APPENDIX D

Cultural Resources Technical Report

HISTORIC PROPERTIES IDENTIFICATION REPORT FOR THE DE SOTO TANKS PROJECT

11200 De Soto Avenue, Los Angeles
Los Angeles County, California

PREPARED BY:

Los Angeles Department of Water & Power

Environmental Planning and Assessment

111 North Hope Street, Room 1044

Los Angeles, California 90012

Contact: Brian Gonzalez, Los Angeles Department of Water and Power

WITH ASSISTANCE BY:

DUDEK

Kate Kaiser, MSHP; Erica Nicolay, MA; and Samantha Murray, MA

38 North Marengo Avenue

Pasadena, California 91101

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TABLE OF CONTENTS

SECTION PAGE

APPENDICES

A. Preparer's Qualifications
B. **CONFIDENTIAL** Records Search Results
C DPR Forms

FIGURES

TABLES

ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
City	City of Los Angeles
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
HCM	Historic-Cultural Monument
HPOZ	Historic Preservation Overlay Zone
LADWP	Los Angeles Department of Water and Power
MG	million gallons
MLD	most likely descendant
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PRC	California Public Resources Code
project	De Soto Tanks Project
SCCIC	Southern California Coastal Information Center
SHPO	State Historic Preservation Officer
SRF	State Revolving Fund
SWRCB	State Water Resources Control Board

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EXECUTIVE SUMMARY

Dudek was retained by the Los Angeles Department of Water and Power (LADWP) to complete a cultural resources study for the De Soto Tanks EIR Project. The De Soto Tanks EIR Project is a water storage project proposed by the LADWP. The project would functionally replace the existing 3-million-gallon (MG) De Soto Reservoir, located at 11200 De Soto Avenue, with two buried, pre-stressed circular concrete storage tanks immediately north of the existing reservoir site. The combined operating storage capacity upon completion of the new storage tanks would be approximately 20 MG. The new tanks would provide additional local storage to increase operational effectiveness, reliability, and flexibility; system redundancy; and emergency water supply to the West San Fernando Valley. The study involved completion of a California Historical Resources Information System (CHRIS) records search, archival research on the town of Chatsworth and LADWP water infrastructure, a pedestrian survey of the project area, and documentation and evaluation of the De Soto Reservoir in consideration of NRHP, CRHR, and City of Los Angeles designation criteria.

As funding for the project is from the State Revolving Fund (SRF) Loan Program, which is partially funded by the U.S. Environmental Protection Agency, the project would be subject to federal environmental regulations. To comply with applicable federal statutes and authorities, the U.S. Environmental Protection Agency established specific "CEQA Plus" requirements in the Operating Agreement with the State Water Resources Control Board for administering the SRF Loan Program. Therefore, the purpose of this report is to identify all cultural resources within the project Area of Potential Effect (APE) and to determine whether the project would result in a significant impact to an historical resource under the California Environmental Quality Act (CEQA) or an adverse effect to an historic property under Section 106 of the National Historic Preservation Act (NHPA).

The CHRIS records search results indicated that no cultural resources were previously recorded within the project APE. After thorough consideration of NRHP, CRHR, and City of Los Angeles Historic-cultural Monument (HCM) designation criteria, the De Soto Reservoir addressed in this project does not appear eligible for either national, state, or local listing. Therefore, it does not appear to be an historical resource for the purposes of CEQA or an historic property for the purposes of Section 106 of the NHPA. Standard protection measures for unanticipated discoveries of archaeological resources and human remains are provided in the Recommendations section (see Section 8.1 and 8.2).

This study finds that the proposed project would have no impact on historical resources under CEQA and would have no effect on historic properties under Section 106 of the NHPA.

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1 INTRODUCTION

The De Soto Tanks Project (project) is a water storage project that is being proposed by the Los Angeles Department of Water and Power (LADWP). The project would functionally replace the existing 3-MG De Soto Reservoir, located at 11200 De Soto Avenue, with two buried, pre-stressed circular concrete storage tanks immediately north of the existing reservoir site. The combined operating storage capacity upon completion of the new storage tanks would be approximately 20 MG. These tanks would provide additional local storage to increase operational effectiveness, reliability, and flexibility; system redundancy; and emergency supply to the West San Fernando Valley.

The existing De Soto Reservoir, located in the northwestern area of the San Fernando Valley, was built in 1941. Excavation at the proposed project site would be required to bury the tanks below existing grade level in order to achieve LADWP's target water elevations for reservoirs; the tanks would be approximately 240 feet in diameter and 40 feet in height. The project would also require the installation of new inlet pipelines that would connect to the LADWP Rinaldi Trunk Line and new outlet pipelines that would connect to the LADWP De Soto Trunk Line and Granada Trunk Line. A new regulator station will be required to reduce water pressure from the Rinaldi Trunk Line originating at the Los Angeles Aqueduct Filtration Plantd. Upon completion of the new De Soto Tanks, a new pump station (the De Soto Pump Station) would be constructed in the location of the existing De Soto Reservoir, which would be removed.

The LADWP retained Dudek to conduct a cultural resources study in support of the project. This report presents the results of a cultural resources records search, an intensive pedestrian survey of the proposed Area of Potential Effects (APE), recordation and evaluation of the extant De Soto Reservoir and surrounding parcel, which was constructed over 45 years ago, and analysis of indirect impacts to the adjacently located Chatsworth Momonga/Mission Trail. This report satisfies the requirements of CEQA, which requires lead agencies to determine whether a discretionary project may have a significant impact on historical resources. The LADWP, as a municipal utility, would implement and operate the project and therefore would be the CEQA lead agency. The regulatory framework for the project is CEQA-Plus, which requires the State Water Resources Control Board (SWRCB) to consult directly with agencies responsible for implementing federal environmental laws and regulations. As such, project-related activities with the potential to affect historic properties are considered federal undertakings, subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations (36 CFR Part 800). Therefore, the purpose of this report is to identify all cultural resources within the project APE and to determine whether the project/undertaking would result in a significant impact to an historical resource under CEQA or an adverse effect to an historic property under Section 106 of the NHPA.

Dudek Architectural Historian Kate Kaiser, MSHP, is the primary author of this report and evaluated the De Soto Reservoir. Archaeologists Erica Nicolay and Elizabeth Denniston requested the records search and conducted the intensive-level survey. Finally, Historic Built Environment Lead Samantha. Murray, MA, served as the Principal Investigators for the project. Ms. Murray and Ms. Kaiser meet the Secretary of the Interior's Professional Qualification Standards (PQS, 36 CFR Part 61) for architectural history. Ms. Murray and Ms. Nicolay also meet the Standards for Archaeology. Preparer's qualifications are provided in Appendix A.

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2 PROJECT DESCRIPTION/UNDERTAKING

2.1 Project Description

The proposed project is a water project that is being proposed by the LADWP. The project would functionally replace the existing 3 MG De Soto Reservoir, located at 11200 De Soto Avenue, with two buried, pre-stressed circular concrete storage tanks and a pump station at the existing reservoir site. The combined operating storage capacity upon completion of the new storage tanks would be approximately 20 MG. These tanks and pump station would provide additional local storage and pumping capability to increase operational effectiveness, reliability, and flexibility; system redundancy; and emergency supply to the West San Fernando Valley.

Construction

The proposed project involves excavation of the site north of the existing De Soto Reservoir to a depth of approximately 50 feet, followed by the construction of two pre-stressed concrete tanks, each of which would be approximately 245 feet in diameter and approximately 40 feet in height. The majority of the excavated material would be hauled from the project site via the State Route (SR) 118 Freeway to both the Mojave Yard, located in the City of Mojave, California, and a facility permitted to accept excavated soil materials. Upon completion of the tanks, the existing reservoir would be demolished in order to facilitate construction of the future pump station.

Excavation for the tanks would involve the use of heavy equipment, including excavators, front loaders, and dozers. Based on preliminary estimates, approximately 350,000 loose cubic yards of soil would need to be excavated at the project site to accommodate the tanks. Approximately 116,000 cubic yards of this material would be used to backfill around the tanks once they are constructed. However, the majority of the excavated material, approximately 340,000 cubic yards, would be hauled off site, requiring approximately 160 truck trips per day, assuming 50% of the haul trucks are 10 cubic-yard haul trucks and 50% of the haul trucks are 15 cubic-yard haul trucks, for 8 hours per day for hauling activities. Excavation and hauling would occur over a period of approximately 8.5 months. Approximately 10,000 cubic yards of the excavated soil would be stockpiled on site, approximately 100,000 cubic yards of excavated soil would be hauled to LADWP's Mojave Yard, and the remaining approximately 240,000 cubic yards of excavated material would be hauled to a facility permitted to accept excavated soil materials.

After excavation, the tank construction would entail the installation of inlet/outlet pipelines, a reinforced concrete floor, the erection of scaffolding for the walls and roof, the installation of wall and roof panels, the construction of columns to support the roof, wrapping the tanks with pre-stressing cables, and the application of concrete on the walls and roof. This process would involve the delivery of materials and concrete and the use of heavy equipment, including cranes and concrete pump trucks.

East of the tank site would be a new below ground flow control station. The purpose of the flow control station would be to control the water flow into the tanks from the Rinaldi Trunk Line to the east. The flow control station would be

approximately 2,500 square feet in size and house mechanical equipment and controls to regulate water flow into the tanks.

After completion of the tanks and flow control station, the area surrounding the tanks would be backfilled, and a perimeter road would be constructed around the tanks for maintenance access. All cut slopes from excavation would be properly stabilized and revegetated. Although the tanks themselves would be buried, the roof of the tanks would not be covered.

New pipelines, inlet, and outlet pipelines of the tanks would be constructed on site as well as extend off site to connect with Rinaldi Trunk Line to the east and De Soto Trunk Line to the south. After completion of the tanks and pipelines, the existing De Soto Reservoir would be demolished and the new pump station would be constructed. To install the new 66-inch pipeline connection to the Rinaldi Trunk Line to the east, two open trenches would be constructed to facilitate pipe jacking below grade. A total of 620 feet of pipeline would be required for this connection. One open trench would be located on the project site and the second trench would be located within the existing 60-foot LADWP easement on the east side of Rinaldi Street. With pipe jacking occurring below grade, Rinaldi Street would remain open to through traffic throughout the estimated 9 month pipeline installation process.

To connect the project with the De Soto Trunk Line, new piping would be installed below ground on the project site and south along De Soto Avenue. Approximately 570 feet of pipe jacking from the storage tanks to the project site's western boundary would be done on site. Upon reaching the project site's western boundary at De Soto Avenue, open trench pipeline installation would occur along the eastern side (approximately 35 feet of work area required) of De Soto Avenue. Pipeline installation along De Soto Avenue would occur along approximately 2,650 feet extending from the project site at the north to Chatsworth Street at the south. With the exception of pipe jacking beneath the intersection of De Soto Avenue and Rinaldi Street, all other pipeline installation would be done via cut-and-cover construction, therefore requiring the closing of 2 traffic lanes and the median lane along De Soto Avenue throughout the approximately 24 month construction period. Upon completion of pipeline installation, the roadway would be repaired, repaved, and the lanes along De Soto Avenue would be reopened.

Access to and egress from the site during construction would be from Rinaldi Street on the east and/or De Soto Avenue on the west. Construction of the proposed project would take approximately 6 years to complete, beginning 2023.

Upon completion of the storage tanks, the existing De Soto Reservoir would no longer be necessary and as such would be demolished. Demolition of the reservoir would entail demolition of the following: aluminum roof decking, timber roof framing, concrete columns, perimeter concrete walls, and asphalt concrete paving. This would result in approximately 560 tons or 440 cubic yards of material that would be hauled from the project site. As with the excavated earth removed during the construction of the storage tanks, the excavated material would be hauled off site, requiring approximately 50 truck trips. Excavated material would be hauled from the project site via the SR 118 Freeway to a facility permitted to accept excavated soil materials.

Operation

As discussed above, the proposed tanks would store potable water to increase operational effectiveness, reliability, and flexibility; system redundancy; and emergency supply to the West San Fernando Valley. The proposed flow control station would control water flow coming from Los Angeles Aqueduct Filtration Plant UV Plant weir, which has an 1,191-foot high water elevation, to De Soto Tanks, which have an 1,130-foot high water elevation. The proposed De Soto Pump Station would pump water from De Soto Tanks to the 1,305-foot pressure zone in the west valley. No workers would be required to operate these facilities on a daily basis; however, these facilities would require periodic maintenance. As such, operational activities would be essentially the same as those that occur under existing conditions.

2.2 Project Location

The proposed project site is located at 11200 De Soto Avenue, in the Chatsworth community of City of Los Angeles. The project site is generally bounded by the SR 118 Freeway to the north, De Soto Avenue to the west, and Rinaldi Street to the south and east. Adjacent to the De Soto Reservoir property on the east side is an undeveloped, privately-owned parcel of land that would be acquired in order to facilitate construction of the proposed project. The project is located in Council District No. 12 and in the Chatsworth Neighborhood Council area.

The proposed project would occur on several assessor's parcels owned by LADWP. The southernmost parcel (APN 2706007901) is developed with the existing De Soto Reservoir, which would be removed after completion of the proposed tanks. The two northernmost parcels (APNs 2701003907 and 2707001904) are essentially undeveloped. An additional undeveloped parcel (APN 2707001019), not owned by LADWP, is proposed for acquisition to facilitate project construction. The project site is highly disturbed, consisting primarily of ruderal vegetation that is maintained through mowing and/or tilling. A 12-foot wide dedicated equestrian trail easement extends from Rinaldi Street on the south adjacent to the eastern edge of the southernmost LADWP parcel, where the reservoir is located. This formal easement does not continue across the northernmost LADWP parcels, but LADWP has allowed equestrian access across these parcels between Rinaldi Street on the east and the dedicated equestrian easement on the west. Throughout construction and operation of the proposed project, equestrian access would be maintained.

Existing development that adjoins the LADWP property includes Sierra Canyon School to south/southeast of the project site and residential properties to the southwest. Undeveloped property adjoins the LADWP property to the south, west, and northeast. The SR 118 Freeway is located directly north of the project site. Surrounding uses include Sierra Canyon School to the west of De Soto Avenue, residential development south and southeast of Rinaldi Street, and open space and residential development north of the SR 118 Freeway. An overview of the project location is shown in Figures 1 and 2.

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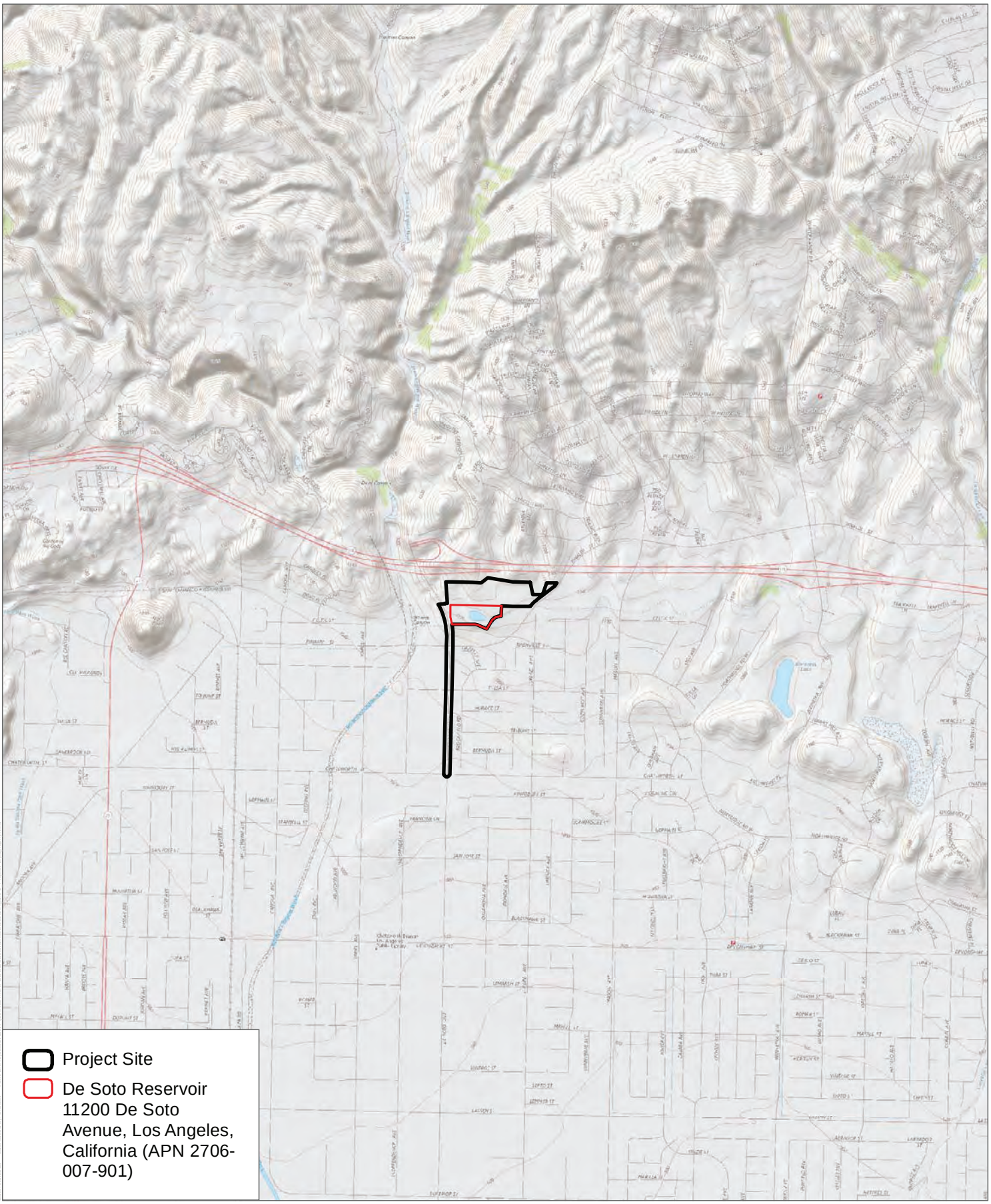

SOURCE: USGS 7.5-Minute Series Oat Mountain Quadrangle
Township 2N; Range 16W; Section 8

DUDEK

0 1,000 2,000 Feet
0 285 570 Meters
1:24,000

FIGURE 1

Project Topography

LADWP De Soto Tanks Cultural Report

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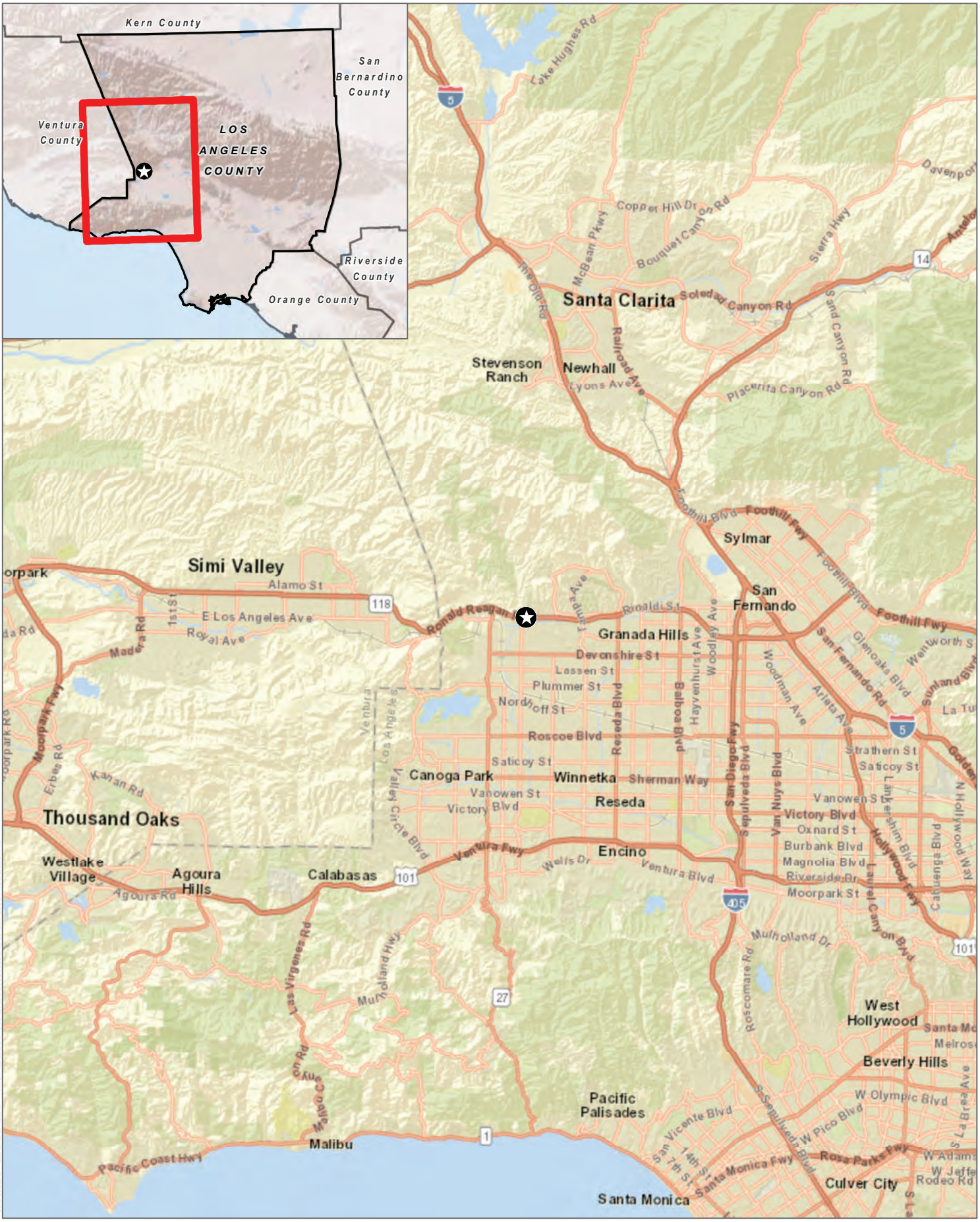

SOURCE: ESRI 2018

DUDEK

0 10,500 21,000 Feet

FIGURE 2

Vicinity Map

LADWP De Soto Tanks Cultural Report

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2.3 Area of Potential Effect

The APE is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties. Determination of the APE is influenced by a project's setting, the scale and nature of the undertaking, and the different kinds of effects that may result from the undertaking (36 CFR 800.16(d)). The project includes both a direct and indirect APE. Unlike archaeological resources, which are considered only in the project's direct APE, historic built environment resources are considered in both the project's direct and indirect APE, as built resources are subject to indirect impacts such as vibration and visual intrusions. The project APE (Figure 3) includes consideration of the direct and indirect effects of the project/undertaking.

