed project would include the installation of all necessary equipment and structures needed to facilitate on-site sodium hypochlorite generation, ammoniation, injection, and monitoring. The chloramination station would be a single-story structure designed in a style similar to the existing facilities. The piping would be located below the ground and would not be visible following the completion of construction.

The 99th Street Wells Pumping Station is located at 9880 Wadsworth Avenue in the Watts community of the City of Los Angeles. It is located at the intersection of Wadsworth Avenue and 99th Street. The project site is bound by Wadsworth Avenue to the west, a utility right-of-way to the north, and 99th Street Elementary School to the east and south. The project site is located on the following U.S. Geological Survey (USGS) 7.5-minute quadrangle maps: Inglewood (USGS 1981a) and South Gate (USGS 1981b). The project site is in Section 32 of Township 2 South, Range 13 West. The project site encompasses approximately 24,800 square feet (0.6 acre).

The investigation included a records search at the South Central Coastal Information Center housed at California State University, Fullerton. Three resources, the Boulder Dam – Los Angeles 287.5 kV Transmission Line (P-19-188983), the Zamora Walkway (P0190190948), and the Paul R. Williams/Parkside Manor Historic District (P-19-190949) have previously been recorded within 0.5 mile of the project site. No cultural resources have previously been recorded within the project area of potential effects (APE). The records search revealed that five cultural resource investigations were previously conducted within a 0.5-mile radius of the project site. No California Historical Landmarks or Los Angeles Historic-Cultural Monuments are located within 0.5 mile of the project site.

A Sacred Lands File search conducted for this project by the Native American Heritage Commission (NAHC) did not result in the identification of any documented sacred lands within 0.5 mile of the proposed project. Two rounds of Native American contact were implemented, consisting of an information letter, response form, and map, which were sent to local Native American representatives identified by the NAHC. Seven individuals have been in contact about the project and five responses have been received. Native American representatives recommend archaeological and Native American monitoring.

As part of the cultural resources field investigation, an intensive survey for historic architectural resources that had the potential to be impacted by the project was conducted on July 23, 2013. Resources that were or appeared to be 45 years or older were recorded with digital photographs and evaluated under criteria for listing in the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP). The survey identified two resources that appear 45 years or older: the 99th Street Wells Pumping Station (P-19-192306) and the 99th Street Elementary School (P-19-192305). These resources do not meet the criteria to be eligible for either the CRHR or the NRHP. There are no significant historic properties within the APE. There will be no impact to historic properties.

A pedestrian survey was conducted as part of this assessment to identify the presence of any archaeological resources in the proposed project footprint. No archaeological resources were identified as the result of this survey. Based on the results of this study, there is low potential that archaeological resources will be encountered during ground disturbing activities for the proposed project. If archaeological resources are encountered during ground disturbing activities, LADWP will contact an archaeologist who meets the Secretary of the Interior's Standards for Archaeology to evaluate and determine appropriate treatment for the resource in accordance with Section 106 of the National Historic Preservation Act and the California Public Resource Code (PRC) Section 21083.2(i). If any Native American cultural material is encountered within the project site, consultation with interested Native American parties will be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. If human remains are discovered, work in the immediate vicinity of the discovery will be suspended and the Los Angeles County Coroner contacted. If the remains are deemed Native American in origin, the Coroner will contact the NAHC and identify a Most Likely Descendant (MLD) pursuant to Public Resources Code Section 5097.98 and California Code of Regulations Section 15064.5.

INTRODUCTION

This document reports a Phase I cultural resources assessment in connection with the 99th Street Wells Chloramination Station Project (project) in the Watts community of the City of Los Angeles. The City of Los Angeles Department of Water and Power (LADWP) proposes to build a new chloramination station in a grassy area immediately south of its existing 99th Street Wells Pumping Station complex. The proposed project is part of LADWP's program to comply with the federal Stage 2 Disinfection and Disinfectants Byproducts Rule (DDBPR) through a system-wide conversion from chlorination to chloramination of the in-City potable water supply. The chloramination station would combine a liquid ammonium sulfate (LAS) solution with sodium hypochlorite to form chloramines to disinfect the groundwater supply distributed by the 99th Street Wells Pumping Station complex. The chloramination station would be a single-story structure of a style similar to the existing facilities. The piping would be located below the ground and would not be visible following the completion of construction. This Phase I cultural resources assessment was prepared in support of an Initial Study/Mitigated Negative Declaration, in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. and the State CEQA Guidelines, California Code of Regulations Section 15000 et seq. and in support of the State of California State Water Resources Control Board (SWRCB) Clean Water State Revolving Fund Water Recycling Funding Program (SRF) application.

The 99th Street Wells Pumping Station is located at 9880 Wadsworth Avenue in the Watts community of the City of Los Angeles. It is located at the intersection of Wadsworth Avenue and 99th Street. The project site is bound by Wadsworth Avenue to the west, a utility right-of-way to the north, and 99th Street Elementary School to the east and south. The project site is located on the following California U.S. Geological Survey (USGS) 7.5-minute quadrangle maps: Inglewood (USGS 1981a) and South Gate (USGS 1981b). The project site is in Section 32 of Township 2 South, Range 13 West. The project site encompasses approximately 24,800 square feet (0.6 acre).

PROJECT PERSONNEL

AECOM personnel involved in the cultural resources assessment are as follows: Heather Gibson, Ph.D., RPA, served as principal investigator and contributed to the report; Marc A. Beherec, Ph.D., RPA, contributed to the report and conducted archaeological survey; Linda Kry contributed to the report and conducted archival research and archaeological survey; M. K. Meiser, M.A., conducted evaluations of historic architectural resources; Tim Harris and Alec Stevenson provided graphics and geographic information system support; and Christy Dolan, M.A., RPA, provided senior review. Resumes of key personnel are included in Appendix A.

REPORT ORGANIZATION

This report is organized following the *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format* guidelines, (California Office of Historic Preservation 1990). These guidelines provide a standardized format and suggested report content, scaled to the size of the project. First, a project description, including project location, proposed undertaking, and construction schedule, is provided. Next, the environmental and cultural settings are presented along with a detailed history of the project site. The research methods are then presented, followed by the results of the archival research, Native American contact program, and field survey. The final section summarizes the results of the cultural resources assessment and provides recommendations for resource eligibility and further work.

PROJECT DESCRIPTION

PROJECT LOCATION AND SETTING

The proposed project would be located within the existing 99th Street Wells Pumping Station complex property, which is located in the Watts community of the City of Los Angeles (Figure 1). The property is located at 9880 Wadsworth Avenue, at the intersection of Wadsworth Avenue and 99th Street (Figure 2). The project site is bound by Wadsworth Avenue to the west, a utility right-of-way to the north, and 99th Street Elementary School to the east and south. The project site is adjacent to residential single-family homes west of Wadsworth Avenue.

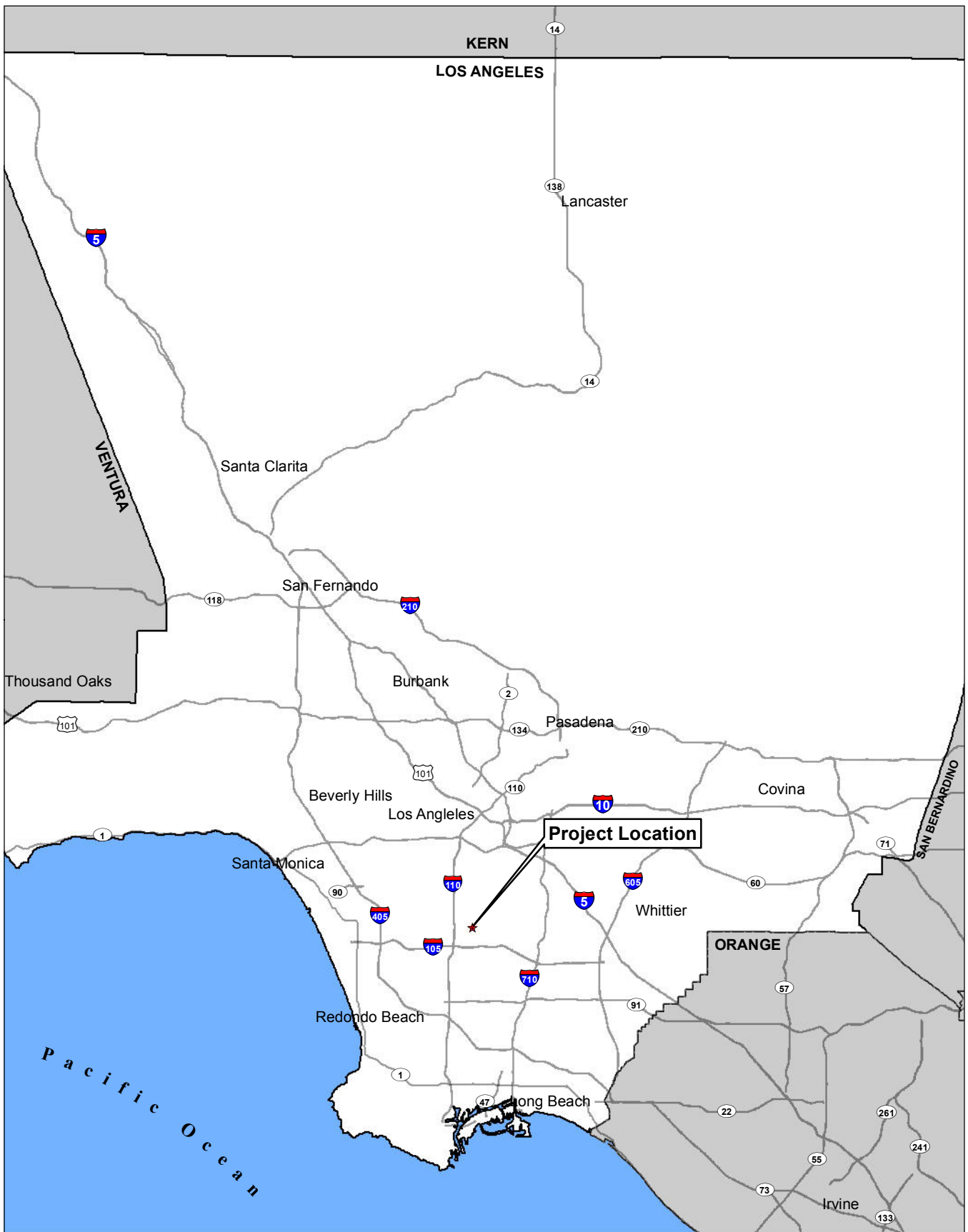
The project site is located on the following USGS 7.5-minute quadrangle maps: Inglewood (USGS 1981a) and South Gate (USGS 1981b). The project site is in Section 32 of Township 2 South, Range 13 West. The project site encompasses approximately 24,800 square feet (0.6 acre).

PROPOSED PROJECT

The new chloramination facility would be constructed within the LADWP-owned 99th Street Wells Pumping Station complex and would include all necessary equipment and structures needed to facilitate on-site sodium hypochlorite generation, ammoniation, injection, and monitoring. The chloramination station would combine a liquid ammonium sulfate (LAS) solution with sodium hypochlorite to form chloramines to disinfect the groundwater supply distributed by the 99th Street Wells Pumping Station complex. The proposed project would include construction of the chloramination station and associated piping in an undeveloped, grassy area in the southeast corner of the project site. The chloramination station would be a single-story structure designed in a style similar to the existing facilities. The piping would be located below ground and would not be visible following the completion of construction. No demolition of buildings, removal of trees, or alterations of sidewalks is anticipated. Additional fencing would also be installed to secure the new chloramination station. Figure 3 shows the existing layout of the 99th Street Wells Pumping Station complex and Figure 4 shows the proposed layout including construction staging areas for the project.

Construction Schedule and Scenario

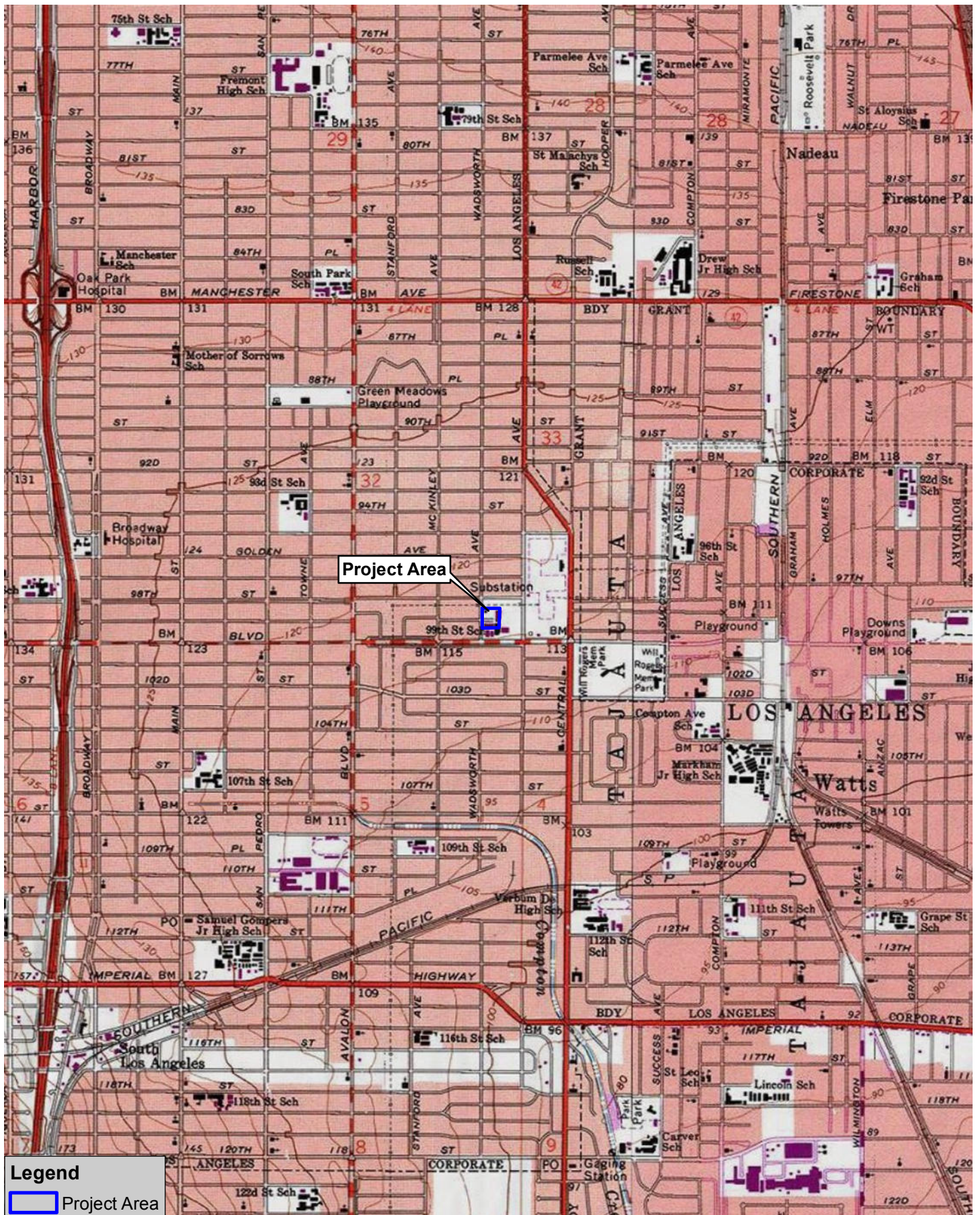
Construction of the proposed project is anticipated to begin in spring 2016 and take approximately 2 years to complete, concluding in spring/summer 2018. Site preparation is anticipated to take 6 weeks and construction of the chloramination station and installation of piping is anticipated to take 30 months. The construction staging area which includes materials storage and employee and equipment parking would be located immediately to the north of the project site within the utility right-of-way as shown in Figure 4. Access to the project site and to the construction staging area would occur from Wadsworth Avenue. The project site would be accessed from the construction staging area at two gates on the north side of the project site.



Source: ESRI (2012)



Figure 1
Regional Location Map



Source: ESRI National Geographic USA Topographic Maps; 7.5 Minute Quadrangles Inglewood (1981); South Gate (1981)



Figure 2
Project Location Map



Source: Bing Maps 2013

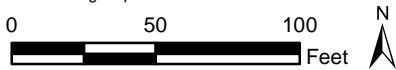



Figure 3

Aerial Map of Existing Site Layout



- Proposed Project**
- A** Construction Office Trailer
 - B** Employee Parking
 - C** Steel Beams Storage
 - D** Piping Storage
 - E** Station Materials
 - F** Equipment Parking
 - G** Access Gates
 - H** Trailer and Guard Shack
- Existing Structures**
- 1** Existing Building #1 (Old P.S.)
 - 2** Existing Building #2
 - 3** Restroom
 - 4** Existing Chlorination Station
 - 5** Existing Corrosion Building
 - 6** Fluoridation Building

 Closest Residence To LADWP Property



0 100 Feet




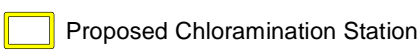
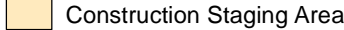



-  Proposed Pipes
-  Proposed Sound Wall
-  99th St Elementary School Fenceline
-  Proposed Chloramination Station
-  Construction Staging Area
-  Project Site
-  Existing Fence
-  Proposed Fence

Figure 4
Proposed Site Plan

99th Street Wells
Pumping Station Complex



To accomplish all the elements of the proposed project, the delivery of construction equipment, materials, and supplies to the 99th Street Wells Pumping Station complex would be required. Vehicles required for the project construction include backhoes, grader, compactor, concrete truck, drill rig, excavators, crane, front end loader, forklifts, and water trucks. Recurrent deliveries would include material and components required for the chloramination station construction, pipe segments for new water line connections, and concrete for various elements of the project. Excavation on the project site would also create truck trips for transferring the excavation material and removing the debris from the project site for off-site disposal. The chloramination station construction would create up to approximately 1,700 cubic yards of excavated material and approximately 130 cubic yards of demolition material and debris. Additionally, approximately 300 CY of concrete would be delivered to the project site. Overall, approximately 200 total off-site truck trips may be required.

Ground-disturbing activities for the proposed project would include excavation of the areas for the construction of the chloramination building and installation of new pipelines. The chloramination station would be 40 by 60 feet. The excavation area for the proposed chloramination station would be 53.5 feet by 74.5 feet and would require a maximum depth of 9 feet. The pipes would require trenching approximately 1 foot wide and 3 feet deep. The approximate total length of piping required for installation is 755 feet. The underground electrical conduits would require trenching approximately 3 feet wide and 4 feet deep. The approximate total length of electrical conduits required for installation is 308 feet. All these excavations will occur within the existing 99th Street Wells Pumping Station complex.

Project Benefits

The proposed project would provide many benefits to the City of Los Angeles water supply and construct the necessary infrastructure to convey more potable water to customers in the South Los Angeles/Harbor portion of the City of Los Angeles. The proposed project would convert the existing City-wide groundwater disinfection system from free chlorine to chloramine as chloramine forms less disinfection byproducts and has no odor.

Additionally, the proposed project would also comply with the trihalomethanes limits set by the federal Stage 2 DDBPR drinking water regulation because conversion to chloramine disinfection by the controlled feed of LAS with sodium hypochlorite into the water supply would ensure the reduction of trihalomethanes and other byproducts produced by traditional chlorine disinfection.

In addition to improved water quality, the City-wide conversion to chloramines would improve the reliability of the water supply by allowing the use of Metropolitan Water District of Southern California supplies without restrictions due to issues associated with disinfectant blending. The 99th Street Wells Chloramination Station Project is one of several water system improvements required for the City-wide conversion to chloramine disinfection.

AREA OF POTENTIAL EFFECTS (APE)

Per 36 CFR 800.16(d), the area of potential effects (APE) is defined as “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character of use of historic properties, if any such properties exist.” The APE for the proposed project is established as the area in which historic properties, if present, could potentially be affected including areas used for project staging and temporary construction.

For the purposes of the proposed project, the APE would include the project site, the utility right-of-way to the north, and the 99th Street Elementary School immediately adjacent to the project site (i.e., the building directly to the east, the parking lot and building directly to the south, and a portion of the building directly to the southeast of the project site) (Figure 5). The APE takes into consideration the construction staging area and the 99th Street Elementary school buildings that are immediately adjacent to the project site.

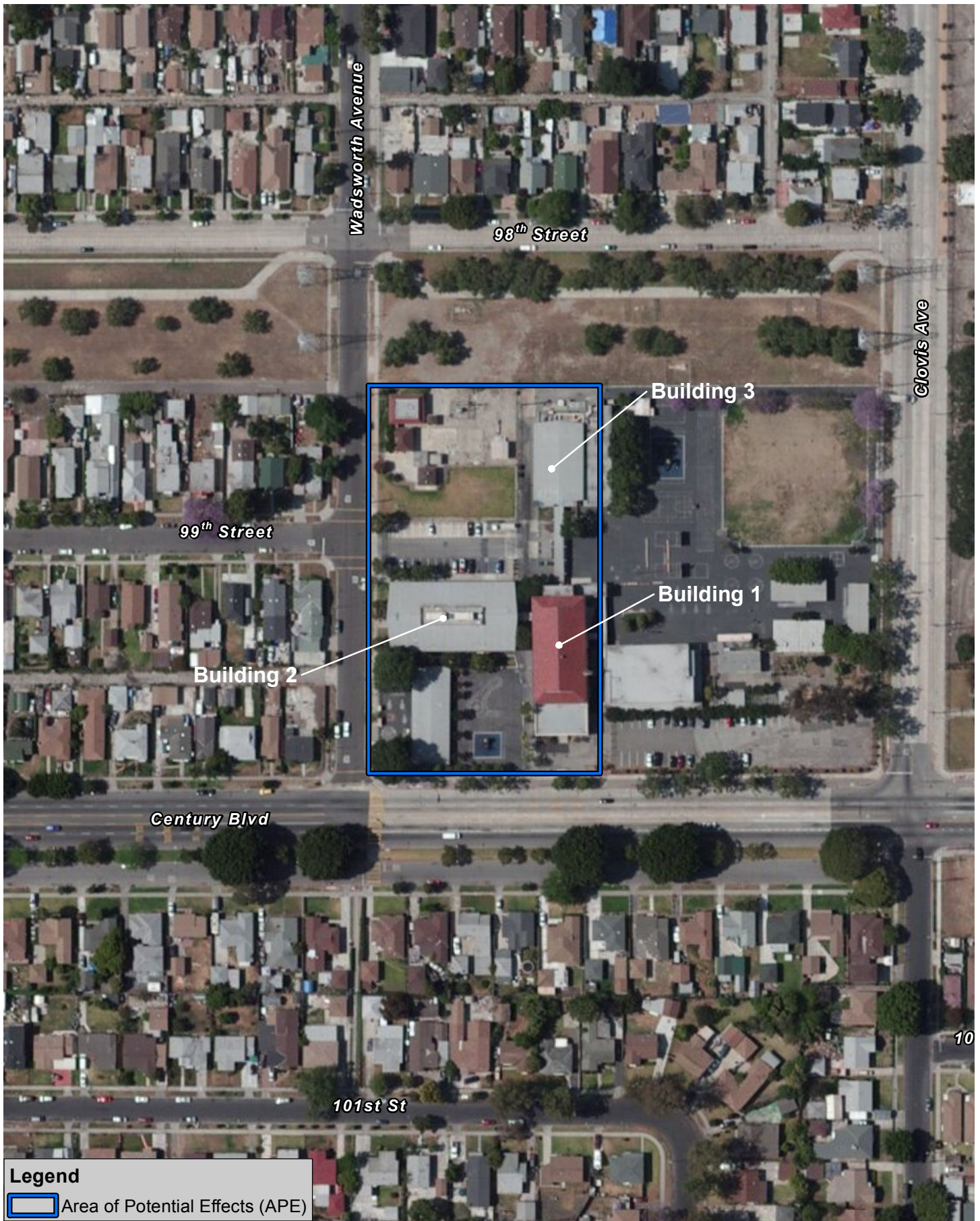


Figure 5
Project APE Map

SETTING

ENVIRONMENTAL AND GEOLOGICAL SETTING

The project is located in the central Los Angeles Basin, which 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 (Yerkes et al. 1965). The floodplain forest of the Los Angeles Basin formed one of the most biologically rich habitats in Southern California. Willow, cottonwood, and sycamore, and a dense underbrush of alder, hackberry, and shrubs once lined the Los Angeles River as it passed near present-day downtown Los Angeles (Gumprecht 1999). Climatically, this area is generally Mediterranean and is characterized by mild winters and moderate, dry summers with occasional storms. The project site is situated in an area designated as younger Quaternary alluvium on geologic maps (Yerkes and Campbell 2005).

CULTURAL SETTING

As a framework for discussing the potential cultural resources that may exist at the project site, the following discussion summarizes the current understanding of major prehistoric and historic developments in and around Los Angeles. This is followed by a more focused discussion of the history of the vicinity of the project site itself.

Prehistoric Overview

While people are known to have inhabited southern California beginning at least 13,000 years before present (B.P.) (Arnold et al. 2004), the earliest evidence of human occupation in the Los Angeles area dates to at least 9000 B.P. and is associated with a period known as the Millingstone Cultural Horizon (Wallace 1955; Warren 1968). Departing from the subsistence strategies of their nomadic big-game hunting predecessors, Millingstone populations established more permanent settlements. These settlements 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 Millingstone occupations are typically identified by the presence of handstones (manos) and millingstones (metates), while those Millingstone occupations dating later than 5000 B.P. contain a mortar and pestle complex as well, signifying the exploitation of acorns in the region.

Although many aspects of Millingstone culture persisted, by 3500 B.P. a number of socioeconomic changes occurred (Erlandson 1994; Wallace 1955; Warren 1968). These changes are associated with the period known as the Intermediate Horizon (Wallace 1955). Increased populations in the region necessitated the intensification of existing terrestrial and marine resources (Erlandson 1994). This was accomplished in part through the use of the circular shell fishhook on the coast, and more abundant and diverse hunting equipment. Evidence for shifts in settlement patterns has been noted at a variety of locations at this time and is seen by many researchers as reflecting increasingly territorial and sedentary populations. The Intermediate

Horizon marks a period in which specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and nonutilitarian materials were acquired, and travel routes were extended. Archaeological evidence suggests that the margins of numerous rivers, marshes, and swamps within the Los Angeles River Drainage served as ideal locations for prehistoric settlement during this period. These well-watered areas contained a rich collection of resources and are likely to have been among the more heavily traveled routes.

