

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



WP&S Committee	Water Planning and Stewardship	Monday, October 11, 2021
R. Atwater, Chair	Committee	Meeting Schedule
C. Kurtz, Vice Chair		09:00 am - F&I
J. Abdo	Meeting with Board of Directors *	10:00 am - E&O
L. Ackerman		12:00 pm - Break
G. Cordero	October 11, 2021	12:30 pm - WP&S
D. De Jesus	000000111,2021	02:00 pm - C81
L. Dick	12:20 n m	
S. Goldberg	12.30 p.m.	03:00 pm - OP&1
M. Hogan	I have a first start for a start before a little start and start a start	
R. Lefevre	Live streaming is available for all board and committee meetings on our	
M. Luna	mwdh2o.com website (<u>Click to Access Board M</u>	<u>eetings Page)</u>
J. Morris		
M. Petersen	Public Comment Via Teleconference Only: Mem	bers of the public may present
G. Peterson	their comments to the Board on matters within t	heir jurisdiction as listed on
B. Pressman	the agenda via teleconference only. To participa	te call (404) 400-0335 and use
R. Record	Code: 9601962.	

* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee.

1. Opportunity for members of the public to address the committee on matters within the committee's jurisdiction (As required by Gov. Code Section 54954.3(a))

** CONSENT CALENDAR OTHER ITEMS -- ACTION **

2. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the Meeting of the Water Planning and <u>21-546</u> Stewardship Committee held September 13, 2021

Attachments: 10112021 WPS 2A Minutes

3. CONSENT CALENDAR ITEMS - ACTION

7-8 Adopt framework for amending Local Resources Program Agreements; Review and consider the City of Beverly Hills' approved Final Mitigated Negative Declaration and take related CEQA actions; and authorize the General Manager to reinstate and amend the existing Local Resources Program agreement for the Beverly Hills Desalter Project

Attachments: 10122021 WPS 7-8 B-L.pdf

<u>10122021 7-8 ATT 2 - Beverly Hills Desalter Environmental</u> Docs 10122021 WPS 7-8 Presentation.pdf

** END OF CONSENT CALENDAR ITEMS **

4. OTHER BOARD ITEMS - ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

a.	Update on Water Surplus and Drought Management	<u>21-503</u>
	Attachments: <u>10122021 WPS 6a Report</u> <u>10122021 WPS 6a Presentation.pdf</u>	
b.	Overview of Allocation Plan	<u>21-506</u>
	Attachments: 10112021 WPS 6b Presentation.pdf	
MA	NAGEMENT REPORTS	
a.	Colorado River Matters	<u>21-505</u>
	Attachments: 10112021 WPS 7a Report	
b.	Water Resource Management Manager's Report	<u>21-504</u>

8. FOLLOW-UP ITEMS

None

7.

9. FUTURE AGENDA ITEMS

10. ADJOURNMENT

NOTE: This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Agendas for the meeting of the Board of Directors may be obtained from the Board Executive Secretary. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site http://www.mwdh2o.com.

Requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

WATER PLANNING AND STEWARDSHIP COMMITTEE

September 13, 2021

Chair Atwater called the teleconference meeting to order at 12:50 p.m.

Members present: Chair Atwater, Vice Chair Kurtz, Directors Abdo, Ackerman, Cordero, De Jesus, Dick, Goldberg, Hogan, Lefevre, Luna, Morris, Petersen (entered after roll call), Peterson, Pressman, and Record.

Member absent: None.

Other Board Members present: Chairwoman Gray, Directors Blois, Butkiewicz, Dennstedt, Erdman, Faessel, Jung, McCoy, Murray, Ramos, Smith, and Tamaribuchi.

Committee staff present: Coffey, Hagekhalil, Hasencamp, Munguia, Schlotterbeck, and Upadhyay.

1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE COMMITTEE ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION (AS REQUIRED BY GOV. CODE SECTION 54954.3(A))

- 1. Name not provided, Burbank resident, provided comments regarding stormwater capture.
- 2. Lonnie Smith Christopher, Assistant Director, Gateway City Council of Governments, provided comments in support of Agenda item 7-4, the 2021 California Resiliency Challenge.
- 3. Adrian Covert, Sr. Vice President Public Policy, Bay Area Council, provided comments in support of Agenda item 7-4, the 2021 California Resiliency Challenge.
- 4. Katie Wagner, Sierra Club California, provided comments opposing Agenda item 9-3.