The direct APE is where ground disturbance is expected to occur, representing the project footprint. The direct APE includes the following:

- The area north of the existing De Soto Reservoir, which will be excavated to a depth of approximately 50 feet to accommodate two 240 foot diameter concrete tanks, and new pipelines, the inlets, and outlets pipelines of the tanks;
- Staging areas around the parcel for heavy equipment, including excavators, front loaders, and dozers, as well as delivered materials for the construction of the two new tanks;
- Staging areas for approximately 350,000 loose cubic yards of excavated soils prior to being used as backfill or hauled off site. Excavation and hauling would occur over a period of about 8 months;
- Excavated material would be hauled from the project site via the SR 118 Freeway to a facility permitted to accept excavated soil materials;
- The existing reservoir would be demolished in order to facilitate construction of the future pump station;
- Access to and egress from the site during construction would be from Rinaldi Street on the east and/or De Soto Avenue on the west. Construction of the proposed project would take approximately 6 years to complete, beginning in late 2020.

The vertical extent of the APE for the project is considered the depth of soils disturbed during intake channel construction that have the potential to contain intact cultural deposits, estimated to be 50 feet below grade.

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SOURCE: ESRI 2018

DUDEK

0 200 400 Feet

FIGURE 3

Area of Potential Effect (APE)

LADWP De Soto Tanks Cultural Report

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2.4 Regulatory Setting

This study was completed in compliance with federal cultural resources laws and regulations, including Section 106 of the NHPA. Under Section 106, historic and archaeological districts, sites, buildings, structures, and objects are assigned significance based on their exceptional value or quality in illustrating or interpreting history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance; these are described below.

Federal

The NHPA established the National Register of Historic Places (NRHP) and the President's Advisory Council on Historic Preservation (ACHP), and provided that states may establish State Historic Preservation Officers (SHPOs) to carry out some of the functions of the NHPA. Most significantly for federal agencies responsible for managing cultural resources, Section 106 of the NHPA directs that

> [t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP.

Section 106 also affords the ACHP a reasonable opportunity to comment on the undertaking (16 USC 470f).

36 Code of Federal Regulations, Part 800 (36 CFR 800) implements Section 106 of the NHPA. It defines the steps necessary to identify historic properties (those cultural resources listed in or eligible for listing in the NRHP), including consultation with federally recognized Native American tribes to identify resources with important cultural values; to determine whether or not they may be adversely affected by a proposed undertaking; and the process for eliminating, reducing, or mitigating the adverse effects.

The content of 36 CFR 60.4 defines criteria for determining eligibility for listing in the NRHP. The significance of cultural resources identified during an inventory must be formally evaluated for historic significance in consultation with the ACHP and the California SHPO to determine if the resources are eligible for inclusion in the NRHP. Cultural resources may be considered eligible for listing if they possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Regarding criteria A through D of Section 106, the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, cultural resources, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

A. Are associated with events that have made a significant contribution to the broad patterns of our history; or

B. Are associated with the lives of persons significant in our past; or

C. 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. have yielded or may be likely to yield, information important in prehistory or history [36 CFR 60.4].

The 1992 amendments to the NHPA enhance the recognition of tribal governments' roles in the national historic preservation program, including adding a member of an Indian tribe or Native Hawaiian organization to the ACHP.

The NHPA amendments:

- Clarify that properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization may be determined eligible for inclusion in the National Register
- Reinforce the provisions of the Council's regulations that require the federal agency to consult on properties of religious and cultural importance.

The 1992 amendments also specify that the ACHP can enter into agreement with tribes that permit undertakings on tribal land and that are reviewed under tribal regulations governing Section 106. Regulations implementing the NHPA state that a federal agency must consult with any Indian tribe that attaches religious and cultural significance to historic properties that may be affected by an undertaking.

State

California Register of Historical Resources

In California, the term "historical resource" includes "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1(j)). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1(a)). The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

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

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

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

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

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource younger than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see California Code of Regulations, Title 14, Section 4852(d)(2)).

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

California Environmental Quality Act

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

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

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; CEQA Guidelines Section 15064.5(b)). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(q)), it

is a "historical resource" and is presumed to be historically or culturally significant for the purposes of CEQA (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project does any of the following (CEQA Guidelines Section 15064.5(b)(2)):

1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any historical resources, then evaluates whether that project would cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

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

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

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

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

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

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC Sections 21074(c) and 21083.2(h)), further consideration of significant impacts is required.

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

California Health and Safety Code

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

Local

Los Angeles Historic-Cultural Monuments

Local landmarks in the City of Los Angeles are known as Historic-Cultural Monuments (HCMs) and are under the aegis of the Planning Department, Office of Historic Resources. They are defined in the Cultural Heritage Ordinance as follows (Los Angeles Municipal Code Section 22.171.7, added by Ordinance No. 178,402, effective April 2, 2007):

> Historic-Cultural Monument (Monument) is any site (including significant trees or other plant life located on the site), building or structure of particular historic or cultural significance to the City of Los Angeles, including historic structures or sites in which the broad cultural, economic or social history of the nation, State or community is reflected or exemplified; or which is identified with historic personages or with important events in the main currents of national, State or local history; or which embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a

> study of a period, style or method of construction; or a notable work of a master builder, designer, or architect whose individual genius influenced his or her age.

For the purposes of SurveyLA, this definition has been broken down into the following four HCM designation criteria that closely parallel the existing NRHP and CRHR criteria:

1. Is identified with important events in the main currents of national, State or local history, or exemplifies significant contributions to the broad cultural, political, economic or social history of the nation, state, city, or community; or
2. Is associated with the lives of Historic Personages important to national, state, city, or local history; or
3. Embodies the distinctive characteristics of a style, type, period, or method of construction; or represents a notable work of a master designer, builder or architect whose genius influenced his or her age; or possesses high artistic values; or
4. Has yielded, or has the potential to yield, information important to the pre-history or history of the nation, state, city or community.

Historic Preservation Overlay Zones

As described by the City of Los Angeles Office of Historic Resources, the Historic Preservation Overlay Zone (HPOZ) Ordinance was adopted in 1979 and amended in 2004 to identify and protect neighborhoods with distinct architectural and cultural resources. HPOZs, commonly known as historic districts, provide for review of proposed exterior alterations and additions to historic properties within designated districts.

Regarding HPOZ eligibility, City of Los Angeles Ordinance Number 175891 states (Los Angeles Municipal Code, Section 12.20.3):

> Features designated as contributing shall meet one or more of the following criteria:
>
> 1. adds to the Historic architectural qualities or Historic associations for which a property is significant because it was present during the period of significance, and possesses Historic integrity reflecting its character at that time; or
> 2. owing to its unique location or singular physical characteristics, represents an established feature of the neighborhood, community or city; or
> 3. retaining the building, structure, Landscaping, or Natural Feature, would contribute to the preservation and protection of an Historic place or area of Historic interest in the City.

Regarding effects on federal and locally significant properties, Los Angeles Municipal Code states the following (Section 91.106.4.5, Permits for Historical and Cultural Buildings):

The department shall not issue a permit to demolish, alter or remove a building or structure of historical, archaeological or architectural consequence if such building or structure has been officially designated, or has been determined by state or federal action to be eligible for designation, on the National Register of Historic Places, or has been included on the City of Los Angeles list of historic cultural monuments, without the department having first determined whether the demolition, alteration or removal may result in the loss of or serious damage to a significant historical or cultural asset. If the department determines that such loss or damage may occur, the applicant shall file an application and pay all fees for the California Environmental Quality Act Initial Study and Check List, as specified in Section 19.05 of the Los Angeles Municipal Code. If the Initial Study and Check List identifies the historical or cultural asset as significant, the permit shall not be issued without the department first finding that specific economic, social or other considerations make infeasible the preservation of the building or structure.

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3 HISTORIC CONTEXT

3.1 Environmental Setting

The project site is located within the San Fernando Valley at the base of the Santa Susana Mountains. The San Gabriel Mountains are to the northeast, and the Santa Monica Mountains to the south. The project slopes to the south from the mountain foothills to the valley floor. Elevations range from 1,150 feet (351 m) above mean sea level (amsl) at the northern extent to 790 feet (241 m) amsl at the southern extent. There is no plant association for this site. The area surrounding the project area is completely urbanized and natural plant communities have been eradicated. Patches of non-native grasses are present on the parcel, as well as the cut stumps of what appear to be ornamental trees, likely eucalyptus, and palms and young eucalyptus near the parcel edge nearest the road. The De Soto Tanks are situated at the base of a small slope. The project is underlain by Quaternary alluvium and marine deposits (map unit Q), with Upper Cretaceous marine rocks, unit 1 (map unit Ku) within the Santa Susana Mountains to the north.

3.2 Cultural Setting

Prehistoric Overview

Numerous chronological sequences have been devised to aid in understanding cultural changes within southern California. Building on early studies and focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four periods are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's (1955) synthesis initially lacked chronological precision due to a paucity of absolute dates (Moratto 1984), this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by southern California researchers in the last three decades (Byrd and Raab 2007:217). Several revisions have been made to Wallace's (1955) synthesis using radiocarbon dates and projectile point assemblages (e.g., Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994).

Horizon I–Early Man (ca. 10,000–6,000 B.C.)

When Wallace defined the Horizon I (Early Man) period in the mid-1950s, there was little evidence of human presence on the southern California coast prior to 6000 B.C. Archaeological work in the intervening years has identified numerous pre-8000 B.C. sites, both on the mainland coast and the Channel Islands (e.g., Erlandson 1991; Johnson et al. 2002; Moratto 1984; Rick et al. 2001). The earliest accepted dates for occupation are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area about 10,000 years ago (Erlandson 1991). On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago (Johnson et al. 2002). Present-day Orange and San Diego counties contain several sites dating to 9,000 to 10,000 years ago (Byrd and Raab 2007; Macko 1998a; Mason and Peterson 1994; Sawyer and Koerper 2006). Known sites dating to the Early Man period are rare in western Riverside

County. One exception is the Elsinore site (CA-RIV-2798-B), which has deposits dating as early as 6630 calibrated B.C. (Grenda 1997).

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas and on Pleistocene lakeshores in eastern San Diego County (see Moratto 1984). Although few Clovis-like or Folsom-like fluted points have been found in southern California (e.g., Dillon 2002; Erlandson et al. 1987), it is generally thought that the emphasis on hunting may have been greater during Horizon I than in later periods. Common elements in many sites from this period, for example, include leaf-shaped bifacial projectile points and knives, stemmed or shouldered projectile points, scrapers, engraving tools, and crescents (Wallace 1978). Subsistence patterns shifted around 6000 B.C. coincident with the gradual desiccation associated with the onset of the Altithermal climatic regime, a warm and dry period that lasted for about 3,000 years. After 6000 B.C., a greater emphasis was placed on plant foods and small animals.

Horizon II–Milling Stone (6000–3000 B.C.)

The Milling Stone Horizon of Wallace (1955, 1978) and Encinitas Tradition of Warren (1968) (6000–3000 B.C.) are characterized by subsistence strategies centered on collecting plant foods and small animals. Food procurement activities included hunting small and large terrestrial mammals, sea mammals, and birds; collecting shellfish and other shore species; near-shore fishing with barbs or gorges; the processing of yucca and agave; and the extensive use of seed and plant products (Kowta 1969). The importance of the seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages, namely milling stones (metates and slabs) and handstones (manos and mullers). Milling stones occur in large numbers for the first time during this period, and are more numerous still near the end of this period. Recent research indicates that Milling Stone Horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007).

Milling Stone Horizon sites are common in the southern California coastal region between Santa Barbara and San Diego, and at many inland locations, including the Prado Basin in western Riverside County and the Pauma Valley in northeastern San Diego County (e.g., Herring 1968; Langenwalter and Brock 1985; Sawyer and Brock 1999; Sutton 1993; True 1958). Wallace (1955, 1978) and Warren (1968) relied on several key coastal sites to characterize the Milling Stone period and Encinitas Tradition, respectively. These include the Oak Grove Complex in the Santa Barbara region, Little Sycamore in southwestern Ventura County, Topanga Canyon in the Santa Monica Mountains, and La Jolla in San Diego County. The well-known Irvine site (CA-ORA-64) has occupation levels dating between ca. 6000 and 4000 B.C. (Drover et al. 1983; Macko 1998b).

Stone chopping, scraping, and cutting tools made from locally available raw material are abundant in Milling Stone/Encinitas deposits. Less common are projectile points, which are typically large and leaf-shaped, and bone tools such as awls. Items made from shell, including beads, pendants, and abalone dishes, are generally rare. Evidence of weaving or basketry is present at a few sites. Kowta (1969) attributes the presence of numerous scraper-planes in Milling

Stone sites to the preparation of agave or yucca for food or fiber. The mortar and pestle, associated with pounding foods such as acorns, were first used during the Milling Stone Horizon (Wallace 1955, 1978; Warren 1968).

Cogged stones and discoidals are diagnostic Milling Stone period artifacts, and most specimens have been found within sites dating between 4000 and 1000 B.C. (Moratto 1984). The cogged stone is a ground stone object with gear-like teeth on its perimeter. Discoidals are similar to cogged stones, differing primarily in their lack of edge modification. Discoidals are found in the archaeological record subsequent to the introduction of the cogged stone. Cogged stones and discoidals are often purposefully buried, and are found mainly in sites along the coastal drainages from southern Ventura County southward, with a few specimens inland at Cajon Pass, and heavily in Orange County (Dixon 1968; Moratto 1984). These artifacts are often interpreted as ritual objects (Eberhart 1961; Dixon 1968), although alternative interpretations (such as gaming stones) have also been put forward (e.g., Moriarty and Broms 1971).

Characteristic mortuary practices of the Milling Stone period or Encinitas Tradition include extended and loosely flexed burials, some with red ochre, and few grave goods such as shell beads and milling stones interred beneath cobble or milling stone cairns. "Killed" milling stones, exhibiting holes, may occur in the cairns. Reburials are common in the Los Angeles County area, with north-oriented flexed burials common in Orange and San Diego counties (Wallace 1955, 1978; Warren 1968).

Koerper and Drover (1983) suggest that Milling Stone period sites represent evidence of migratory hunters and gatherers who used marine resources in the winter and inland resources for the remainder of the year. Subsequent research indicates greater sedentism than previously recognized. Evidence of wattle-and-daub structures and walls has been identified at several sites in the San Joaquin Hills and Newport Coast area (Mason et al. 1991, 1992, 1993; Koerper 1995; Strudwick 2005; Sawyer 2006), while numerous early house pits have been discovered on San Clemente Island (Byrd and Raab 2007). This architectural evidence and seasonality studies suggest semi-permanent residential base camps that were relocated seasonally (de Barros 1996; Koerper et al. 2002; Mason et al. 1997) or permanent villages from which a portion of the population left at certain times of the year to exploit available resources (Cottrell and Del Chario 1981).

Horizon III–Intermediate (3000 B.C.–A.D. 500)

Following the Milling Stone Horizon, Wallace's Intermediate Horizon and Warren's Campbell Tradition in Santa Barbara, Ventura, and parts of Los Angeles counties, date from approximately 3000 B.C. to A.D. 500 and are characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. The Campbell Tradition (Warren 1968) incorporates David B. Rogers' (1929) Hunting Culture and related expressions along the Santa Barbara coast. In the San Diego region, the Encinitas Tradition (Warren 1968) and the La Jolla Culture (Moriarty 1966; Rogers 1939, 1945) persist with little change during this time.

During the Intermediate Horizon and Campbell Tradition, there was a pronounced trend toward greater adaptation to regional or local resources. For example, an increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites along the California coast during this period. Related chipped stone tools suitable for hunting

are more abundant and diversified, and shell fishhooks become part of the tool kit during this period. Larger knives, a variety of flake scrapers, and drill-like implements are common during this period. Projectile points include large side-notched, stemmed, and lanceolate or leaf-shaped forms. Koerper and Drover (1983) consider Gypsum Cave and Elko series points, which have a wide distribution in the Great Basin and Mojave deserts between ca. 2000 B.C. and A.D. 500, to be diagnostic of this period. Bone tools, including awls, were more numerous than in the preceding period, and the use of asphaltum adhesive was common.

Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment. Hopper mortars and stone bowls, including steatite vessels, appeared in the tool kit at this time as well. This shift appears to correlate with the diversification in subsistence resources. Many archaeologists believe this change in milling stones signals a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn (e.g., Glassow et al. 1988; True 1993). It has been argued that mortars and pestles may have been used initially to process roots (e.g., tubers, bulbs, and corms associated with marshland plants), with acorn processing beginning at a later point in prehistory (Glassow 1997) and continuing to European contact.