The Late Prehistoric period, from approximately 1500 B.P. to the mission era, is the period associated with the florescence of the contemporary Native American group known as the *Gabrielino* (Wallace 1955). Coming ashore near Malibu Lagoon or Mugu Lagoon in October of 1542, Juan Rodriguez Cabrillo was the first European to make contact with the *Gabrielino* Indians. Occupying 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) and maps produced by early explorers indicate that at least 26 *Gabrielino* villages were within proximity to known Los Angeles River courses, while an additional 18 villages were reasonably close to the river (Gumprecht 1999). Subsistence consisted of hunting, fishing, and gathering. Small terrestrial game were hunted with deadfalls and rabbit drives, and by burning undergrowth, while 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 acorns, 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]).

Historic Overview

Spanish explorers made brief visits to *Gabrielino* territory in 1542 and 1602, and on both occasions the two groups exchanged trade items (McCawley 1996). Sustained contact with Europeans did not commence until the onset of the Spanish Period, which began in 1769 when Gaspar de Portola and a small Spanish contingent began their exploratory journey along the California coast from San Diego to Monterey. Passing through the Los Angeles area, they reached the San Gabriel Valley on August 2 and traveled west through a pass between two hills where they encountered the Los Angeles River and camped on its east bank. 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 downtown, known as the Glendale Narrows, and those areas along the river's various outlets into the sea.

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, approximately 9 miles northeast of the project site. By the early 1800s, the majority of the surviving *Gabrielino* population had entered the mission system. The *Gabrielino* inhabiting Los Angeles County were under the jurisdiction of either Mission San Gabriel or Mission San Fernando. Mission life offered the Indians 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, the *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. 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, and by the early 1800s the pueblo produced 47 cultigens (Gumprecht 1999).

Alta California became a state when Mexico won its independence from Spain in 1821, and Los Angeles selected its first city council the following year. The authority of the 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 quickly fell into decay.

The first party of U.S. immigrants arrived in Los Angeles in 1841, although surreptitious commerce had previously been conducted between Mexican California and residents of the United States and its territories. 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* like the Avila, Domínguez, Lugo, and Sepúlveda families (Wilkman and Wilkman 2006:14–17). 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).

The United States took control of California after the Mexican–American War of 1846, and seized Monterey, San Francisco, San Diego, and Los Angeles (then the state capital) with little resistance. Local unrest soon bubbled to the surface, and Los Angeles slipped from U.S. control in 1847. 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 United States in 1850 as the 31st state (Wilkman and Wilkman 2006:15).

The discovery of gold at Sutter's Mill in 1849 led to an enormous influx of people from other parts of the United States in the 1850s and 1860s; these "forty-niners" rapidly displaced the old rancho families. Southern California's prosperity in the 1850s was largely a result of the increased demand for cattle for meat and hides, which was created by the gold rush. Southern California was able to meet this need, and the local ranching community profited handsomely (Bell 1881:26).

Surrounded by miles of ranchos, Los Angeles was the center of a vibrant cattle industry throughout the 19th century. The city served as a trading hub for Southern California's "cow

counties,” and, at mid-century, the plaza was lined with the shops and town homes of ranch owners (Robinson 1979:243). In 1860, Los Angeles County had approximately 75,000 head of cattle, 14,000 horses, and 95,000 sheep. More than 55,000 bushels of wheat, 85,000 bushels of corn, and 209,000 pounds of wool were produced annually. The county accounted for approximately two-thirds of the state’s wine output, producing almost 163,000 gallons in 1860. These agricultural pursuits were essential to the local economy.

When the Southern Pacific Railroad (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. The completion of the second transcontinental line, the Atchison, Topeka and Santa Fe, took place in 1886 causing a fare war that drove fares to an unprecedented low. More settlers continued to head west and the demand for real estate skyrocketed. As real estate prices soared, land that had been farmed for decades outlived its agricultural value and was sold to become residential communities. 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 tremendous influx of people necessitated an increase in public transportation options, and, in the final years of the 19th century, passenger rail lines proliferated. Beginning with the Spring and Sixth Street Railway Company in 1873, dozens of rail lines appeared throughout the Los Angeles area. The Los Angeles Pacific Company began improving and extending interurban rail lines in earnest in 1906, creating impressive new switching stations and tunnels designed to shorten travel time and increase efficiency (Electric Railway Historical Association 2008). The majority of these lines were subsequently incorporated into the Pacific Electric Company. 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 extensive floodplain dried up; the richly vegetated landscape had been cleared for construction materials and fuel; and the tens of thousands of head of cattle, horses, and sheep had decimated the local grasses. A number of waterworks projects were underway during the second half of the 19th century in an effort to increase water flow and water retention. These projects included the construction of Echo Park Reservoir, the Silver Lake Reservoir, and the further expansion of the *zanja* irrigation ditches. When these measures proved insufficient, a more permanent solution to Los Angeles’ water shortage was sought. Under the direction of city engineer William Mulholland, the Los Angeles Bureau of Water Works and Supply constructed the 238-mile-long Los Angeles Aqueduct. This 5-year project, completed in 1913, employed the labor of more than 5,000 men and brought millions of gallons of water into the San Fernando (now Van Norman) Reservoir (Gumprecht 1999). Now able to offer water and sewer service at a grand scale, many smaller cities were voluntarily incorporated by Los Angeles (Robinson 1979:244).

The beginning of the 20th 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). This landscape demanded an innovative transportation solution, and Los Angeles embraced automobiles and freeways like no other city had. The first homemade car pattered down city streets in 1897. Seven years later, the first grand theft auto was reported by Los Angeles Police (Wilkman and Wilkman 2006:50). Inexpensive automobiles gained popularity in the 1920s, soon creating tremendous congestion in the centers of cities and

necessitating alternate transportation routes. The Arroyo Seco Parkway, connecting Los Angeles to Pasadena, was among the earliest “express auto highways” in the United States, opening in December 1940 (Balzar 2006). Dozens of freeways were constructed in the post-World War II years, radically altering the character of Los Angeles by simultaneously dividing local neighborhoods and connecting outlying communities.

During the first three decades of the 20th century, more than two million people moved to Los Angeles County, transforming it from a largely agricultural region into a major metropolitan area. By 1945, Los Angeles had undertaken 95 annexations, expanding from a 28-square-mile agrarian pueblo into a densely populated city covering more than 450 square miles (Robinson 1979:245).

History of the Project Vicinity: Watts

The Watts neighborhood lies within former *Gabrielino* territory, but there is little historical record of the Native American presence in Watts. The first area land grant was known as Rancho la Tajuata, or Tajauta. There is some debate regarding the origin of this name. An early history of the neighborhood claims the area was settled by a Spanish family named Tajuata who were “the real pioneers” of the area (*Watts Advertiser-Review* 1938). Other sources suggest the name is Spanish and means “low bluffs” or “the low bluffs on the North” (Collins 1980:38; Ray 1985:4).

A. L. Kroeber (1925:897) suggested that Tajuata is a Hispanicization of a *Gabrielino* place name. Harrington interviewed a member of the Lugo family in South San Gabriel who claimed that Tajuata belonged to the Lugos, that the site was known to them as El Rancho Nuevo, and that Tajuata was a Native American name. The Lugos did in fact occupy Rancho San Antonio, which bordered Tajuata. Based on this, McCawley (1996:58) suggests that the site is Huutnga, a *Gabrielino* rancheria located at a place called “Ranchito de Lugo.” Huutnga may mean “in the Willows,” a name similar to Willowbrook, the name given to part of the land grant by later settlers. However, while Tajuata may seem like an obvious Hispanicization of Huutnga, it is more likely that Huutnga is located at the Rancho Potrero de Filipe Lugo, in the Whittier Narrows area.

Rancho Tajuata is tied historically to the prominent Californio Avila (or Abila) family. The Avila family worked land in the project vicinity as early as the Spanish period, possibly as early as 1820 (Ray 1985:4). Governor Manuel Micheltoarena granted 1 square league of land, including what would become Watts and Willowbrook, to Anastasio Avila in 1843. The grant was bounded roughly by the present-day streets of Firestone Boulevard in the north, Rosecrans Boulevard in the south, Central Avenue in the west, and Alameda Street in the east. Anastasio Avila was a prominent Angelino. Born in 1776, he served as *alcalde* of Los Angeles between 1819 and 1821. His brother Francisco, another one-time *alcalde*, built the more famous Avila Adobe on Olvera Street. Anastasio Avila built a two-room adobe on his grant. The Avila Adobe on Rancho la Tajuata was said to still be standing at the intersection of Grape and 115th Streets in 1938 (*Watts Advertiser-Review* 1938). Another old Spanish house was said to stand near the intersection of Compton Avenue and 103rd Street and served as a rectory for the Catholic Church, now called St. Lawrence of Brindisi (*Watts Advertiser-Review* 1938; *Our Community* [1941] 1965). Harrington’s informant told him “The old adobe house was a quarter of a block west of the

spring site” (qtd. in McCawley 1995:58). Rancho Tajuata was primarily used for livestock ranching.

Avila’s son Enrique (or Henrique) patented the land according to United States law in 1873, but his claim was not without dispute. Settlers claimed much of the rancho. Avila filed claims as early as 1856 (*Los Angeles Star* 1856), but it was not until 1875 that he finally prevailed in the California Supreme Court against 15 rival claimants to the land (*Los Angeles Herald* 1875).

Beginning in the mid-1860s, before land title was even clear, Rancho la Tajuata was subdivided (*Los Angeles Herald* 1876). The 1869 construction of the SPRR along Alameda Street, at the edge of Tajuata, made this land more desirable. The parcels were mostly sold as smaller ranches and farms. By the mid-1880s, a small community called Tajuata had been established; it is reported to have had a school with approximately 100 pupils (*Los Angeles Times* [LAT] 1887). In the first decades of the 20th century, small ethnic communities began to develop in this area. Germans bought large tracts in the northeast portion of Watts. Japanese immigrants held farms in Tajuata, particularly along Central Avenue and Main Street (now 103rd Street). Some African Americans moved into the southeast of Tajuata, and the southwest was largely Mexican, an enclave known as El Jarín (The Garden) or “Spanish Camp.” A Greek community called Palomar was founded in the southeast; Russians soon joined the Greeks (Ray 1985; Jimenez y West 2007; *Our Community* [1941] 1965). Watts was a popular settling place for migrants from both the American South and outside the United States. Germans, Scots, Italians, Canadians, Irish, English, Norwegians, Swiss, Danes, Turks, and Jews settled in the city (Belieu 1938).

In 1902, the Pacific Electric Railway (the Red Car Line) extended a line through Rancho la Tajuata to Long Beach. Near what is now 103rd Street, branches were also established to Santa Ana and the South Bay. Land speculator and local resident Charles Watts or his widow donated land for construction of a railroad station at what is now 1686 East 103rd Street, and the railroad named the stop Watts Station, or the Wilmington Watts Freight Station, in his honor. A combination passenger and freight depot was constructed at the site in 1904; it was the first building of importance on Main Street (Ray 1985). The Late Victorian building survived the 1965 Watts Riot, is one of the few remaining Pacific Electric Railroad depots, and was entered into the National Register of Historic Places (NRHP) in 1974 (P-19-167188). Since 1989, the LADWP has used the building as a customer service office (Feldman 1989; Grimes 1972).

The Red Car Line helped turn Watts into a multi-ethnic working class suburb. Watts Station became the center of the community (Plate 1). The railroad made no stops between Watts and Los Angeles, enabling residents to arrive downtown in 22 minutes at a price of 14 cents, round-trip. Promoters noted that residents of Watts could get to downtown Los Angeles faster than many residents of Los Angeles itself. Roads and tiny house lots—typically 25 by 130 feet—were quickly laid out and sold for as little as \$1 down and \$1 a week (Belieu 1938). Road grids were established, but each developer used a different grid. The first streets were paved in 1911. A business district grew up on Main Street, but it was small, since Watts was envisioned to be a bedroom community for Los Angeles (Belieu 1938; *Watts Advertiser-Review* 1938). The town of Watts was incorporated in 1906, and by that time it was estimated that Watts was home to two or three grocery stores, a dry goods store containing a post office, a lumber yard, a hardware store, and a saloon (*Our Community* [1941] 1965:3). The town voted to annex itself to Los Angeles in

1926. Development was swift at the time of annexation. The streets running east-west, all of which were named, were integrated into the numbered Los Angeles road system, and Main Street became 103rd Street.



Plate 1: Watts Station, Main Street (Now 103rd Street), Watts, July, 1912 (Grimes 1972).

In 1925, the 98th Street School was named and opened. Its name was changed to the 99th Street Elementary School in the midst of plans for improvement in 1926 (Los Angeles Unified School District 1973). Late in that year, the Los Angeles Public School system began considering plans for a 12-unit 99th Street Elementary School building, which would cost \$84,000 and rise to two stories with a basement, “with pressed brick exterior facing and tuffa stone trimming” (LAT 1926).

The streets of Watts were initially gas-lit, but by the early 1920s some homes already had electricity. The construction of the Boulder Dam to Los Angeles transmission line—an engineering marvel that extended a distance of 266 miles and used new technology to carry electricity—made reliable and inexpensive electricity possible in this part of Southern California (Scattergood 1935). The line terminated at the Century Receiving Station, on the northeast corner of Century Boulevard and Clovis Avenue, much of which was built in 1926, the year of annexation (Stewart 2008). As of 1944, 85% of the power for Los Angeles came from the Boulder Dam to this station, which was the largest power station operated by the LADWP (LAT 1944). A later line was extended west from the Century Receiving Station paralleling 98th Street in 1946. The line was opposed by residents who feared a drop in property values and the dangers associated with having high voltage power lines so close to their school. Signs were posted in

front of houses along 98th Street, calling it Mayor Fletcher Bowron Street and asserting that the mayor had lost control over the LADWP (Plate 2).



**Plate 2: Sign Protesting the 98th Street Transmission Line, ca. 1946
(LADWP Photo Archive n.d.).**

The area around Central Avenue, which includes the project site, was approximately 1 mile from Watts Station. This made the land less desirable than plots closer to the train depot, and the area was consequently slow to develop. It came to be known as Central Avenue Gardens after its many small farms (*Our Community* [1941] 1965). Nearby is Green Meadows, named for George Wright's ranch that existed at the spot in the middle 19th century (Guinn 1915:2:273). Central Avenue Gardens was settled by small numbers of African Americans in the 1920s to 1940s. Marshall Stimson purchased land in the south of Watts to establish an African-American colony (Stimson 1966). He styled it as a philanthropic gesture to help incoming African Americans own their own homes, but local resident Alfred Belieu described the first land sales to African Americans in Watts as part of a "spite deal" (Ray 1985:15). Regardless, the southern part of Central Avenue Gardens south of Main Street soon came to be called Mudtown, and was a small colony of African-American migrants from the American South (Jimenez y West 2007). According to a history compiled by a teacher at the 111th Street School, "One of the chief aims of the people is for Central Avenue Gardens to become the ideal Colored district" (*Our Community* [1941] 1965:6).

Over the ensuing decades, Watts increasingly became an African-American ghetto. Increasing use of personal automobiles made reliance on trains unnecessary, and the small houses of Watts were increasingly undesirable in contrast with the now more easily accessible suburbs. Large numbers of African Americans came to Los Angeles during the Second Great Migration during and after World War II. The African-American population of Los Angeles County increased eightfold, from 75,000 in 1940 to 600,000 in 1965. These newcomers were excluded from many newer neighborhoods by racially restricted covenants, and found themselves concentrated in the neighborhoods of south and central Los Angeles, including Watts (Collins 1980; Poe [1965] 1977).

Unplanned overpopulation of African-American neighborhoods was compounded by planned concentration of the poor. In 1938, the State of California chartered the Housing Authority of the City of Los Angeles (HACLA), which began to build low-income multi-unit dwellings across Watts in the 1940s (HACLA Fact Sheet 2009; Sitton 2005). Hacienda Village (now Gonzaque Village) was built at 103rd Street and Compton Avenue in 1942. Imperial Courts, located on Imperial Highway at Grape Street, was completed in 1944. Nickerson Gardens was built at 1590 East 114th Street in 1955. Also in 1955, Jordan Downs, a housing complex built for World War II workers adjacent to Jordan High School, was converted to public housing 1955. Race quotas, which froze African Americans out of most subsidized housing, were abolished in 1943; this allowed for an influx of disadvantaged African Americans into the Watts projects. As early as 1942, a Subcommittee of the United States House of Representatives was warned of the possibility of race riots due to simmering tensions related to the “intolerable housing condition” for African Americans in Los Angeles (in Collins 1980:28). By 1950, African Americans made up 71.2% of the population of Watts, and Latinos made up 19.1% (Lopez 1994).

Watts is perhaps best known in the American collective memory for the 1965 Watts Riots, which broke out as the result of alleged police brutality. On August 11, 1965, California Highway Patrolman Lee W. Minikus, a Caucasian motorcycle officer, stopped 21-year-old African-American motorist Marquette Frye on suspicion of driving under the influence of alcohol near the corner of 116th Street and Avalon Boulevard outside Watts. A crowd began to gather while the two were awaiting a squad car. Frye and his family members allegedly became combative, as did members of the crowd. Rumors quickly spread through the neighborhood that the police were brutalizing pregnant and elderly women. As the police withdrew after making several arrests, the crowd began throwing stones at the departing police cars, then at other automobiles, and finally beating motorists (Conot 1968; Governor’s Commission on the Los Angeles Riots 1965).

Fueled by rumors of police brutality and years of pent-up resentment, the violence quickly escalated and spread both inside and outside of Watts. Thousands or tens of thousands participated in the ensuing looting and violence (Plate 3). Over the next 6 days, stores were looted and burned firearms were stolen from stores, and snipers shot from the rooftops. Among their targets were firefighters, who were issued flak jackets and given National Guard protection. According to the official tally, when the National Guard finally restored calm, a total of 977 buildings were looted, burned, or otherwise damaged, and 268 of these were destroyed. In total, 34 people were killed (23 of them by police and National Guard) and 1,032 were injured. The business district of Watts was destroyed, and 103rd Street became known as Charcoal Alley.



Plate 3: Businesses Burn during the Watts Riot, 1965 (New York World-Telegram 1965).

History of the Project Site

The earliest maps of the project vicinity show an undeveloped plain. A single house and a corral are shown on Enrique Abila's "Diseno of Rancho la Tajauta," first drawn in the 1850s (Plate 4). The house is shown standing near a spring. Woods are seen in the north and the west of the land grant and a body of water or swamp appears in the southeast. In addition, five springs and their watercourses are mapped.

The most useful maps for charting the history of the APE are USGS maps. In the 1923 and 1924 Watts 7.5' USGS maps, this region is still largely undeveloped. Main Street (now 103rd Street) ends at Central Avenue. The nearest structure is shown at the northwest corner of Clovis Street and Century Boulevard. Clovis Street terminates at Century Boulevard at this date, and both streets are unpaved.

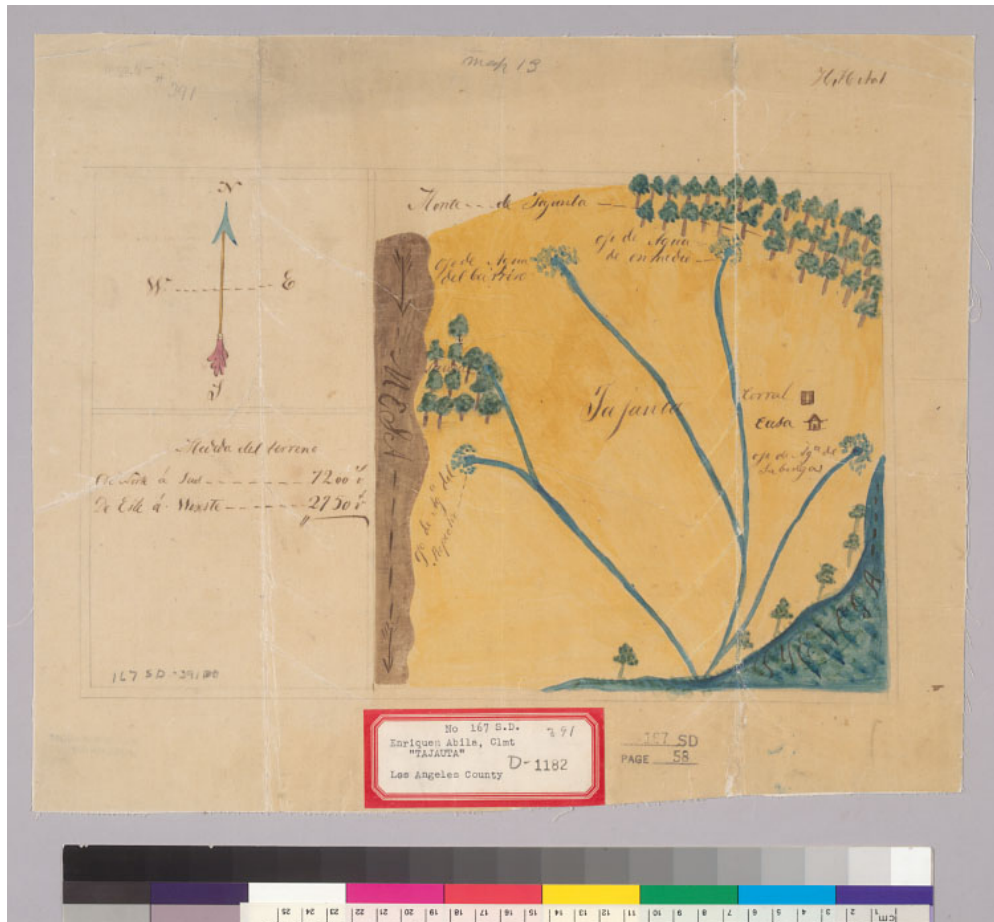


Plate 4: Enrique Abila’s Diseño of Rancho la Tajauta (Calisphere 2011).

By 1937, the Watts 7.5’ USGS map shows that most of Watts has developed. The one exception is the area south of Century Boulevard and west of Clovis Avenue, which remains almost entirely undeveloped. Avalon Street was constructed by 1925. Central Avenue now has its characteristic diagonal bend north of the Century Receiving Station. The Century Receiving Station now appears, bounded by Century Boulevard in the south, 95th Street in the north, Clovis Avenue in the east, and Central Avenue in the west. The 99th Street School is shown, though its footprint is smaller than in later years. The 1937 map shows 99th Street as a through street, and the elementary school lies entirely to the south of this street. One structure is shown within the APE at the northeast corner of Wadsworth Avenue and 99th Street (Plate 5). A power line cuts west from the substation through this block.



Plate 5: 1937 Watts USGS 7.5' Topographic Map, Circle Indicates Project Site.

By the time of the 1950 and 1952 Inglewood 7.5' USGS maps, Watts is so developed that individual, privately owned structures are no longer depicted. The 99th Street Elementary School buildings are still entirely south of 99th Street. The 99th Street Pumping Station complex is coded as private land, and no structures are shown (Plate 6). A 1952 aerial photo shows a structure or structures at the 99th Street Wells Pumping Station site, but the resolution is too poor to describe what stood here (Historic Aerials 2013).



Plate 6: 1950 Inglewood USGS 7.5' Topographic Map, Circle Indicates Project Site.

By the 1964 Inglewood 7.5' USGS map (Plate 7), 99th Street between Wadsworth Avenue and Clovis Avenue was vacated. The area north of 99th Street had become public land. A structure stands at the northeast corner of 99th Street and Wadsworth Avenue, on the present 99th Street Wells Pumping Station property.



Plate 7: 1964 Inglewood USGS 7.5' Topographic Map, Circle Indicates Project Site.

The evolution of the 99th Street school grounds is clear in the USGS maps and in aerial photos (Historic Aerials 2013). As noted in the historic background above, the 99th Street Elementary School was constructed beginning after 1926. Building 1 dates to approximately 1927. The school first appears on the 1937 Watts USGS 7.5' map, where it is shown as three or four buildings, mostly at the east end of the school property (see Plate 5). By the time of the 1950, 1952, and 1957 Inglewood maps, a total of 10 buildings appear on the school campus (see Plate 6). These also appear in a 1952 aerial photo (Historic Aerials 2013). Between 1957 and 1964, the campus changes radically. Building 1 appears on the map, but the cluster of buildings at the west end of the complex has disappeared. These have been replaced by buildings with recognizably different footprints (see Plate 7). Other buildings that appear alongside the main building in the 1937 and later maps appear to be enlarged with additions or replaced entirely by larger structures.

By 1972, further changes to the configuration of the 99th Street Elementary School are evident. These changes are seen in an aerial photograph and photorevised USGS map. The campus has begun to assume its present configuration (Plate 8). All the buildings except Building 1 have been razed. The cluster of buildings east of Building 1 was replaced with a single, smaller building. The foundation of one of the destroyed buildings is still visible in the 1972 aerial photograph. The two buildings that had paralleled 98th Street east of its intersection with Wadsworth Avenue were replaced with a single large building (Building 2). Two new buildings appear south of this long building. In addition, the auditorium north of 98th Street (Building 3) has been constructed as the first school building north of the now-closed street. It is clear that only one building on the original campus, Building 1, survives from the beginning of the school's construction to the present day.



Plate 8: 1964 Inglewood USGS 7.5' Topographic Map, Photorevised 1972, Circle Indicates Project Site; New School Buildings Indicated in Pink.

The destruction of the Watts Riots spared the immediate vicinity of the APE (Plate 9), since the rioting targeted commercial structures. Will Rogers Memorial Park, private homes, and the power substation served as buffers between the 103rd Street business district, which was largely destroyed, and 9880 Wadsworth Avenue. Public buildings like the 99th Street Elementary School were largely spared during the riots. However, much of the discourse concerning improving conditions in Watts after the riots revolved around improving the area's educational system (Turpin 1965; Governor's Commission on the Los Angeles Riots 1965). The influx of money to rebuild and improve Watts after the riot led to the massive campus reorganization described above. The school buildings were indirect casualties of the riot.