CONSENT CALENDAR OTHER ITEMS – ACTION

-2-

2. CONSENT CALENDAR OTHER ITEMS – ACTION

A. Approval of the Minutes of the Adjourned Meeting of the Water Planning and Stewardship Committee held August 16, 2021

3. CONSENT CALENDAR ITEMS – ACTION

- 7-4 Subject: Express support for the 2021 California Resilience Challenge; and approve a financial sponsorship of \$200,000 to continue as a Resilience Leader and Steering Committee member; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA
 - Presented by: Warren A. Teitz, Manager, Resource Development Team
 - Motion: Authorize the General Manager to sponsor the California Resiliency Challenge with a \$200,000 contribution and renew Metropolitan's seat on the Steering Committee.

Mr. Teitz gave a presentation on the California Resiliency Challenge that builds resilience against increasing climate change threats through state-wide collaboration. Metropolitan's support of the Challenge and sponsorship would co-fund a second round of projects targeting underrepresented communities.

The following Directors provided comments or asked questions:

- 1. Luna
- 2. Hogan

After completion of the presentations, Director Morris made a motion, seconded by Director De Jesus to approve the consent calendar consisting of items 2A and 7-4.

The vote was:

 Ayes:
 Directors Abdo, Ackerman, Atwater, Cordero, De Jesus, Dick, Goldman, Hogan, Kurtz, Lefevre, Luna, Morris, Petersen, Peterson, Pressman, and Record.

 Noes:
 None

 Absent:
 None

 Abstentions:
 None

The motion for items 2A and 7-4 passed by a vote of 16 ayes, 0 noes, 0 absent, and 0 abstentions.

4. OTHER BOARD ITEMS – ACTION

None

5. BOARD INFORMATION ITEMS

9-2 Information on a potential seasonal land fallowing pilot program with the Quechan Indian Tribe of the Fort Yuma Indian Reservation and farmers within Quechan tribal land for 2022-2023

Ms. Razavian provided a presentation on a potential seasonal fallowing pilot program with the Quechan Indian Tribe that would reduce water consumption in the Quechan Indian tribal land and augment Metropolitan's Colorado River supplies. The Metropolitan/Quechan Indian Tribe Seasonal Fallowing Pilot Program would incentivize farmers to fallow land irrigated with Colorado River water for the spring and summer months during 2022 to 2023.

The following Directors provided comments or asked questions:

- 1. Lefevre
- 2. Kurtz
- 9-3 Considerations for purchasing land which uses higher-priority Colorado River water supplies

Presented by: Jack Safely, Manager, Imported Supply Unit

Mr. Safely provided a presentation that focused on the history and considerations for purchasing and leasing land holdings in the Palo Verde region.

The following Directors provided comments or asked questions:

- 1. Dick
- 2. Lafevre
- 3. Peterson
- 4. Petersen
- 5. Gray
- 6. Butkiewicz
- 7. Record

Presented by: Noosha Razavian, Assistant Resource Specialist II, Water Resource Management

6. COMMITTEE ITEMS

a. Subject: Update on Water Surplus and Drought Management

Presented by: Tiffany Tran, Asst Resource Specialist II, Water Resource Management

-4-

Ms. Tran provided a presentation and reported on 2021 Supply and Demand balance, Metropolitan's new drought actions for the near and long-term, and an update on Department of Water Resources.

Deven Upadhyay, Assistant General Manager and COO, added comments about an upcoming report relating to system changes and opportunities under Metropolitan's capital program to help with the situation in Metropolitan's State Water Project-served areas.

The following Directors provided comments or asked questions:

- 1. Record
- 2. Peterson
- b. Subject: Overview of Allocation Plan

Presented by: None

This item was deferred due to time limitation.

7. MANAGEMENT REPORTS

a. Subject: Colorado River Matters

Presented by: None

This item was deferred due to time limitation.

b. Subject: Water Resource Management Manager's Report

Presented by: None

This item was deferred due to time limitation.

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

Dir. Kurtz requested discussion on a policy for purchasing land at appraised ranges.

10. ADJOURNMENT

Next meeting will be held on October 11, 2021.

Meeting adjourned at 2:18 p.m.