Characteristic mortuary practices during the Intermediate Horizon and Campbell Tradition included fully flexed burials, placed facedown or face-up, and oriented toward the north or west (Warren 1968). Red ochre was common, and abalone shell dishes were infrequent. Interments sometimes occurred beneath cairns or broken artifacts. Shell, bone, and stone ornaments, including charmstones, were more common than in the preceding Encinitas Tradition. Some later sites include Olivella shell and steatite beads, mortars with flat bases and flaring sides, and a few small points. The broad distribution of steatite from the Channel Islands and obsidian from distant inland regions, among other items, attest to the growth of trade, particularly during the latter part of this period. Recently, Raab and others (Byrd and Raab 2007) have argued that the distribution of Olivella grooved rectangle (OGR) beads marks "a discrete sphere of trade and interaction between the Mojave Desert and the southern Channel Islands."

Horizon IV–Late Prehistoric (A.D. 500–Historic Contact)

In the Late Prehistoric Horizon (Wallace 1955, 1978), which lasted from the end of the Intermediate (ca. A.D. 500) until European contact, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points, usually stemless with convex or concave bases, suggests an increased usage of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Other items include steatite cooking vessels and containers, the increased presence of smaller bone and shell circular fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and personal ornaments made from shell, bone, and stone. There is also an increased use of asphalt for waterproofing and as an adhesive.

Many Late Prehistoric sites contain beautiful and complex objects of utility, art, and decoration. Ornaments include drilled whole venus clam (Chione spp.) and drilled abalone (Haliotis spp.). Steatite effigies become more common, with

scallop (Pecten spp. and Argopecten spp.) shell rattles common in middens. Mortuary customs are elaborate and include cremation and interment with abundant grave goods. By A.D. 1000, fired clay smoking pipes and ceramic vessels began to appear at some sites (Drover 1971, 1975; Meighan 1954). The scarcity of pottery in coastal and near-coastal sites implies ceramic technology was not well developed in that area, or that ceramics were obtained by trade with neighboring groups to the south and east. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

Another feature typical of Late Prehistoric period occupation is an increase in the frequency of obsidian imported from the Obsidian Butte source in Imperial County, California. Obsidian Butte was exploited after ca. A.D. 1000 when it was exposed by the receding waters of Holocene Lake Cahuilla (Wilke 1974). A Late Prehistoric period component of the Elsinore site (CA-RIV-2798-A) produced two flakes that originated from Obsidian Butte (Grenda 1997; Towner et al. 1997). Although about 16 percent of the debitage at the Peppertree site (CA-RIV-463) at Perris Reservoir is obsidian, no sourcing study was done (Wilke 1974). The site contains a late Intermediate to Late Prehistoric period component, and it is assumed that most of the obsidian originated from Obsidian Butte. In the earlier Milling Stone and Intermediate periods, most of the obsidian found at sites within Riverside County came from northern sources, primarily the Coso volcanic field. This appears to be the case within Prado Basin and other interior sites that have yielded obsidian (e.g., Grenda 1995; Taşkiran 1997). The presence of Grimes Canyon (Ventura County) fused shale at southern California archaeological sites is also thought to be typical of the Late Prehistoric period (Demcak 1981; Hall 1988).

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages (Wallace 1955). Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's (1968) cultural ecological scheme, the period between A.D. 500 and European contact is divided into three regional patterns. The Chumash Tradition is present mainly in the region of Santa Barbara and Ventura counties; the Takic or Numic Tradition is present in the Los Angeles, Orange, and western Riverside counties region; and the Yuman Tradition is present in the San Diego region. The seemingly abrupt changes in material culture, burial practices, and subsistence focus at the beginning of the Late Prehistoric period are thought to be the result of a migration to the coast of peoples from inland desert regions to the east. In addition to the small triangular and triangular side-notched points similar to those found in the desert regions in the Great Basin and Lower Colorado River, Colorado River pottery and the introduction of cremation in the archaeological record are diagnostic of the Yuman Tradition in the San Diego region. This combination certainly suggests a strong influence from the Colorado Desert region.

In Los Angeles, Orange, and western Riverside counties, similar changes (introduction of cremation, pottery, and small triangular arrow points) are thought to be the result of a Takic migration to the coast from inland desert regions. This Takic or Numic Tradition was formerly referred to as the "Shoshonean wedge" or "Shoshonean intrusion" (Warren

1968). This terminology, used originally to describe a Uto-Aztecan language group, is generally no longer used to avoid confusion with ethnohistoric and modern Shoshonean groups who spoke Numic languages (Heizer 1978; Shipley 1978). Modern Gabrielino/Tongva, Juaneño, and Luiseño in this region are considered the descendants of the prehistoric Uto-Aztecan, Takic-speaking populations that settled along the California coast during this period or perhaps somewhat earlier.

Historical Overview

Spanish Period (1769-1822)

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabrílllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabrílllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to Alta California based on the surveys conducted by Cabrílllo and Vizcaíno (Cleland 2005; Gumprecht 2001).

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823, including Mission San Fernando Rey de España (Cleland 2005; Gumprecht 2001; Jorgensen 1982; Kyle 2002; Roderick 2001).

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named "the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula" or "Our Lady the Queen of the Angeles of the Porciúncula." Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Gumprecht 2001; Jorgensen 1982; Kyle 2002).

The expedition camped at a watering place at the base of the San Gabriel Mountains in 1769 and the location was noted in Crespi's diary. The mission was founded in September 1797 by Father Fermín Lasuén and Fray Francisco Dumetz. The mission consisted of a church, fountains, cloisters and extensive agricultural grounds outside the area. The Spanish missionaries impressed the native Tongva, Tatavium, and Chumash tribes into Christianity through baptism and service as neophytes. The land taken by the Spanish was not repatriated to these tribes (Cleland 2005; Roderick 2001).

Mexican Period (1822-1848)

A major emphasis during the Spanish Period in California was the construction of missions and associated ranchos and presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Cleland 2005; Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. In 1846, Mission San Fernando lands were issued as a land grant by then governor Pío Pico to Eulogio de Celis, and renamed simply Ex-Mission San Fernando (Figure 4). The new rancho lands were bound by Rancho San Francisco to the north, to the east by Rancho Tujunga, to the west by Rancho Simí, and on the south by the Santa Monica Mountains (Cleland 2005).

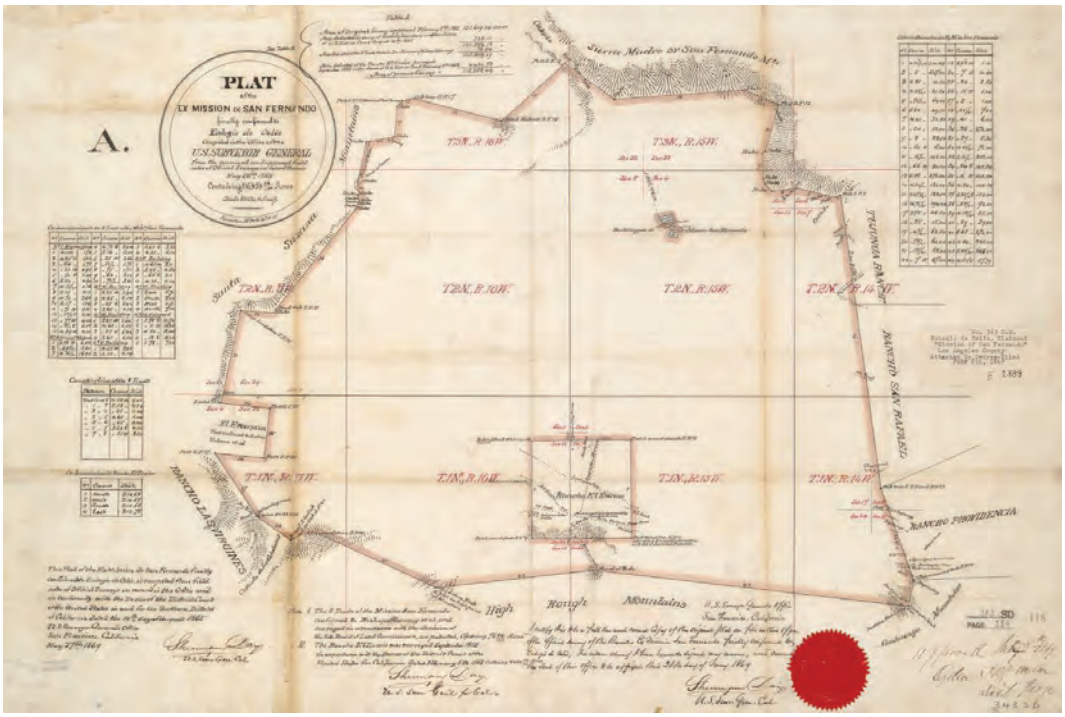

Figure 4. Plat of the Ex Mission de San Fernando [Calif.] : finally confirmed to Eulogio de Celis; U.S. Surveyor General, May 26, 1869 (UC Bancroft Library Land Case E-1389)

American Period (1848-Present)

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican- American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period. California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods (Cleland 2005).

De Celis retained his rancho after the war until his death in 1874. After de Celis' death, his family sold the rancho to California State Senator Charles Maclay and business partners George K. and Benjamin F. Porter. The Porters claimed the land west of present-day Sepulveda Boulevard. Isaac Van Nuys and J.B. Lankershim acquired the southern half of the valley south of Roscoe Boulevard. Maclay's rancho extended from present day Sepulveda Boulevard east to the San Gabriel foothills. The Porter brothers' ranch would be one of the last sections of the San Fernando Valley to be developed. In 1888, Benjamin Porter sold a portion of the property near the Santa Susana Pass to the Porter Land and Water Company, which laid out the town of Chatsworth Park (Dumke 1944; Kyle 2002; Roderick 2001).

Historic Context of the Town of Chatsworth

The original 1888 town site laid out by the George R. Crow of the Porter Land & Water Company planned Chatsworth Park as a farming community with land divided into 10-acre plots along three major streets: Ben Porter Avenue, Devonshire Avenue, and Fernando Avenue. In 1893, another town plat was filed for Chatsworth Park that added a railroad station, Main Street, and commercial corridor. Chatsworth Park retained an agricultural identity, and was along a major stage route connecting Los Angeles and Santa Barbara through Santa Susana Pass. In 1893, Southern Pacific Railroad built a depot and rail line to the town, offering a way to transport crops, mainly wheat, to the greater Los Angeles area (Height 1953; Roderick 2001; Wanamaker 2011; Watson 1991).

Los Angeles voters approved $22 million for the Los Angeles Aqueduct project in 1905 and construction on the aqueduct began in 1908 and completed in 1913. The aqueduct, which would bring water from Owens Valley to the City of Los Angeles, brought intensive land speculation and settlement to the San Fernando Valley. However, to take advantage of the City of Los Angeles' new water source, surrounding communities had to agree to be annexed to the City of Los Angeles. Formerly independent towns such as of Pacoima, Roscoe, and Lankershim voted for annexation in the years immediately after the aqueduct was completed. With the new source of water, San Fernando Valley farmers exchanged dry farming for irrigated crops and orchards. Agriculture expanded throughout the San Fernando Valley and specific towns became associated with certain crop production. Citrus and nut tree orchards became common in the northern portion pf San Fernando Valley including at Chatsworth Park (Height 1953; Preston 1965; Roderick 2001; Wanamaker 2011; Watson 1991).

In 1918, the Chatsworth Reservoir was completed, intended as the nineteenth and last in a chain of reservoirs of the Los Angeles Aqueduct System (Figure 5). The Chatsworth High Line aqueduct was the conduit that ran along the northern edge of the valley, connecting the San Fernando Reservoir to Chatsworth Reservoir. It replaced a series of temporary, open-air "ditches" installed in preparation of the permanent aqueduct system, increasing arable land in San Fernando Valley from 3,000 acres in 1914 to 30,000 acres in 1917 (D.H. Anderson Publishing Company 1916; Geiger 1918).

Figure 5. Aerial View across Chatsworth Reservoir to Simi Valley, looking northwest. Roy C Seeley Company photography, no date (Los Angeles Public Library LAPL 00032971)

In 1920, Chatsworth was annexed to the City of Los Angeles. The same year, the San Fernando Valley population was estimated at 20,000 people. By 1930, the valley's population had doubled to just over 51,000. The agricultural economy of Chatsworth remained stable through the Great Depression. By 1940, the San Fernando Valley population was 155,443. Despite the growing residential population, small-scale farms and orchards still dominated land use in the San Fernando Valley through World War II (Roderick 2001; Wanamaker 2011).

World War II brought increased urbanization as military operations near Los Angeles brought in hundreds of thousands of soldiers and their families. After the war, both employment opportunities and affordable real estate kept families in the area. Suburban sprawl from Los Angeles reached the San Fernando Valley, and brought another 250,000 people to the valley, raising its 1950 population to just over 400,000. Dense housing developments and residential areas constricted

formerly agricultural areas, all but pushing them into the surrounding foothills and margins of the Valley for the rest of the century. In 1954, at the end of De Soto Avenue at Oat Mountain, the U.S. Defense Department developed a U.S. Army base and launch site the Nike Hercules missiles, called the Nike Missile Base LA-88 (Figure 6). The military operation there further fueled the influx of residents to the Chatsworth Area. By the end of the 1950s, nine of the ten largest manufacturers in the Valley served the Defense Department. Lockheed, Rocketdyne, Litton Systems, Ramo-Woolridge, RCA, Marquardt, and Radioplane each employed over a thousand employees (Preston 1965; Roderick 2001; Watson 1991).

As automobiles and freeways permeated the culture of the country and the state of California, so too did they have impact in Chatsworth. In 1960, the Ventura Freeway finally opened, and between 1972 and 1980, SR 118 was completed in the northern portion of Chatsworth, immediately north of the project site. These highways brought an emphasis on automobile travel and allowed residents ease of access for commuting around the greater Los Angeles area and the Santa Barbara area (Roderick 2001).

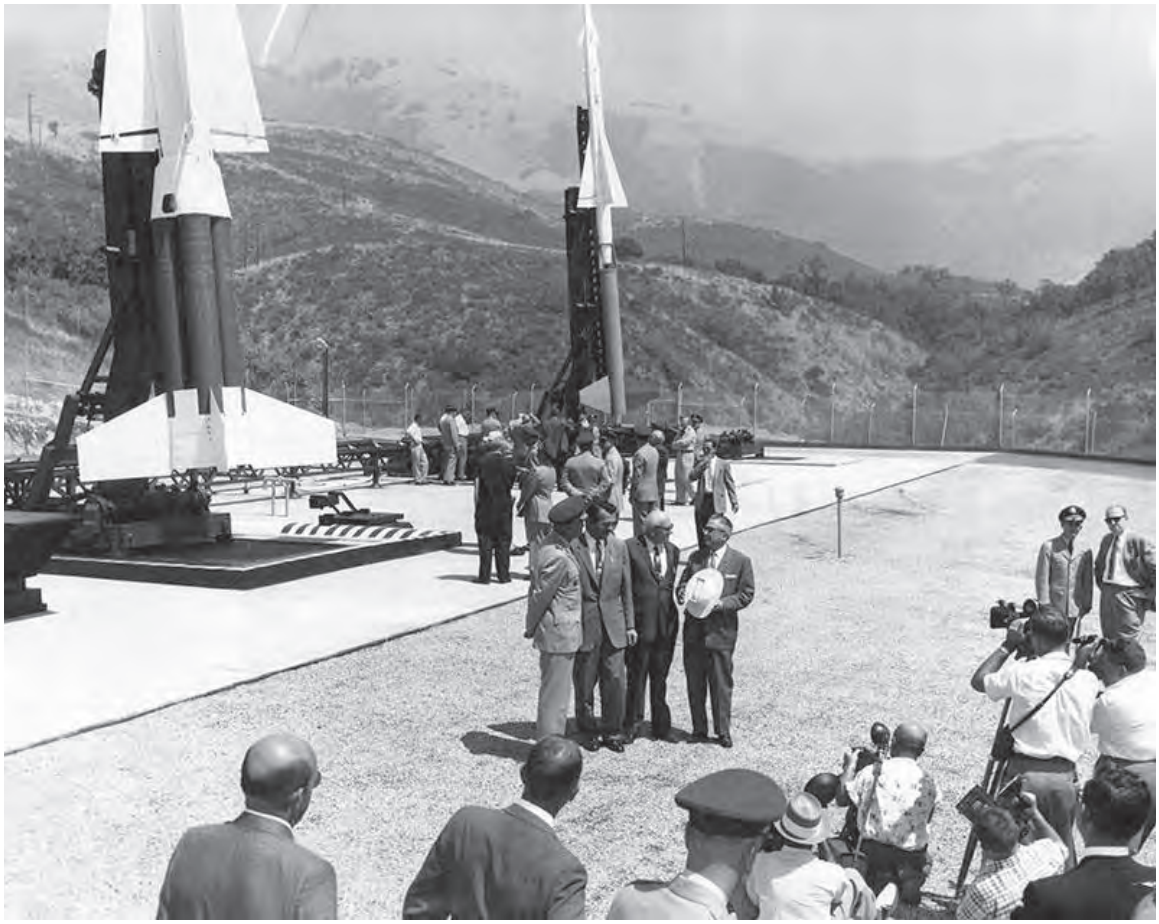

Figure 6. Oat Mountain Nike-Hercules Base in Chatsworth California., looking north, 1958 (Los Angeles Public Library LAPL00114029)

History of the De Soto Tanks Reservoir

Originally planned as the Chatsworth High Line Reservoir, the De Soto Reservoir went into service in 1941 (LADWP 1942; Laval 1938, 1944; Soifer 2018). It is located along the Chatsworth High Line, which was a pipeline originally conceived to connect the San Fernando Reservoir to the Chatsworth Reservoir (not to be confused with the Chatsworth High-Line Reservoir). The San Fernando Reservoir went into service in 1918 and consisted of two reservoirs: San Fernando Reservoir No. 1 (upper) completed in 1913 and San Fernando Reservoir No. 2 (still under construction 1916). The Chatsworth Reservoir site was scouted in 1911 and 1913, and construction began after securing the title to the property from Benjamin. Porter in 1917. The Chatsworth Reservoir was completed in 1918, and filled in 1919. The Chatsworth High Line was built concurrently with the reservoir projects, and was built to replace a series of already existing irrigation ditches in the area to formally connect the two reservoirs. The High Line was constructed in 1916, and completed in 1918 before the Chatsworth Reservoir was filled (D.H. Anderson Publishing Company 1916; LAT 1916; Robertson et. al. 1918; SWBC 1918; WPA 2018).

In 1930-1931 the Chatsworth Reservoir was drained and built up to hold a greater water capacity, as the population of Chatsworth increased. As the decade continued, increased water demands on the Chatsworth Reservoir and High Line meant that the water served as emergency residential and domestic drinking water, rather than its originally intended agricultural role. Also in 1931, the lands for a new LADWP reservoir called the Chatsworth High Line Reservoir was purchased and plans were drawn up for the new reservoir. The Chatsworth High Line Reservoir, a different, smaller water feature than the Chatsworth Reservoir, was intended as an earthen reservoir at the mouth of Brown's Canyon. The State of California voided plans for this reservoir in 1933 due to a change in LADWP's dam construction program, and the LADWP's inability to start the reservoir construction in the permitted amount of time (LADWP 1931, 1933; WPA 2018).

De Soto Reservoir was redesigned, built, and placed into service in 1941. It was built by contractors Schroeder & Company, Inc. of Roscoe, California. The site was an open-air, concrete lined tank on a small parcel in the foothills of the Santa Susana Mountains. Construction of the De Soto Reservoir pioneered a new method for compacting the reservoir embankment (Figures 7 and 8) (LADWP 1942):

> The side slopes and the bottom were paved with 4 inches of asphaltic concrete placed in two 2 inch layers, each layer being rolled by a light hot roller followed by a heavy cold roller weighing 2,000 pounds per linear foot. The hot roller smoothed and conditioned the surface so that the heavy roller could be operated without picking up or gouging into the plastic material. The rollers were moved up and down the slope by means of hoists mounted on small tractors. The inside embankment slopes are 1-1/2 to 1 and the height is 22 feet. A cement coating was brushed on the asphaltic concrete surface in order to reduce soil stress and to provide a smoother surface for better cleaning of the reservoir when empty.