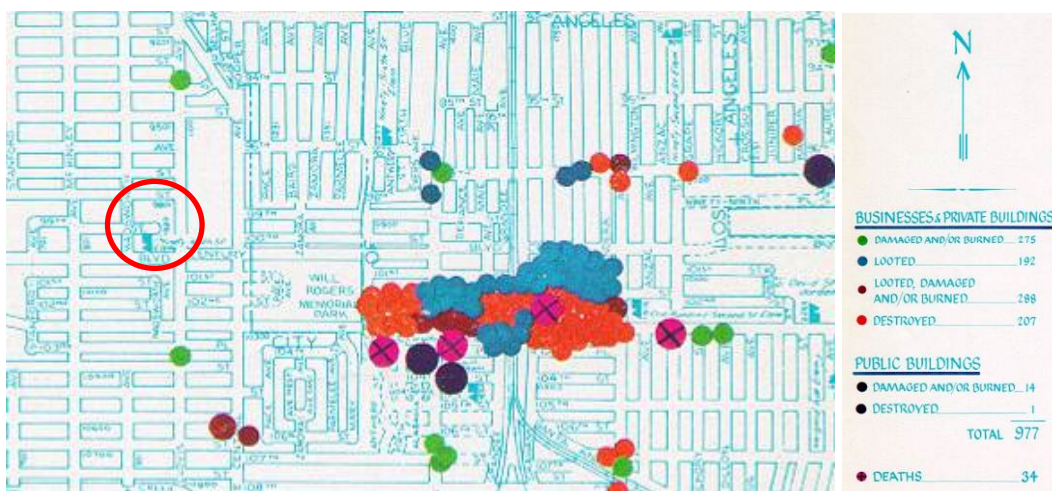


Plate 9: Map of Los Angeles Curfew Area Showing Destruction during Watts Riots (Governor's Commission on the Los Angeles Riots 1965). Circle Indicates Project Vicinity.

ARCHIVAL RESEARCH AND CONTACT PROGRAM

The cultural resources investigation for this project involved archival research and a field survey. The archival research conducted for this project included a records search at the South Central Coastal Information Center (SCCIC), and a sacred lands file (SLF) search.

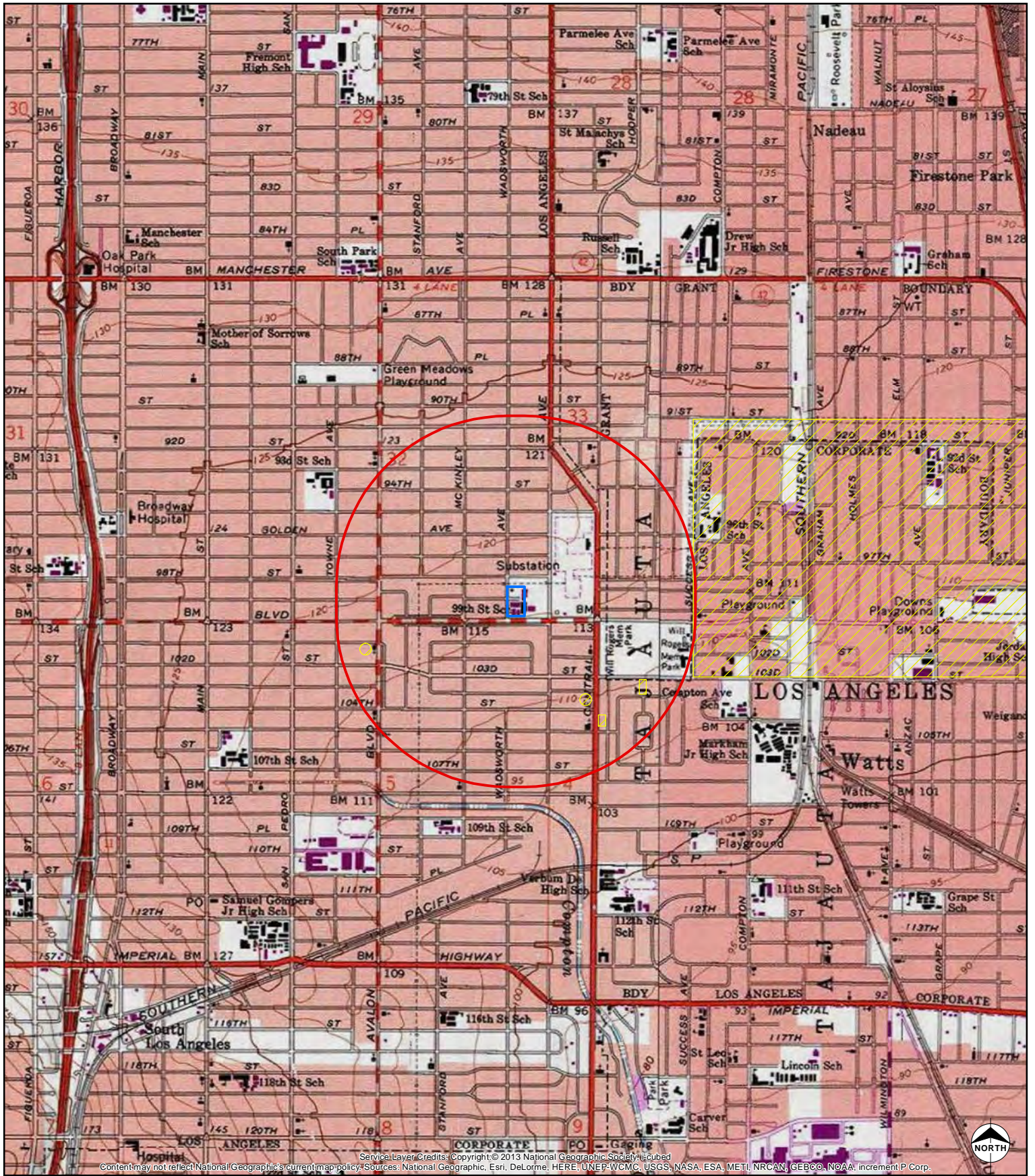
ARCHIVAL RESEARCH

Additional historic research to develop a historical context for the project site was conducted at a number of archival repositories. Archives searched include the Los Angeles Public Library (LAPL), Calisphere (the University of California's digital collections), the California Digital Newspaper Collection, the University of Southern California digital archives, Library of Congress electronic resources, and Navigate LA. Documents searched during the course of the research include book and journal publications, historic newspaper articles, historic photographs, historic maps, and engineering plans.

Records Search

Initial California Historical Resources Information System (CHRIS) archival research of the project site was conducted by Linda Kry on July 17, 2013, at the SCCIC housed at California State University, Fullerton. This was followed by an updated CHRIS records search by Marc Beherec on March 9, 2016. The research focused on the identification of previously recorded cultural resources within a 0.5-mile radius of the proposed project footprint. The archival research involved review of cultural resources site records, historic maps, and historic site and building inventories. The NRHP database and listings for the California State Historic Resources Inventory (HRI), and the California Historical Landmarks (CHL) Register were examined to determine whether any resources in this radius were listed in or had been determined eligible for these registers. The California Points of Historical Interest (CPHI), the California Register of Historical Resources (CRHR), and the City of Los Angeles Historic-Cultural Monuments also were reviewed for resources located within or adjacent to the project site. The SCCIC CHRIS records search results summary is listed in Table 1.

The records search revealed that five cultural resources investigations were previously conducted within a 0.5-mile radius of the project site (Table 2). Two of these investigations are the results of a cultural resources records search and site visit, and the remaining three are survey reports. None of these investigations overlapped the APE (Figure 6).



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Legend

- Previous Cultural Resource Investigation
- Project Area
- Half Mile Buffer

0 2,000
Feet

Scale 1:24,000
1 inch = 2,000 feet

LADWP
99th Street

**Previous Cultural Resources
Investigations Within 0.5-mile
of the Project Footprint**

Date: 6/20/2016 Project: 60334574

AECOM **Figure 6**

Table 1. SCCIC CHRIS Records Search Results Summary¹

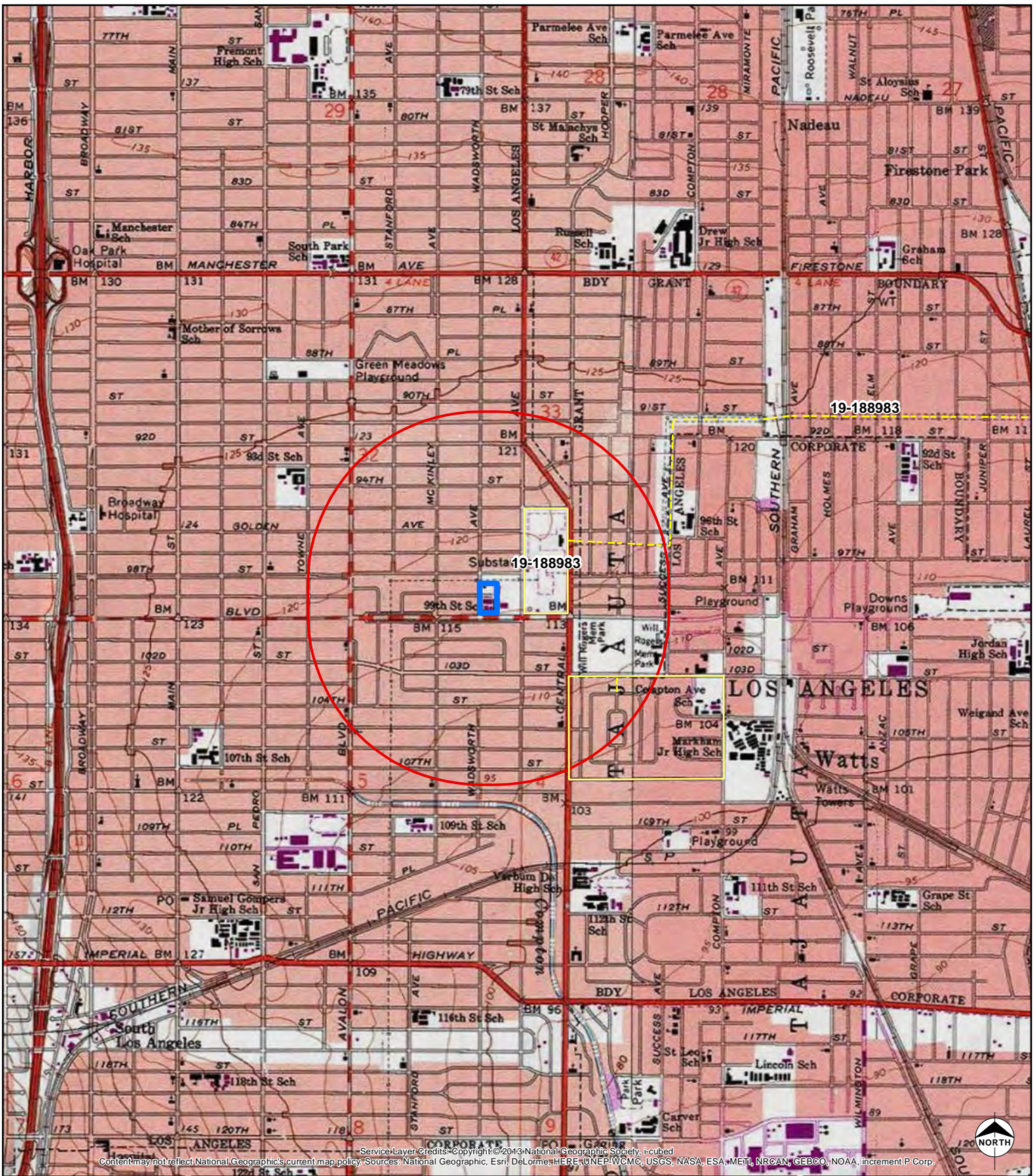
	Within Project Area	Within 0.5 mile Radius of the Project site
Archaeological Resources	0	1
Built-Environment Resources	0	3
Reports and Studies	0	5
National Register of Historic Places (NRHP)	2	3
California State Historic Resources Inventory (HRI)	0	0
California Historical Landmarks Register (CHL)	0	0
California Points of Historical Interest (CPHI)	0	0
California Register of Historical Resources (CRHR)	2	3
City of Los Angeles Historic-Cultural Monuments	0	0

Note: The CHRIS records search was performed by AECOM staff at the SCCIC; therefore no SCCIC issued CHRIS report was provided. This table reports the summary of results found during AECOM's records search from March 2016.

Table 2. Previous Surveys Conducted within 0.5 Mile of the Project

Author	Report # (LA-)	Description	Date
Anderson, Katherine and Mathew Gonzalez	12800	Los Angeles Department of Public Works Stairway and Walkway Lighting Unit 7 Project (W.O. L1250078), City of Los Angeles, California, Historic and Archaeological Resources Survey and Evaluation	2014
Bonner, Wayne H.	8798	Cultural Resources Records Search and Site Visit Results for T-mobile Candidate LA03253b (Friendly Friendship Baptist Church), 10101 South Avalon Boulevard, Los Angeles, Los Angeles County, California	2006
Bonner, Wayne H. and Kathleen Crawford	9508	Cultural Resources Records Search and Site Visit Results for T-mobile Candidate LA03253C (Friendly Friendship 2), 10101 South Avalon Boulevard, Los Angeles, Los Angeles County California	2008
King, Phil V.	8955	Final Report for Year Three Historical and Cultural Resources Survey of Los Angeles: Sylmar, Watts, Crenshaw, and Vermont/Slauson	1983
Wood, Catherine M. and Mark C. Robinson	7691	Archaeological Survey Report for the Imani Fe East and West Project 10345 S. Central Avenue and 10408-10424 S. Central Avenue, Los Angeles, California	2006

The records search indicated that three cultural resources have been previously recorded within 0.5 mile of the project site. All three are built resources (Table 3). None of these resources are located within the APE (Figure 7).



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Legend

- Cultural Resources - Line
- Cultural Resources - Polygon
- Project Area
- Half Mile Buffer

0 2,000
Feet
Scale 1:24,000
1 inch = 2,000 feet

LADWP
99th Street

**Previously Documented
Cultural Resources Within
0.5-mile of the Project Footprint**

Date: 6/20/2016 Project: 60334574

AECOM **Figure 7**

Table 3. Previously Recorded Resources within 0.5 Mile of the Project Site

Permanent Trinomial (CA-LAN-)	P-Number (P-19-)	Description	Date Recorded/ Updated	NRHP/CRHR Eligibility
None	188983	The Boulder Dam – Los Angeles 287.5 kV Transmission Line	08/02/1999; 08/2008	Nominated for NR; listed on CR
None	190948	Zamora Walkway	07/03/2014	Contributor to a district determined eligible for NR by consensus through Section 106 process. Listed in the CR.
None	190949	Paul R. Williams/Parkside Manor Historic District	NA	Found eligible for CR and NR

P-19-188983

This resource is the 40-mile segment of the Boulder Dam – Los Angeles 287.5 kV Transmission Line situated within Los Angeles County. The transmission line consists of two parallel electrical transmission circuits carried on steel lattice towers running approximately 270 miles from the Hoover Dam to Century Receiving Station in Watts. The resource is less than 0.25 mile directly east of the project site. The Boulder Dam – Los Angeles 287.5 kV Transmission Line was determined eligible for inclusion in the NRHP in 1999 under Criteria A and C and its eligibility remained the same when it was reassessed in 2008. This resource is located outside the area of potential effects (APE).

P-19-190948

This resource is the Zamora Walkway. The walkway is an approximately 5-foot-wide and 240-foot-long concrete pedestrian extension of Zamora Avenue constructed ca. 1947 by the Rayden Building Company. The walkway was found eligible for inclusion in the CRHR and the NRHP in 2014 as a contributing feature to the Paul R. Williams/Parkside Manor Historic District, described under P-19-190949, below.

P-19-190949

This resource is the Paul R. Williams/Parkside Manor Historic District. The district consists of approximately five north-south residential blocks and six east-west residential blocks bordered generally by Central Avenue on the west, Compton Avenue on the east, 103rd Street on the north, and 107th Street on the south. The district was developed as a planned residential neighborhood by the Rayden Building Company, which purchased the property from the County of Los Angeles in 1944. The district has been found eligible for the NRHP under Criteria A and C. This resource is located approximately 0.35-mile southeast of the APE.

Ha'utnga

In addition to the documented built resources, a marginal note on the SCCIC's South Gate 7.5' Topographic Map adjacent to the 0.5-mile study area reads, "Possible vicinity of HA'UTNGA." Ha'utnga, or Huutnga, is a Gabrielino place name. As discussed in the section entitled "History of the Project Vicinity: Watts," above, ethnographic evidence indicates that a site named Huutnga existed on property belonging to the Lugo family. Among other holdings, the Lugos possessed Rancho San Antonio, the western boundary of which lay approximately 1.6-mile east of the APE. It is not clear if the SCCIC map's annotator intended to place Huutnga within 0.5-mile of the project APE, or merely somewhere on the South Gate 7.5' Topographic Map. The closest mapped prehistoric or ethnohistoric site documented in the SCCIC archive is CA-LAN-0385, located more than 1.80-mile from the APE.

California State Historic Resources Inventory

The California Office of Historic Preservation's HRI does not list any historic resources within 0.5 mile of the project site.

California Historical Landmarks

A listing of CHLs identified no historic landmarks within 0.5 mile of the project site.

Los Angeles Historic-Cultural Monument Register

A search of the LAHCM register did not identify any historic monuments previously recorded within 0.5 mile of the project.

INTERESTED PARTIES CONSULTATION PROGRAM

Sacred Lands File Search

As part of this investigation, AECOM conducted a Native American contact program on behalf of the LADWP, to inform interested parties of the proposed project and to address any concerns regarding Traditional Cultural Properties or other resources that might be affected by the project. The program involved contacting Native American representatives provided by the Native American Heritage Commission (NAHC) to solicit comments and concerns regarding the project. Two rounds of Native American contact were conducted; the first in 2013 during initial project planning, and the second in 2016 to comply with the SRF application requirements. Documents pertaining to the Native American contact program are attached as Appendix B.

A letter was prepared and mailed to the NAHC on July 25, 2013. The letter requested that a Sacred Lands File check be conducted for the project and that contact information be provided for Native American groups or individuals that may have concerns about cultural resources in the project site. The NAHC responded in a letter dated July 29, 2013. The letter indicated that "A record search of the NAHC Sacred Lands File failed to indicate the presence of Native American traditional cultural places" in the project site. However, the letter also noted "the NAHC SLF inventory is not exhaustive; therefore, the absence of archaeological or Native American sacred places does not preclude their existence." The letter included an attached list of Native American contacts who may have knowledge of cultural resources in the vicinity of the project site.

Letters were mailed on August 6, 2013, to each group or individual provided on the NAHC contact list (Table 4). Maps depicting the project site and response forms were attached to each letter (see Appendix B). One response was received for the first round of Native American contact and the results are reported in Table 4.

Table 4. Native American Contacts – August 2013

Native American Contact	Letter Sent	Date of Reply	Follow-Up	Response
Bernie Acuna Gabrielino-Tongva Tribe	08/06/2013	n/a	09/10/2013: Left voicemail message	No response
Conrad Acuna Gabrielino-Tongva Tribe	08/06/2013	n/a	09/10/2013: Left voicemail message	No response
Cindi Alvitre Ti' At Society/Inter-Tribal Council of Pimu	08/06/2013	n/a	09/10/2013: Left voicemail message	No response
Ron Andrade, Director Los Angeles Native American Indian Commission	08/06/2013	n/a	09/10/2013: Left voicemail message	No response
Linda Candelaria, Chairwoman Gabrielino-Tongva Tribe	08/06/2013	n/a	09/10/2013: Left voicemail message	No response
Robert Dorame Gabrielino Tongva Indians of California Tribal Council	08/06/2013	n/a	09/10/2013: Spoke with Mr. Dorame via telephone	Mr. Dorame stated that he is not familiar with the area but believes there is a site in the area. Mr. Dorame did not provide any further information pertaining to the site he mentioned.
Sam Dunlap Gabrielino Tongva Nation	08/06/2013	n/a	09/10/2013: Left voicemail message	No response
Anthony Morales Gabrielino/Tongva San Gabriel Band of Mission Indians	08/06/2013	n/a	09/10/2013: Left voicemail message	No response
John Tommy Rosas Tongva Ancestral Territorial Tribal Nation	08/06/2013	n/a	09/10/2013: Left voicemail message	No response
Andy Salas, Chairperson Gabrielino Band of Mission Indians	08/06/2013	n/a	09/10/2013: Left voicemail message	No response

A second letter was sent to the NAHC on April 18, 2016. The letter requested that a Sacred Lands File (SFL) check be conducted for the project and that contact information be provided for Native American groups or individuals that may have concerns about cultural resources in the project site. The NAHC responded in a letter dated and emailed April 25, 2016. The letter noted, “A search of the SFL was completed for the USGS quadrangle information provided with negative results.” The letter included a list of six Native American representatives who may have information about, or interest in, the project APE.

Letters were sent to each of the original individuals contacted, as well as each of the individuals on the NAHC’s list, on April 26, 2016. Letters were sent to the most recent address on file of a total of 12 individuals (Table 5). To date, eight individuals have been in contact about the project and five responses have been received. The results are reported in Table 5 below.

Table 5. Native American Contacts – April 2016

Native American Contact	Letter Sent	Date of Reply	Follow-Up	Response
Bernie Acuna Gabrielino-Tongva Tribe	04/26/2016	n/a	05/13/2016: Left voicemail message	No response
Conrad Acuna Gabrielino-Tongva Tribe	04/26/2016	n/a	n/a	No additional contact information is provided for Mr. Acuna and no response has been received.
Cindi Alvitre Ti’ At Society/Inter-Tribal Council of Pimu	04/26/2016	n/a	05/13/2016: Left voicemail message	No response
Ron Andrade, Director Los Angeles Native American Indian Commission	04/26/2016	n/a	05/13/2016:	Number provided was disconnected. No response received.
Linda Candelaria, Chairwoman Gabrielino-Tongva Tribe	04/26/2016	n/a	05/13/2016	In a follow up phone conversation Ms. Candelaria stated that she had turned the project over to someone else and that she would have them contact us. A phone number was provided so that the individual she assigned to the project could respond to the project.
Robert Dorame Gabrielino Tongva Indians of California Tribal Council	04/26/2016	n/a	05/13/2016	In a follow up phone conversation Mr. Dorame requested that we send him an email with the letter and map so that he could review the project. He also stated that a response will be provided if family or tribal members who live, have lived, or are familiar with the project area are identified. Mr.

Native American Contact	Letter Sent	Date of Reply	Follow-Up	Response
				Dorame stated that if we do not hear back from him that the tribe does not have a comment on the project. An email was sent to Mr. Dorame at address gtongva@verizon.net the same day.
Sam Dunlap Gabrielino Tongva Nation	04/26/2016	n/a	05/10/2016	Mr. Dunlap stated that he has no specific concerns about this project, but he always recommends archaeological monitoring and Native American monitoring by a member of the Gabrielino/Tongva Nation because unexpected finds may occur.
Sandone Goad, Chairperson Gabrielino/Tongva Nation	04/26/2016	n/a	n/a	Ms. Goad was not contacted for a follow up call due to the fact that she regularly requests we contact Mr. Dunlap for comment. Because we were able to contact Mr. Dunlap we determined there was no need to call Ms. Goad.
Anthony Morales Gabrielino/Tongva San Gabriel Band of Mission Indians	04/26/2016	n/a	05/13/2016	Mr. Morales was reached in the course of follow up calls. Mr. Morales stated that the presence of the project near where water used to flow and the presence of Gabrielino villages in the vicinity indicate the project area is sensitive. Mr. Morales stated that he recommends archaeological monitoring and Native American monitoring to be done, and that members from his tribal council for the Gabrielino/Tongva San Gabriel Band of Mission Indians be the ones to do the work. Mr. Morales also requested that he be kept updated on the progress on this project as it moves forward.

Native American Contact	Letter Sent	Date of Reply	Follow-Up	Response
Joseph Ontiveros, Cultural Resource Department Soboba Band of Luiseno Indians	04/26/2016	n/a	05/13/2016	In a follow up phone call Mr. Ontiveros was contacted. Mr. Ontiveros followed this with a letter. Mr. Ontiveros stated that Soboba Band has no specific concerns with the project, but does recommend Native American monitoring. He would like to defer to Anthony Morales of the Gabrielino/ Tongva San Gabriel Band of Mission Indians, who was also contacted about the project.
John Tommy Rosas Tongva Ancestral Territorial Tribal Nation	04/26/2016	n/a	05/13/2016	Mr. Rosas responded by email on April 26, 2016 indicating that he received our letter and that he would review the document and respond at a later date. Mr. Rosas was contacted by phone when we had not heard back from him. In the follow up phone call Mr. Rosas stated that he had not yet had time to review the documents and that he would respond at a later date.
Andy Salas, Chairperson Gabrielino Band of Mission Indians	04/26/2016	05/03/2016	n/a	Chairperson Salas responded via email. He states that the village of Tajauta or Tajuatagna (but not Huutnga) is in the vicinity of the project, and included a scan from McCawley 1996: 57. Mr. Salas states, " <i>Given all the above, the proper thing to do for your project would be for our Tribe to monitor ground disturbing construction work.</i> "

CULTURAL RESOURCES SURVEY RESULTS

A cultural resources field survey of the project site was conducted by Marc Beherec, Ph.D., RPA, and Linda Kry on July 23, 2013. Pedestrian survey was conducted within the APE and all portions of the project site, including the existing 99th Street Wells Pumping Station, the site of the proposed chloramination station, and the proposed laydown area to the north of the existing Pumping Station. The cultural resources survey included identification of archaeological and built environment resources.

Cultural resources identified during the surveys were documented on appropriate Department of Parks and Recreation (DPR) 523 forms. These included a Primary Form (Form 523A) and Location Map (Form 523J), at a minimum. Some resources required Building, Structure, and Object Record (523B), Sketch Map (Form 523K), and/or Continuation Sheets (Form 523L). Resource locations were determined using a Global Positioning System unit. All completed DPR site forms will be sent to the SCCIC for the assignment of permanent numbers in the state inventory system prior to finalizing this report. DPR forms are included in this report in Appendix C.

ARCHAEOLOGICAL SURVEY

The archaeological survey focused on the identification of any surface evidence of archaeological materials in the project footprint. The pedestrian survey encompassed the areas that would be disturbed by the project. All unpaved and undeveloped portions of the site were walked in transects of 15 meters or less.