Richard Atwater Chair

8



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



• Board of Directors Water Planning and Stewardship Committee

10/12/2021 Board Meeting

7-8

Subject

Adopt framework for amending Local Resources Program Agreements; Review and consider the City of Beverly Hills' approved Final Mitigated Negative Declaration and take related CEQA actions; and authorize the General Manager to reinstate and amend the existing Local Resources Program agreement for the Beverly Hills Desalter Project

Executive Summary

The Local Resources Program (LRP) provides financial incentives to encourage the development of local water supplies for Southern California. The LRP evolved over time to include refinements to the incentive amount, process for determining the incentive, and agreement terms. Each LRP agreement includes performance provisions that require projects to maintain a level of production through the contract term. The Beverly Hills Desalter LRP encountered unforeseen production problems and the agreement terminated after five consecutive years of non payment from Metropolitan. The City of Beverly Hills is appealing this termination. Metropolitan staff recommends that the Board grant the appeal and authorize the General Manager to reinstate and amend the agreement.

Details

Background

In 1982, Metropolitan created the Local Resources Program (LRP) to provide financial incentives to help local agencies develop water recycling and groundwater recovery projects. Since inception, Metropolitan provided about \$708 million in incentives for the development of more than 3.0 million acre-feet (AF) of recycled water and 1.1 million AF of recovered groundwater. There are 100 projects currently in operation. LRP projects increase water supply reliability, reduce imported water demands, decrease the burden on the Metropolitan's infrastructure, reduce system costs, and free up conveyance capacity. In addition, the LRP helps Metropolitan meet its legislative mandates under SB 60 to expand water conservation, recycling, and groundwater storage and replenishment measures. Overall, the LRP provides benefits to all member agencies regardless of project location.

Metropolitan coordinated with member agencies to refine the program in 2014 to modify performance provisions, increase the maximum incentive amount to \$340/AF, provide three alternative payment options, include on-site retrofit costs as an eligible cost, offer reimbursable services, and added seawater desalination as an eligible resource. Subsequent to the 2014 program modifications, Metropolitan accepted 18 new projects that are now in various stages of design, construction, and operation. In 2018, the Board authorized an Interim Program target of 170,000 AF.

Current LRP Performance Provisions for Project Production

Performance provisions are an important component of the LRP agreements since they encourage both project development and continued performance. Performance provisions allow Metropolitan to free up contractual commitments for projects that are unlikely to achieve their original timeline or production targets. This allows the Board to reallocate released project capacity for future LRP projects.

Some older LRP agreements include a performance provision that automatically terminates an agreement if the project does not receive incentives from Metropolitan for a period of five consecutive years. LRP incentives are stopped if: (1) the project unit cost is less than Metropolitan's effective rate for sliding scale incentives; or (2) the project is no longer producing water. Newer LRP agreements include performance provisions that provide staff more flexibility to work with agencies experiencing project disruptions.

The City of Beverly Hills (Beverly Hills) encountered significant unforeseen production impacts to its LRP project that were outside of their control and resulted in the project being shutdown in 2015. The agreement was automatically terminated in 2020 after five consecutive years of non payment from Metropolitan.

Framework for Future Requests to Pause and Extend the Term of LRP Contracts

In June 2021, the Board approved a framework that provides agencies an ability to request additional time to begin LRP project operation when they experience start-up delays. Staff recognizes that LRP projects may also face production issues that are beyond the agency's control.

Similar to the June 2021 action, board-approval is sought to provide additional flexibility to agencies to return projects to operation after a disruption. The proposed framework would, with the Board's approval, allow a one-time pause in the required production and an equal-time extension of the agreement term. The extension would be for no longer than three years, and only for projects that had previously started operation. The proposed framework recognizes that LRP production may fail from Acts of God, unforeseen changes in water quality, facility failure, or source water changes.

Metropolitan would apply this consideration to an agency that faces unforeseen production issues that significantly affect production of a project. The proposed framework to amend LRP agreements would assist agencies to correct the deficiencies and bring the project back online.