Figure 7. Photo demonstrating roller compaction technique at De Soto Reservoir, 1942. (LADWP Record Center)

Figure 8. Photo demonstrating the roller compaction technique pioneered at the De Soto Reservoir, 1942, looking east. (LAPL 1004960, also held by LADWP Record Center)

Water from the Chatsworth High Line filled De Soto Reservoir. The reservoir handled terminal water storage for the High Line. From the De Soto Reservoir, water switched from a pressure system to a gravity system and discharged into a separate domestic and irrigation supply water mains: the Chatsworth High Line Extension (which replaced the former High Line aqueduct to the Chatsworth Reservoir), and the planned projects for Granada and De Soto Trunk Lines (CDWR 1964; FAS 1944; Laval 1938; LADWP 1941, 1942; Soifer 2018; NETR 2018a).

As the population of the San Fernando Valley swelled in the post-World War II years, the demand for drinking water increased in the valley, turning previously agricultural water resources into drinking water for new residents. In 1954, LADWP proposed the first portion of the Granada Trunk Line, which would connect the Upper San Fernando Reservoir to the De Soto Reservoir. The new trunk line ran beside the existing Chatsworth High Line, and increased the total amount of water the Department of Water and Power was able to provide. In 1958, the second portion of the Granada Trunk Line, which extended from De Soto Reservoir to Roscoe Blvd near Cohasset, was approved and constructed between 1958 and 1959 (Valley News 1954, 1958).

In 1971, the Sylmar Earthquake caused widespread damage to the San Fernando Valley, including its water infrastructure. The Chatsworth High Line, Maclay High Line, and Chatsworth Reservoir were temporarily disabled due to the earthquake damage and the Chatsworth Reservoir was officially retired as a result of sustained damage and cost of repair. The reservoir was converted into a natural area park in the earthquake aftermath. Despite this, the De Soto Reservoir and trunk lines remained in service as emergency water supply, for the area, continuing to service the region (LAT 1971; WPA 2018)

Alterations

There have been several recorded alterations to the De Soto Reservoir. Between its construction in 1941 and 1945, a caretaker's house, patio, garage, toolshed, and water tank were constructed east of the De Soto Reservoir (Figure 9). In 1945, a cesspool and water main were added to the site. In 1948, the reservoir was cleaned and drained, revealing damage and soil settlement under the concrete at the west end of the reservoir. In 1954, the Granada Trunk Line replaced the Chatsworth High Line as the water source from Upper San Fernando Reservoir to De Soto Reservoir. In 1958, a second portion of the Granada Trunk Line, from De Soto Reservoir to Roscoe Boulevard was initiated. In 1959, LADWP sold a portion of the De Soto Reservoir lot as an easement for the Southern California Edison. In 1961, LADWP briefly attempted to acquire adjacent properties to the De Soto Reservoir, for a project that proposed to enlarge the existing reservoir, but this was unsuccessful and concluded in 1962 (Green 1948; Peterson 1959; Porter 1945; Socha 1962; Valley News 1954, 1958).

In 1971, a chlorination station was added to the property. It was also around this time that the larger 1918 Chatsworth Reservoir was decommissioned due to earthquake damage and repurposed as a natural park. Sometime between 1982 and 1994, the one outbuilding was removed to its foundations. In 1988, due to drought and water contamination concerns, the De Soto Reservoir was covered with an aluminum cover, protecting to water from evaporation and contamination from the recently completed Ventura Highway/Ronald Reagan Freeway (SR 118). The success of covering the De Soto Reservoir spurred other reservoir coverings in the LADWP-managed reservoirs. In 2016, the Caretaker's House and outbuilding were demolished (AMI 1982; FAS 1965; LAT 1971, 1988; Teledyne 1971; USGS 1994; Google Earth 2018).

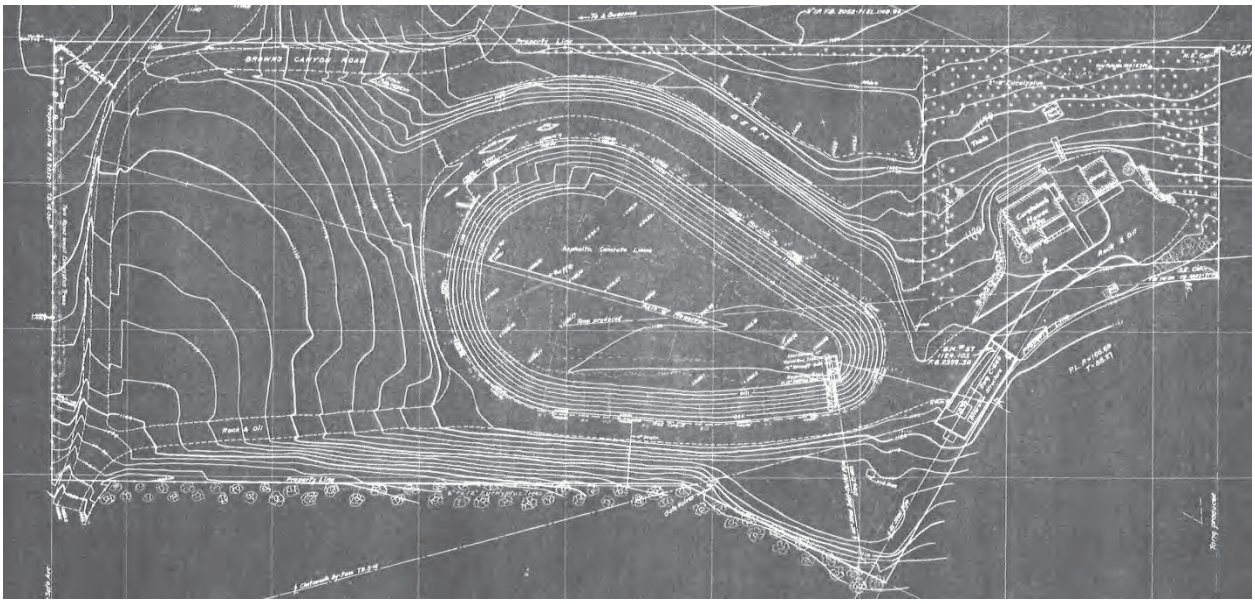

Figure 9. Plans showing caretaker's house and outbuildings, December 1941. (LADWP Records Center)

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4 BACKGROUND RESEARCH

4.1 CHRIS Records Search

As part of the cultural resources study prepared for the project, Dudek conducted a California Historical Resources Information System (CHRIS) records search at the South Central Coastal Information Center (SCCIC) on June 29, 2017, or a 0.5-mile radius around the proposed project APE. This search included their collections of mapped prehistoric, historic, and built environment resources, Department of Parks and Recreation Site Records, technical reports, and ethnographic references. The results of this record search are included in Appendix B (Confidential Record Search Appendix). Additional consulted sources included historical maps of the project area, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility.

Previous Cultural Resources Studies

The SCCIC records indicate that 73 cultural resources investigations have been conducted within a half mile of the APE (Table 1). Of these, one previous studies overlap a portion of the indirect APE, four studies intersect the indirect APE, and one study is adjacent to the indirect APE. One study (LA-02366) overlaps the De Soto Tanks proposed project area.

Table 1. Previously Cultural Resources Investigations within 0.5 Mile of the APE

SCCIC Report Number	Title	Author	Year	Proximity to APE
26	Assessment of the Archaeological Resources and the Impact of Development of Highway 118 Areas to be used as Fill Sites in the San Fernando Valley	Major, Gary W.	1974	Outside
35	Assessment of the Archaeological Impact by the Development of Browns Creek, Unit 4 and Browns Debris Basin, City of Los Angeles and Unincorporated Territory of the County of Los Angeles, California	Gates, Gerald R.	1974	Adjacent
53	Archaeological Assessment of Tentative Tract No. 32472 for Tierra Engineering Co.	Major, Gary W.	1974	Outside
71	An Archaeological Evaluation of Proposed Changes in the Use of LAN-357	Leonard, Nelson N. III	1974	Outside
76	Evaluation of the Archaeological Resources and Potential Impact of the Proposed Modification of an Area Adjacent to Browns Canyon, Los Angeles County Into a Sanitary Landfill	Rosen, Martin D.	1975	Outside

Table 1. Previously Cultural Resources Investigations within 0.5 Mile of the APE

SCCIC Report Number	Title	Author	Year	Proximity to APE
81	Evaluation of the Archaeological Resources for the Area wide Facilities Plan for the Las Virgenes Municipal District, (Malibu Coast, Western Santa Monica Mountains, Southern Simi Hills), Los Angeles and Ventura Counties.	Rosen, Martin D.	1975	Outside
160	Phase 1 Cultural Resources Survey Fiber Optic Cable Project Burbank to Santa Barbara, California for US Sprint Communications Company	Dames and Moore	1988	Outside
304	Archaeological Assessment of a Proposed Development in Chatsworth, City of Los Angeles, California	Pence, Robert L.	1978	Outside
468	Archaeological Survey Report: A 17+/- Acre Parcel of Property Located Between the Simi Valley Freeway and Topanga Canyon Boulevard in Chatsworth, California	Murray, John R.	1978	Outside
592	Cultural Resource Reconnaissance and Assessment of a Lot in Chatsworth, Los Angeles County, California	McIntyre, Michael J.	1979	Outside
628	Cultural Resource Survey and Impact Assessment for a 4.81 Acre Parcel Located in the Northwestern Part of the San Fernando Valley, in the City and County of Los Angeles, California	Singer, Clay A.	1979	Outside
666	Cultural Resource Survey and Impact Assessment for Tentative Tract No. 38956, in the Community of Chatsworth, City and County of Los Angeles, California.	Singer, Clay A.	1979	Outside
838	An Archaeological Assessment of the Walker Cairn Site (CA-LAN-21), Chatsworth, California	Tartaglia, Louis J.	1980	Outside
1043	Assessment of the Archaeological Impact of Tentative Tract No. 31247	Toren, George A.	1977	Outside
1410	An Archaeological Resource Survey and Impact Assessment of a 4.83 Acre Parcel at 10815 Canoga Avenue in Chatsworth, City and County of Los Angeles (TT No. 43437)	Colby, Susan M.	1984	Outside
1448	Assessment of the Archaeological Resources Within Tentative Tract No. 4301, County of Los Angeles, California	Wawlsh, Michael R.	1984	Outside
1677	Cultural Resource Evaluation and Mitigation Alternatives for Archaeological Site CA-LAN-209	Parker, John	1987	Outside
1744	Archaeological Survey and Test Excavation in Unit 18 of the Porter Ranch, Los Angeles County, California	White, Robert and L. White	1988	Outside
1745	Archaeological Test Excavations at LAN-664, Located on the Porter Ranch, Los Angeles County, California	Van Horn, David M.	1987	Outside
1771	Draft Environmental Impact Report Porter Ranch Land Use/Transportation Specific Plan	ETI	1989	Outside
2010	Assessment of the Archaeological Impact of the Proposed Development of the 5 Acres of Tentative Tract #30350	Briuer, Frederick L.	1976	Outside

Table 1. Previously Cultural Resources Investigations within 0.5 Mile of the APE

SCCIC Report Number	Title	Author	Year	Proximity to APE
2034	Cultural Resources Reconnaissance of the Devil Canyon Project Area, 44 Acres in Chatsworth, Los Angeles County, California	Bissell, Ronald M. and Kenneth Becker	1990	Outside
2086	Summary and Assessment of Archaeological Resources on a 1300 Acre Portion of Porter Ranch Property in the Santa Susana Foothills, Los Angeles County	Brown, Robert S.	1989	Outside
2096	Report of Archaeological Reconnaissance Survey of a Nine Acre Parcel (a-1 Zone) 21521 Rinaldi Chatsworth, California	Salls, Roy A.	1990	Outside
2133	Two Rock Art Sites in the San Fernando Valley: VEN-149 and LAN-357	Sanburg, Delmer, Jr., Dana Bleitz Sanburg, Frank Bleitz, and Edith Bleitz	1978	Outside
2204	Cultural Resources Reconnaissance of the Continental Community Project Area, 55 Acres in Chatsworth, Los Angeles County, California	Evans, Stuart A. and Ronald M. Bissell	1990	Outside
2250	Draft Environmental Impact Report: Chatsworth Porter Ranch District Plan Re-study	EIP Associates, Inc.	1991	Outside
2366	Draft Master Environmental Impact Report	Wessel, Richard L.	1976	Overlaps
2390	Astronomy, Myth, and Ritual in the West San Fernando Valley	Romani, John F., Dan Larson, Gwen Romani, and Arlene Benson	1988	Outside
2623	Pictographs of the Santa Monica Mountains Status Report as of May 15, 1977 (same As V-1134)	Lowe, P. J.	1977	Outside
2892	Phase I Archaeological Survey Report Pacific Pipeline Project Santa Barbara Coastal Re-routes Ethnohistoric Village Placement Locations	Stone, David and Robert Sheets	1993	Outside
2950	Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project	Peak & Associates, Inc.	1992	Outside
3131	Archaeological Assessment of Evans Ranch	Toren, George A. and Frederick L. Bruier	1976	Outside
3189	Assessment of the Archaeological Impact by the Development of Property Tracts Number 32630 and 32599	Romani, John F.	1976	Outside

Table 1. Previously Cultural Resources Investigations within 0.5 Mile of the APE

SCCIC Report Number	Title	Author	Year	Proximity to APE
3301	Archaeological Assessment Santa Susana Pass Road Realignment California West Development Chatsworth, California	Scientific Resource Surveys, Inc.	1989	Outside
3405	Field Archaeology 1971 CA-LAN-357	Otte, Jim	1971	Outside
3406	LAN-357; Chatsworth-Walker Site	Gilmore, Jack	1972	Outside
3487	Assessment of the Impact Upon Archaeological Resources by the Development of Units 5,6,10,11,12,13,15,16, and 17 of Porter Ranch	Wessel, Richard L.	1976	Outside
3499	Metropolitan Water District West Valley Project Cultural Resources Technical Report	Eisentraut, Phyllisa	1994	Intersects
3639	Santa Monica Mountains State Park (undeveloped)	King, Thomas F.	1970	Outside
3847	Shamanism and Rock Art in Far Western North America	Whitley, David S.	1992	Outside
3974	Archaeological Assessment for Pacific Bell Mobile Services Telecommunications Facility LA 172-01, 11200 De Soto Avenue, Chatsworth, City and County of Los Angeles, California	McLean, Deborah K.	1998	Intersects
4124	Semester Report for Anthropology 7	Barajas, Luisa	1972	Outside
4137	Five Prehistoric Archeological Sites in Los Angeles County, California	Walker, Edwin Francis	1998	Outside
5530	Cultural Resource Assessment for AT&T Wireless Services Facility Number C946.1, County of Los Angeles, CA	Duke, Curt	2000	Outside
5856	Phase I Archaeological Survey of the Chatsworth Ridge Estates Study Area, Los Angeles County, California	W&S Consultants	2000	Outside
6148	Cultural Resources Monitoring and Contractor Cultural Resources Education for Sub Area G-1 (Tract Numbers 50511-01, 50511-02 and 50512-03) Within Unit 15 of the Porter Ranch Development Project, Los Angeles, California	Sikes, Nancy E.	2002	Outside
6599	Historic Resource Evaluation Report Mason Avenue At-grade Crossing and Safety Improvements Project Los Angeles City, California	Foster, John M.	2002	Outside
6914	Cultural Resources Reconnaissance and Monitoring for Tentative Tract 53783 and Road Cuts 21, 25, and 26 within the Porter Ranch Development Project, Los Angeles, California	Sikes, Nancy E.	2003	Outside
7837	Rock Art of the Santa Monica and the Santa Susana Mountains	Knight, Albert	2001	Outside
8255	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and II	Arrington, Cindy and Nancy Sikes	2006	Outside

Table 1. Previously Cultural Resources Investigations within 0.5 Mile of the APE

SCCIC Report Number	Title	Author	Year	Proximity to APE
8283	Cultural Resources Record Search and Site Visit Results for Royal Street Communications, LLC Candidate LA0021A (Holy Shepard Lutheran Church), 10347 Mason Avenue, Chatsworth, Los Angeles County, California	Bonner, Wayne H.	2007	Outside
8423	Cultural Resources Monitoring for Tentative Tract 50507 and 50510, Parcels within the Porter Ranch Development Project, Chatsworth, Los Angeles County, California	Underbrink, Susan	2007	Outside
8803	Cultural Resources Records Search and Site Visit Results for Cingular Wireless Candidate Nl-0177-03 (McDonald's), 20932 Devonshire Street, Chatsworth, Los Angeles County, California	Bonner, Wayne H.	2006	Outside
9061	Cultural Resources Monitoring for Tentative Tract 54153, a Parcel within the Porter Ranch Development Project, Chatsworth, Los Angeles, California	Maxon, Patrick and Jessica DeBusk	2005	Outside
9064	Browns Canyon Rule 20B Overhead Removal Project, Chatsworth-Macneil-Newhall-San Fernando 66kV Line, Los Angeles County	Schmidt, June A.	2005	Outside
9065	DWO 6135-7981, A.I. No. 5-7941: Iverson 2.4 kV Idle Facility Removal, Chatsworth Area, Los Angeles County	Schmidt, James J.	2005	Outside
9071	Field Inventory Report: Assessment for Browns Canyon (CA-8102A) Wireless Facility, 11056 N De Soto Avenue, Chatsworth, Los Angeles County, California	Billat, Scott	2005	Intersects
9297	Re: DWO 6035-4800; A.I. No. A-4809; 4kV, Deteriorated Pole Replacement Project, Los Angeles County	Williams, Audry	2008	Outside
9390	Re: DWO 6335-6783; A.I. No. 6-6746: Big Rock 16 kV: Deer Lake Pole Relocation Project, Chatsworth Area, Los Angeles County	Schmidt, James J.	2006	Outside
9869	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate SV11272D (Golden Oaks), Northridge, Los Angeles County, California	Wayne Bonner	2008	Outside
10637	Rock Art of the Santa Monica Mountains and the Simi Hills	Knight, Albert	1999	Outside
10707	Cultural Resource Records Search and Site Visit Results for T-Mobile USA Candidate SV11941-D (Porter Park and Ride), 11245 North Winnetka Avenue, Los Angeles, California	Bonner, Wayne	2010	Outside
10708	Cultural Resource Records Search and Site Visit Results for T-Mobile USA Candidate SV12271-A (Mason Colo), 10347 Mason Avenue, Chatsworth, Los Angeles County, California	Bonner, Wayne	2010	Outside
10798	A Phase I Archaeological Survey for the Proposed Improvements to 10860 Topanga Canyon Road, City of Chatsworth, Los Angeles County, California	Wlodarski, Rob	2011	Outside

Table 1. Previously Cultural Resources Investigations within 0.5 Mile of the APE

SCCIC Report Number	Title	Author	Year	Proximity to APE
11149	California State University, Northridge, Astronomy and Social Integration: An Examination of Astronomy in a Hunter and Gatherer Society. A thesis submitted in partial satisfaction of the requirements for the degree of Masters of Arts in Anthropology.	Romani, John	1981	Outside
11532	VZW Parker 4239, 11056 N De Soto Avenue Chatsworth, CA	Martorana, Dean	2011	Intersects
11729	Cultural Resources Records Search and Site Visit, LA0612-118FWY/Rinaldi, 11245 Winnetka Avenue, Chatsworth, CA 91311	Johnson, Brent	2011	Outside
12064	Chatsworth Early Residents, Julius Fried	Vincent, Ann	2012	Outside
12065	Chatsworth Past and Present	Vincent, Ray and Ann Vincent	2012	Outside
12386	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate CLV0017 (SBA Faux Water Tower), 20946 Devonshire Street, Chatsworth, Los Angeles County, California	Bonner, Wayne	2013	Outside
12661	Cultural Resource Assessment Class III Inventory, Verizon Wireless Services Andora Facility Community of Chatsworth, City of Los Angeles, Los Angeles County, California	Fulton, Phil	2014	Outside

LA-02366

One report overlaps the project area. In 1976, Richard L. Wessel prepared a Master Environmental Impact Report for 1,200 acres of undeveloped land within Porter Ranch, located west of Tampa Avenue and north of Rinaldi St. Wessel conducted an archival research, record search, and an archaeological field survey. Wessel concluded that the development would have a direct impact on three archaeological resources within the area and an indirect impact on nearby archaeological resources.