Proposed Chloramination Station Building Site

The proposed chloramination station building site lies south of the 99th Street Wells Pumping Station complex and north of a closed portion of 99th Street (Plate 10). This area is currently partially overgrown with low grasses, and visibility is approximately 50%. There is great deal of bioturbation, probably due to pocket gopher activity. Soils consist of fine to coarse-grained tan silty sand with small amounts of gravel. No artifacts were observed in this area.



Plate 10: Proposed Chloramination Station Building Site.

99th Street Wells Pumping Station

The 99th Street Wells Pumping Station consists of six buildings, an electric transformer, and a concrete forebay-covering. More than 50% of the ground surface within the existing complex is developed. The exposed soils consist of light brown coarse-grained silty sand mixed with small pebbles. Visibility within the fenced site was about 75%. Sparse grasses and some landscaping, particularly along the fence line paralleling Wadsworth Avenue, obscured the remaining 25% of the surface area. A sparse scatter of clear bottle glass and building materials including brick, porcelain, and tile fragments; ceramic insulator fragments; metal hardware; and vitrified sewer pipe fragments, as well as a concentration of unidentified corroded ferrous metal fragments, were observed on the grounds. These materials may be recent in origin. No prehistoric artifacts or diagnostic historic artifacts were observed.

Proposed Lay-Down Area

North of the existing 99th Street Wells Pumping Station complex is a small park beneath power lines. An access gate in the north fence accesses the existing complex from this park, and the proposed lay-down area is directly north of this gate (Plate 11). This area is largely free of vegetation and debris, and visibility was greater than 95%. Soils resembled those in the north end of the existing Sanitation Complex. No artifacts were observed on the surface in this area.



Plate 11: Overview of Proposed Lay-Down Yard, View West.

Potential for Archaeological Resources

Prehistoric Site Potential

Review of previous investigations in the vicinity of the project and of the prehistoric context for the area provides an understanding of the potential for encountering prehistoric sites in the project site. The important factors to consider in constructing such a model include elevation, soil conditions, proximity to water sources, and proximity to raw materials. In addition, subsequent land use is an essential factor in whether archaeological remains have been preserved.

Currently, the water sources shown in historic maps of the 99th Street area are dried up or tamed, often to provide water for the City of Los Angeles. However, historically Tajuata was known for its swamps, springs, and artesian wells. The alluvial soil was laid down by meandering rivers, such as predecessors of the modern Los Angeles River. Current water sources do not reflect the relatively recent past. For example, as late as 1938, the Watts Canal was a popular fishing spot at the intersection of Central Avenue and 106th Street, less than 0.5 mile southeast of the APE (*Watts Advertiser-Review* 1938; *Our Community* [1941] 1965). Rich soil and once abundant waters may have made this area desirable for indigenous peoples.

It is possible that prehistoric resources could be buried beneath the ground surface, especially in areas where development has included only minimal ground disturbance. The proposed building site is undeveloped and may therefore hold intact prehistoric deposits, with the likelihood increasing with depth.

Historic Period Site Potential

The Watts area has been utilized as ranchland since the Spanish period. The lands lay within the grazing area of Mission San Gabriel Arcangel, and not far from important routes to San Pedro. The land was ranched as part of Rancho la Tajuata as early as 1820. But no indications of early development were encountered during historical research. From 1926, the 99th Street Elementary School has existed just south of the property, and homes began to spring up nearby in the first quarter of the 20th century. A building appears on the site in 1937 topographic maps. There is some potential to encounter archaeological resources associated with these historic uses within the project site.

HISTORIC ARCHITECTURAL RESOURCES SURVEY

As part of the cultural resources field investigation, the project footprint and surrounding areas were surveyed for historic architectural resources that have the potential to be impacted by the project.

Resources that were or appeared to be 45 years or older and have the potential to be impacted, directly or indirectly by project activities, were recorded with digital photographs and evaluated under criteria for listing in the NRHP and CRHR. Two resources were identified in the APE and are discussed below.

99th Street Wells Pumping Station (P-19-192306)

The 99th Street Wells Pumping Station is a complex located at 9880 Wadsworth Avenue that contains six buildings, and a concrete forebay and sand trap. Building 1 is identified as the old pumping station building, located at the center of the complex (Plate 12). It is a one-story concrete building with a square plan, smooth concrete exterior walls that contain recessed panels, and a low-pitched hipped asphalt roof. The south façade contains offset double doors. The building does not contain windows. Building 1 is a utilitarian building that is currently used as the Chemical Analyzer Building and houses chemicals. Based on LADWP records, Building 1 was built in the late 1940s.

The remaining buildings in the complex are also utilitarian and were constructed after 1972. Building 2 (built between 1972 and 1980), the current pumping station, is a one-story building with a square plan and exaggerated hipped roof with wide, overhanging eaves that is located immediately north of Building 1 (Plate 13). Building 3 (built post-1972) is an ancillary concrete block shed restroom with a square plan and hipped roof (Plate 14). Building 4 (built post-1972) is a one-story brick building with two connected sections that currently functions as the Chlorination Building, and will be used as a storage facility after the completion of the proposed Chloramination Station Building (Plate 15). Building 5 (built between 1980 and 2003) is a one-story concrete structure that functions as the Corrosion Inhibitor Building (Plate 16). Building 6 (built post-1972) is a one-story concrete building that serves as a Fluoridation Building (Plate 17). In the center of the complex is the concrete roof of a 215,000-gallon forebay and sand trap (Plate 18). Numerous functional alterations have occurred around the complex, including the various years of construction of the existing buildings, and the additions of several pipes and an exterior safety shower.



Plate 12: 99th Street Wells Pumping Station Building 1, View Facing North.



Plate 13: 99th Street Wells Pumping Station Building 2, View Facing Southwest.



Plate 14: 99th Street Wells Pumping Station Building 3, View Facing Northeast.



Plate 15: 99th Street Wells Pumping Station Building 4, View Facing Northwest.



Plate 16: Building 5, Oblique View to Southwest.



Plate 17: Building 6, North Façade, View to Southwest.



Plate 18: Concrete Forebay and Sand Trap Cover, View South.

99th Street Elementary School (P-19-192305)

The 99th Street Elementary School is a complex that contains several buildings, three of which are or may be 45 years or older, face the project area, and are identified as Buildings 1, 2, and 3 (see Figure 5). The remaining school buildings were built after 1972 (based on USGS topographic maps and aerial photographs).

Building 1 (Plate 19) is a two-story concrete school building with a rectangular plan, paired multi-pane windows with transoms above, a hipped gabled tile roof with gable vents, an addition to the north, an addition to the south, and a brick arcade breezeway attached at its northeast corner (Plate 20). It may have a full basement. The additions are one-story and have similar fenestration. These were added at an unknown date.

Building 2 (Plate 21) is a two-story school classroom building with a rectangular plan, tilt up concrete or masonry walls, vinyl or aluminum windows in the side elevations, and a low-pitched front-gabled roof that is oriented towards Wadsworth Avenue. The central entrance is in the west façade and consists of double-doors in a brick veneer exterior with open bays in the wide gable. It was built between 1964 and 1972.

Building 3 (Plate 22) is the two-story school auditorium building with a rectangular plan, concrete or masonry exterior walls, and a low-pitched gable roof with clerestory windows in the gable. It is designed in the same style as Building 2 and was built between 1964 and 1972.



Plate 19: 99th Street Elementary School Building 1 (at left), View Facing Northwest.



Plate 20: 99th Street Elementary School Building 1, North Side, View Facing Southwest



Plate 21: 99th Street Elementary School Building 2, View Facing South



Plate 22: 99th Street Elementary School Building 3, View Facing South

EVALUATION AND MANAGEMENT RECOMMENDATIONS

Archival research and a cultural resources survey identified 5 cultural resources within 0.5 mile of the project APE (Figure 8). Of these, 2 lay within the APE. These resources are the 99th Street Wells Pumping Station (P-19-192306) and the 99th Street Elementary School (P-19-192305). The following discussion evaluates these resources for eligibility for listing on the NRHP and CRHR, and provides management recommendations for these resources and potential unanticipated discoveries.

REGULATORY SETTING

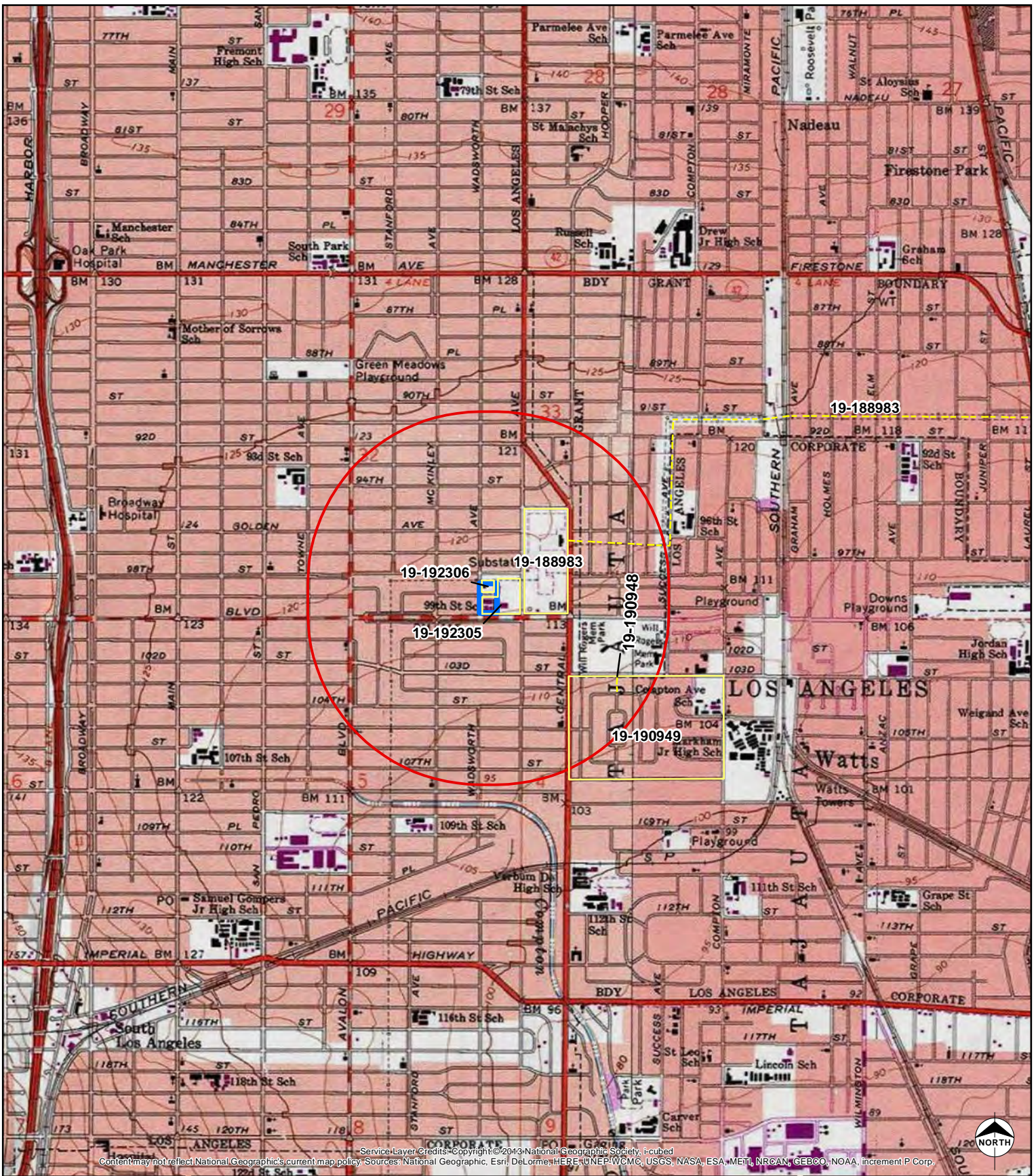
Cultural resources in California are protected by a number of federal, state, and local regulations, statutes, and ordinances. Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. State and federal laws use different terms for cultural resources. California state law discusses significant cultural resources as “historical resources,” whereas federal law uses the terms “historic properties” and “historic resources.” In all instances where the term “resource” or “resources” is used, it is intended to convey the sense of both state and federal law.

NRHP

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

A resource meeting one or more of the National Register criteria must also retain the essential physical features that enable it to convey its historic identity. The quality of significance is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property will always possess several, and usually most, of the aspects.



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Legend

- Cultural Resources - Line
- Cultural Resources - Polygon
- Project Area
- Half Mile Buffer

0 2,000
Feet
Scale 1:24,000
1 inch = 2,000 feet

LADWP
99th Street

**Cultural Resources
Within 0.5-mile of the
Project Footprint**

Date: 6/20/2016 Project: 60334574

AECOM Figure 8

CRHR

The CRHR was created to identify resources deemed worthy of preservation on a state level and was modeled closely after the NRHP. The criteria are nearly identical to those of the NRHP but focus on resources of statewide, rather than national, significance. The CRHR consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process.

The criteria for eligibility of listing in the CRHR are based on NRHP criteria but are identified as 1 through 4 instead of A through D. To be eligible for listing in the CRHR, a property must be at least 50 years of age and possess significance at the local, state, or national level, under one or more of the following four criteria:

1. It 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; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, historic resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

RESOURCES EVALUATION AND FINDING OF EFFECT

A thorough pedestrian survey of the study area did not result in the identification of any previously unknown archaeological resources. Two historic architectural resources were identified in the APE and evaluated based on NRHP and CRHR criteria (see below).

99th Street Wells Pumping Station (P-19-192306)

The 99th Street Wells Pumping Station does not meet the criteria to be eligible for the CRHR or NRHP. The complex, originally established in the late 1940s, was built during the postwar development of Watts and the City of Los Angeles. It currently serves as a chlorination station within the LADWP's potable water supply system. The water supply is pumped through the complex, where the water is tested and treated to make it potable. The complex has had several alterations for functional reasons several times in the past, including the addition of new buildings. The complex currently contains six buildings and a concrete forebay and sand trap.

Only one of these buildings, Building 1, the original pump station, is over 45 years old. The remaining complex buildings and structures were built post-1972.

The complex is associated with postwar and late 20th century development in the Watts community and the City of Los Angeles, but the buildings and their utilitarian functions have not had an important or specific historic role, nor are they 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 (NRHP Criterion A; CRHR Criterion 1). Research has not revealed an association between the water treatment facility and any specific historical figures or any person whose life was important to local, California, or national history (NRHP Criterion B; CRHR Criterion 2). The water treatment facility, including the pumping station, the auxiliary buildings, the forebay and the sand trap, are utilitarian in construction, and typical of their types dating from the late 1940s (Building 1 only) and the 1970s. The complex, including its individual buildings and structures, does not embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master, or possess high artistic values (NRHP Criterion C; CRHR Criterion 3). It is unlikely to yield information important in the prehistory or history of the local area, California, or the nation (NRHP Criterion D; CRHR Criterion 4). The resource does not meet the level of significance to meet either NRHP criteria A through D or CRHR criteria 1 through 4. It is not eligible for the NRHP or the CRHR.

99th Street Elementary School (P-19-192305)

The 99th Street Elementary School does not meet the criteria to be eligible for the NRHP or the CRHR. Established in 1925 as the 98th Street School, renamed in 1926 as the 99th Street School, and expanded with substantial school buildings in 1927, this public school was established during the early development of Watts and its annexation to the City of Los Angeles. The school campus includes several buildings, but only one dates to 1927, and two others were built at an unknown date between 1965 and 1972. All other buildings on the campus were built post-1972.

The 99th Street Elementary School is associated with early residential development and the expanding educational system in Watts during the early 20th century. However, the school does not appear to have specific associations with any historic 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 (NRHP Criterion A; CRHR Criterion 1). Research has not revealed any specific associations with a person whose life was important to local, California, or national history (NRHP Criterion B; CRHR Criterion 2). The complex contains a mix of architectural styles, the most prominent being Spanish Eclectic (Building 1) and late 20th century Modern (Buildings 2 and 3). The method of construction is typical for both eras and is not unique. As a complex, it does not have a stylistic unity, and as individual buildings, they do not exhibit architectural significance. The school complex does not embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master, or possess high artistic values (NRHP Criterion C; CRHR Criterion 3). The resource is unlikely to yield information important in the prehistory or history of the local area, California, or the nation (NRHP Criterion D; CRHR Criterion 4). The resource does not meet the level of significance to meet either NRHP criteria A through D or CRHR criteria 1 through 4. It is not eligible for the NRHP or the CRHR.

Finding of Effect

Based on the evaluation of the above resources, neither the 99th Street Wells Pumping Station (P-19-192306) nor the 99th Street Elementary School (P-19-192305) is eligible for the NRHP or the CRHR. As such, a finding of no historic properties affected pursuant to 36 CFR Part 800.4(d)(1) applies to this undertaking.

RECOMMENDATIONS

Paleontological Recommendations

A consultation of the USGS *Preliminary Geologic Map of the Los Angeles 30' x 60' Quadrangle, Southern California* (Yerkes and Campbell 2005) shows that the 99th Street Wells Pumping Station and surrounding area consist of younger Quaternary Alluvium. The field visit did not reveal the presence of any local conditions that would contradict this assertion or require special consideration. These deposits are younger than 10,000 years old. Consequently, such deposits have a low probability of yielding fossils, including vertebrate fossils or other scientifically significant fossils. Excavation is not to exceed 9 feet in depth for any component of the proposed project, and therefore is not anticipated to disturb any other subsurface deposits or formations. No mitigation is typically required in deposits of this nature (Christensen 2007; Scott and Springer 2003).

Archaeological Recommendations

Based on the results of the archival research and survey, there is low potential that archaeological resources will be encountered during ground disturbing activities for the proposed project. Ground disturbance required for the proposed project will not exceed 9 feet in depth. If archaeological resources are encountered during ground disturbing activities, LADWP will contact a qualified archaeologist to evaluate and determine appropriate treatment for the resource in accordance with 36 CFR § 800.13(b) (3) and California Public Resource Code (PRC) Section 21083.2(i). If any archaeological resources are encountered during ground-disturbing activities, work will be temporarily halted in the vicinity of the find and the archaeologist will be called to the project site to examine and evaluate the resource in accordance with the provisions of NHPA and CEQA. If any Native American cultural material is encountered within the project site, consultation with interested Native American parties will be conducted to apprise them of any such findings and solicit any comments they may have regarding appropriate treatment and disposition of the resources. If human remains are discovered, work in the immediate vicinity of the discovery will be suspended and the Los Angeles County Coroner contacted. If the remains are deemed Native American in origin, the Coroner will contact the NAHC and identify a Most Likely Descendant (MLD) pursuant to Public Resources Code 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.

Historic Architectural Resources Recommendations

Two historic architectural resources that were 45 years old or older were identified as a result of the intensive survey. The 99th Street Wells Pumping Station was originally built in the late 1940s; the current complex contains one original building and several modern (post-1972) utilitarian buildings, and is the site of the proposed project. The 99th Street Elementary School was originally built as the 98th Street School in 1925, renamed in 1926, and expanded in 1927; the current complex includes one original building from 1927 and several later additions. The complex is located to the south of the project site. These two resources were evaluated and did not meet criteria for listing in the NRHP or the CRHR.

As such, there are no historic properties or significant historical resources within the APE and a finding of no historic properties affected has been determined. No further work is recommended concerning historic architectural resources.

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APPENDIX A

RESUMES

Heather Gibson, PhD, RPA

Archaeologist

Education

Ph.D., with distinction, Anthropology, Syracuse University, Syracuse, NY, 2007
M.A., Anthropology, Syracuse University, Syracuse, NY, 2004
B.A., magna cum laude, Anthropology and French, University of Notre Dame, 1998

Professional Affiliations

Member, Society for California Archaeology
Member, Society for Historical Archaeology
Member, Register of Professional Archaeologists
Member, Society for American Archaeology

Training

National Preservation Institute, Section 106 Review for Experienced Practitioners (2012)
National Preservation Institute, Section 106 Basics (2010)

Grants + Awards

2008, Doctoral Prize, Syracuse University
2008, Certificate in University Teaching, Syracuse University
2007–2008, Post-doctoral Fellowship, Mellon French Atlantic History Group, McGill University
2006, Maxwell Dean's Dissertation Fellowship, Syracuse University
2004–2005, Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) grant, US Department of Education
2001–2004, 2005–2006, University Fellow, Syracuse University

Heather Gibson is an anthropologically trained archaeologist with 11 years of research experience. Her archaeological experience includes archival research, surveys, and excavations at sites in the United States and Caribbean. As an historical archaeologist who has worked on a range of 18th, 19th, and 20th century sites, she has deep knowledge of historic material culture. She has served as project archaeologist and principal investigator on cultural resources and environmental projects in compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) for public and private sector clients including a range of local and federal agencies. Dr. Gibson meets the Secretary of the Interior's professional qualification standards in both history and archaeology. She has been awarded numerous grants for her research and is the author of journal articles and papers presented at national and international conferences.

Project Experience

Elysian Park – Downtown Water Recycling Pipeline Phase I Study and Archaeological Discovery and Treatment Plan, Los Angeles Department of Water and Power, Los Angeles, CA

Principal investigator and report author for Phase I study in compliance with CEQA and Section 106 of the NHPA. Conducted background research, pedestrian survey, and analysis of archaeological potential for project area. Drafted technical report and archaeological treatment plan, including treatment recommendations for the historic Los Angeles *zanja* water conveyance system.

Los Angeles Department of Water and Power, Van Norman Complex Water Quality Improvement, Phase I Cultural Resources Assessment, Los Angeles, CA

Project archaeologist and technical report co-author for Phase I archaeological study in compliance with CEQA. Conducted background research and analysed impacts of proposed facility upgrades to cultural resources.

City of Los Angeles Harbor Department, WWL Vehicle Cargo Terminal at Berths 195-200A Phase I Archaeological Study, Los Angeles County, CA

Project archaeologist and technical report co-author for Phase I archaeological study in compliance with CEQA. Conducted background research, developed historic context, and analysed impacts of proposed facility upgrades to cultural resources.

SWCA Environmental Consultants/County of Los Angeles, Los Angeles Plaza Cemetery Technical Report, Los Angeles, CA

Primary author and project manager for analysis of historic artifact assemblage excavated from 19th century cemetery site. Provided laboratory analysis of 19th century historic material culture, created descriptive artifact catalog, conducted additional research to identify and date artifacts, and authored report chapter for technical study in compliance with Section 106.

City of Los Angeles Department of Public Works, Aiso Street Parking Facility Archaeological Assessment, Los Angeles, CA

Archaeological and paleontological monitoring for this project resulted in discovery of seven 19th and 20th century features and more than 100 isolated artifacts. The features were documented, excavated, and evaluated for their significance under CEQA. Tasks included analysis of results and authoring final report documenting construction monitoring, describing features and artifacts that recovered, and evaluating their significance.

City of Los Angeles Department of Public Works, Alameda Street/Spring Street Arterial Redesign Phase II Archaeological Resource Assessment, Los Angeles, CA

Archaeological monitoring was conducted for this project during construction activities related to widening of Alameda Street. During the course of monitoring, archaeologists discovered historic archaeological resources related to the late 19th and early 20th century use of the area. Resources discovered included a segment of the original Zanja Madre irrigation system, railroad elements, and the original brick pavement of Alameda Street located under the present roadway. Mitigation in compliance with CEQA was developed to address each of the resource types, and included documentation, avoidance, and removal. As project archaeologist, conducted analysis of results and authored final report. Report documents the construction monitoring, describes the features and artifacts that were recovered, and evaluates their historic significance.

California High Speed Rail Authority, California High-Speed Train, Fresno to Merced Cultural Resources Inventory, Fresno and Merced Counties, CA

Project historian who conducted built environment fieldwork to record and evaluate historic resources for railway alignment and affiliated parcel acquisitions. Evaluated resources within the Area of Potential Effects to recommend eligibility to the National Register of Historic Places and California Register of Historic Resources. Project archaeologist for development of treatment plans to address project impacts to archaeological resources.

Los Angeles Unified School District, Central Los Angeles High School #9, Los Angeles, CA

Project archaeologist providing senior review, report content, and report editing for 19th century cemetery project. Project includes data recovery of archaeological materials in connection with the 19th century Los Angeles City Cemetery in downtown Los Angeles, which were discovered during archaeological monitoring of the demolition and grading phases of construction at the Central Los Angeles Area New High School #9. The project team coordinated with the Los Angeles County Coroner and office of Vital Statistics to obtain disinterment permits; developed a mitigation plan incorporating the components related to the future disposition of remains, artifact curation, and commemoration; and conducted laboratory analysis of artifacts and human remains. A technical report documenting the history of the cemetery, its role in 19th-century Los Angeles, and the results of the osteological and artifact analysis is currently being prepared. Responsibilities included reviewing the technical report, drafting necessary sections to provide synthesis, and coordinating supplementary analysis necessary for project completion.

Tessera Solar, Imperial Valley Solar Project, Imperial County, CA

Project archaeologist for Bureau of Land Management (BLM) Class III intensive pedestrian survey, resource documentation, and site evaluation efforts for an approximately 6,500-acre solar power project on BLM land under a Fast-Track American Recovery and Reinvestment Act funding schedule. AECOM services included field investigations, preparation of cultural resource documents, and Section 106 consultation. As designed, the project was crossed by the Congressional-designated Juan Bautista de Anza National Historic Trail corridor. Responsibilities pertained to the portion of the project area that overlays the National Historic Trail corridor. Consultation on the disposition of the trail corridor involved hiring subconsultants to do specialized analysis; summarizing consultant findings for presentation to BLM and consulting parties (State Historic Preservation Office, National Park Service, and National Trust for Historic Preservation, and others); and drafting a synthetic technical report.

National Park Service, Four Trails Feasibility Study Environmental Assessment, CA, CO, IA, ID, KS, MO, NE, OK, OR, NV, UT, WA, WY

Project archaeologist for feasibility study for revisions to the California, Mormon Pioneer, Pony Express, and Oregon National Historic Trails. Role includes background research, analysis of existing conditions, and assessment of impacts to archaeological resources. Prepared archaeological resources sections for EA.

National Park Service, Butterfield Overland Trail Environmental Assessment, AK, AR, CA, MO, NM, OK, TX

Project archaeologist for special resource study to evaluate feasibility of adding the Butterfield Overland trail as a national historic trail. Role includes background research, analysis of existing conditions, and assessment of impacts to archaeological resources. Prepared archaeological resources sections for EA.

Ukraine Famine-Genocide Memorial Commission and National Park Service, Ukraine Famine-Genocide Memorial Environmental Assessment and Phase I Archaeological Study, Washington, D.C.

Project archaeologist for memorial commission who conducted archival research and analysis of potential impacts to archaeological resources for this NEPA and Section 106 project. Evaluated impacts to archaeological resources for multiple proposed project design alternatives and prepared corresponding Environmental Assessment sections. Prepared Phase IA archaeological report following District of Columbia guidelines. Coordinated archaeological studies with State Historic Preservation Office on behalf of the client.

Department of State, Potomac Annex Feasibility Study, Washington, DC

Project archaeologist who conducted archival research, archaeological site visit, and preliminary study of potential impacts to archaeological resources. Worked with client to design a strategy for early consideration of cultural resources in the design phase. Prepared memo detailing historic background, known archaeological resources, archaeological potential of project area, and recommended steps for identification and evaluation of archaeological resources. Participated in client meetings to present results.

National Park Service, Vietnam Veterans Memorial Education Center Environmental Assessment, Washington, DC

Project archaeologist for National Environmental Policy Act (NEPA) and Section 106 project. Conducted background research and analysis of archaeological sensitivity for project APE. Evaluated impacts to archaeological resources for multiple proposed project design alternatives and prepared Environmental Assessment

archaeological resources sections. Coordinated archaeological studies with State Historic Preservation Office on behalf of client.

General Services Administration, Mary E. Switzer Building Site Improvements, Phase I/II Investigations, Washington, DC

Project archaeologist who provided technical support for geoarchaeological and combined Phase I/II archaeological studies for site where a buried 19th century foundation was identified. Coordinated with subconsultants conducting fieldwork and provided project management support. Coordinated archaeological studies with State Historic Preservation Office on behalf of the client.

National Park Service, Eisenhower Memorial Environmental Assessment and Phase IA Archaeological Study, Washington, DC

Project archaeologist for memorial commission who conducted archival research, archaeological pedestrian survey, and analysis of potential impacts to archaeological resources for this NEPA and Section 106 project. Evaluated impacts to archaeological resources for multiple proposed project design alternatives and prepared corresponding Environmental Assessment sections. Prepared Phase IA archaeological report following District of Columbia guidelines for archaeological investigations and recommended subsequent steps to identify and evaluate resources and archaeological potential. Coordinated archaeological studies with State Historic Preservation Office on behalf of the client.

Selected Reports

Elysian Park – Downtown Water Recycling Project Archaeological Discovery and Treatment Plan, City of Los Angeles, California, with S. Dietler. 2012. Prepared for Los Angeles Department of Water and Power. AECOM.

Underneath Alameda Street: Archaeological Monitoring Report for the Alameda Street/Spring Street Arterial Redesign Phase II Project, City of Los Angeles, California, with S. Dietler. 2011. Prepared for City of Los Angeles, Department of Public Works. AECOM.

Archaeological Assessment for the Aiso Street Parking Facility Project, City of Los Angeles, California, with L. Kry and S. Dietler. 2011. Prepared for City of Los Angeles, Department of Public Works. AECOM.

Publications

Not Dead But Gone Before: The Archaeology of Los Angeles City Cemetery. 2012. AECOM Cultural Heritage Publication No. 4, H. Gibson and S. Dietler, editors. Prepared for Los Angeles Unified School District. AECOM.

Gibson, Heather. 2010. Review of *Building the Devil's Empire*, by S. Dawdy. *Historical Archaeology*, Vol. 44, No. 2.

Gibson, Heather. 2009. Domestic Economy and Daily Practice in Guadeloupe: Historical Archaeology at La Mahaudière Plantation. *International Journal of Historical Archaeology*, Vol. 13, No. 1.

Gibson, Heather. 2007. *Daily Practice and Domestic Economy in Guadeloupe, FWI: An Archaeological and Historical Study*. Ph.D. Dissertation, Syracuse University, Syracuse, New York.

Kelly, Kenneth, and Heather Gibson. 2005. Plantation Village Archaeology in Guadeloupe, French West Indies. In *Proceedings of the XX International Congress of Caribbean Archaeologists*, edited by G. Tavares and M. Garcia Arevalo. Museo del Hombre Dominicano and Fundacion Garcia Arvela, Santo Domingo.

Marc A. Beherec, PhD, RPA
Project Archaeologist

Education

PhD, Anthropology, University of California, San Diego, San Diego, CA, 2011
MA, Anthropology, University of California, San Diego, San Diego, CA, 2004
BA, Anthropology (Geology minor), University of Texas, Austin, Austin, TX, 2000

Professional Affiliations

Member, Register of Professional Archaeologists
Member, Society for American Archaeology
Member, Society for California Archaeology
Member, California Mission Studies Association

Dr. Marc Beherec has been involved in the field of cultural resources management for over a decade. He has worked throughout the southwest on projects within Federal and State regulatory framework, and is experienced in the identification and analysis of both prehistoric and historic era artifacts. Dr. Beherec also has extensive experience in Archaic period sites in the western US as well as archaeological analyses in Jordan. For the past year and a half, he has served as Monitoring Coordinator and Lead Monitor for the NextEra Genesis Solar Energy Project and then for Los Angeles Metropolitan Transportation Authority projects.

Selected Project Experience**Los Angeles County Metropolitan Transportation Authority Compliance Monitoring (Los Angeles Metro)**

Monitoring Coordinator for the cultural resources compliance monitoring of multiple projects within the greater Los Angeles area. Tasks involve the scheduling and coordination of between 5 and 25 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.

NextEra Genesis Solar Energy Project Cultural Resources Compliance Monitoring

Monitoring Coordinator and 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 western Mojave Desert. Tasks involve the scheduling and coordination of between 5 and 25 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.

notations, artifact catalogs), conducted preliminary lithic analysis, measured lithic blades for statistical studies, and supervised student volunteers in washing lithics. Work was performed before joining this firm.

**San Bernardino National Forest San Jacinto District
Archaeologist, Idyllwild, CA**

Archaeologist assigned to Idyllwild Ranger Station, San Jacinto District, San Bernardino National Forest, Riverside County, California. 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. 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 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, Austin, TX

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 (unit forms and maps, profile maps, Munsell

Trina Meiser**Historic Preservation Planner****Education**

MA, Historic Preservation Planning, Cornell University, 2003
BA, History, Kenyon College, 1998

Years of Experience

With AECOM 5
With other firms 6

Technical Specialties

Historic Resources Evaluation
Cultural Resources Management

Professional Affiliations

National Trust for Historic Preservation
California Preservation Foundation

Trina Meiser is a Secretary of Interior-qualified historian and historic preservationist (36 CFR Part 61) with over 10 years of experience in identifying, evaluating, and planning for historic structures, districts, sites, and cultural resources. Ms. Meiser has conducted several cultural resources studies, including the preparation of survey and evaluation reports, impacts analyses and findings of effect, National Register of Historic Places nominations, Historic Structure Reports, and HABS/HAER documents. She has consulted on a variety of energy, transportation, military, housing, and community projects with clients, architects, engineers, and agency representatives for regulatory review, specifically NHPA Section 106 consultation. Her experience in historic preservation planning provides a strong understanding of historic preservation laws and a thorough knowledge of the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. Ms. Meiser maintains a solid knowledge of architectural history and building materials conservation and has led seminars on architectural styles, workshops in materials conservation, and preservation design charrettes.

**Abengoa Mojave Solar Project,
Lockhart, CA**

Prepared historical resources studies in support of an Environmental Assessment for a solar energy project. Conducted archival research, contact programs, and fieldwork, and prepared technical report for the evaluation

of historical resources and mitigation measures.

Solar Millennium Blythe Solar Power Project, Riverside County, CA

Prepared historical resources studies in support of an AFC application. Conducted archival research, contact programs, and fieldwork, and prepared technical report for the evaluation of historical resources and mitigation measures. Coordinated process with BLM and CEC.

Solar Millennium Palen Solar Power Project, Riverside County, CA

Prepared historical resources studies in support of an AFC application. Conducted archival research, contact programs, and fieldwork, and prepared technical report for the evaluation of historical resources and mitigation measures. Coordinated process with BLM and CEC.

IID Dixieland 230kV Transmission Line Project, Imperial County, CA

Conducted archival research and fieldwork to identify potential historic properties for the cultural resources survey. Coordinated with BLM.

Niland Solar Project, Imperial County, CA

Conducted archival research and fieldwork to identify potential historic properties for the cultural resources survey.

City of Temecula Main Street Bridge Replacement Project, Temecula, CA

Conducted a survey and historical research of historic resources in Old Town Temecula adjacent to the Main Street Bridge. Results were recorded on DPR forms and in the HPSR per Caltrans guidelines.

SR-76 Mission to I-15 Historical Resources Evaluation Report, San Diego County, CA

Conducted fieldwork to record and evaluate ranching buildings and residences. Prepared the HRER per Caltrans standards for the

evaluation of historical resources for eligibility to the National Register and the California Register.

SR-94 Widening and HOV Lanes Project, San Diego, CA

Conducted fieldwork to record and evaluate urban built environment resources. Prepared the HRER and HPSR per Caltrans standards for the evaluation of historical resources for eligibility to the National Register and the California Register.

Potomac Annex Building 1 Project, Washington, DC

For GSA and the Department of State, performed a conditions assessment of Building 1 in the Potomac Annex Historic District to identify existing character-defining features and to assess their integrity. Prepared analysis of potential impacts in a Historic Preservation Report that will describe existing features and recommend appropriate treatments to maintain the property's integrity as part of rehabilitation efforts.

National Park Service Jefferson National Expansion Memorial, St. Louis, MO

Performed research and prepared portions of the historical context the Native American occupation, the French colonial establishment, and the 19th century development of the built environment for the GMP/EIS as consultant to NPS.

Los Angeles Harbor Light Station Rehabilitation Project, San Pedro, CA

For U.S. Coast Guard, prepared Finding of No Adverse Effect for the NRHP-listed "Angel's Gate" lighthouse. Conducted research to supplement the NRHP nomination's significance evaluation, and prepared a property assessment to establish historically significant and character-defining features of the lighthouse. In conjunction with engineers, determined rehabilitation plan including sensitive

treatments adhering to the *Secretary of Interior's Standards*.

**San Francisco Veterans Affairs Medical Center
Seismic Upgrade Project,
San Francisco, CA**

On behalf of the VA, consulted with architects for the rehabilitation design and seismic retrofit of the 1930s-era Art Deco SFVAMC buildings within a NRHP-listed historic district. As part of Section 106 consultation, provided guidance based on *Secretary of Interior's Standards for Rehabilitation*.

**National Register Eligibility Assessment for
Grow the Force and Base Utility Infrastructure
Projects,
Camp Pendleton, CA**

Evaluated over 150 buildings located on Camp Pendleton for eligibility to the NRHP. Incorporated findings in an inventory to support the project EIS.

Linda Kry

Staff Archaeologist

Education

B.A. Anthropology, University of California Los Angeles
A.A. Anthropology, Cerritos College, Norwalk, California

Publications + Technical Papers + Presentations

Ehringer, C., L. Kry, S. Dietler, and M. Strauss. 2008. After the Bones Are Gone: The Role Of Personal Effects in Identifying Unmarked Historic Burials. Poster presentation at the Society for Historical Archaeology Annual Meeting, Albuquerque, NM.

Linda Kry is an archaeologist with six years of experience in cultural resources management within Los Angeles County, Imperial County, Riverside County and the Mojave Desert. Linda has developed considerable expertise with all aspects of cultural resources investigations including managing field surveys and lab analysis. She assists in the management of cultural resources specialists who conduct various types of cultural resources compliance including phase I surveys, construction monitoring, Native American consultation, archaeological testing and treatment and prehistoric and historic resource significance evaluations.

In her current role, Linda has gained extensive experience with identification and classification of all types of historic materials including ceramics, glass bottles, metal cans, garment-related items, and coffin hardware, as well as processing artifact collections, including assessing conservation requirements and artifact reconstruction. Her work in various desert and coastal projects has broadened her experience to include the identification and recordation of prehistoric resources. In addition, Linda is proficient in historic and prehistoric record searches, general historic literature research, museum and archival research, Sanborn map research, Native American consultation, and the preparation of all related cultural resources documentation. Linda authors and co-authors technical reports and is familiar with requirements for CEQA and Section 106 compliance. Her present research interests include the historical development of Los Angeles and 19th to mid-20th century consumer practices.

Project Experience

Temple Street Widening, Los Angeles, CA

Served as an archaeological monitor during road construction and utilities relocation in downtown Los Angeles. Duties included documenting historic archaeological features, coordinating work schedules with on-site construction personnel, and maintaining detailed daily reports. Responsible for processing and sorting artifact collection.

Main Street Parking Facility and Motor Transport Division, Los Angeles, CA

Archaeological and paleontological monitor of construction site in downtown Los Angeles. Responsible for identification, recovery, and mapping of historic archaeological features, maintaining detailed daily reports, and coordinating work schedules with on-site construction foreman. Over 19 historic archaeological features dating from the 1860s to the 1920s were recovered on-site. Processed and sorted artifact collection.

Central Los Angeles High School #9, Los Angeles, CA

Duties included assessing artifact conditions and conservation needs, assisting with development and implementation of artifact cleaning procedures, assisting with artifact classification and cataloging using Excel, and reconstruction of artifacts. Over 3,000 historic-era artifacts were recovered from a 19th-century cemetery.

Alameda Street, Los Angeles, CA

Archaeological monitoring of street construction at Alameda Street in downtown Los Angeles resulted in the identification and recovery of over 300 historic-era artifacts. In addition, segments of both narrow-gauge and standard gauge rail lines, sections of brick foundations, and brick irrigation features were documented. A large section of late 19th to early 20th century brick pavement and part of the Zanja were also uncovered and documented during construction.

Lakeside Recreational Complex, Sylmar, CA

Led archaeological survey and authored report on a Phase I cultural resources evaluation of the historic-era Lakeside Debris Basin property. Tasks include a California Register eligibility assessment for the facility itself and archaeological features identified as a result of the survey, and prepared a Cultural Resources Technical Report with findings and recommendations for further work, pursuant to CEQA requirements.

First Street Trunk Line, Los Angeles CA

Conducted archaeological monitoring of utilities installation, responded to monitoring discoveries including historic-period utility pipes, and determined appropriate mitigation in the form of recordation. An archaeological monitoring report will be prepared at the conclusion of the project.

Van Norman Chloramination Station, San Fernando CA

Conducted archaeological monitoring with a Native American monitor during project construction. Co-author of archaeological monitoring report that will be prepared at the conclusion of the project.

Fire Station No. 48, Seal Beach, CA

Authored a report in connection with archaeological and Native American monitoring during project construction in support of cultural resources assessment pursuant to CEQA requirements.

Topanga Library Project, Topanga Canyon, CA

AECOM conducted archaeological monitoring during construction of the Topanga Library. Construction included the installation waterlines along the roadway outside of the main project area. Monitoring resulted in the discovery of materials associated with the recorded archaeological site CA-LAN-8. Served as crew chief during archaeological testing of this site. Resources were identified and evaluated for eligibility to the National Register of Historic Places.

Solar Millennium Blythe Project, Blythe, CA

Served as Crew Chief for an archaeological survey of a proposed solar electric generating facility in the Chuckwalla Valley. The project included an archaeological survey of the project site and buffer zones, the recordation of historic and prehistoric archaeological sites, and recordation of field data on Department of Parks and Recreation Forms.

Solar Millennium Palen Project, Chuckwalla Valley, CA

Served as Co-Crew Chief for an archaeological survey of a proposed solar electric generating facility in the Chuckwalla Valley. The project included an archaeological survey of the project site and buffer zones, the recordation of historic and prehistoric archaeological sites.

South Region Elementary School #1, Los Angeles, CA

Archaeological Monitor, Lab Technician. Conducted archaeological monitoring in south-central Los Angeles. The area had been in use since 1909 and was the home of several domestic, religious, and retail establishments. Responsible for processing and sorting artifact collection.

Exposition Corridor Light Rail Transit, Los Angeles County, CA

Field Archaeologist. Photo-documented potentially historic buildings along several proposed routes for the new Exposition Light Rail in West Los Angeles, Santa Monica, and Culver City.

Woodland Duck Farm Project, El Monte, CA

Field Archaeologist. Assisted with the Phase I investigation, including a historic structure and archaeological survey of the site of the former historic Woodland Duck Farm.

Lang Ranch, Thousand Oaks, CA

Field Archaeologist. Participated in the archaeological testing of the 46-acre project area. Project work involved the archaeological testing at two artifact isolate locations to determine presence of sub-surface deposits.

Santa Anita Reservoir, Los Angeles County, CA

Field Archaeologist. Assisted with the Phase I archaeological survey of the site of the Santa Anita Dam, Reservoir and Complex.

McCoy Solar, Blythe, CA

Field Archaeologist. Assisted in an archaeological survey of a proposed solar electric generating facility in the Chuckwalla Valley. The project included an archaeological survey of the project site and buffer zones, the recordation of historic and prehistoric archaeological sites, and recordation of field data on Department of Parks and Recreation Forms.

California High Speed Train Project, Fresno, Madera, and Merced Counties, CA

Field Archaeologist. Assisted in archaeological survey of parcels for a proposed high speed train in Central California. The project included an archaeological survey of the project areas of potential effect and buffer zones, the recordation of historic and prehistoric archaeological resources, and recordation of field data on Department of Parks and Recreation Forms.

Mojave Solar One Project, San Bernardino County, CA

Field Archaeologist. Assisted in an archaeological survey. The project included an archaeological survey of the project areas of potential effect and buffer zones, the recordation of historic and prehistoric archaeological resources, and recordation of field data on Department of Parks and Recreation Forms.

Hansen Dam Project, Los Angeles, CA

Conducted a Phase I investigation comprised of an archaeological survey of the Project site, recordation of historic and prehistoric cultural resources, including features and identification of previously recorded sites. Authored an assessment report.

Dixieland TO IV 230 KV T-Line Project, Imperial County, CA

Field Archaeologist. Assisted in the archaeological survey of an alignment for a proposed transmission line. The project included an archaeological survey of the project site, the recordation of historic and prehistoric archaeological resources, and recordation of field data on Department of Parks and Recreation Forms.

Aiso Street Project, Los Angeles, CA

Served as an archaeological monitor during construction for a parking facility in downtown Los Angeles. Duties included documenting

historic archaeological features, coordinating work schedules with AECOM staff and on-site construction personnel, and maintaining detailed daily reports. Responsible for processing, sorting and cataloguing the artifact collection for curation. Also made contributions to a report documenting the Project findings and results.

Greenline Right of Way Survey, Los Angeles County, CA

Participated in archaeological field survey of the Greenline right of way from Torrance to LAX in Los Angeles. Tasks included recording of historical and archaeological resources.

Santa Anita Reservoir, Los Angeles County, CA

Assisted in a Phase I investigation, including a historic structure and archaeological survey of the site of the Santa Anita Dam, Reservoir and Complex.

ILWU Local 13 Dispatch Hall Project, Los Angeles, CA

Conducted a Phase I investigation comprised of an archaeological survey of the Project site and recordation of archaeological resources. Wrote up the survey results, the Sacred Lands File search results and the Native American Contact program results for the Project cultural technical memo as part of a Draft Initial Study/Mitigated Negative Declaration Report.

Alcazar Yard, Los Angeles, CA

Conducted research for historic building evaluation through the review of building permits at various Department of Building and Safety facilities in Los Angeles County and review of Sanborn Fire Insurance Maps.

St. Jude Hospital, Fullerton, CA

Conducted a survey of the project area and authored survey results.

OCTA I-5 Highway Improvements EIR, Orange County, CA

Conducted Native American contact program as part of CEQA.

New Long Beach Courthouse Project, Long Beach, CA

Served as archaeological and paleontological monitor during construction for a new courthouse in the City of Long Beach. Duties included providing worker's training regarding archaeological and paleontological resources for on-site personnel, documenting historic archaeological features and coordinating with clients and AECOM staff. Participated in the testing excavations of early twentieth century privies that were discovered during monitoring. Served as Lab Director and was responsible for directing the processing, sorting and cataloguing of the artifact collection for curation. Co-authored a report documenting the Project findings and results.

Genesis Solar, Blythe, CA

Archaeological monitoring for the Genesis solar farm project. Monitored placement of transmission lines, large scale excavation for the placement of solar panels, and caisson drilling for solar panel footings. Aspects of the project included monitoring, survey, testing, and artifact collection. Responsibilities included field lead monitor, recordation and collection of cultural resources discovered during monitoring, survey and scheduling with archaeological, Native American and construction crews.

San Fernando Valley WRP, Los Angeles County, CA

Assisted in a Phase I portion of the project. Tasks included a records search and field survey for potential archaeological resources. Project is on-going.

Civic Center Joint Use Project, Santa Monica, CA

Management of a Phase I process. Responsibilities include: a records search, survey of project area, scheduling with AECOM staff, and co-authoring the results. Project is on-going.

Selected Reports

Central Los Angeles High School #9 Archaeological Excavation Report (in progress). Prepared for Los Angeles Unified School District. AECOM. (anticipated 2011).

Hansen Dam Golf Course Water Recycling Project Phase I Archaeology Assessment Los Angeles County, California (lead author). Prepared for the Los Angeles Department of Water and Power. AECOM July 2010.

Negative Archaeological Monitoring Report for the Fire Station 48 Replacement Project City of Seal Beach, California (lead author). Prepared for the City of Seal Beach. AECOM August 2010.

Draft Archaeological Assessment for the Temple Street Widening Project City of Los Angeles, California (contributing author). Prepared for Los Angeles Department of Public Works-Engineering. AECOM December 2009.

Phase I Cultural Resources Assessment for the Topanga Underground Utility District Project City of Topanga, California (contributing author). Prepared for the Los Angeles County Department of Public Works. AECOM April 2011.

APPENDIX B

**NATIVE AMERICAN
CONTACT PROGRAM**

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX



April 25, 2016

Marc Beherec, PhD., RPA
AECOM, Inc.

Sent by e-mail: marc.beherec@aecom.com
Number of Pages: 2

RE: Proposed LADWP 99th Street Wells Chloramination Station Project, Community of Watts, Inglewood and South Gate USGS Quadrangles, Los Angeles County, California

Dear Dr. Beherec:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent above reference codes is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the USGS quadrangle information provided with negative results.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,



Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

**Native American Heritage Commission
Tribal Consultation List
Los Angeles County
April 25, 2016**

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA 91778
GTTribalcouncil@aol.com
(626) 483-3564 Cell

Gabrielino Tongva

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393
Covina, CA 91723
gabrielenoindians@yahoo.com Gabrielino
(626) 926-4131

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231
Los Angeles, CA 90012
sgoad@gabrielino-tongva.com
(951) 807-0479

Gabrielino Tongva

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490
Bellflower, CA 90707
gtongva@verizon.net
(562) 761-6417 Voice/Fax

Gabrielino Tongva

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
1999 Avenue of the Stars, Suite 1100
Los Angeles, CA 90067
(626) 676-1184 Cell

Gabrielino

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487
San Jacinto, CA 92581
jontiveros@soboba-nsn.gov
(951) 663-5279
(951) 654-5544, ext 4137

Luiseno
Cahuilla

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed LADWP 99th Street Wells Chloramination Station Project, Community of Watts, Inglewood and South Gate USGS Quadrangles, Los Angeles County, California.



AECOM Inc
515 South Flower Street, 8th Floor, Los Angeles, CA 90071
T 213.593.7700 F 213.593.7715 www.AECOM.com

April 26, 2016

Gabrielino-Tongva Tribe
Bernie Acuna, Co-Chairperson
1999 Avenue of the Stars
Suite 1100
Los Angeles, CA 90067

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Mr. Acuna:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **We may have contacted you in the past about this project. The project has since been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

The project proposes to construct and operate 99th Street Wells Chloramination Station (NNCS) within the existing 99th Street Pumping Station (NNPS), which is located in the Watts community of the City of Los Angeles. The proposed project is part of LADWP's program to comply with the federal Stage 2 Disinfection and Disinfectants Byproducts Rule through a systemwide conversion from chlorination to chloramination of the in-City potable water supply. The project would include the demolition of existing structures and the installation of all necessary equipment and structures needed to facilitate on-site sodium hypochlorite generation, ammoniation, injection, and monitoring. The proposed work includes the construction of a single-story chloramination station, the installation of below ground pipes, and the demolition of an existing chlorination building on the NNPS Complex property.

The 99th Street Wells Pumping Station encompasses approximately 24,800 square feet (0.6 acres) and is located at the intersection of Wadsworth Avenue and 99th Street. The project site is located on the following U.S. Geological Survey (USGS) 7.5-minute quadrangle maps: Inglewood (USGS 1981a) and South Gate (USGS 1981b). The project site is in Section 32 of Township 2 South, Range 13 West (Enclosure 1).

For this update, an archival records search was conducted at the South Central Coastal Information Center (SCCIC) on March 9, 2016. As a result of this investigation three historic cultural resources were identified within a half mile of the project area, none of which are located in the project site. In addition to the documented built resources, a marginal note on the SCCIC's South Gate 7.5' Topographic Map adjacent to the 0.5-mile study area reads, "Possible vicinity of HA'UTNGA." Ha'utnga, or Huutnga, is a Gabrielino place name. However, ethnographic evidence indicates that a site named Huutnga existed on property belonging to the Lugo family which lays approximately 1.6-mile east of the project area.

An archaeological survey of the project area was conducted on July 23, 2013. No Native American cultural resources were observed in the project site.

AECOM Inc

515 South Flower Street, 8th Floor, Los Angeles, CA 90071
T 213.593.7700 F 213.593.7715 www.AECOM.com

The response form (Enclosure 2) is provided to help us identify and address your concerns with this project. Return of this form does not imply that you approve or disapprove of the project nor does it limit your opportunity to comment at a later time. Please return the response form to the address shown below no later than May 26, 2016.

Please feel free to contact me directly with any questions.