Previously Recorded Cultural Resources

The records search found that 30 previously recorded cultural resources were located within 0.5-mile (1,600 meters) of the project area. None of these resources overlap the project area. Eight of these sites are historic archaeological sites, 21 sites are prehistoric archaeological sites, and one site is a historic built environment resource. None of the sites have been evaluated for the NRHP, and their eligibility status is unknown. Details pertaining to these resources are listed below in Table 2.

Table 2. Previously Recorded Cultural Resources within 0.5 Mile of the APE

Primary Number (P-19-)	Trinomial (CA-LA-)	Period	NRHP/CRHR Status	Recorded By/Year	Description
21	21	Prehistoric	Unknown	Walker, E.F. 1951	Rock cairns and subsurface deposit
89	89	Prehistoric	Unknown	Chartkoff, K. 1966	Rock shelters and dense scatters of groundstone tools, lithic tools, and lithic debitage
93	93	Prehistoric	Unknown	Singer, C. 1966	Rock shelters (n=2); one with possible midden deposit
209	209	Prehistoric	Unknown	Becker, K. 1990; Hector, S. 1977	Rock shelters and rock art of varying kind; bedrock milling; surface artifacts; and possible midden deposit
357	357	Prehistoric	Unknown	Salls, R. and D. Bleitz, 1990; Singer, C. and J. West 1969	Rock shelters and rock art of varying kind; bedrock milling; surface artifacts; dense midden deposit; cremation remains
649	649	Prehistoric	Unknown	Whitely, D. 2000; Becker, K. 1990; Gates, G. and G. Toren 1974	Scatter of tools and lithic debitage
661	661	Prehistoric	Unknown	Sikes, N. 2003; Toren, A. 1976	Originally recorded as an earth; site not relocated during 2003 survey
664	664	Prehistoric	Unknown	Sikes, N. 2002; Wessel, R. 1976	Scatter of groundstone tools, lithic tools, and lithic debitage over two loci; site destroyed by development as of 2002
668	668	Prehistoric	Unknown	Toren, A. and J. Kleeb 1976	Burial; removed during of sewer line
901	901	Prehistoric	Unknown	Edberg, B. 1978	Rock art
995	995	Prehistoric	Unknown	Van Horn 1979	Rock shelter with lithic scatter
996	996	Prehistoric	Unknown	Van Horn 1979	Rock shelter with lithic scatter
997	997	Prehistoric	Unknown	Van Horn 1979	Rock shelter with lithic scatter
998	998	Prehistoric	Unknown	Van Horn 1979	Lithic scatters (n=2)
1620	1620	Prehistoric	Unknown	Knight, A. 1989	Scatter of groundstone tools, a stone bowl fragment, and lithic tools
1740	1740	Historic Built Environment	Unknown	Becker, K. 1990	Bridge crossing Devil Canyon
1741	1741	Historic	Unknown	Dice, M. 2014; Whitley, D. 2000; Becker, K 1990	Remnants of a 1920s residential property

Table 2. Previously Recorded Cultural Resources within 0.5 Mile of the APE

Primary Number (P-19-)	Trinomial (CA-LA-)	Period	NRHP/CRHR Status	Recorded By/Year	Description
1742	1741	Historic	Unknown	Whitley, D. 2000; Becker, K 1990	Remnants of a 1920s residential property
1743	1743	Prehistoric	Unknown	Whitley, D. 2000; Becker, K 1990	Sparse scatter of lithic debitage
1744	1744	Prehistoric	Unknown	Whitley, D. 2000; Becker, K 1990	Sparse scatter of lithic tools
1745	1745	Prehistoric	Unknown	Whitley, D. 2000; Becker, K 1990	Sparse scatter of groundstone and lithic tools and lithic debitage
2826	2826	Prehistoric	Unknown	Simon, J. 2000	Quarry and lithic scatter
2827	2827	Prehistoric	Unknown	Simon, J. 2000	Quarry and lithic scatter
3792	3792	Prehistoric	Unknown	Schmidt, J. and J. Schmidt 2006	Quarry and lithic scatter
4425	—	Historic	Unknown	Dice, M. 2014	Remnants of a 1940s residential property
4426	—	Historic	Unknown	Dice, M. 2014	Remnants of a 1920s residential property
150430	—	Historic	Unknown	Edberg, B. 1978	Remnants of an early 1900s residential property
150431	—	Historic	Unknown	Edberg, B. 1978	Remnants of an early 1900s residential property
150432	—	Historic	Unknown	Edberg, B. 1978	Remnants of an early 1900s residential property
150433	—	Historic	Unknown	Edberg, B. 1978	Remnants of an early 1900s residential property

The Chatsworth Momonga/Mission Trail

Although not identified as part of the original CHRIS records search, the Chatsworth Momonga/Mission Trail is a locally designated historical resource that traverses the northern portion of the project area. The Trail begins at the intersection of De Soto Avenue and Rinaldi Street and ends at Limekiln Canyon Trail, 250 feet west of Tampa Avenue. It passes through 23 parcels of mostly vacant land. The trail is on a flat, even grade with a slight incline at the beginning of the trail and a slight decline at the end. On November 15, 2018, the trail was officially designated as a City of Los Angeles Historic-Cultural Monument (HCM) under City Criteria 1, based on the following summarized statement of significance:

> The Chatsworth Momonga/Mission Trail "reflects the broad cultural, economic, or social history of the nation, state, or community" for its pre-Spanish settlement use as a route between the Native

> American villages of Achoicominga and Momonga, and for its association with the historic network of trails that connected the San Fernando and Ventura Missions during California's Mission Period (1769-1833).

Relative to the project APE, the Trail begins just south of the APE at the northeast corner of Rinaldi Street and De Soto Avenue, defined by a simple metal pipe handrail on either side of the trail. The trail runs along the north side of Rinaldi Street for approximately 300 feet before turning north behind Sierra Canyon High School. The trail then straddles the border between LADWP's property to the east and Sierra Canyon High School to the west. The trail intersects the project APE in an area north of the school parking lot and south of an unpaved parking lot located on APN 2701-003-907 before crossing east over Rinaldi Street out of the project APE.

4.3 Building Development Research

Los Angeles Public Library

Dudek visited Los Angeles Central Library on May 7, 2018. Dudek referenced the San Fernando Valley and Chatsworth history sections, and the USACE history sections for site information. In addition, Dudek staff reviewed a number of online resources available through the Los Angeles Public Library. These tools include accessing online Sanborn Maps, online LADWP photo collections, online historical photograph collections, and online historical newspaper collections, which were all used in the preparation of the historic context (Section 3).

LADWP Photograph Collection

Dudek contacted Angela Tatum, archivist for the Department of Water and Power Photograph Collection, hosted online by the Los Angeles Public Library on May 3, 2018. On May 17, 2018, Ms. Tatum responded that the LADWP Collection had no photographs or ephemera related to the De Soto Reservoir. Ms. Tatum forwarded the research request to Dr. Paul Soifer and to the LADWP Water Engineering Section.

LADWP Records Center

Dudek contacted Paul Soifer, PhD, the Consulting Historian for the Department of Water and Power, on May 3, 2018. On May 17, 2018, Dr. Soifer responded that mention of the De Soto Reservoir among annual reports or copies of employee magazine *Intake*. Dr. Soifer noted that mention of the De Soto Reservoir was surprisingly absent from annual reports, which cover yearly projects of all scales, as well as U.S. Army Corps of Engineers and Works Progress Administration (WPA) projects. On May 30, 2018, Ms. Kaiser met with Dr. Soifer at the Record Center and went through the LADWP Closed File collection, which had information including correspondence, photographs, and descriptions of alterations and change orders for the De Soto Reservoir.

Los Angeles Department of Buildings and Safety

Dudek used the Los Angeles Department of Building and Safety online building records search on May 3, 2018, to obtain building permits and establish a building chronology and alteration chronology that were used in the preparation of the historical context (Section 3) and significance evaluations (Section 6).

Aerial Photograph and Historic Map Review

A review of historic maps and aerial photographs was conducted as part of the archival research effort for the project. All Sanborn maps for the City of Los Angeles were reviewed, and the project area was not included on any of the maps. No Sanborn maps were available for the town of Chatsworth or Chatsworth Park, California.

Historic aerial photographs were reviewed for the project site from the following years: 1930, 1938, 1944, 1945, 1947, 1952, 1956, 1959, 1960, 1965, 1967, 1969, 1971, 1974, 1976, 1977, 1980, 1981, 1994, 2003, 2005, 2009, 2010, 2012, and 2014. Historical topographical maps were reviewed for the project site for the following years: 1903, 1908, 1916, 1924, 1928, 1929, 1930, 1932, 1939, 1941, 1943, 1948, 1953, 1958, 1964, 1965, 1967, 1970, 1980, 1984, 1992, and 2012 (AMI 1974, 1981; Aeroflex Corp 1959; FAS 1930, 1939, 1944, 1956, 1960, 1965; Laval 1938; NETR 2018a, 2018b; Pacific Air 1952; Teledyne 1971, 1976; USGS 1994).

Prior to its in-service date of 1941, the project area appears on three aerial photographs from 1930, 1938, and 1939. In all three of these photographs, the project area appears as undeveloped land, surrounded by agricultural fields to the south and east, a wide watercourse/streambed to the west, and the foothills of the Santa Susana Mountains to the north (FAS 1930, 1939; Laval 1938).

The De Soto Reservoir first appears in the 1944 aerial photograph. The reservoir is visibly filled, and a short ramp leading from the paved around the reservoir enters on the northwest side. Immediately east of the reservoir are three residential properties and their respective outbuildings. The western-most of these is the De Soto Reservoir caretaker's building, according to plan drawings for the area. Orchards and windbreaks on the west, south and east sides surround the De Soto Reservoir property. North of the De Soto Reservoir property are the as-yet undeveloped Santa Susana Foothills (FAS 1944).

The subject property and surrounding buildings and orchards appear relatively unchanged in the 1952, 1956, 1959, 1960, 1965, 1967, and 1969 aerial photographs. Small residential subdivisions begin to appear southwest of the subject property in 1965 along the Brown's Creek flood control channel. In the 1971 aerial photograph, the orchards south of the subject property (south of Tulsa Street) appear to have been demolished and in the next available photograph from 1974, we can see that they are replaced by single-family residential properties. The orchards south of the subject property and Tulsa Street/the northern boundary of the residential subdivision also disappear in the 1974 aerial. In the 1976 aerial, the western portion of State Route 118 (Ronald Reagan Freeway) appears west of the subject property and the boundaries of Chatsworth seem to have reached north uniformly to the foothills of the Santa Susana Mountains. At this time, there are only a few city blocks left that appear as agricultural fields, and the majority of the lands surrounding

the De Soto Reservoir appears to be residential (AMI 1974; Aeroflex Corp. 1959; FAS 1956, 1960, 1965; NETR 2018a, 2018b; Pacific Air 1952; Teledyne 1971, 1976).

In the 1981 aerial photograph, one of the three residential properties east of De Soto Reservoir was removed. In the 1982 aerial photograph, the area immediately southeast of the subject property appears to have had its vegetation cleared. Sometime between 1982 and the 1994 aerial photograph, the caretaker's house east of the reservoir is demolished, leaving only one large residential property east of the site, apparently unrelated to the function of the reservoir. Between the 2005 and 2009 aerial photographs, the last residential building east of the reservoir is removed, and Rinaldi Street, a six-lane, winding, diagonal street that cuts northeast from De Soto Avenue to State Route 118 appears, as does the Sierra Canyon School Upper Campus building. Two single-family residence lots also appear on the north side of Rinaldi Street.

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5 CULTURAL RESOURCES SURVEY

5.1 Methods

Dudek Archaeologist Elizabeth Denniston, MA, conducted the intensive-level pedestrian survey on March 14, 2018. The intensive-level survey methods consisted of a pedestrian survey the parcel (APN 2706007901), in 15 meter transects. Each transect was taken at ground level, on a wide, flat, grass area, obstructed only by the paved access road, and De Soto Reservoir structure. GPS points and photographs of the built features on the parcel and of the parcel itself were taken. Building dates along De Soto Avenue were checked using assessor data from the Zoning Information and Map Access System (ZIMAS); however, since all parcels were outside of the APE, they were not surveyed or evaluated for this project.

All fieldwork was documented using field notes, a digital camera, and iPad technology with close-scale field maps, and aerial photographs. Photographs were taken using a Canon Powershot digital camera with a 16MP resolution and 8× zoom feature. GPS points of landmarks and precise locations of new intake facilities were taken with an Apple iPad (Model No. MP242LL/A) equipped with georeferenced PDF maps of the project site. Accuracy of this device ranged between 3 and 10 meters. All field notes, photographs, and records related to the current study are on file at Dudek's Pasadena, California, office.

5.2 Survey Conditions

The general vicinity surrounding the project site is a mostly urbanized area bounded to the north by State Highway 118, to the west by De Soto Avenue, and the south and east by residential neighborhoods, developed between 1971 and 1977. The elevation of the project area slopes gently south Towards Rinaldi Street. Vegetation at the site is sparse and consists mostly of palms, eucalyptus trees, and sparse grasses. Ground visibility is high. There are four notable or structures or building remnants at the site that may be greater than 45 years in age: the meteorological station (ca. 1965-1971), the chlorination building (1971), a cement mortared well (1941), and a board-formed concrete stem wall building foundation, pierced for inlet and outlet pipes (1941) (Figures 10–15) (NETR 2018a, Teledyne Geotronics 1971).

5.3 Results

No surface evidence of archaeological resources were encountered during the survey. Six resources were observed during the survey: the De Soto Reservoir (1941); the chlorination building (1971); a river rock and cement mortared well (circa 1941); a meteorological station (no date) a concrete building foundation (circa 1941); and the beginning segment of the Chatsworth Momonga/Mission Trail (a City of Los Angeles HCM).

Figure 10. De Soto Reservoir (1941) looking north. March 14, 2018. (IMG1679)

Figure 11. De Soto Reservoir (1941) looking east. March 14, 2018. (IMG1702)

Figure 12. Board-formed concrete building foundation, looking southwest. March 14, 2018. (IMG1670)

Figure 13. Well features and chlorination outbuilding, looking west. March 14, 2018. (IMG1674)

Figure 14. Meteorological Station, looking southwest. March 14, 2018. (IMG1677)

Figure 15. Entrance to the Chatsworth Momonga/Mission Trail. October 11, 2018. (Commission Staff Report)

6 HISTORICAL SIGNIFICANCE EVALUATION

6.1 Resource Description

The following presents a description and evaluation of a segment of the De Soto Reservoir property (reservoir and associated structures) within the project APE. The complete set of State of California Department of Parks and Recreation 523 Forms (DPR Forms) is located in Appendix C (OHP 1995).

De Soto Reservoir (1941)

The De Soto Reservoir was constructed and went into service in 1941 and is approximately 45,000-square feet. The reservoir sits in a graded hillside at the northwest corner of De Soto Avenue and Rinaldi Street. Access to the reservoir is through a paved road that can be entered from De Soto Avenue and runs east through the graded area. The access road has a spur that turns south then east again and runs along the periphery of the pear-shaped De Soto Reservoir. At its maximum width the reservoir is approximately 194 feet (north/south) and approximately 317 feet long (east/west). The construction of the reservoir consists of an oval-shaped concrete base and a metal roof cap, which covers the top and the sides of the reservoir. The metal roof is white and characterized by a series of trapezoidal shaped ridges resembling a folded plate that run roughly north–south along the top and arranged vertically along the sides. There is a hexagonal metal fixture, likely a gutter system, attached to the top of the roof that runs the maximum length of the reservoir. There is a metal ladder and a metal walkway on top of the roof at the southeastern edge of the reservoir, which lead to a utility box and manhole. Along this walkway, there are built-in pipes and equipment related to the maintenance of the reservoir. The periphery of the reservoir is bound by an asphalt road that is lined by a concrete curb with drainages.

Concrete Foundation (1941)

This concrete foundation is located roughly 125 feet northeast of the De Soto Reservoir. According to plans held by LADWP (refer to Figure 9), the foundation was for the toolshed building associated with the original caretaker's house (demolished 2016). The foundation consists of a board-form concrete stem wall, roughly 2 feet high, 6 inches thick an covering a 12 foot by 20 foot space. Rubble and tree slash is piled inside the foundation.

Well (1941)

The well is located approximately 150 feet east of the De Soto Reservoir. According to plans held by LADWP, the well was located midway between the caretaker's house and garage, and was likely for aesthetic purposes. The well rises three feet high, with a 3 foot exterior diameter and 2 foot-6 inch interior diameter. It is constructed of loosely coursed rock rubble masonry and mortared thickly with concrete.

Chlorination Building (1971)

The Chlorination Station building was added to the site in 1971. It is a shed roofed utilitarian structure, with a footprint measuring 26 feet by 16 feet. The building is constructed of concrete masonry unit blocks and features a shed roof clad in rolled composite roofing, with a wide 1-1/2 foot wide overhang. The front elevation faces south to the access road and features only a metal door with no other fenestration. The east and west elevations have nothing, the rear (north) elevation features a small metal vent built into the wall, and utility boxes with a metal awning over the gas meter.

Meteorological Station (circa 1965-1971)

The meteorological station was built over the area marked on the 1941 plans as "diversion structure." The station is inside a chain link fenced and is still located atop a diversion structure that appeared inoperable at the time if visit. Inside the chain link fence there is a board covered channel; a metal, gable-roofed housing for a pump or diesel engine; a board formed concrete structure with mesh screens on one side; a raised, concrete maintenance hole, with a metal disc-style cover; and a metal pole structure of unknown use; all of which is set inside a board formed concrete retaining wall, with two steps on the northeast side, roughly 2 feet high and topped with chain link fence.

6.2 NRHP and CRHR Criteria

NRHP Criterion A/CRHR Criterion 1: associated with events that have made a significant contribution to the broad patterns of our history.

The De Soto Reservoir property (reservoir and associated structures) are part of a larger water system that originally serviced a primarily agricultural community at Chatsworth from 1941 onward. The reservoir itself changed functions from active municipal supply to water reserves, and has been altered several times to accommodate the residential and industrial growth of Chatsworth. The changes, however, are symptomatic of other regional and local change, rather than the cause or leading force for them. The De Soto Reservoir property is one of many water resources that LADWP and Chatsworth have utilized to meet their water needs over the years. It is neither the first such designed resource, nor is it directly associated with any of the major constructive periods by LADWP in the area (1917-1918 or 1930), nor is it directly associated with the historical trends responsible for the mid-century growth of Chatsworth: such as the manufacturing industry in the area such as Lockheed, Rocketdyne, Litton Systems, Ramo-Woolridge, RCA, Marquardt, and Radioplane, or the military-industrial site at Brown's Canyon (Nike Missile Base LA-88). The De Soto Reservoir property, then, is not associated with specific, distinguishable periods of growth or historical events that have resulted in a significant contribution to the history of Los Angeles, California, or the nation. Therefore, the subject property does not appear eligible under NRHP/CRHR Criteria A/1.

NRHP Criterion B/CRHR Criterion 2: associated with the lives of significant persons in our past.

Archival research on the De Soto Reservoir property failed to reveal associations with any persons significant in the history of Los Angeles, the state, or the nation. Therefore, the De Soto Reservoir property does not appear eligible under NRHP/CRHR Criteria B/2.

NRHP Criterion C/CRHR Criterion 3: 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.