Sincerely,



Marc A. Beherec, Ph.D., RPA

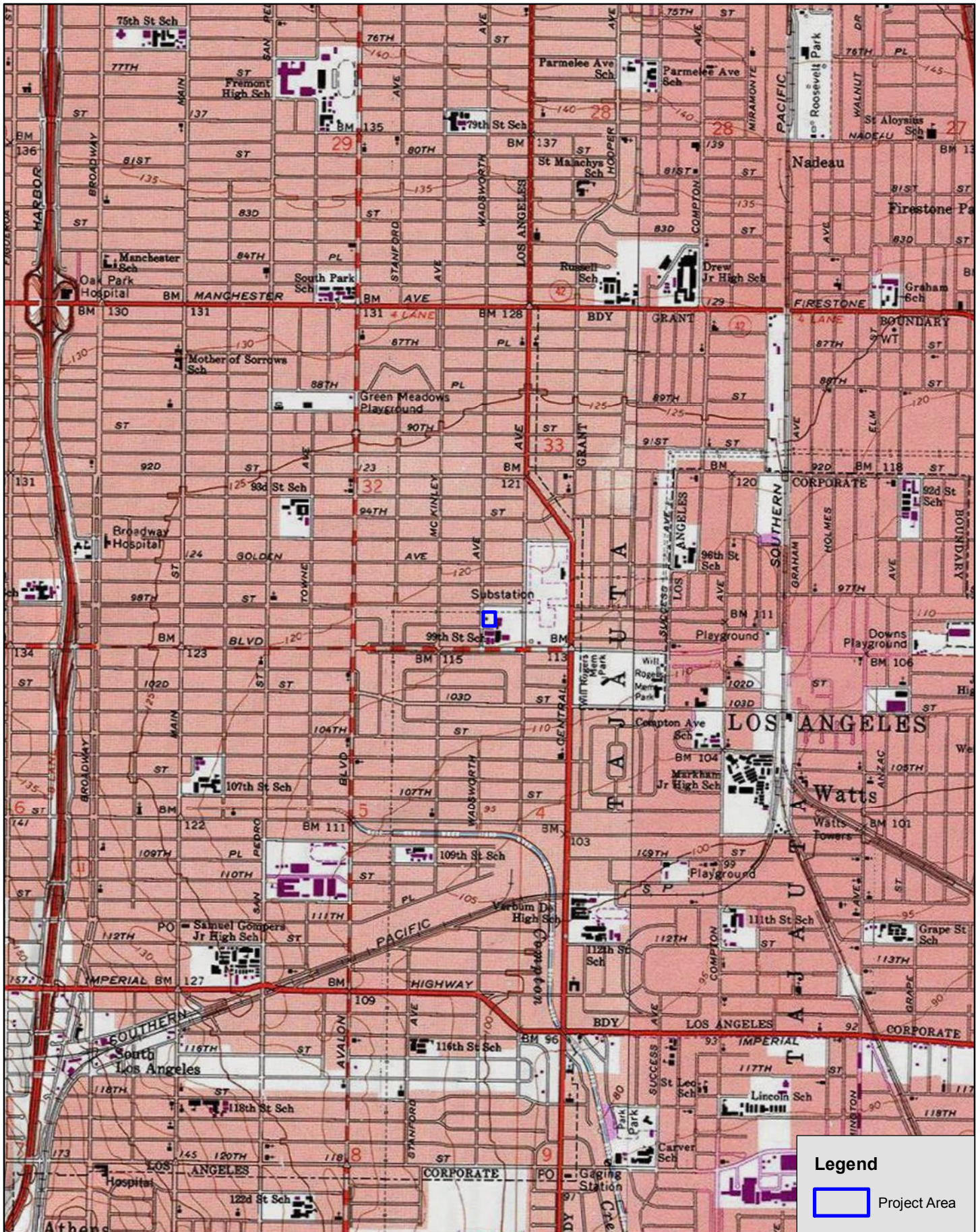
Archaeologist

213.593.8481

marc.beherec@aecom.com

Enclosures:

- 1) Project Area Overview Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope



Source: National Geographic Society 2013, 7.5 minute topographic quadrangles: Inglewood 1981; Southgate 1981



Legend

Project Area

Project Area Map

99th Street Chloramination Station Project

**LADWP 99th Street Chloramination Station Project Update
NATIVE AMERICAN RESPONSE FORM**

Please circle appropriate response below.

I/We (would like) (would not like) to be contacted. You may contact me/us at the address and phone number below.

I/We (do) (do not) have concerns. They are outlined below:

Please Print Name, Tribal Office/Affiliation, Address, and Phone Number

Signature

Date

Please return completed form no later than May 26, 2016 to:

Marc A. Beherec, Ph.D., RPA
AECOM
515 S Flower Street
8th Floor
Los Angeles, CA 90071

Contact Report Form

AECOM Contact: Allison HillDate: 5/132016Project # 60334574Individual Contacted: Bernie AcunaPhone # 310-428-5690

Contact Information

Subject of Contact: 99th Street Chloramination Station Project Update

Items Discussed

Called Mr. Acuna at about 2 pm to follow up about the project, using the number listed above. There was no answer and a voice mail was left informing Mr. Acuna about the purpose of the call and providing a brief summary of the project and contact information for Marc Beherec so that he can provide comments if he wishes in the future.

Follow Up



AECOM Inc
515 South Flower Street, 8th Floor, Los Angeles, CA 90071
T 213.593.7700 F 213.593.7715 www.AECOM.com

April 26, 2016

Gabrielino-Tongva Tribe
Conrad Acuna
1999 Avenue of the Stars
Suite 1100
Los Angeles, CA 90067

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Mr. Acuna:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **We may have contacted you in the past about this project. The project has since been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

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Please feel free to contact me directly with any questions.

Sincerely,



Marc A. Beherec, Ph.D., RPA

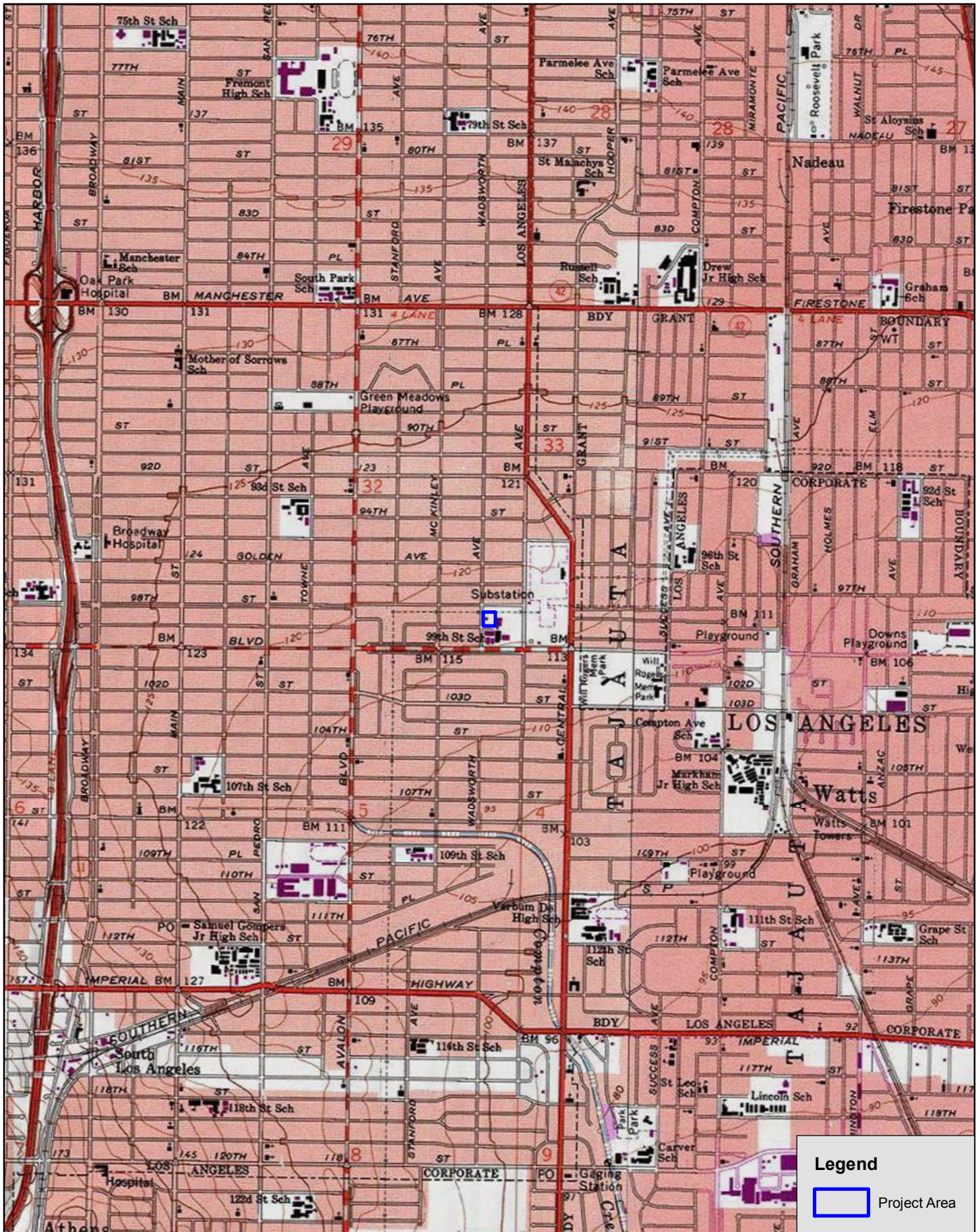
Archaeologist

213.593.8481

marc.beherec@aecom.com

Enclosures:

- 1) Project Area Overview Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope



Source: National Geographic Society 2013, 7.5 minute topographic quadrangles: Inglewood 1981; Southgate 1981



Legend

Project Area

Project Area Map

99th Street Chloramination Station Project

**LADWP 99th Street Chloramination Station Project Update
NATIVE AMERICAN RESPONSE FORM**

Please circle appropriate response below.

I/We (would like) (would not like) to be contacted. You may contact me/us at the address and phone number below.

I/We (do) (do not) have concerns. They are outlined below:

Please Print Name, Tribal Office/Affiliation, Address, and Phone Number

Signature

Date

Please return completed form no later than May 26, 2016 to:

Marc A. Beherec, Ph.D., RPA
AECOM
515 S Flower Street
8th Floor
Los Angeles, CA 90071

Contact Report Form

AECOM Contact: Allison Hill

Date: 5/13/2016

Project # 60334574

Individual Contacted: Conrad Acuna

Phone # N/A

Contact Information

Subject of Contact: 99th Street Chloramination Station Project Update

Items Discussed

Conrad Acuna from the Gabrielino-Tongva Tribe was not contacted during the follow-up contact program. No phone number or email address is provided in previous NAHC letters.

Follow Up



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April 26, 2016

Ti'At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman-Manisar
3094 Mace Avenue, Apt. B
Costa Mesa, CA 92626

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Ms. Alvitre:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **We may have contacted you in the past about this project. The project has since been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

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Marc A. Beherec, Ph.D., RPA

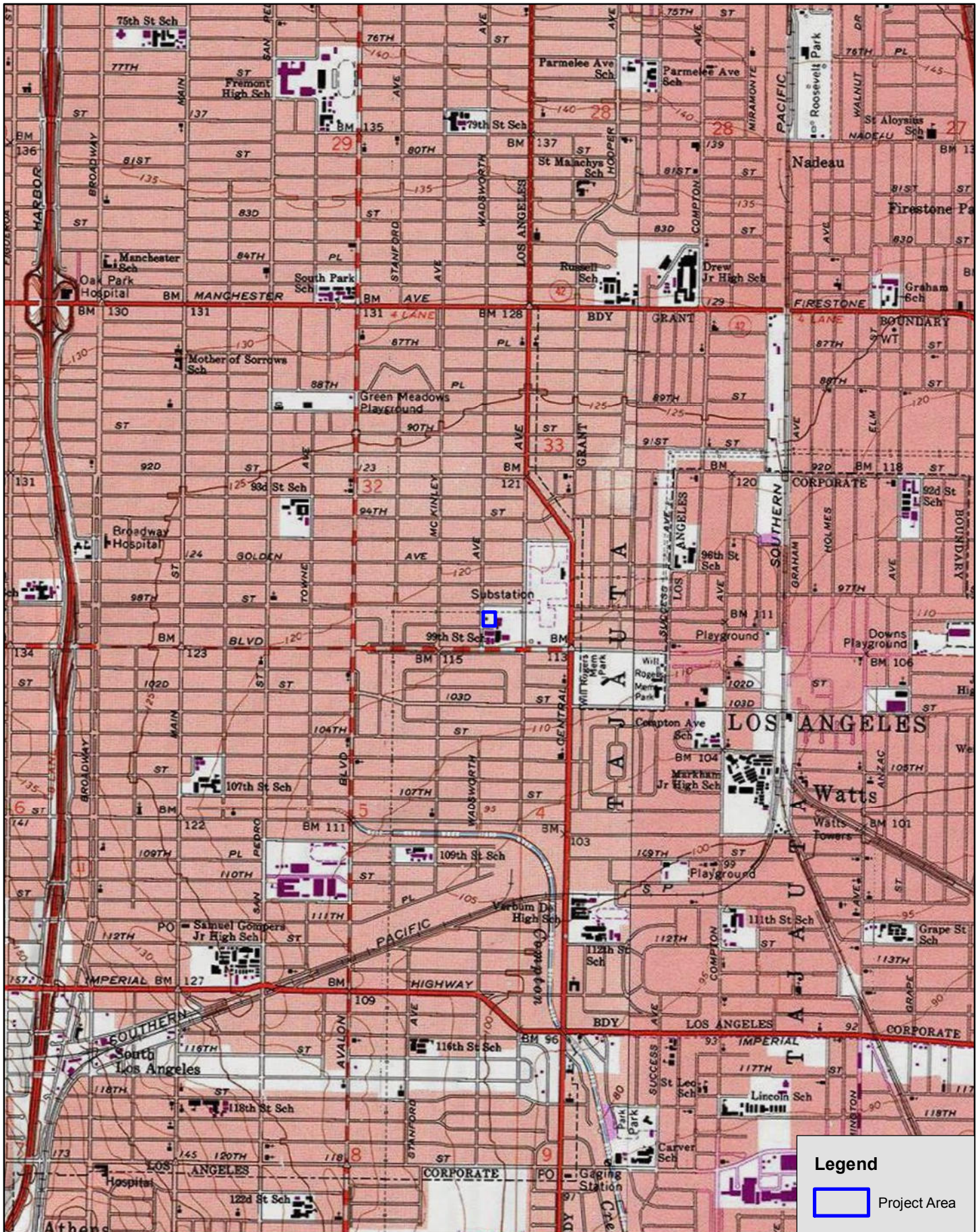
Archaeologist

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Source: National Geographic Society 2013, 7.5 minute topographic quadrangles: Inglewood 1981; Southgate 1981



Legend

Project Area

Project Area Map

99th Street Chloramination Station Project

**LADWP 99th Street Chloramination Station Project Update
NATIVE AMERICAN RESPONSE FORM**

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AECOM
515 S Flower Street
8th Floor
Los Angeles, CA 90071

Contact Report Form

AECOM Contact: Allison Hill

Date: 5/13/2016

Project # 60334574

Individual Contacted: Cindi Alvitre

Phone # (714) 504-2468

Contact Information

Subject of Contact: 99th Street Chloramination Station Project Update

Items Discussed

Called Ms. Alvitre at approximately 2:15 pm to follow up about the project, using the number listed above. There was no answer and a voicemail was left informing Ms. Alvitre about the purpose of the call and a providing a brief summary of the project. We provided contact information for Marc Beherec so that she can provide comments in the future.

Follow Up



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April 26, 2016

LA City/County Native American Indian Comm.
Ron Andrade, Director
3175 West 6th Street, Rm 403
Los Angeles, CA 90020

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Mr. Andrade:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **We may have contacted you in the past about this project. The project has since been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

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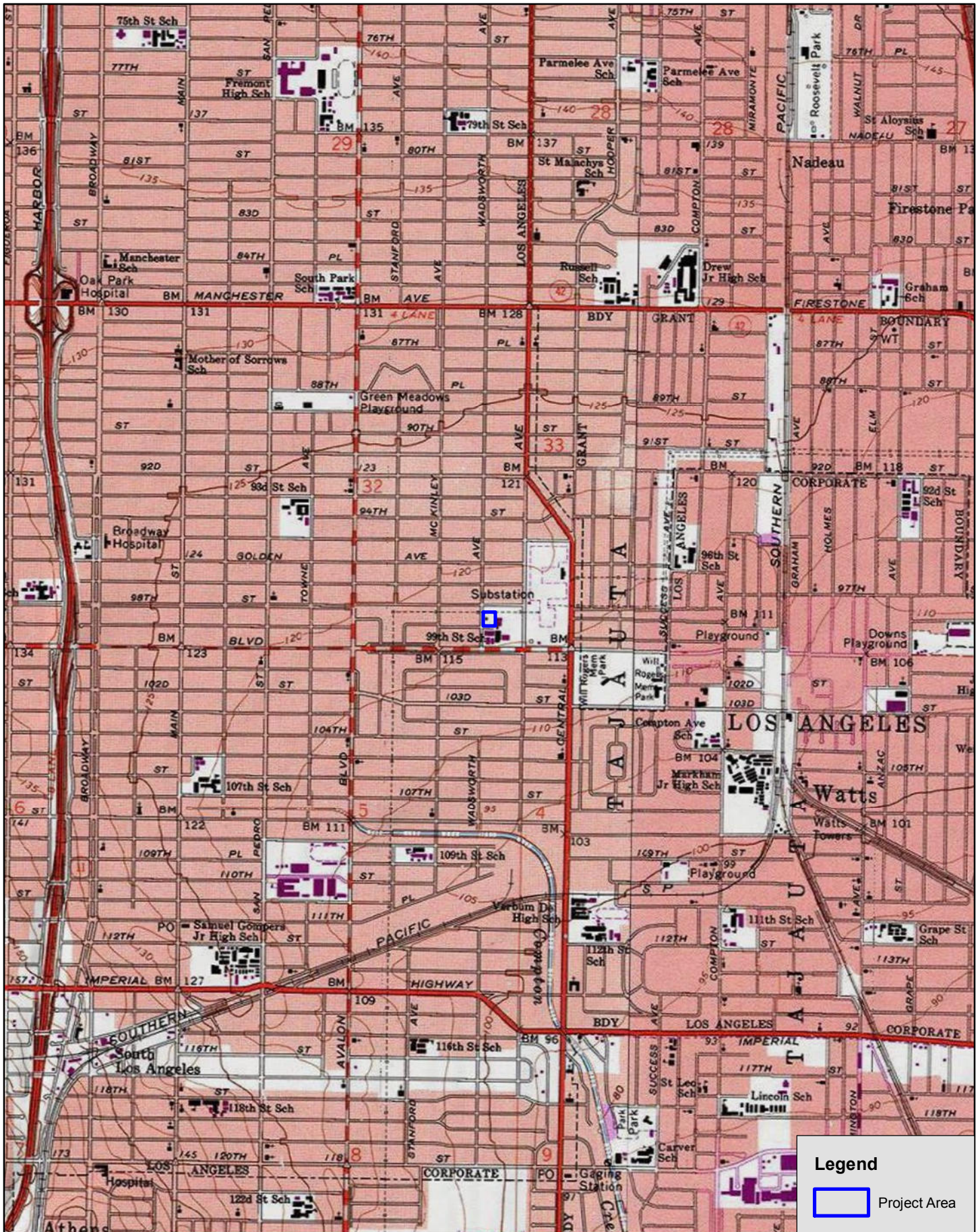
Archaeologist

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Source: National Geographic Society 2013, 7.5 minute topographic quadrangles: Inglewood 1981; Southgate 1981



Project Area Map

99th Street Chloramination Station Project

**LADWP 99th Street Chloramination Station Project Update
NATIVE AMERICAN RESPONSE FORM**

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AECOM
515 S Flower Street
8th Floor
Los Angeles, CA 90071

Contact Report Form

AECOM Contact: Allison Hill

Date: 5/13/2016

Project # 60334574

Individual Contacted: Ron Andrade

Phone # 213-351-5324

Contact Information

Subject of Contact: LADWP 99th Street Chloramination Station Project Update

Items Discussed

Called Mr. Andrade at 2:30 pm. The phone number provided by the NAHC in the original letter was disconnected. Mr. Andrade was not included in the updated NAHC letter. No further contact was made.

Follow Up



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April 26, 2016

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
1999 Avenue of the Stars
Suite 1100
Los Angeles, CA 90067

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Ms. Candelaria:

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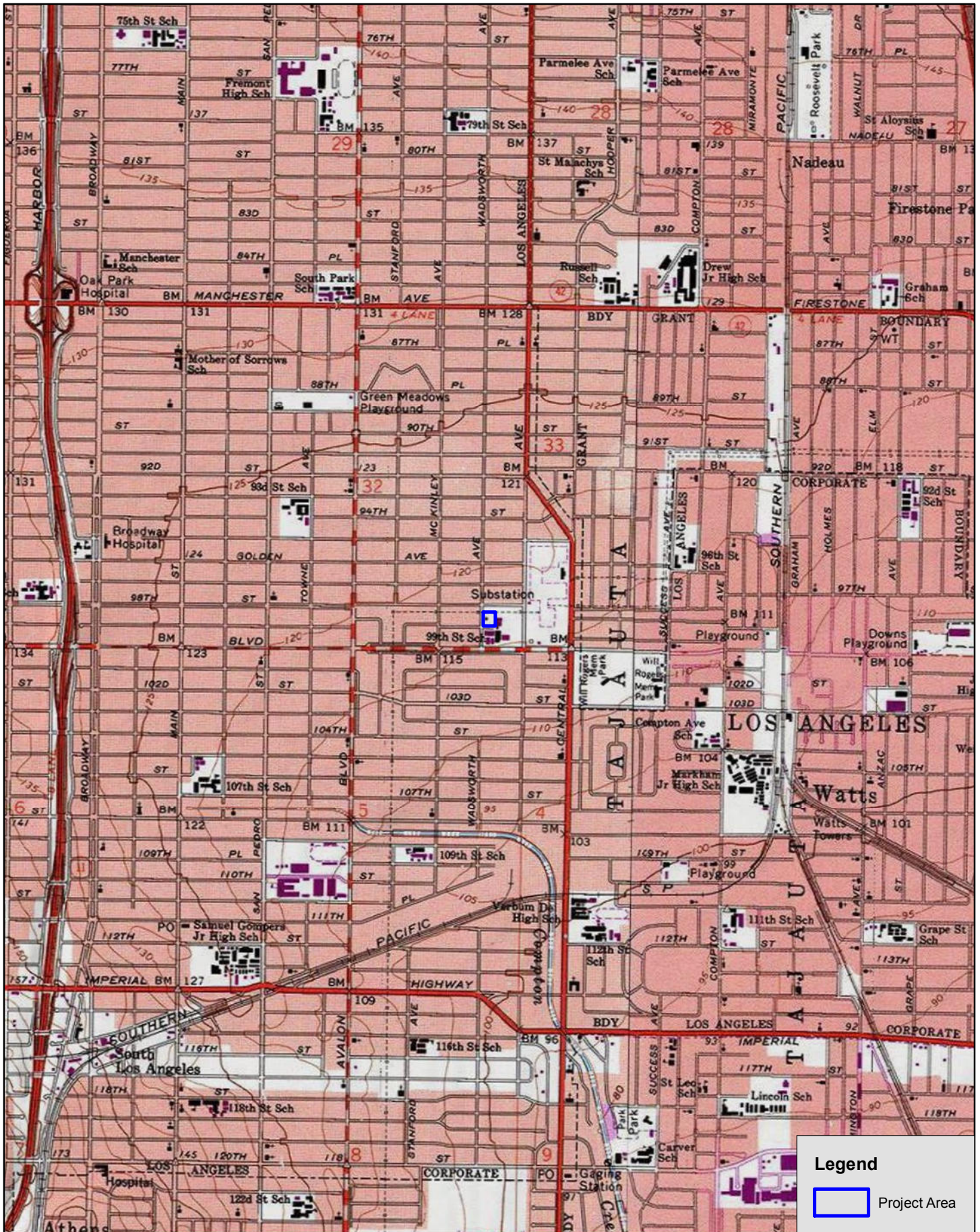
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Project Area Map

99th Street Chloramination Station Project

Contact Report Form

AECOM Contact: Allison HillDate: 5/13/2016Project # 60334574Individual Contacted: Linda CandelariaPhone # 626-676-1184

Contact Information

Subject of Contact: 99th Street Chloramination Station Project Update

Items Discussed

Linda Candelaria, Co-Chairperson of the Gabrielino-Tongva Tribe was contacted at about 2:30 pm. Ms. Candelaria stated that she had turned the project over to someone else and that she would have them contact us. I provided my phone number so that the individual she assigned to the project could get back to me.