The De Soto Reservoir property is composed of several structures which exhibit utilitarian engineering, focused around a small-scale reservoir meant to supply water via trunk lines to both agricultural-based and residential recipients. The LADWP engineers who designed De Soto Reservoir pioneered a new construction and surface-finishing system that involved rolling the four-inch asphaltic concrete lining on the reservoir's steep slopes via a tractor with a roller and hoisting drum attachment, according to an engineering periodical. Despite the enthusiastic response the *Engineering News-Record*, the construction method resulted in a lining failure exposed during its first official cleaning in 1945. Since then, repairs and additional equipment have been used to supplement to operation of the reservoir, indicating that the construction method, while novel, was not repeated due to its impracticality. The original construction method was obliterated in 1948, just a few years after it had been placed into service, when LADWP made repairs to the structure to prevent further leaking and settling. The De Soto Reservoir was covered, further altering the original design, between 1982 and 1988. Around the remainder of the property built components were demolished in 2016 and 1971 (caretaker's house, garage, tool shed), as well as added in the late 1960s and 1971 (meteorological station, chlorination building). Minor components of the original caretakers house remain (well and tool shed foundation), but not enough to convey function or historical association. The reservoir itself does not embody any distinctive characteristics of a type, period, or method of construction that persists through the present unaltered. There are little inherent artistic or designed values associated with the concrete reservoir. Archival research could not directly connect the De Soto Reservoir to a master architect, engineer, or craftsperson. As-built plans provided did not specify the designer of the reservoir or associated buildings and structure beyond "DWP." For all of the reasons described herein, the subject property does not appear eligible under NRHP/CRHR Criteria C/3.

NRHP Criterion D/CRHR Criterion 4: have yielded, or may be likely to yield, information important in history or prehistory.

There is no evidence to indicate that the De Soto Reservoir property is likely to yield any information important in prehistory or history. The subject property is also not associated with an archaeological site or a known subsurface cultural component. Therefore, the subject property does not appear eligible under NRHP/CRHR Criteria D/4.

6.3 Integrity

The De Soto Reservoir property appears to retain integrity of location and association only. Integrity of setting, design, materials, workmanship, and feeling are diminished through the numerous changes to the reservoir itself, the demolition and addition of modern buildings, its immediate setting on LADWP land, and its overall setting in Chatsworth. The integrity of setting, on a large LADWP tract with a caretaker's house and associated buildings, in a general setting in an non-urbanized agricultural area, is no longer extant, destroyed by residential subdivision development, the introduction of the Sierra School, and the SR 118 highway. Design, materials, and workmanship have been greatly diminished by the multiple repairs and the covering of the reservoir between 1982 and 1988.

Further, the design intent of the De Soto Reservoir changed from a terminal reservoir to a tie-in for multiple trunk lines as early as the 1950s. The reservoir no longer retains integrity of feeling. It can no longer convey the feeling of an open-air reservoir with a LADWP on-site caretaker due to the deconstruction or alterations to the reservoir site over time. The site retains integrity of association with its original owner LADWP and their engineering and drafting team, as well as integrity of location as the reservoir itself has never been moved or enlarged.

6.4 City of Los Angeles HCM Criteria

For the same reasons already discussed in application of NRHP and CRHR criteria, the De Soto Reservoir property does not appear eligible under any of the City of Los Angeles HCM criteria, as described below:

- **The broad cultural, political, economic, or social history of the nation, state, or community is reflected or exemplified:**

  As state in Criterion A/1 above, the De Soto Reservoir property is not associated with any broader cultural, political, economic, or social history of the United States, the state of California, the city of Los Angeles or the neighborhood of Chatsworth. The reservoir is part of a larger context of water supply to the entirety of the City of Los Angeles and supported towns and communities in the surrounding region including San Fernando Valley. Individually, the reservoir and associated structures hold little a minor role in the broader history of water supply.

- **Identified with historic personages or with important events in the main currents of national, state, or local history:**

  As stated in Criterion B/2, archival research on the De Soto Reservoir property failed to reveal associations with any persons significant in the history of Los Angeles, the state, or the nation. Additionally, no specific important events were identified that can be connected with the main currents of local, state, or national history.

- **Embody the distinguishing characteristics of an architectural-type specimen, inherently valuable for a study of a period, style, or method of construction:**

  As stated in Criterion C/3, the De Soto Reservoir property is a concrete reservoir and associated structures and outbuildings. It had been constructed simply, lacking distinctive characteristics of a period, or style. The method of construction for the reservoir, using the tractor with roller attached to a hoisting arm to compact the reservoir surface before pouring the concrete liner was recorded as innovative for the time, however, subsequent alterations to the reservoir after the reservoir settled and leaked have damaged the integrity of this construction method. The other structures and buildings are unremarkable and lack architectural value.

- **A notable work of a master builder, designer, or architect whose individual genius influenced his or her age:**

  Also stated in Criterion C/3, archival research did not reveal master builders, designers, or architects with any degree of influence over their peers or time period associated with the De Soto Reservoir property.

6.5 Evaluation Findings

After thorough consideration of NRHP, CRHR, and City of Los Angeles HCM evaluation criteria, the De Soto Reservoir does not appear eligible for either national, state, or local listing. Therefore, the De Soto Reservoir does not appear to be an historical resource for the purposes of CEQA or an historic property for the purposes of Section 106 of the NHPA.

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7 PROJECT EFFECTS/IMPACTS ASSESSMENT

Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on historic properties, assess the effects, and seek ways to avoid, minimize, or mitigate any adverse effects on such properties (36 CFR 800.1[a]). No historic properties have been identified within the project's Area of Potential Effects (APE), as a result of the records search, survey, and archival research. Therefore, no known historic properties will be affected by the proposed undertaking. As a result, a finding of "no adverse effect" is recommended for the proposed undertaking.

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (PRC section 21084.1; CEQA Guidelines section 15064.5(b)). One historical resource was identified within the project APE: the Chatsworth Momonga/Mission Trail, a locally designated historical resource that traverses the northern portion of the project area. The trail travels in between LADWP's property to the east and Sierra Canyon High School to the west, and intersects the project APE in an area north of the school parking lot and south of an unpaved lot located on APN 2701-003-907.

LADWP has committed to avoiding this resource, such that it would not be impacted by any proposed project-related activities. Construction of the new concrete tanks, access road, pipelines, and associated infrastructure would occur approximately 60 feet away from the intersecting portion of the trail. Likewise, demolition of the existing reservoir would occur approximately 75 feet away from the adjacent portion of the trail that straddles the APE. Further, the trail would remain open to the public during all construction and demolition activities. In consideration of potential impacts to the trail's historic setting, the trail traverses through an area that has seen extensive development in recent years, such that most of its original historic setting within the overlapping portions of the APE has already been lost. Construction of the SR 118 freeway, adjacent housing, high school, and existing water infrastructure have already impacted the historic setting of the trail in this segment. The demolition of the existing tanks and construction of new tanks would not significantly alter the already compromised setting of the trail. Therefore, no historical resources will be significantly impacted by the project and a finding of "less than significant impact" under CEQA is recommended for this project.

While no surface evidence of historical or archaeological resources was identified as a result of this study, it is possible that subsurface resources could be encountered/impacted by ground disturbing activities associated with the Project. Recommendations to reduce effects/impacts to undiscovered, subsurface cultural resources is provided in Section 8.

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8 RECOMMENDATIONS

No new cultural resources were identified within the Project APE as a result of the current study; therefore, no further management recommendations are necessary beyond standard protection measures to address unanticipated discoveries of cultural resources and human remains (listed below).

8.1 Unanticipated Discovery of Cultural Resources

In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the Project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA or Section 106 of the NHPA, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

8.2 Unanticipated Discovery of Human Remains

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

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APPENDIX A

Preparer's Qualifications

Kate Geraghty Kaiser

Architectural Historian

Kate Geraghty Kaiser is an architectural historian with more than five years of professional experience as a cultural resource manager specializing in California Environmental Quality Act/National Environmental Quality Act (CEQA/NEPA) compliance, National Historic Preservation Act (NHPA) Section 106 compliance, reconnaissance and intensive level surveys, archival research, cultural landscapes, and GIS.

EDUCATION

University of Oregon
M.S. Historic Preservation, 2017
Boston University
B.A. Archaeology, 2009

PROFESSIONAL AFFILIATIONS

California Preservation Foundation
Vernacular Architecture Forum
Association for Preservation Technology - Southwest

Ms. Kaiser meets the Secretary of the Interior's Professional Qualification Standards for both Architectural History and Archaeology. She is experienced at managing multidisciplinary projects in the lines of transportation and federal land management. She has experience preparing environmental compliance documentation in support of projects that fall under Sections 106 and 110 of the National Historic Preservation Act (NHPA), and the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA).

Dudek Project Experience (October 2017-present)

Development

Trail to Crane Creek Project, Sonoma County, California. 2018

Ms. Kaiser served as architectural historian and co-author of the cultural resources report for the Trail to Crane Creek Built Environment Report. Preparation of the report involved site recordation, extensive archival research, historic context development, engineering feature development descriptions, historical significance evaluations, and updated DPR forms for a historic stone wall component of the project. The project proposed to modify sections of the historic wall for the completion of a bike path for a Rohnert Park Regional Park.

Floriston Spring Filtration Project, Nevada County, California. 2018

Ms. Kaiser served as architectural historian and author of the cultural resources report for the Floriston Spring Filtration Project. Ms. Kaiser contributed building development descriptions, archival research, historical context development, and historical significance evaluations for the Floriston Schoolhouse, constructed in 1893. The project proposed to alter portions of the schoolhouse including its modern addition, as well as trench and lay pipe for a new water filtration system, new wastewater system and new holding tanks.

Stickleback Movie Ranch Evaluation Project, Los Angeles County, California. 2018.

Ms. Kaiser served as architectural historian and author of the cultural resources report for the Stickleback Movie Ranch Report. Ms. Kaiser contributed on-site fieldwork, building development descriptions, archival research, historical context development, and historical significance evaluations for five extant ranch buildings and several other fire-damaged resources. The project proposed to demolish extant buildings after they were damaged and portions of the property sustained extensive damage after the 2016 Sand Fire.

1830 Wilikina Project. Wahiawā, Honolulu County, Hawai'i. 2018.

Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form and accompanying report for the Kemoo-By-The-Lake condominium building at 1830 Wilikina Drive in Wahiawā, constructed in 1972. Ms. Kaiser's report included defining the APE, conducting a record search of the mall

and adjacent properties with SHPD, developing the building description, archival research, historical context development, historical significance evaluations, and RLS form production for Kemoo-By-The-Lake Condominium. The project proposed to modify an existing telecommunication equipment tower atop the condominium building.

Harbor View Plaza Project. Honolulu, Honolulu County, Hawai'i. 2018. (in progress)
Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form and accompanying report for the building at 1676 Ala Moana Boulevard in Honolulu, constructed in 1968. Ms. Kaiser's report included conducting a record search of the building and adjacent properties with SHPD, developing the building description, archival research, historical context development, historical significance evaluations, and RLS form production for the 16 floor high-rise apartments. The project proposed to construct a new telecommunication equipment tower atop the building.

Naniloa Surf Project. Hilo, Hawai'i County, Hawai'i. 2018.
Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form for the Grand Naniloa Hotel in Hilo, constructed in 1967. Ms. Kaiser's report included building development descriptions for each of the hotel complex buildings, archival research, historical context development, historical significance evaluations, and RLS form production for the Grand Naniloa Hotel, including addressing its designation as a Historic Hotel of America. The project proposed to modify an existing telecommunication equipment tower atop one of the hotel buildings.

Dole Cannery Project. Honolulu, Honolulu County, Hawai'i. 2018.
Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form and accompanying report for the Dole Cannery warehouse buildings at 650 Iwilei Road in Honolulu, constructed between 1918 and 1931. Ms. Kaiser's report included defining the APE, conducting a record search of the company, the cannery, and adjacent properties with SHPD, developing the building description, archival research, historical context development, historical significance evaluations, and RLS form production for Dole Cannery. The project proposed to modify an existing telecommunication equipment tower atop the 7-story warehouse building.

1132 South King Project. Honolulu, Honolulu County, Hawai'i. 2018.
Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form and accompanying report for the building at 1132 King Street in Honolulu, constructed in 1965. Ms. Kaiser's report included defining the APE, conducting a record search of the building and adjacent properties with SHPD, developing the building description, archival research, historical context development, historical significance evaluations, and RLS form production for the mixed use residential/commercial building. The project proposed to construct a new telecommunication equipment tower atop the building.

Aʻala Street Project, Honolulu, Honolulu County, Hawai'i. 2018.
Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form and accompanying report for the Aloha United Fund Building in Honolulu, constructed in 1970. This building had been previously identified as eligible for the NRHP and HRHP under Criterion C in 2017. Ms. Kaiser's report included defining the project APE, RLS form production, conducting a record search of the Aloha United Fund Building and adjacent properties with SHPD, developing the building description, extensive archival research, historical context development, and analyzing the existing historical significance evaluation for the

building within the researched and fully developed historical context. The project proposed to modify an existing telecommunication equipment tower atop the building. In consideration of its eligibility status, Ms. Kaiser proposed recommendations that the new equipment would not adversely affect character defining features that qualify the building for the NRHP or Hawai'i Register.

Market City Project, Honolulu, Honolulu County, Hawai'i. 2018.
Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form and accompanying report for the Market City Shopping Center, constructed in 1948. Ms. Kaiser contributed report sections that included defining the APE, conducting a record search of the shopping and adjacent properties with SHPD, developing the building description, and RLS form production for the shopping center. The project proposed to modify an existing telecommunication equipment tower atop the shopping center.

Kaʻahumanu Mall Project, Kahului, Maui County, Hawai'i. 2018.
Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form and accompanying report for the Queen Ka'ahumanu Center Mall in Kahului, constructed in 1972. Ms. Kaiser's report included defining the APE, conducting a record search of the mall and adjacent properties with SHPD, developing the building description for the outdoor mall complex, extensive archival research, historical context development, historical significance evaluation, and RLS form production for the Queen Ka'ahumanu Center Mall. The project proposed to modify an existing telecommunication equipment tower atop the mall's movie theater building.

Education

James Campbell High School Project. 'Ewa Beach, Honolulu County, Hawai'i. 2018.
Ms. Kaiser served as architectural historian and author of the reconnaissance level survey form for the James Campbell High School in 'Ewa Beach, constructed in 1962. Ms. Kaiser's report included building development descriptions, archival research, historical context development, historical significance evaluations, and RLS form production for Building D on James Campbell High School campus. The project proposed to install new telecommunication equipment atop the existing building.

Emerson Hall Replacement Project, University of California Davis, Yolo County, California. 2017.
Ms. Kaiser served as architectural historian and author of the cultural resources report for the Emerson Hall Replacement Project. Ms. Kaiser contributed building development descriptions, archival research, historical context development, and historical significance evaluations for Emerson Hall. The project proposed to demolish Emerson Hall, a University of California, Davis dormitory, and replace it with a new 180,000 gsf dormitory which includes increasing bed capacity from 600 students to 800 students, updating and improving HVAC, fire suppression systems, plumbing, lighting, telecommunications, high-speed internet access, parking improvements, and demolishing select buildings.

Elkus Ranch Master Plan Project, University of California Davis, San Mateo County, California. 2017
Ms. Kaiser served as architectural historian and coauthor of the cultural resources report for the Elkus Ranch Master Plan Project. Ms. Kaiser contributed building development descriptions, archival research, in-field research, GIS data collection, and historical significance evaluations for buildings in the project. The project proposed to create a master plan for the ranch, which includes building improvements, parking improvements, and demolishing select buildings.

Municipal

Los Angeles Department of Water and Power De Soto Tanks EIR Project, City of Los Angeles, Los Angeles County. California. 2018.
Ms. Kaiser served as architectural historian and author of the cultural resources report for the Los Angeles Department of Water and De Soto Tanks EIR CEQA-Plus Project. Preparation of the report involved site recordation, extensive archival research including coordinating with the DWP Records Center, historic context development, engineering feature development descriptions, historical significance evaluations, and DPR forms for each building of the project. The evaluation found the property ineligible under all NRHP, CRHR, and Los Angeles HCM designation criteria. The project proposed to demolish a concrete reservoir over 45 years in age and replace it with two underground reservoirs.

City of San Diego Public Utility Department, Historical Context Statement and Cultural Resource Report for Reservoirs. City of San Diego, San Diego, County, California. 2018 (in progress).
Ms. Kaiser served as architectural historian and co-author of the historical context statement for the San Deigo Reservoir system administered by the Public Utilities Department. Preparation of the historical context statement involved extensive archival research in the Public Utility Department archive, historic context development, engineering feature development descriptions, historical significance evaluations, and DPR forms for ten reservoirs and pipelines included in the project.

Los Angeles Department of Water and Power Tujunga Spreading Grounds Enhancement Project, City of Los Angeles, Los Angeles County. California. 2018.
Ms. Kaiser served as architectural historian and author of the cultural resources report for the Los Angeles Department of Water and Power Tujunga Spreading Grounds CEQA-Plus Project. Preparation of the report involved site recordation, extensive archival research, historic context development, engineering feature development descriptions, historical significance evaluations, and DPR forms for each building of the project. The evaluation found the property ineligible under all NRHP, CRHR, and Los Angeles HCM designation criteria. The project proposed to modify a US Army Corps of Engineer-owned flood control channel to divert more flood water from the Tujunga Flood Control Channel into the Tujunga Spreading Grounds.

Los Angeles Department of Water and Power West Los Angeles District Yard Project, City of Los Angeles, Los Angeles County. California. 2017.
Ms. Kaiser served as architectural historian and author of the cultural resources report for the Los Angeles Department of Water and Power West Los Angeles District Yard Project. Preparation of the report involved extensive archival research, in-field research, historic context development, building development descriptions, historical significance evaluations, and DPR forms for each building of the project. The evaluation found the property ineligible under all NRHP, CRHR, and Los Angeles HCM designation criteria. The project proposed to demolish existing buildings and build new buildings and an underground parking structure.

Santa Monica City Yards Master Plan Project, City of Santa Monica, Los Angeles County California. 2017. Ms. Kaiser served as architectural historian and coauthor of the cultural resources report for the Santa Monica City Yards Master Plan Project contributed archival research, and building development section of the report. The project proposed to demolish existing structures at the City Yards.

Erica Nicolay

Cultural Resource Specialist

Erica Nicolay is an cultural resource specialist with 3 years' experience as an archaeologist, primarily in Southern California. Ms. Nicolay has worked on projects for private developers, municpalities, government agencies, and energy companies. She has experience determining cultural resource sensitity for proposed projects, developing project-specific mitigation measures, communicating with interested parties, and/or conducting fieldwork in order to assess known resources or determine if unknown resources could be present.

EDUCATION

California State University, Northridge
MA, Public Archaeology, 2016
University of California, Los Angeles
BA, Anthropology, 2012

Relevant Project Experience

Development

Cultural Resource Assessment for the Compton High School Replacement Project, Compton California. (3 Weeks) Co-authored cultural resource assessment report for the proposed Compton High School Replacement Project. The purpose of this assessment was to determine the sensitivity of the project area and to determine the likelihood that archaeological resources would be impacted by the proposed construction. Tasks comprised conducting historical research, including analyzing historical aerials, historical topographic maps, and ethnographic literature; initiating and tracking a Native American outreach program; and conducting a search of the California Historical Resources Information System (CHRIS).

222 West Second Street Tribal Cultural Resource Assessment, Los Angeles, California. (3 weeks) Co-authored a tribal cultural resource assessment for a proposed development at 222 West Second Street. The purpose of this assessment was to determine the likelihood of encountering historic or prehistoric tribal cultural resources during the proposed construction. Tasks included analyzing historical aerials, maps and ethnographic resources, and conducting a search of the CHRIS.