Follow Up



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April 26, 2016

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
PO Box 490
Bellflower, CA 90707

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Mr. Dorame:

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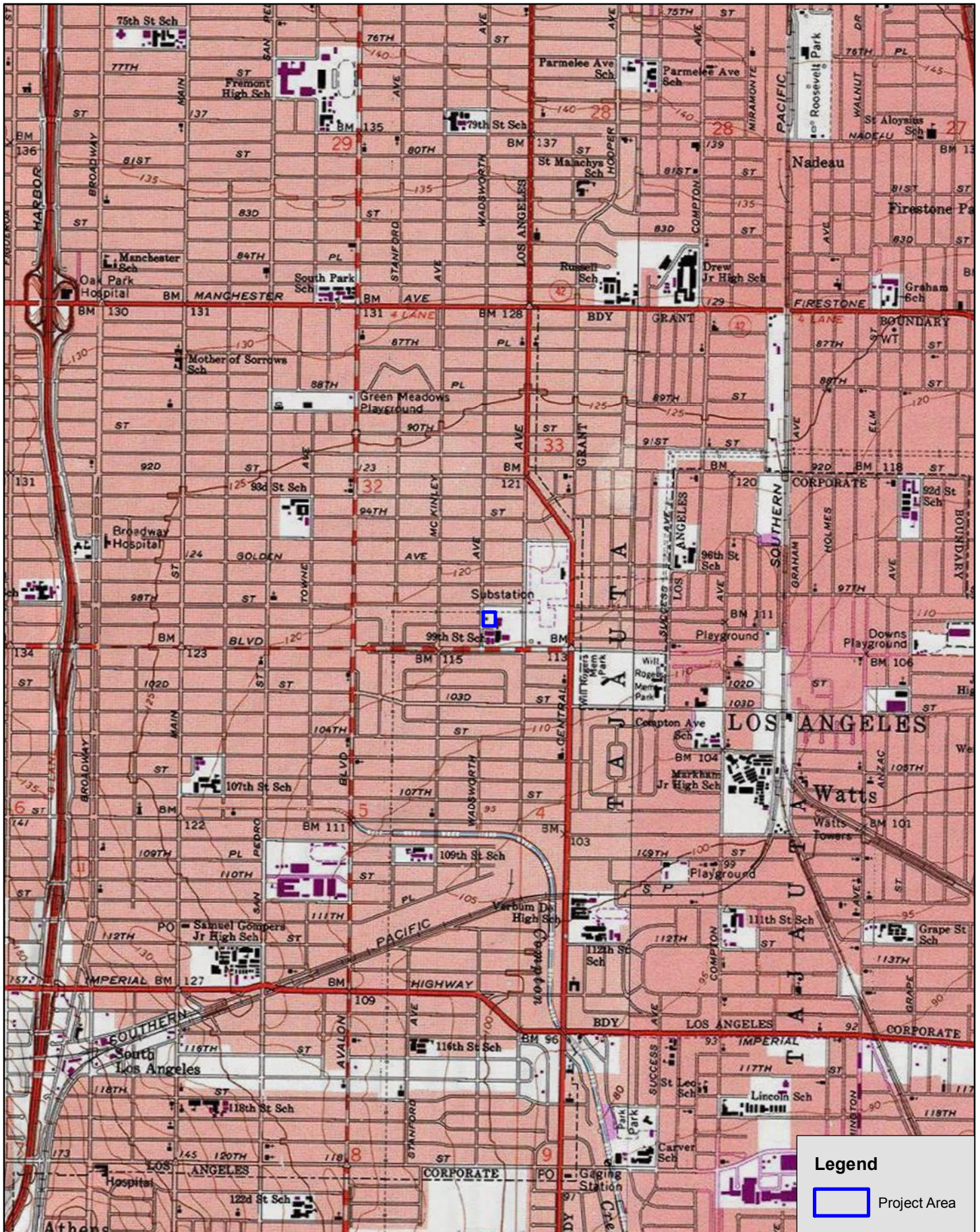
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Project Area

Project Area Map

99th Street Chloramination Station Project

**LADWP 99th Street Chloramination Station Project Update
NATIVE AMERICAN RESPONSE FORM**

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AECOM
515 S Flower Street
8th Floor
Los Angeles, CA 90071

Contact Report Form

AECOM Contact: Allison HillDate: 5/13/2016Project # 60334574Individual Contacted: Robert DoramePhone # 562-761-6417

Contact Information

Subject of Contact: 99th Street Chloramination Station Project Update

Items Discussed

Mr. Dorame was contacted by phone at approximately 2:35 pm. In the phone conversation Mr. Dorame requested that we send him an email with the letter and map so that he can review. He also stated that they will respond with comment if they have family or tribal members who live, have lived, or are familiar with the project area. Mr. Dorame stated that if we do not hear back from him that they do not have a comment on the project. An email was sent to Mr. Dorame at address gtongva@verizon.net at approximately 2:45 pm.

Follow Up



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April 26, 2016

Gabrielino Tongva Nation
Sam Dunlap, Cultural Resources Director
PO Box 86908
Los Angeles, CA 90086

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Mr. Dunlap:

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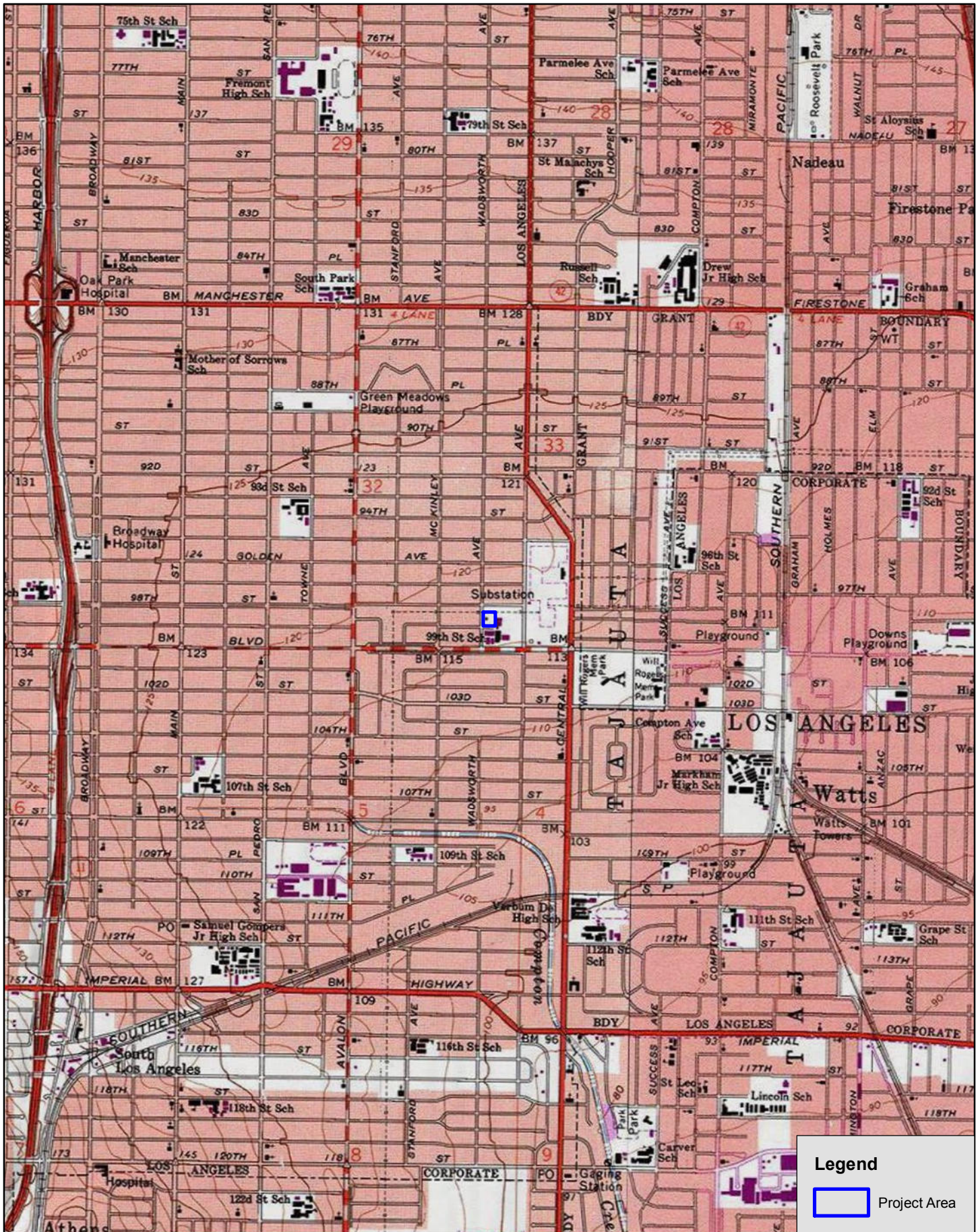
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Project Area Map

99th Street Chloramination Station Project

Contact Report Form

AECOM Contact: Marc BeherecDate: 5/10/2016Project # 60334574Individual Contacted: Sam DunlapPhone # 909-262-9351

Contact Information

Subject of Contact: 99th Street Chloramination Station

Items Discussed

Called Sam Dunlap to seek comment on 99th Street. Mr. Dunlap said he did not recall the project documents, and asked about the size of the property, its proximity to water and trails, and whether any sites were revealed by the records search. I informed him that the project is 0.6 acres and that no natural water sources were revealed by map research (but that the project is on an alluvial fan, so rivers went through there in the past). I informed him that two named sites may be located somewhere in the South Gate/Watts vicinity (Tajuata and Huutnga) and that the closest prehistoric site revealed by the records search was more than 1.8 miles away.

Mr. Dunlap said that based on what he heard he has no specific concerns about the project. However, he cautioned that he always recommends both archaeological monitoring and Native American monitoring by a member of the Gabrielino/Tongva Nation during ground-disturbing work, since unexpected finds may be encountered.

Follow Up



AECOM Inc
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April 26, 2016

Sandonne Goad, Chairperson
Gabrielino/Tongva Nation
106 ½ Judge John Aiso St.
Los Angeles, CA 90012

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Chairperson Goad:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **The project has been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

The project proposes to construct and operate 99th Street Wells Chloramination Station (NNCS) within the existing 99th Street Pumping Station (NNPS), which is located in the Watts community of the City of Los Angeles. The proposed project is part of LADWP's program to comply with the federal Stage 2 Disinfection and Disinfectants Byproducts Rule through a systemwide conversion from chlorination to chloramination of the in-City potable water supply. The project would include the demolition of existing structures and the installation of all necessary equipment and structures needed to facilitate on-site sodium hypochlorite generation, ammoniation, injection, and monitoring. The proposed work includes the construction of a single-story chloramination station, the installation of below ground pipes, and the demolition of an existing chlorination building on the NNPS Complex property.

The 99th Street Wells Pumping Station encompasses approximately 24,800 square feet (0.6 acres) and is located at the intersection of Wadsworth Avenue and 99th Street. The project site is located on the following U.S. Geological Survey (USGS) 7.5-minute quadrangle maps: Inglewood (USGS 1981a) and South Gate (USGS 1981b). The project site is in Section 32 of Township 2 South, Range 13 West (Enclosure 1).

For this update, an archival records search was conducted at the South Central Coastal Information Center (SCCIC) on March 9, 2016. As a result of this investigation three historic cultural resources were identified within a half mile of the project area, none of which are located in the project site. In addition to the documented built resources, a marginal note on the SCCIC's South Gate 7.5' Topographic Map adjacent to the 0.5-mile study area reads, "Possible vicinity of HA'UTNGA." Ha'utnga, or Huutnga, is a Gabrielino place name. However, ethnographic evidence indicates that a site named Huutnga existed on property belonging to the Lugo family which lays approximately 1.6-mile east of the project area.

An archaeological survey of the project area was conducted on July 23, 2013. No Native American cultural resources were observed in the project site.

The response form (Enclosure 2) is provided to help us identify and address your concerns with this project. Return of this form does not imply that you approve or disapprove of the project nor does it limit your

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opportunity to comment at a later time. Please return the response form to the address shown below no later than May 26, 2016.

Please feel free to contact me directly with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Marc A. Beherec". The signature is fluid and cursive, with a long horizontal stroke at the end.

Marc A. Beherec, Ph.D., RPA

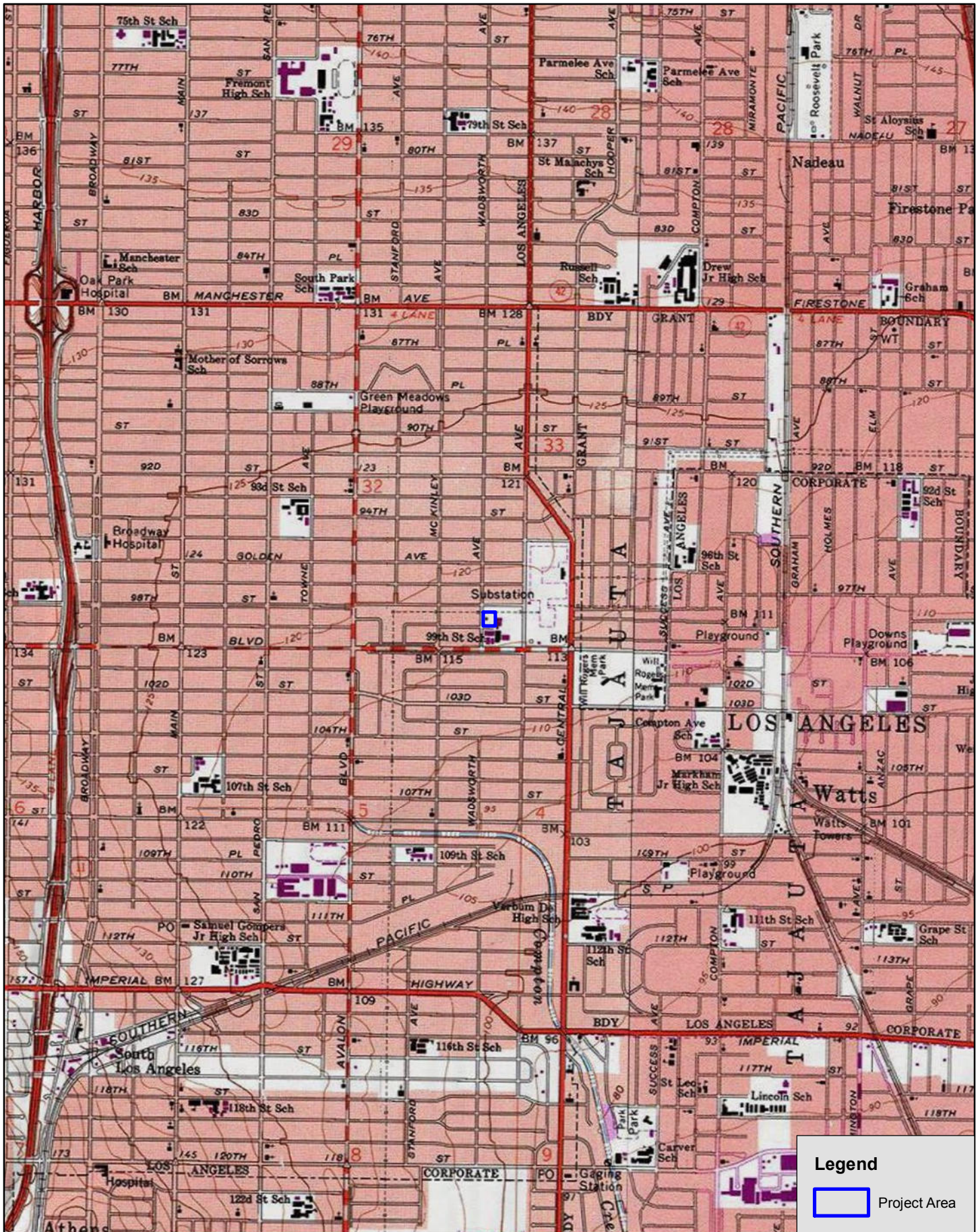
Archaeologist

213.593.8481

marc.beherec@aecom.com

Enclosures:

- 1) Project Area Overview Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope



Source: National Geographic Society 2013, 7.5 minute topographic quadrangles: Inglewood 1981; Southgate 1981



Legend

Project Area

Project Area Map

99th Street Chloramination Station Project

Contact Report Form

AECOM Contact: Allison HillDate: 5/13/2016Project # 60334574Individual Contacted: Sandonne GoadPhone # 951-807-0479

Contact Information

Subject of Contact: LADWP 99th Street Chloramination Station Project Update

Items Discussed

Ms. Goad has deferred comment to Mr. Sam Dunlap on the last several projects we have contacted her about. Ms. Goad always stipulates that if we do not hear from Mr. Dunlap that we should contact her so that she can follow up. In this case we have been in contact with Mr. Dunlap about the project and have not contact Ms. Goad to follow up about the letter which we sent to her.

Follow Up



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April 26, 2016

Gabrielino/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
PO Box 693
San Gabriel, CA 91778

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Mr. Morales:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **We may have contacted you in the past about this project. The project has since been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

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The 99th Street Wells Pumping Station encompasses approximately 24,800 square feet (0.6 acres) and is located at the intersection of Wadsworth Avenue and 99th Street. The project site is located on the following U.S. Geological Survey (USGS) 7.5-minute quadrangle maps: Inglewood (USGS 1981a) and South Gate (USGS 1981b). The project site is in Section 32 of Township 2 South, Range 13 West (Enclosure 1).

For this update, an archival records search was conducted at the South Central Coastal Information Center (SCCIC) on March 9, 2016. As a result of this investigation three historic cultural resources were identified within a half mile of the project area, none of which are located in the project site. In addition to the documented built resources, a marginal note on the SCCIC's South Gate 7.5' Topographic Map adjacent to the 0.5-mile study area reads, "Possible vicinity of HA'UTNGA." Ha'utnga, or Huutnga, is a Gabrielino place name. However, ethnographic evidence indicates that a site named Huutnga existed on property belonging to the Lugo family which lays approximately 1.6-mile east of the project area.

An archaeological survey of the project area was conducted on July 23, 2013. No Native American cultural resources were observed in the project site.

AECOM Inc

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The response form (Enclosure 2) is provided to help us identify and address your concerns with this project. Return of this form does not imply that you approve or disapprove of the project nor does it limit your opportunity to comment at a later time. Please return the response form to the address shown below no later than May 26, 2016.

Please feel free to contact me directly with any questions.

Sincerely,



Marc A. Beherec, Ph.D., RPA

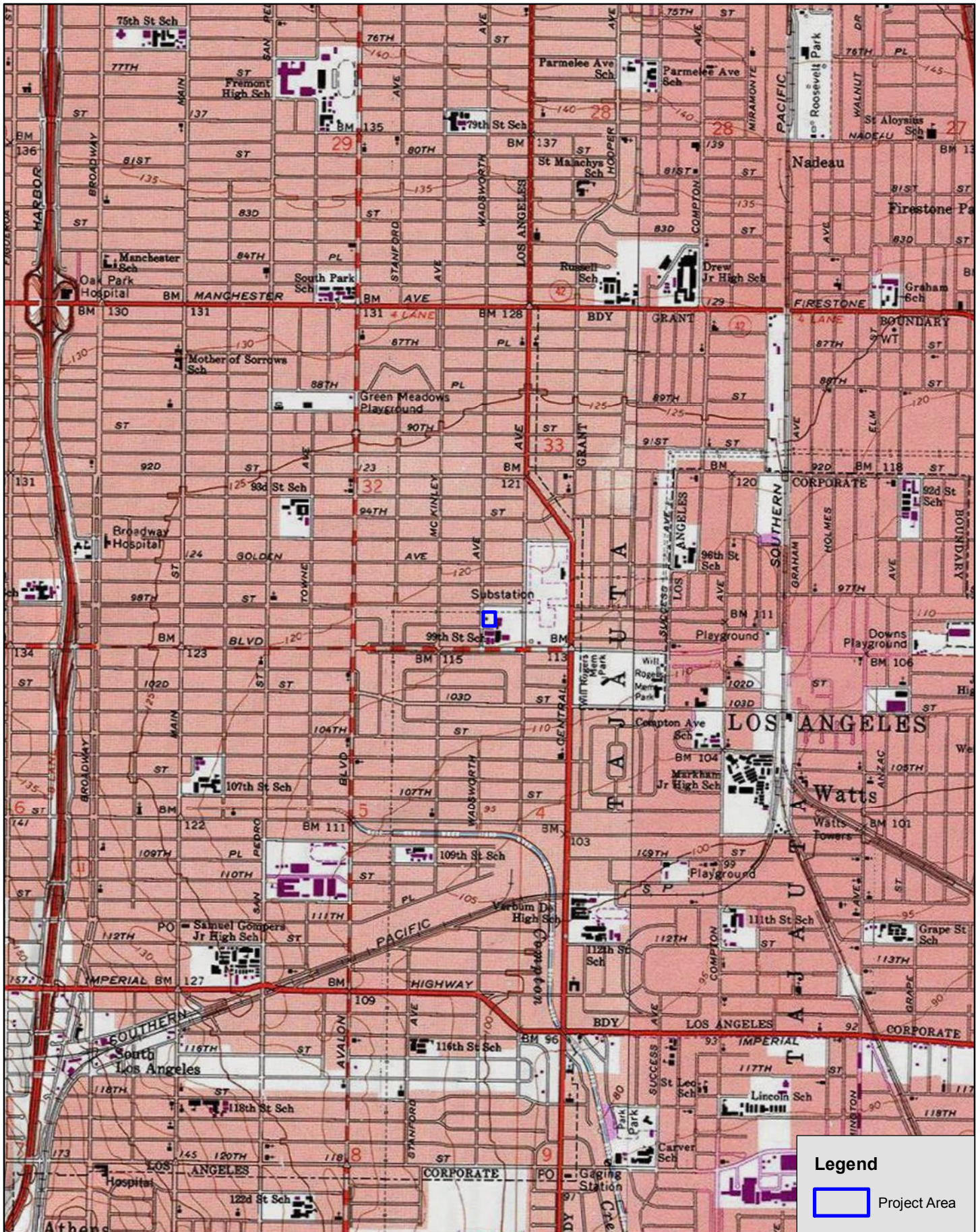
Archaeologist

213.593.8481

marc.beherec@aecom.com

Enclosures:

- 1) Project Area Overview Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope



Source: National Geographic Society 2013, 7.5 minute topographic quadrangles: Inglewood 1981; Southgate 1981



Legend

Project Area

Project Area Map

99th Street Chloramination Station Project

**LADWP 99th Street Chloramination Station Project Update
NATIVE AMERICAN RESPONSE FORM**

Please circle appropriate response below.

I/We (would like) (would not like) to be contacted. You may contact me/us at the address and phone number below.

I/We (do) (do not) have concerns. They are outlined below:

Please Print Name, Tribal Office/Affiliation, Address, and Phone Number

Signature

Date

Please return completed form no later than May 26, 2016 to:

Marc A. Beherec, Ph.D., RPA
AECOM
515 S Flower Street
8th Floor
Los Angeles, CA 90071

Contact Report Form

AECOM Contact: Allison Hill

Date: 5/13/2016

Project # 60334574

Individual Contacted: Anthony Morales

Phone # 626-483-3564

Contact Information

Subject of Contact: 99th Street Chloramination Station Project Update

Items Discussed

Contacted Anthony Morales at approximately 1:30 pm at the number provided above. Mr. Morales requested a brief summary of the project description and information regarding the results of our records search. He also requested information about the cultural and natural resources in the area and what we anticipate our recommendations will be. I informed Mr. Morales that I did not have the specifics available to me at the moment but that the LA river was near by and that we were aware of a few villages in the area but that none were within the project footprint. Mr. Morales stated that he would recommend archaeological monitoring and Native American monitoring to be done, and that members from his tribal council for the Gabrieleno/Tongva San Gabriel Band of Mission Indians be the ones to do the work. Mr. Morales also requested that he be kept updated on the progress on this project as it moves forward. I informed Mr. Morales that we would be sure to include his comments and recommendations in our report.

Follow Up



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April 26, 2016

Joseph Ontiveros, Cultural Resources Department
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, CA 92581

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Mr. Ontiveros:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **The project has been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

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An archaeological survey of the project area was conducted on July 23, 2013. No Native American cultural resources were observed in the project site.

The response form (Enclosure 2) is provided to help us identify and address your concerns with this project. Return of this form does not imply that you approve or disapprove of the project nor does it limit your

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opportunity to comment at a later time. Please return the response form to the address shown below no later than May 26, 2016.

Please feel free to contact me directly with any questions.

Sincerely,



Marc A. Beherec, Ph.D., RPA

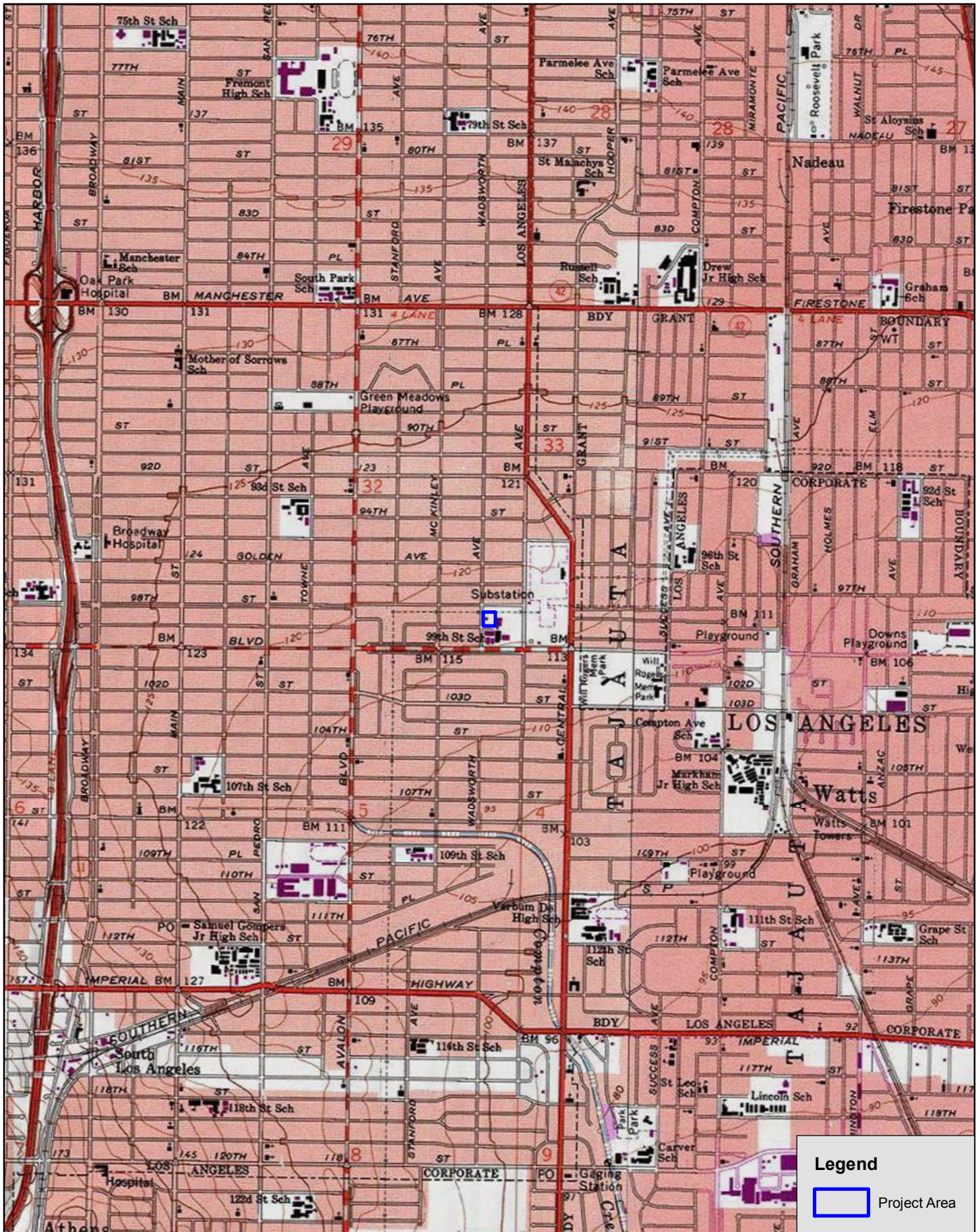
Archaeologist

213.593.8481

marc.beherec@aecom.com

Enclosures:

- 1) Project Area Overview Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope



Source: National Geographic Society 2013, 7.5 minute topographic quadrangles: Inglewood 1981; Southgate 1981



Project Area Map

99th Street Chloramination Station Project

Contact Report Form

AECOM Contact: Allison HillDate: 5/13/2016Project # 60334574Individual Contacted: Joseph OntiverosPhone # 951-663-5279

Contact Information

Subject of Contact: 99th Street Chloramination Station Project Update

Items Discussed

Contacted Mr. Ontiveros at the number listed above around 2:20 pm. Mr. Ontiveros asked where the project was located. When I informed him that it was in Watts in Los Angeles, California he stated that he would like to formally defer to Anthony Morales and the Gabrieleno/ Tongva San Gabriel Band of Mission Indians. He also requested that we inform Mr. Morales of his decision to defer.