Resource Management

Archaeological Testing and Data Recovery Project, Malibu, California. (6 weeks) Served as a co-field director for an archaeological testing program and subsequent data recovery project at a prehistoric site in Malibu. The purpose of the project was to assess the state of the site, determine if there were intact features present in the proposed footprint of construction for a new gas line, and efficiently and appropriately document and remove any uncovered features. Tasks included supervising a crew of eight archaeologists, coordinating with construction crews, tracking excavation progress and findings, conducting excavation, and creating to-scale plan-view maps of all features.

Updated Cultural Resource Survey for the Travertine Land Development, La Quinta, California. (3 weeks) Served as survey leader on private and Bureau of Land Management land in La Quinta for the proposed Travertine Land Development Proposal. The purpose of the survey was to revisit sites that had previously been located and determine if they were within or outside of the proposed project's area of potential effects. Tasks include relocating and assessing the state of previously recorded sites, preparing updated site forms, and coauthoring the final survey report.

Fort Irwin Reliability Project, Barstow, California (3 weeks). Served as a field technician during transmission line surveys for Southern California Edison in Barstow, California. Compiled DPR forms and assisted with report preparation at the culmination of the survey.

High Speed Rail, Construction Package 4, Wasco, California (6 months). Served as the lead archaeological/paleontological monitor for construction associated with the High Speed Rail Project in Kern County. Construction activities monitored consisted mainly of geo-tech boring and grading. Surveyed areas solo or as part of team prior to any construction work took place. Ensured construction work only took place within approved footprint. Coordinated schedules with the lead engineers, construction crews, biological monitors, and Native American monitors to ensure all sensitive areas were monitored. Compiled monthly monitoring reports detailing all findings and all areas monitored that were submitted to the Authority.

Alameda Corridor Extension Project, San Gabriel, California (9 months). Served as a field technician during the San Gabriel Mission ACE Project. Screened and excavated a mission-era site immediately adjacent to the San Gabriel Mission. The identification of human and faunal remains was required. Participated in data analysis and entry into the Microsoft Access database. This data entry involved preliminary identification quality checks as well as meta-data quality assurance within the database.

Metropole Project, Avalon, Catalina Island, California (3 months). Served as a field technician during the Metropole Project on Catalina Island. Monitored, excavated, and screened back dirt from previous excavations with emphasis on identification of grave goods and the distinction between human and faunal remains. Participated in data analysis and entry into the Microsoft Access database. This data entry involved preliminary identification quality checks as well as meta-data quality assurance within the database.

Samantha Murray, MA

Historic Built Environment Lead / Senior Architectural Historian

EDUCATION

California State University, Los Angeles
MA, Anthropology, 2013

California State University, Northridge
BA, Anthropology, 2003

PROFESSIONAL AFFILIATIONS

California Preservation Foundation
Society of Architectural Historians
National Trust for Historic Preservation
Registered Professional Archaeologist

Samantha Murray is a senior architectural historian with 12 years' professional experience in in all elements of cultural resources management, including project management, intensive-level field investigations, architectural history studies, and historical significance evaluations in consideration of the California Register of Historical Resources (CRHR), the National Register of Historic Places (NRHP), and local-level evaluation criteria. Ms. Murray has conducted hundreds of historical resource evaluations and developed detailed historic context statements for a multitude of property types and architectural styles, including private residential, commercial, industrial, educational, medical, ranching, mining, airport, and cemetery properties, as well as a variety of engineering structures and objects. She has also provided expertise on numerous projects requiring conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Ms. Murray meets the Secretary of the Interior's Professional Qualification Standards for both Architectural History and Archaeology. She is experienced managing multidisciplinary projects in the lines of transportation, transmission and generation, federal land management, land development, state and local government, and the private sector. She has experience preparing environmental compliance documentation in support of projects that fall under the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act (NHPA). She also prepared numerous Historic Resources Evaluation Reports (HRERs) and Historic Property Survey Reports (HPSRs) for the California Department of Transportation (Caltrans).

Dudek Project Experience (2014-2018)

Birch Specific Plan 32-Unit Condo Project, City of Carson, Los Angeles County, California (2018). Dudek was retained by the City of Carson to prepare a cultural resources report for a project that proposes to demolish approximately 6,200 square feet of existing residential buildings and roughly 5,850 square feet of pavement on the project site, and construct a 32-unit residential condominium community with on-grade parking, landscaping, and other associated improvements. The historical significance evaluation included three residential properties proposed for demolition. All properties were found not eligible under all designation criteria and integrity requirements. Ms. Murray provided QA/QC of the final cultural resources report.

Santa Monica/Orange Grove Mixed-Use Development at 7811 Santa Monica Boulevard, City of West Hollywood, Los Angeles County, California (2017). Dudek was retained by the City of West Hollywood to prepare an Environmental Impact Report (EIR) for the Santa Monica/Orange Grove Mixed-Use Development Project. In support of the EIR, Dudek conducted a cultural resources inventory and evaluation of two commercial properties at 7811 Santa Monica Blvd. and 1125-1127 N. Ogden Drive. Both properties were found not eligible for designation under

NRHP, CRHR and local designation criteria. Ms. Murray co-authored the technical report and provided QA/QC.

Transportation Vessels Manufacturing Facility Project at Berth 240, Port of Los Angeles, Los Angeles County, California (2017). Dudek was retained by the Los Angeles Harbor Department (LAHD) to provide a cultural resources assessment for a project that proposes to construct a facility to manufacture transportation vessels at Berth 240 off South Seaside Avenue on Terminal Island. The site is adjacent to the NRHP-eligible Bethlehem Shipyard Historic District. Ms. Murray provided an updated conditions assessment of the site and an updated evaluation of the historic district to address integrity issues. She also reviewed project design plans for new construction within the district for conformance with the Secretary of the Interior's Standards for Rehabilitation.

Berths 238-239 [PBF Energy] Marine Oil Terminal Wharf Improvements Project and Lease Renewal, Port of Los Angeles, Los Angeles County, California (2017). Dudek was retained by the Los Angeles Harbor Department (LAHD) to provide an updated cultural resources assessment for Berths 238-239 at the Port of Los Angeles (POLA), as part of the proposed Environmental Impact Report (EIR) for the Berths 238-239 [PBF Energy] Marine Oil Terminal Wharf Improvements Project and Lease Renewal. Ms. Murray updated a previous evaluation of the project area conducted in 2010. This included a pedestrian survey, archival research, and a cultural resources impact assessment. The wharf was found not eligible under all designation criteria.

Robertson Lane Hotel Commercial Redevelopment Project, City of West Hollywood, Los Angeles County, California (2017). Ms. Murray served as architectural historian and peer reviewer of the historical evaluation report. The project involved conducting a records search, archival research, consultation with local historical groups, preparation of a detailed historic context statement, evaluation of three buildings proposed for demolition in consideration of local, CRHR, and NRHP designation criteria, and assistance with the EIR alternatives analysis.

8777 Washington Boulevard Project, Culver City, Los Angeles County, California (2017). Dudek prepared a cultural resources assessment for a project that proposed to demolish the property located at 8777 Washington Blvd. Ms. Murray evaluated the building for NRHP, CRHR, and local level criteria and integrity requirements and co-authored the cultural resources report.

Covina Transit-Oriented Mixed-Use Development Project, City of Covina, Los Angeles County, California (2016). The proposed project would involve a General Plan Amendment (GPA) to develop a mixed-use residential, transit-oriented development (TOD) project. The proposed project would consist of three primary components: 1) a Transit Center and Park & Ride facility; 2) the Covina Innovation, Technology, and Event Center (iTEC) - an event center and professional office incubator space; and 3) residential townhome units. Ms. Murray evaluated one residential and one commercial property over 45 years old for historical significance. Both were found not eligible. Ms. Murray also co-authored the cultural resources technical report.

Jack in the Box Drive Through Restaurant Project, City of Downey, Los Angeles County, California (2015). Ms. Murray served as architectural historian and lead author of the cultural resources study which included evaluation of two historic resources in consideration of national,

state, and local criteria and integrity requirements. The study also included a records search, survey, and Native American Coordination.

635 S. Citrus Avenue Proposed Car Dealership MND, City of Covina, Los Angeles County, California (2015). Ms. Murray served as architectural historian and archaeologist, and author of the cultural resources MND section. The project proposes to convert an existing Enterprise Rent-a-Car facility into a car dealership. As part of the MND section, Ms. Murray conducted a records search, Native American coordination, background research, building permit research, and a historical significance evaluation of the property. The study resulted in a finding of less-than-significant impacts to cultural resources.

8228 Sunset Boulevard Tall Wall Project, City of West Hollywood, Los Angeles County California (2014). Ms. Murray prepared DPR forms and conducted building development and archival research to evaluate a historic-age office building. The project proposes to install a tall wall sign on the east side of the building.

Robert Salamone vs. The City of Whittier (2016). Ms. Murray was retained by the City of Whittier to serve as an expert witness for the defense. She peer reviewed a historic resource evaluation prepared by another consultant and provided expert testimony regarding the contents and findings of that report as well as historic resource requirements on a local and state level in consideration of the City of Whittier's Municipal Code Section 18.84 and CEQA. Judgement was awarded in favor of the City on all counts.

The Santa Monica City Yards Master Plan Project, City of Santa Monica, Los Angeles County, California (2017). The City of Santa Monica retained Dudek to complete a cultural resources study for the proposed City Yards Master Plan project site located at 2500 Michigan Avenue in the City of Santa Monica. The study involved evaluation of the entire City Yards site, including two murals and a set of concrete carvings for historical significance and integrity. As a result, the City Yards and its associated public art work was found ineligible under all designation criteria. Ms. Murray conducted the intensive level survey, building permit research, co-authored the technical report, and provided QA/QC of the final cultural resources report.

148 North Huntington Street, City of Pomona, Los Angeles County, California (2017). Dudek was retained by the City of Pomona to conduct a cultural resources study for the remediation of the project site located at 148 North Huntington Street. The proposed project involves the excavation, removal, and off-site treatment of approximately 10,000 Cubic Yards (CYs) of contaminated soil due to the former presence of a manufactured gas plant (MGP) at the project site (currently the City of Pomona Water and Wastewater Yards). All buildings over 45 years of age within the project site were evaluated for the CRHR and local landmark eligibility as part of the Pomona Gas Plant site. The site was found not eligible with concurrence from the historic resources commission. Ms. Murray conducted the survey, prepared the evaluation, and authored the cultural resources report.

Judicial Council of California Historical Resource Evaluation Report for the Santa Monica Courthouse, City of Santa Monica, Los Angeles County, California (2017). Dudek was retained by the Judicial Council of California (JCC) to prepare an evaluation of the Santa Monica Courthouse building, located at 1725 Main Street in the City of Santa Monica, California. To comply with Public

Resources Code Section 5024(b), the JCC must submit to the State Historic Preservation Officer (SHPO) an inventory of all structures over 50 years of age under the JCC's jurisdiction that are listed in or that may be eligible for inclusion in the National Register of Historic Places (NRHP), or registered or that may be eligible for registration as a California Historical Landmark (CHL). The Santa Monica Courthouse was found not eligible for designation under all applicable criteria. Ms. Murray co-authored the report and provided QA/QC of the final cultural resources report.

Department of General Services Historical Resource Evaluation for the Pomona Armory at 600 South Park Avenue, City of Pomona, Los Angeles County, California (2017). Dudek was retained by the State of California Department of General Services to mitigate potential adverse effects to the Pomona Armory (600 South Park Avenue), a state-owned historical resource proposed to be transferred from State-ownership to a local agency or private owner. Ms. Murray prepared a detailed significance evaluation for the Pomona Park Armory in the consideration NRHP, CRHR, CHL, and City of Pomona designation criteria and integrity requirements, and prepared a single historic landmark application for the property. The Pomona Park Armory was locally designated after unanimous approval by the Historic Resources Commission and City Council. SHPO concurred with the evaluation findings and agreed that adverse effects had been adequately mitigated with no comments.

Presentations

***Historical Resources under CEQA*. Prepared for the Orange County Historic Preservation Planner Working Group. Presented by Samantha Murray, Dudek. December 1, 2016.** Ms. Murray delivered a one-hour PowerPoint presentation to the Orange County Historic Preservation Planner Working Group, which included planners from different municipalities in Orange County, regarding the treatment of historical resources under CEQA. Topics of discussion included identification of historical resources, assessing impacts, avoiding or mitigating impacts, overcoming the challenges associated with impacts to historical resources, and developing effective preservation alternatives.

***Knowing What You're Asking For: Evaluation of Historic Resources*. Prepared for Lorman Education Services. Presented by Samantha Murray and Stephanie Standerfer, Dudek. September 19, 2014.** Ms. Murray and Ms. Standerfer delivered a one-hour PowerPoint presentation to paying workshop attendees from various cities and counties in Southern California. The workshop focused on outlining the basics of historical resources under CEQA, and delved into issues/challenges frequently encountered on preservation projects.

Relevant Training

- CEQA and Historic Preservation: A 360 Degree View, CPF, 2015
- Historic Designation and Documentation Workshop, CPF, 2012
- Historic Context Writing Workshop, CPF, 2011
- Section 106 Compliance Training, SWCA, 2010
- CEQA Basics Workshop, SWCA, 2009
- NEPA Basics Workshop, SWCA, 2008
- CEQA, NEPA, and Other Legislative Mandates Workshop, UCLA, 2008

APPENDIX B

CONFIDENTIAL
Records Search Results

APPENDIX C

DPR Forms

State of California ♿ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 14 ***Resource Name or #:** (Assigned by recorder) De Soto Reservoir
P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Los Angeles County **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Oat Mountain **Date** 2015 **T** 2N; **R** 16E; NW ¼ **of** SW ¼ **of Sec** 8; Mount Diablo **B.M.**
c. Address 11200 De Soto Avenue City Chatsworth Zip 91311
d. UTM: (Give more than one for large and/or linear resources) Zone 11S , 0353873 mE/ 3793384 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
APN: 2706-007-901. The project site is located at 11200 De Soto Avenue, between De Soto Avenue to the west, Rinaldi Street to the south and east and State Highway 118 (Ronald Reagan Freeway) to the north.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The De Soto Reservoir property contains an in-ground reservoir (1941), a building foundation, a well, a chlorination building, and a weather station. The reservoir is a pear-shaped concrete reservoir, now covered by an aluminum cover. Other features at the site are either related to the reservoir keeper's property which used to be immediately east of the reservoir (e.g. foundations) or was added over time to comply with state standards (e.g. chlorination building). (See Continuation Sheet)

***P3b. Resource Attributes:** (List attributes and codes) HP22– reservoir, HP9 – public utility building, AH2 – foundations, AH5 – wells/cistern

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

***P4. Resources Present:** ☒ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)
P5b. Description of Photo: (view, date, accession #) IMG_1679, March 14, 2018; View to northwest
***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
1941 (DWP Records Center)
***P7. Owner and Address:**
Los Angeles Department of Water and Power
111 North Hope Street, Rm. 1044
Los Angeles, California 90012
***P8. Recorded by:** (Name, affiliation, and address) Kate Kaiser and Liz Denniston
Dudek
38 North Marengo Avenue
Pasadena, CA 91101
***P9. Date Recorded:** 3/2018
***P10. Survey Type:** (Describe)
Pedestrian
***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Kaiser, Nicolay, and Murray. 2018. Cultural Resources Report for the Floriston Springs Filtration Project. Dudek.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California ♦ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

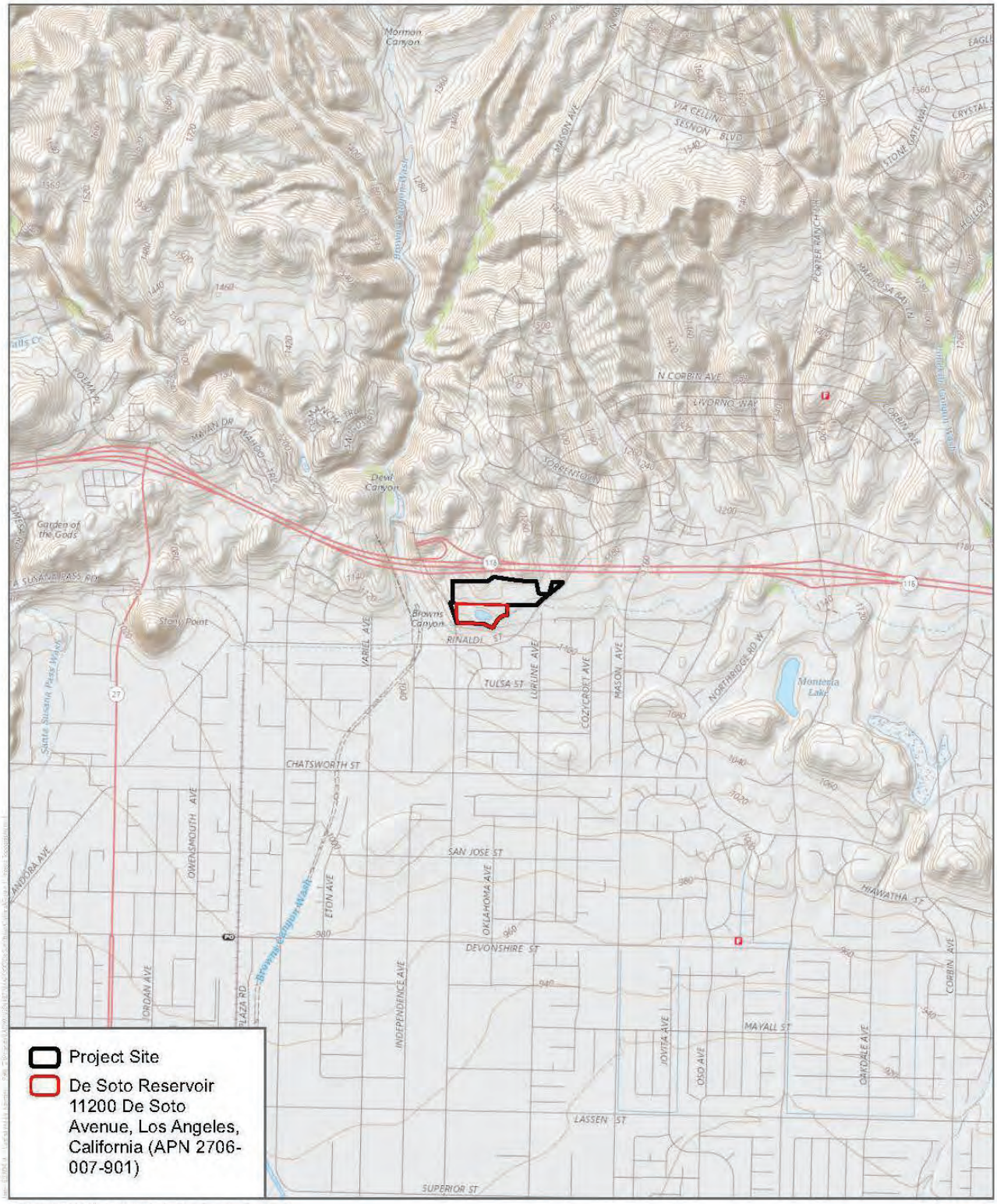
LOCATION MAP

Primary #
HRI#

Trinomial

***Resource Name or #** (Assigned by recorder) De Soto Reservoir

***Map Name:** Oat Mountain, CA ***Scale:** 1:24,000 ***Date of map:** 2015



SOURCE: USGS 7.5-Minute Series Oat Mountain Quadrangle
Township 2N; Range 16W; Section 8

DUDEK

0 1,000 2,000 Feet
0 285 570 Meters
1:24,000

FIGURE 1
Location Map
LADWP De Soto Tanks Cultural Report

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) De Soto Reservoir ***NRHP Status Code**
Page 3 **of** 14

B1. Historic Name: Chatsworth High Line Reservoir; De Soto Avenue Reservoir
B2. Common Name: De Soto Reservoir
B3. Original Use: DWP Reservoir B4. Present Use: DWP Reservoir
***B5. Architectural Style:** Utilitarian
***B6. Construction History:** (Construction date, alterations, and date of alterations)
De Soto Reservoir was constructed in 1941 (See Continuation Sheet)

***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown** **Date:** **Original Location:**
***B8. Related Features:**
Foundations
Well
Weather Station
Chlorination Building
Chatsworth High Line Aqueduct
Chatsworth Reservoir

B9a. Architect: Unknown b. Builder: Los Angeles Department of Water and Power
***B10. Significance: Theme** n/a **Area** n/a
Period of Significance n/a **Property Type** utility **Applicable Criteria** n/a
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Acquiring and Planning the Site

Originally planned as the Chatsworth High Line Reservoir, the De Soto Reservoir went into service in 1941 (FAS 1938, 1944; Soifer 2018) according to visual confirmation from aerial photographs and verbal confirmation from LADWP. It is located along the Chatsworth High-Line, originally conceived to connect the San Fernando Reservoir to the Chatsworth Reservoir. The San Fernando Reservoir went into service in 1918 and consisted of two reservoirs: San Fernando Reservoir No. 1 (upper) completed in 1913 and San Fernando Reservoir No. 2 (still under construction 1916). The Chatsworth Reservoir site was scouted in 1911 and 1913, and construction began after securing the title to the property from Benjamin. Porter in 1917. The reservoir was completed in 1918. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) n/a

***B12. References:**
(See Continuation Sheet)

B13. Remarks:

***B14. Evaluator:** Kate G. Kaiser
***Date of Evaluation:** June 11, 2018

(Sketch Map with north arrow required.)