Follow Up

May 25, 2016

Attn: Marc Beherec, Ph.D., RPA
AECOM
515 South Flower Street, 8th Floor
Los Angeles, CA 90071



RE: LADWP 99th Street Chloramination Station Project

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project(s) has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. At this time the Soboba Band does not have any specific concerns regarding known cultural resources in the specified areas that the project encompasses, but does request that the appropriate consultation continue to take place between concerned tribes, project proponents, and local agencies.

Also, working in and around traditional use areas intensifies the possibility of encountering cultural resources during any future construction/excavation phases that may take place. For this reason the Soboba Band of Luiseño Indians requests that approved Native American Monitor(s) be present during any future ground disturbing proceedings, including surveys and archaeological testing, associated with this project. The Soboba Band wishes to defer to Gabrieleño Tribal Consultants, who are in closer proximity to the project. Please feel free to contact me with any additional questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "JOE", with a long horizontal line extending to the right.

Joseph Ontiveros
Cultural Resource Director
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

Confidentiality: The entirety of the contents of this letter shall remain confidential between Soboba and the City of Los Angeles Department of Water and Power, as well as hired consultant (AECOM). No part of the contents of this letter may be shared, copied, or utilized in any way with any other individual, entity, municipality, or tribe, whatsoever, without the expressed written permission of the Soboba Band of Luiseño Indians.



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April 26, 2016

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
tattnlaw@gmail.com

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Mr. Rosas:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **We may have contacted you in the past about this project. The project has since been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

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For this update, an archival records search was conducted at the South Central Coastal Information Center (SCCIC) on March 9, 2016. As a result of this investigation three historic cultural resources were identified within a half mile of the project area, none of which are located in the project site. In addition to the documented built resources, a marginal note on the SCCIC's South Gate 7.5' Topographic Map adjacent to the 0.5-mile study area reads, "Possible vicinity of HA'UTNGA." Ha'utnga, or Huutnga, is a Gabrielino place name. However, ethnographic evidence indicates that a site named Huutnga existed on property belonging to the Lugo family which lays approximately 1.6-mile east of the project area.

An archaeological survey of the project area was conducted on July 23, 2013. No Native American cultural resources were observed in the project site.

The response form (Enclosure 2) is provided to help us identify and address your concerns with this project. Return of this form does not imply that you approve or disapprove of the project nor does it limit your

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opportunity to comment at a later time. Please return the response form to the address shown below no later than May 26, 2016.

Please feel free to contact me directly with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Marc A. Beherec'.

Marc A. Beherec, Ph.D., RPA

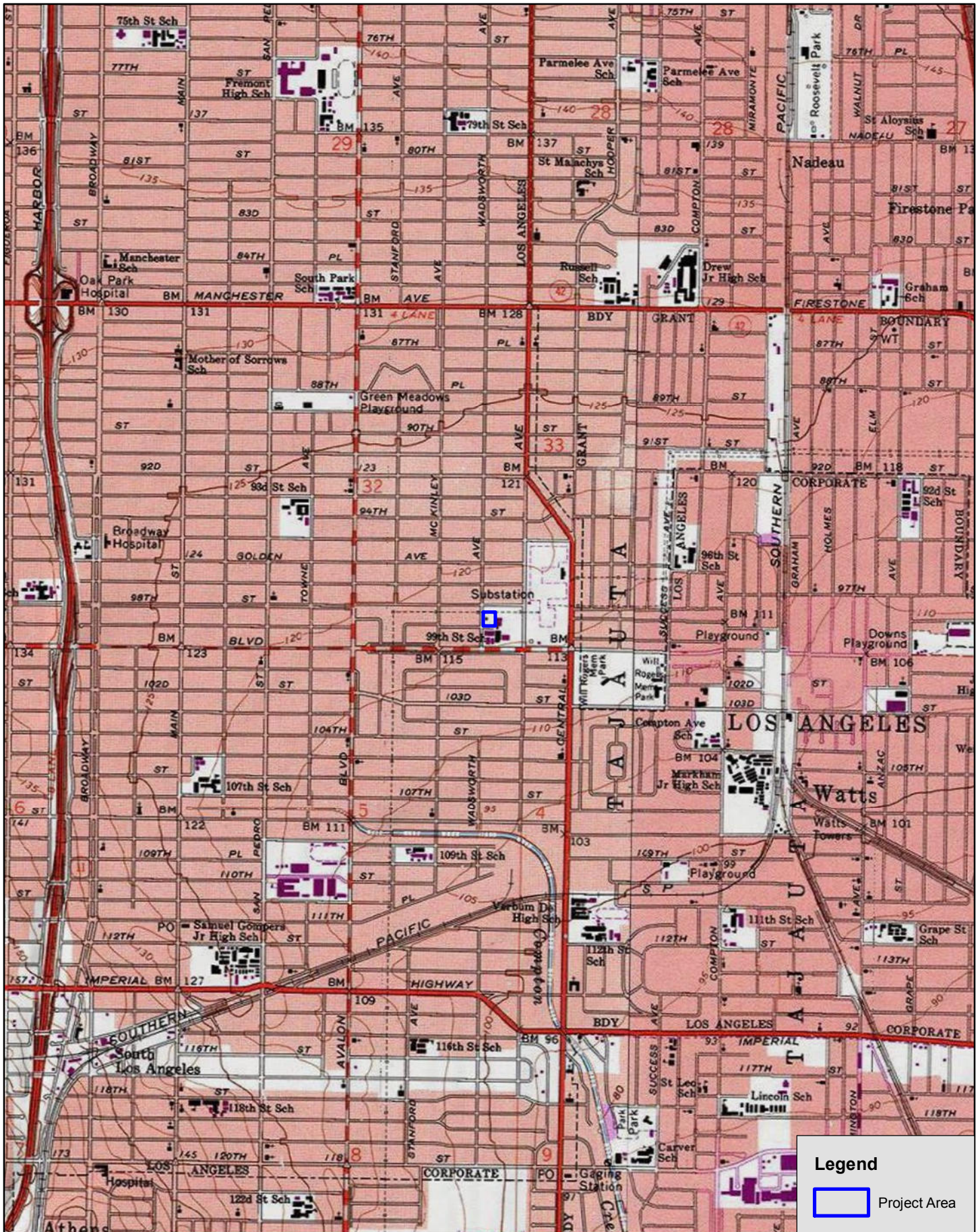
Archaeologist

213.593.8481

marc.beherec@aecom.com

Enclosures:

- 1) Project Area Overview Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope



Source: National Geographic Society 2013, 7.5 minute topographic quadrangles: Inglewood 1981; Southgate 1981



Legend

Project Area

Project Area Map

99th Street Chloramination Station Project

Hill, Allison

From: Johntommy Rosas <tattnlaw@gmail.com>
Sent: Tuesday, April 26, 2016 4:28 PM
To: Hill, Allison
Subject: Re: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

thanks Alison -I will respond in more detail after I review your document-
and I confirm receipt of it -thanks jt

On Tue, Apr 26, 2016 at 3:13 PM, Hill, Allison <Allison.Hill@aecom.com> wrote:

Dear Tribal Administrator Rosas:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **We may have contacted you in the past about this project. The project has since been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

Attached, please find our contact letter for the revised project, as well as a map and contact form. Please feel free to contact Marc Beherec directly with any questions:

Marc A. Beherec, Ph.D., RPA

Archaeologist

AECOM

515 S. Flower St., 8th Floor, Los Angeles, CA 90071

Office: [213-593-8481](tel:213-593-8481)

Cell: [951-296-7561](tel:951-296-7561)

Thank you!

Sincerely,

Allison Hill

Archaeologist

AECOM

515 S. Flower St., 8th Floor, Los Angeles, CA 90071

--

JOHN TOMMY ROSAS

TRIBAL ADMINISTRATOR

TRIBAL LITIGATOR

TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION

A TRIBAL SOVEREIGN NATION UNDER UNDRIP

AND AS A CALIFORNIA NATIVE AMERICAN TRIBE / SB18-AJ52-AJR 42

25 U.S. Code § 1679 - Public Law 85-671

August 18, 1958 | [H. R. 2824] 72 Stat. 619

Tribal sovereignty in the United States is the inherent authority of indigenous tribes to govern themselves within and outside the borders and waters of the United States of America .

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TATTN / TRIBAL NOTICE OF CONFIDENTIALITY:

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TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

tongvanation.org

Contact Report Form

AECOM Contact: Allison HillDate: 5/13/2016Project # 60334574Individual Contacted: John Tommy RosasPhone # 310-570-6567

Contact Information

Subject of Contact: 99th Street Chloramination Station Project Update

Items Discussed

Called Mr. Rosas at about 2:23 pm to follow up about the project, using the number listed above. We had formerly received an email from Mr. Rosas the day we sent the letter in which he stated that he would review the project and get back to us. We had not heard back from Mr. Rosas and decided to follow up with a phone call. When reached by telephone Mr. Rosas stated that he had not yet had time to review our letter and that he would look at it later and get back to us.

Follow Up



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515 South Flower Street, 8th Floor, Los Angeles, CA 90071
T 213.593.7700 F 213.593.7715 www.AECOM.com

April 26, 2016

Gabrielino Band of Mission Indians
Andrew Salas, Chairperson
PO Box 393
Covina, CA 91723

Subject: LADWP 99th Street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Chairperson Salas:

AECOM, Inc. has been retained by the Los Angeles Department of Water and Power to conduct Native American contact for the 99th Street Wells Chloramination Station Project. The Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area. **We may have contacted you in the past about this project. The project has since been updated, but planned construction remains the same. The purpose of this update is to comply with the more rigorous standards of "CEQA-Plus." CEQA-Plus utilizes CEQA documentation plus the federal standards of the National Environmental Policy Act (NEPA). The following project description and enclosed maps supersede all previous project descriptions.**

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Please feel free to contact me directly with any questions.

Sincerely,



Marc A. Beherec, Ph.D., RPA

Archaeologist

213.593.8481

marc.beherec@aecom.com

Enclosures:

- 1) Project Area Overview Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope

Beherec, Marc

From: Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>
Sent: Tuesday, May 03, 2016 11:08 AM
To: Beherec, Marc; Christina Swindall Martinez. Kizh Gabrieleno
Cc: Matt Teutimez.Kizh Gabrieleno
Subject: Sub: LADWP 99th street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations
Attachments: Sub- LADWP 99th street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations .docx; IMG_4728.jpg

Dear Marc

Please see attachment, also Note i made a correction in regards to the village you have documneted in your letter dated April 26,2016 regarding the above project location. In your letter you have the village of Huutnga also spelled Houtgna located within the project location or a few miles away. The village of Huutgna was located in south El Monte on the Ranch Of Felipe Lugo. the village Tajauta is located within the above project location. Thank you
Sincerely,

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
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email: gabrielenoindians@yahoo.com
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GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION

Historically known as The San Gabriel Band of Mission Indians

Recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Dear Marc A. Beherec.

Sub: LADWP 99th street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

"The project locale lies in an area where the Ancestral & traditional territories of the Kizh(Kitc) Gabrieleño villages **Tajauta also known as Tajuatagna** , adjoined and overlapped with each other, at least during the Late Prehistoric and Protohistoric Periods. The homeland of the Kizh (Kitc) Gabrieleños , probably the most influential Native American group in aboriginal southern California (Bean and Smith 1978a:538), was centered in the Los Angeles Basin, and reached as far east as the San Bernardino-Riverside area. The homeland of the Serranos was primarily the San Bernardino Mountains, including the slopes and lowlands on the north and south flanks. Whatever the linguistic affiliation, Native Americans in and around the project area exhibited similar organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home/base sites are marked by midden deposits, often with bedrock mortars. During their seasonal rounds to exploit plant resources, small groups would migrate within their traditional territory in search of specific plants and animals. Their gathering strategies often left behind signs of special use sites, usually grinding slicks on bedrock boulders, at the locations of the resources. Therefore in order to protect our resources we're requesting one of our experienced & certified Native American monitors as well as a Arceo- Monitor to be on site during any & all ground disturbances (this includes but is not limited to pavement removal, pot-holing or auguring, boring, grading, excavation and trenching).

In all cases, when the NAHC states there are "No" records of sacred sites" in the subject area; they always refer the contractors back to the Native American Tribes whose tribal territory the project area is in. This is due to the fact, that the NAHC is only aware of general information on each California NA Tribe they are "NOT" the "experts" on our Tribe. Our Elder Committee & Tribal Historians are the experts and is the reason why the NAHC will always refer contractors to the local tribes.

In addition, we are also often told that an area has been previously developed or disturbed and thus there are no concerns for cultural resources and thus minimal impacts would be expected. I have two major recent examples of how similar statements on other projects were proven very inadequate. An archaeological study claimed there would be no impacts to an area adjacent to the Plaza Church at Olvera Street, the original Spanish settlement of Los Angeles, now in downtown Los Angeles. In fact, this site was the Gabrieleño village of Yangna long before it became what it is now today. The new development wrongfully began their construction and they, in the process, dug up and desecrated 118 burials. The area that was dismissed as culturally sensitive was in fact the First Cemetery of Los Angeles where it had been well documented at the Huntington Library that 400 of our Tribe's ancestors were buried there along with the founding families of Los Angeles (Picos, Sepulvedas, and Alvarados to name a few). In addition, there was another inappropriate study for the development of a new sports complex at Fedde Middle School in the City of Hawaiian Gardens could commence. Again, a village and burial site were desecrated despite their mitigation measures. Thankfully, we were able to work alongside the school district to quickly and respectfully mitigate a mutually beneficial resolution.

Given all the above, the proper thing to do for your project would be for our Tribe to monitor ground disturbing construction work. Native American monitors and/or consultant can see that cultural resources are treated appropriately from the Native American point of view. Because we are the lineal descendants of the vast area of Los Angeles and Orange Counties, we hold sacred the ability to protect what little of our culture remains. We thank you for taking seriously your role and responsibility in assisting us in preserving our culture.

With respect,

Please contact our office regarding this project to coordinate a Native American Monitor to be present. Thank You

Andrew Salas, Chairman
Cell (626) 926-4131

Andrew Salas, Chairman
Albert Perez, treasurer I

Nadine Salas, Vice-Chairman
Martha Gonzalez Lemos, treasurer II

Christina Swindall Martinez, secretary
Richard Gradias, Chairman of the council of Elders

Addendum: clarification regarding some confusions regarding consultation under AB52:

AB52 clearly states that consultation must occur with tribes that claim traditional and cultural affiliation with a project site. Unfortunately, this statement has been left open to interpretation so much that neighboring tribes are claiming affiliation with projects well outside their traditional tribal territory. The territories of our surrounding Native American tribes such as the Luiseno, Chumash, and Cahuilla tribal entities. Each of our tribal territories has been well defined by historians, ethnographers, archaeologists, and ethnographers – a list of resources we can provide upon request. Often, each Tribe as well educates the public on their very own website as to the definition of their tribal boundaries. You may have received a consultation request from another Tribe. However we are responding because your project site lies within our Ancestral tribal territory, which, again, has been well documented. What does Ancestrally or Ancestral mean? The people who were in your family in past times, Of, belonging to, inherited from, or denoting an ancestor or ancestors <http://www.thefreedictionary.com/ancestral>. . If you have questions regarding the validity of the "traditional and cultural affiliation" of another Tribe, we urge you to contact the Native American Heritage Commission directly. Section 5 section 21080.3.1 (c) states "...the Native American Heritage Commission shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated with the project area." In addition, **please see the map below.**

CC: NAHC

APPENDIX 1: Map 1-2; Bean and Smith 1978 map.

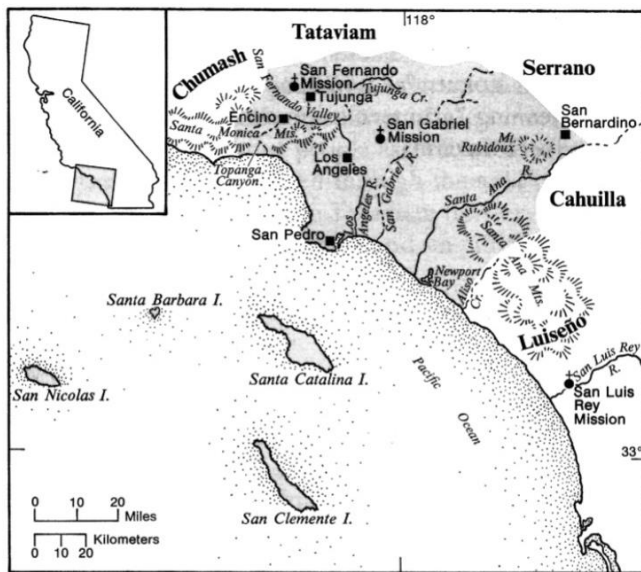


Fig. 1. Tribal territory.

The United States National Museum's Map of Gabrielino Territory:

Bean, Lowell John and Charles R. Smith
1978 Gabrielino IN *Handbook of North American Indians, California*, Vol. 8, edited by R.F. Heizer, Smithsonian Institution Press, Washington, D.C., pp. 538-549

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between Watts and Lynwood was the 4,438 acre Rancho Tajauta granted to Anastasio Avila in 1843 (Cowan 1956:101; Beck and Haase 1974:Map 37). Kroeber suggested that *Tajáuta* was probably based on a Gabrielino placename (Kroeber 1925:897). In his 1918 fieldnotes Harrington reported that he

interviewed Mr. Lugo of [the] S. [San] Gabriel poolroom. He says that the ranch at Watts was of the Lugos and was known as El Rancho Nuevo. The old adobe house was a quarter of a block west of the spring site. [There] used to be tules at the spring. He volunteered that the old name of the place was *Tajáuta*. . . . [Lugo] and told Kewen [José de los Santos Juncos] that it was an Ind. [Indian] name (Harrington 1986:R104 F80).

The name survives in the present Tajauta Avenue in the City of Compton. The name *Tajáuta* may be a

Beherec, Marc

From: Andy <gabrielenoindians@yahoo.com>
Sent: Tuesday, May 03, 2016 7:41 PM
To: Beherec, Marc
Cc: Christina Swindall Martinez. Kizh Gabrieleno; Matt Teutimez.Kizh Gabrieleno; Hill, Allison
Subject: Re: LADWP 99th street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Your welcome No problem . Thank you

Sent from my iPhone

On May 3, 2016, at 5:22 PM, Beherec, Marc <Marc.Beherec@aecom.com> wrote:

Dear Andy,

Thanks very much for your response! We will include your information and recommendations in our report.

Thanks also for the information about Tajuata. We didn't mention it in the letter (because we were focusing on what was on the SCCIC map), but in our report we do discuss Tajuata, as well as the fact that Huutnga may have been located on a different Rancho owned by the Lugos. Most of our information for that comes from McCawley's book, but we did draw on a couple of other histories of Watts.

Respectfully,

Marc

Marc A. Beherec, Ph.D., RPA
Archaeologist
AECOM
515 S. Flower St., 8th Floor, Los Angeles, CA 90071
Office: 213-593-8481
Cell: 951-296-7561

From: Gabrieleno Band of Mission Indians [<mailto:gabrielenoindians@yahoo.com>]
Sent: Tuesday, May 03, 2016 11:08 AM
To: Beherec, Marc; Christina Swindall Martinez. Kizh Gabrieleno
Cc: Matt Teutimez.Kizh Gabrieleno
Subject: Sub: LADWP 99th street Chloramination Station Project Updated Cultural Resources Records Search and NRHP Evaluations

Dear Marc

Please see attachment, also Note i made a correction in regards to the village you have documneted in your letter dated April 26,2016 regarding the above project location. In your letter you have the village of Huutnga also spelled Houtgna located within the project location or a few miles away. The village of Huutgna was located in south El

Monte on the Ranch Of Felipe Lugo. the village Tajauta is located within the above project location. Thank you

Sincerely,

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians - Kizh Nation
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Covina, CA 91723
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email: gabrielenoindians@yahoo.com
website: www.gabrielenoindians.org

APPENDIX C

DPR FORMS

(CONFIDENTIAL)

APPENDIX D

TRANSPORTATION/TRAFFIC TECHNICAL OUTPUT

LADWP 99th St Chlor Fac- EIR
Existing Conditions
AM Peak Hour

Turning Movement Report
None

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 Clovis & 98th													
Base	6	37	0	0	163	12	6	0	32	0	0	0	256
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	37	0	0	163	12	6	0	32	0	0	0	256
#2 Wadsworth/Century													
Base	0	0	0	17	0	66	51	583	0	0	878	86	1681
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	17	0	66	51	583	0	0	878	86	1681
#3 Central Ave. / Century Blvd.													
Base	258	1113	43	81	931	130	83	337	197	57	435	42	3707
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	258	1113	43	81	931	130	83	337	197	57	435	42	3707

LADWP 99th St Chlor Fac- EIR
Existing Conditions
PM Peak Hour

Turning Movement Report
None

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 Clovis & 98th													
Base	14	59	0	0	143	11	3	0	13	0	0	0	243
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	14	59	0	0	143	11	3	0	13	0	0	0	243
#2 Wadsworth/Century													
Base	0	0	0	30	0	20	27	976	0	0	710	26	1789
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	30	0	20	27	976	0	0	710	26	1789
#3 Central Ave. / Century Blvd.													
Base	216	932	72	124	1007	98	146	550	280	51	301	57	3834
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	216	932	72	124	1007	98	146	550	280	51	301	57	3834

 LADWP 99th St Chlor Fac- EIR
 Future With Project Conditions
 AM Peak Hour

Turning Movement Report
 Proj AM

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 Clovis & 98th													
Base	6	39	0	0	173	13	6	0	34	0	0	0	272
Added	3	0	0	0	0	0	0	0	3	0	0	0	6
Total	9	39	0	0	173	13	6	0	37	0	0	0	278
#2 Wadsworth/Century													
Base	0	0	0	18	0	70	54	619	0	0	932	91	1784
Added	0	0	0	3	0	2	3	0	0	0	0	8	16
Total	0	0	0	21	0	72	57	619	0	0	932	99	1800
#3 Central Ave. / Century Blvd.													
Base	274	1181	46	86	988	138	88	358	209	60	462	45	3934
Added	10	0	0	0	0	1	0	0	6	0	0	0	17
Total	284	1181	46	86	988	139	88	358	215	60	462	45	3951

 LADWP 99th St Chlor Fac- EIR
 Future With Project Conditions
 PM Peak Hour

Turning Movement Report
 Proj PM

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 Clovis & 98th													
Base	15	63	0	0	152	12	3	0	14	0	0	0	258
Added	3	0	0	0	0	0	0	0	3	0	0	0	6
Total	18	63	0	0	152	12	3	0	17	0	0	0	264
#2 Wadsworth/Century													
Base	0	0	0	32	0	21	29	1036	0	0	753	28	1898
Added	0	0	0	7	0	4	1	0	0	0	0	5	17
Total	0	0	0	39	0	25	30	1036	0	0	753	33	1915
#3 Central Ave. / Century Blvd.													
Base	229	989	76	132	1069	104	155	584	297	54	319	60	4069
Added	7	0	0	0	0	0	1	0	9	0	0	0	17
Total	236	989	76	132	1069	104	156	584	306	54	319	60	4086

LADWP 99th St Chlor Fac- EIR
Future No Project Conditions
AM Peak Hour

Turning Movement Report
None

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 Clovis & 98th													
Base	6	39	0	0	173	13	6	0	34	0	0	0	272
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	39	0	0	173	13	6	0	34	0	0	0	272
#2 Wadsworth/Century													
Base	0	0	0	18	0	70	54	619	0	0	932	91	1784
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	18	0	70	54	619	0	0	932	91	1784
#3 Central Ave. / Century Blvd.													
Base	274	1181	46	86	988	138	88	358	209	60	462	45	3934
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	274	1181	46	86	988	138	88	358	209	60	462	45	3934

LADWP 99th St Chlor Fac- EIR
Future No Project Conditions
PM Peak Hour

Turning Movement Report
None

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 Clovis & 98th													
Base	15	63	0	0	152	12	3	0	14	0	0	0	258
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	15	63	0	0	152	12	3	0	14	0	0	0	258
#2 Wadsworth/Century													
Base	0	0	0	32	0	21	29	1036	0	0	753	28	1898
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	32	0	21	29	1036	0	0	753	28	1898
#3 Central Ave. / Century Blvd.													
Base	229	989	76	132	1069	104	155	584	297	54	319	60	4069
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	229	989	76	132	1069	104	155	584	297	54	319	60	4069

# of Construction Workers (Typical & Peak)*	Typical: 5 Peak: 6	Typical: 4 Peak: 5
# of Dump/Haul Truck Trips Per Day	6	6
# of Equipment & Deliveries Traveling To & From Project Site Per Day (Typical & Peak)*	Typical: 2 Peak: 5	Typical: 2 Peak: 5

Assumed 25 percent of daily trucks in either peak hour, to be conservative.

Total daily trucks: $5 + 6 = 11$

Total daily workers: 6

AM

Six workers in

3 trucks in / 3 trucks out

AM in: $6 + (3 * 2.5) = 14$

AM out: $(3 * 2.5) = 8$

PM

Six workers out

3 trucks in / 3 trucks out

PM in: $(3 * 2.5) = 8$

PM out: $6 + (3 * 2.5) = 14$