(This space reserved for official comments.)

P3a. Description (Continued): The De Soto Reservoir was constructed and went into service in 1941 and is approximately 45,000-square feet. The reservoir sits in a graded hillside at the northwest corner of De Soto Avenue and Rinaldi Street. Access to the reservoir is through a paved road that can be entered from De Soto Avenue and runs east through the graded area. The access road has a spur that turns south then east again and runs along the periphery of the pear-shaped De Soto Reservoir. At its maximum width the reservoir is approximately 194 feet (North/South) and approximately 317 feet long (East/West). The construction of the reservoir consists of an oval-shaped concrete base and a metal roof cap, which covers the top and the sides of the reservoir. The metal roof is white and characterized by a series of trapezoidal shaped ridges resembling a folded plate that run roughly north-south along the top and arranged vertically along the sides. There is a hexagonal metal fixture, likely a gutter system, attached to the top of the roof that runs the maximum length of the reservoir. There is a metal ladder and a metal walkway on top of the roof at the southeastern edge of the reservoir which lead to a utility box and manhole. Along this walkway there is built-in pipes and equipment related to the maintenance of the reservoir. There are also maintenance facilities and equipment located to the southeast of the reservoir, but these are outside the project area. The periphery of the reservoir is bound by an asphalt road that is lined by a concrete curb with drainages.

B6. Construction History (Continued):

Alterations to the Building and Site

There have been several recorded alterations to the De Soto Reservoir.

Between its construction in 1941 and 1945, a caretaker's house, patio, garage, toolshed, and water tank were constructed east of the De Soto Reservoir (Figure 3). In 1945, a cesspool and water main were added to the site. In 1948, the reservoir was cleaned and drained, revealing damage and soil settlement at the west end of the reservoir. In 1954, the Granada Trunk Line replaced the Chatsworth High Line as the water source from Upper San Fernando Reservoir to De Soto Reservoir. In 1958, a second portion of the Granada Trunk Line, from De Soto Reservoir to Roscoe Boulevard was initiated. In 1959, LADWP sold a portion of the De Soto Reservoir lot as an easement for the Southern California Edison. In 1961, LADWP briefly attempted to acquire adjacent properties to the De Soto Reservoir, for a project that proposed to enlarge the existing reservoir, but this was unsuccessful and concluded in 1962 (Green 1948; Peterson 1959; Porter 1945; Socha 1962; Valley News 1954, 1958).

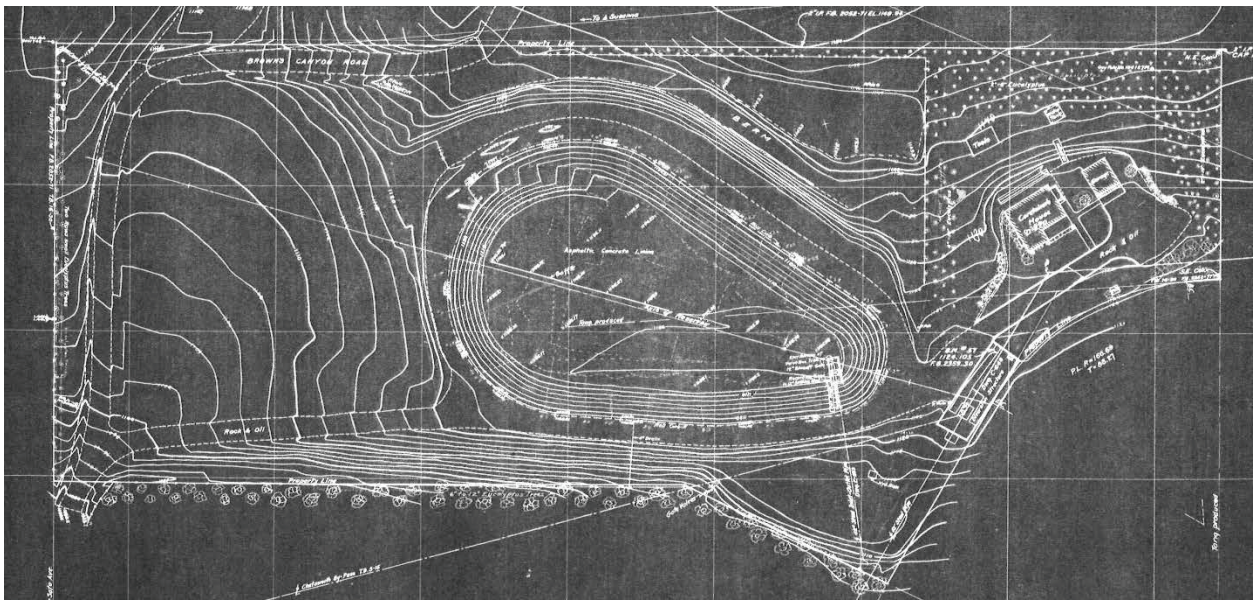


Figure 3. Plans showing caretaker's house and outbuildings, December 1941. (DWP Records Center)

In 1971, a chlorination station was added to the property. It was also around this time that the larger 1918 Chatsworth Reservoir was decommissioned due to earthquake damage and repurposed as a natural park. Sometime between 1982 and 1994, the caretaker's house and outbuildings were removed. In 1988 due to drought and water contamination concerns, the De Soto Reservoir was covered with an aluminum cover, protecting to water from evaporation and contamination from the recently completed Ventura Highway (State Route 118). The success of covering the De Soto Reservoir spurred other reservoir coverings in the LADWP-managed reservoirs (AMI 1982; FAS 1965; LAT 1971, 1988; Teledyne 1971; USGS 1994).

B10. Significance (Continued):

It was finally filled in 1919. The San Fernando Reservoirs and the Chatsworth Reservoir were linked by the Chatsworth High Line, an aqueduct that replaced a series of already existing irrigation ditches in the area to formally connect the two reservoirs. The High Line was constructed in 1916, and completed in 1918 before the Chatsworth Reservoir was filled (CLA 1916; LAT 1916; Robertson et. al. 1918; SWBC 1918; WPA 2018).

In 1930-1931 the Chatsworth Reservoir was drained and built up to hold a higher water capacity, as the population of Chatsworth increased. Increased water demands on the Chatsworth Reservoir and High Line meant that the water served as emergency residential and domestic drinking water, rather than its originally-

intended agricultural role as the decade continued. Also in 1931, the lands for a new DWP reservoir called the Chatsworth High Line Reservoir was purchased and plans were drawn up for the new reservoir. The Chatsworth High Line Reservoir, a different smaller water features than the Chatsworth Reservoir, was intended as an earthen reservoir at the mouth of Brown's Canyon. The State of California voided plans for this reservoir d in 1933 due to a change in LADWP's dam construction program, and the LADWP's inability to start the reservoir construction in the permitted amount of time (LADWP 1931, 1933; WPA 2018).

De Soto Reservoir was redesigned, built, and placed into service in 1941. It was built by contractors Schroeder & Company, Inc. of Roscoe, CA. The site was an open-air, concrete lined tank on a small parcel in the foothills of the Santa Susana Mountains. Construction of the De Soto Reservoir pioneered a new method for compacting the reservoir embankment (Figure 4, 5) (LADWP 1942):

> The side slopes and the bottom were paved with 4 inches of asphaltic concrete placed in two 2 inch layers, each layer being rolled by a light hot roller followed by a heavy cold roller weighing 2,000 pounds per linear foot. The hot roller smoothed and conditioned the surface so that the heavy roller could be operated without picking up or gouging into the plastic material. The rollers were moved up and down the slope by means of hoists mounted on small tractors. The inside embankment slopes are 1-1/2 to 1 and

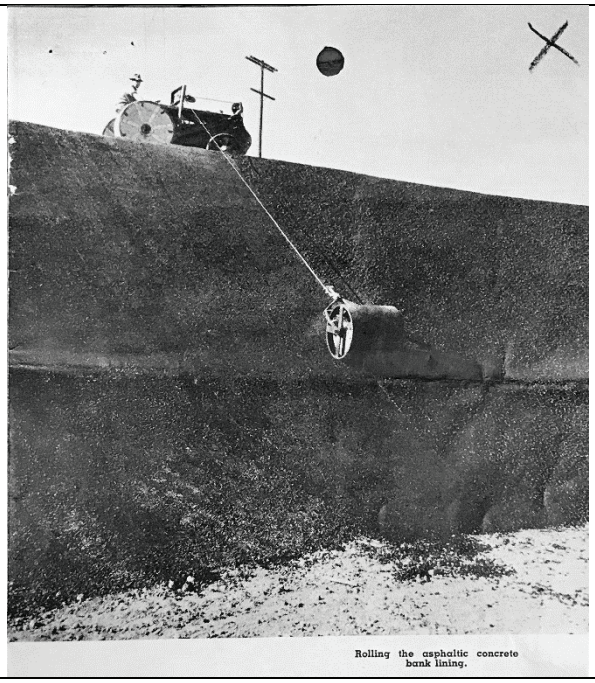


Figure 4. Photo demonstrating roller compaction at De Soto Reservoir, 1942. (DWP Record Center)

Figure 5. Photo demonstrating the roller compaction pioneered at the De Soto Reservoir, 1942, looking east. (LAPL 1004960, also held by DWP Record Center)

the height is 22 feet. A cement coating was brushed on the asphaltic concrete surface in order to reduce soil stress and to provide a smoother surface for better cleaning of the reservoir when empty.

Water from the Chatsworth High Line filled De Soto Reservoir. The reservoir handled terminal water storage at the terminus of the Chatsworth High Line. From the De Soto Reservoir, water switched from a pressure system to a gravity system and discharged into a separate domestic and irrigation supply water mains: the Chatsworth High Line Extension (which replaced the former High Line aqueduct to the Chatsworth Reservoir), and the planned projects for Granada and De Soto Trunk Lines (CDWR 1964; FAS 1944; Laval 1938; LADWP 1941, 1942; Soifer 2018; NETR 2018a).

As the population of the San Fernando Valley swelled in the post-World War II years, the demand for drinking water increased in the valley, turning previously agricultural water resources into drinking water for new residents. In 1954, LADWP proposed the first portion of the Granada Trunk Line, which would connect the Upper San Fernando Reservoir to the De Soto Reservoir. The new trunk line ran beside the existing Chatsworth High Line, and increased the total amount of water the Department of Water and Power was able to provide. In 1958, the second

portion of the Granada Trunk Line, which extended from De Soto Reservoir to Roscoe Blvd near Cohasset, was approved and constructed between 1958 and 1959 (Valley News 1954, 1958).

In 1971, the Sylmar Earthquake caused widespread damage to the San Fernando Valley, including its water infrastructure. The Chatsworth High Line, Maclay High Line, and Chatsworth Reservoir were temporarily disabled due to the earthquake damage and the Chatsworth Reservoir was officially retired as a result of the sustained damage and cost of repair. The reservoir was converted into a natural area park in the aftermath. Despite this the De Soto Reservoir and trunk lines remained in service as emergency water supply, for the area, continuing to service the region (LAT 1971; WPA 2018)

NRHP/CRHR Statement of Significance

In consideration of the project site's history and requisite integrity (see "Integrity Discussion," below), Dudek finds De Soto Reservoir not eligible for listing in the NRHP, CRHR or as a Los Angeles HCM based on the following significance evaluation and in consideration of national and state eligibility criteria.

Criterion A/1: Associated with events that have made a significant contribution to the broad patterns of our history.

The De Soto Reservoir is part of a larger water system that originally serviced a primarily agricultural community at Chatsworth from 1941 onward. The reservoir changed in its uses and has been altered several times to accommodate the residential and industrial growth of Chatsworth. The changes, however, are symptomatic of other regional and local change, rather than the cause or leading force for them. The De Soto Reservoir is one of many reservoirs and water resources that LADWP and Chatsworth have utilized to meet their water needs over the years. It is neither the first such designed resource, nor is it directly associated with any of the major constructive periods by LADWP in the area (1917-1918 or 1930), nor is it directly associated with the manufacturing industry in the area such as Lockheed, Rocketdyne, Litton Systems, Ramo-Woolridge, RCA, Marquardt, and Radioplane, or the military-industrial site at Brown's Canyon (Nike Missile Base LA-88). The De Soto Reservoir, then, is not associated with specific, distinguishable periods of growth or historical events that have resulted in a significant contribution to the history of Los Angeles, California, or the nation. Therefore, the subject property does not appear eligible under NRHP/CRHR Criteria A/1.

Criterion B/2: Associated with the lives of persons significant in our past.

Archival research on the subject property, De Soto Reservoir, failed to reveal associations with any persons significant in the history of Los Angeles, the state, or the nation. Therefore, the subject property does not appear eligible under NRHP/CRHR Criteria B/2.

Criterion C/3: 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.

The subject property is a utilitarian piece of engineering, a small-scale reservoir meant to supply water via trunk lines to both agricultural-based and residential recipients. The engineers De Soto Reservoir did pioneer a new construction and surface-finishing system that involved rolling the four-inch asphaltic concrete lining on the reservoir's steep slopes via a tractor with a roller and hoisting drum attachment. Despite the enthusiastic response the *Engineering News-Record*, the construction method resulted in a lining failure exposed during its first official cleaning in 1945. Since then, repairs and additional equipment have been used to supplement to operation of the reservoir, indicating that the construction method, while novel, was not repeated due to its impracticality. The De Soto Reservoir was covered, further altering the original design between 1982 and 1988. The reservoir does not embody any distinctive characteristics of a type, period, or method of construction that persists through the present unaltered. There are little inherent artistic or designed values associated with the concrete reservoir. Archival research could not directly connect the De Soto Reservoir to a master architect, engineer, or craftsperson. As-built plans provided did not specify the designer of the channel beyond "DWP". For all of the reasons described herein, the subject property does not appear eligible under NRHP/CRHR Criteria C/3.

Criterion D/4: Have yielded, or may be likely to yield, information important in prehistory or history.

There is no evidence to suggest that this property has the potential to yield information important to state or local history, nor is it associated with a known archaeological resource. Therefore, the property is recommended not eligible under NRHP/CRHR Criterion D/4.

City of Los Angeles HCM Criteria

For the same reasons already discussed in application of NRHP and CRHR criteria, the Tujunga Flood Control Channel does not appear eligible under any of the City of Los Angeles HCM criteria, as described below:

- *The broad cultural, political, economic, or social history of the nation, state, or community is reflected or exemplified:*

  As state in Criterion A/1 above, the site is not associated with any broader cultural, political, economic, or social history of the United States, the state of California, the city of Los Angeles or the neighborhood of Chatsworth. The reservoir is part of a larger context of water supply to the entirety of the City of Los Angeles and supported towns and communities in the surrounding region including San Fernando Valley. Individually, the reservoir holds little importance and only holds a minor role in the broader history of water supply.

- *Identified with historic personages or with important events in the main currents of national, state, or local history:*

  As stated in Criterion B/2, archival research on the subject property failed to reveal associations with any persons significant in the history of Los Angeles, the state, or the nation. Additionally, no specific important events were identified that can be connected with the main currents of local, state, or national history.

- *Embody the distinguishing characteristics of an architectural-type specimen, inherently valuable for a study of a period, style, or method of construction:*

  As stated in Criterion C/3, the subject property is a concrete reservoir, and constructed simply, lacking distinctive characteristics of a period, or style. The method of construction for the reservoir, using the tractor with roller attached to a hoisting arm to compact the reservoir surface before pouring the concrete liner might merit study, however, the construction method is also known to have failed in several places and been resurfaced.

- *A notable work of a master builder, designer, or architect whose individual genius influenced his or her age:*

  Also stated in Criterion C/3, archival research did not reveal master builders, designers, or architects with any degree of influence over their peers or time period associated with the De Soto Reservoir.

Integrity

The De Soto Reservoir appears to retain integrity of location and association only. Integrity of setting, design, materials, workmanship, and feeling are diminished through the numerous changes to the reservoir itself, its immediate setting on DWP land and its overall setting in Chatsworth. The integrity of setting, on a large DWP tract with a caretaker's house and associated buildings, in a general setting in an non-urbanized agricultural area, surrounded by orchards. Design, materials, and workmanship have been greatly diminished by the multiple repairs and the covering of the reservoir between 1982 and 1988. Further, the design intent of the De Soto Reservoir changed from a terminal reservoir to a tie-in for multiple trunk lines as early as the 1950s. The reservoir no longer retains integrity of feeling. It can no longer convey the feeling of an open-air reservoir with a DWP on-site caretaker due to the deconstruction or alterations to the reservoir site over time. The site retains integrity of association with its original owner LADWP and their engineering and drafting team, as well as integrity of location as the reservoir itself has never been moved or enlarged.

B12. References (Continued):

AMI. 1982. Aerial photograph. Flight Number AMI-LA-82, frame 11495. 1:36,000 scale. January 23, 1982. Aerial Photograph Collection, Map and Imagery Laboratory, University of California Santa Barbara. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=AMI-LA-82

California Department of Water Resources (CDWR). 1964. "Dams Not Under State Supervision." Accessed May 21, 2018. http://digital-library.csun.edu/cdm/singleitem/collection/WaterWorks/id/1226/rec/5

D.H. Anderson Publishing Company. 1916. "News Notes From Irrigation Projects of the Country." *The Irrigation Age*, Volumes 32-33. Accessed May 7, 2018. https://books.google.com/books?id=ghbsnL_v0FkC&lpg=PA62&ots=FTVIQ2FUds&dq

=%22Chatsworth%20High-line%22&pg=PA62#v=onepage&q=%22Chatsworth%20High-line%22&f=false

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Los Angeles Department of Water and Power (LADWP). 1931. “Chatsworth High Line Reservoir: Plan of Reservoir.” Sheet set: 11214. Designed by D.E. Rockfellow, Drawn by R.T. Sharp and E.B. Lowry. February 1931. Box.32. Drawings held by DWP Records Center.

LADWP. 1933. Letter to George W Hawley, Deputy in charge of dams. March 14, 1933. Closed File 421.26 1942-1973. File held by DWP Records Center.

LADWP. 1941. “Notice of Completion.” Closed File 421.25 1933-1942. File held by DWP Records Center.

LADWP. 1942. Correspondence and photographs exchanged between N.A. Bowers, Pacific Coast Editor of the Engineering News-Record and H.A. Van Norman, LADWP. Closed File 421.26 1942-1973. File held by DWP Records Center.

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