In June 2021, the Board adopted the evaluation criteria for LRP extension requests that modify the start-ofoperation milestone for LRP projects. Staff will use the same criteria to evaluate extension requests for projects facing unforeseen production issues out of the agency's control: (1) formally request an extension and describe the reasons for the pause and describe the actions being taken to correct the issue; (2) affirm that all parties to the agreement are still pursuing the project; (3) provide a revised schedule; and (4) affirm that the project will start operation within the requested extension (not to exceed three fiscal years). All other performance provisions of the agreement would remain in place and the LRP incentives would not exceed the maximum authorization provided by the Board previously.

Attachment 1 is Beverly Hills' request to reinstate and amend their agreement to extend the contract term due to a project shutdown that resulted from unforeseen water quality issues. The request is consistent with the proposed framework and the evaluation criteria approved by the Board. Staff recommends that the Board approve the framework and approve Beverly Hills' request to reinstate and amend the agreement to extend the contract term by three years.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 43171, dated September 15, 1998, the Board approved authorizing the General Manager to execute a Groundwater Recovery Program Agreement with the City of Beverly Hills to implement the Beverly Hills Desalter Project.

By Minute Item 49923, dated October 14, 2014, the Board approved refinements to the Local Resources Program to encourage additional local resource production.

By Minute Item 51356, dated October 9, 2018, the Board approved an interim Local Resources Program target yield of 170,000 AFY of new water production.

By Minute Item 52415, dated June 8, 2021, the Board approved changes to the start-of-operation timing for four Local Resources Program Projects and formally adopt the policy described in the board letter for evaluation of future LRP extension requests.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

Action No. 1 - Adopt framework for amending Local Resources Program Agreements

The proposed action to adopt a framework for amending Local Resources Program Agreements is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making and other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(2) and Section 15378(b)(4) of the State CEQA Guidelines).

Action No. 2 - Review and consider the City of Beverly Hills' approved Final Mitigated Negative Declarations and Addendum and take related CEQA actions, and authorize the General Manager to reinstate and amend the existing Local Resources Program agreement for the Beverly Hills Desalter Project

Pursuant to the provisions of CEQA and the State CEQA Guidelines, the City of Beverly Hills, acting as Lead Agency, prepared a Final Mitigated Negative Declaration (Final MND) for the original project, which was reviewed and approved by Metropolitan on August 25, 1998. On November 20, 2019, Beverly Hills prepared and approved a separate Final MND for the La Brea Subarea Well and Transmission Main Project, addressing the proposed new facilities, upgrades, and improvements. Finally, on March 4, 2021, Beverly Hills prepared an Addendum to this second Final MND which identified some minor project modifications. The Lead Agency also approved the Mitigation Monitoring and Reporting Program (MMRP) for the Project as revised.

Metropolitan, as a Responsible Agency under CEQA, is required to certify that it has reviewed and considered the information in the Final MNDs and Addendum, and adopt the Lead Agency's findings and MMRP prior to approval of the formal terms and conditions for the proposed agreement. The environmental documentation is included as **Attachment 2**.

CEQA determination for Option #2:

None required

Board Option

Option #1

Review and consider the City of Beverly Hills' approved Final Mitigated Negative Declarations and Addendum and take related CEQA actions; authorize the General Manager to reinstate and amend the existing Groundwater Recovery Program Joint Participation Agreement for Recovery and Utilization of Degraded Groundwater for the Beverly Hills Desalter Project with the City of Beverly Hills for up to 2,600 AFY of advanced treated brackish groundwater under the terms included in this letter and approve the proposed framework and one-time pause and extension of agreement terms.

Fiscal Impact: Metropolitan's maximum financial obligation under the original agreement will not change due to the reinstatement and proposed amendment to the agreement. Metropolitan would provide up to \$1.95 million for up to 7,800 AF of project production over three years. Staff factors these incentive payments into Metropolitan's rate projections and includes them in future budgets.

Business Analysis: The project would help Metropolitan achieve its Integrated Resources Plan (IRP) goals and meet its legislative mandates, while reducing the district's system costs.

Option #2

Do not authorize the reinstatement or amendment to the original agreement for the Project. **Fiscal Impact:** None **Pussinger Analysis:** Maternalitan would assume the pussion to be been used in the second second

Business Analysis: Metropolitan would pursue other projects and it may take longer to meet IRP goals

Staff Recommendation

Option #1

10/6/2021 Brad Coffey Date Manager, Water Resource Management 10/6/2021 Adel Hagekhalil Date General Manager

Attachment 1 – Local Resources Program (LRP) Request for Reinstatement of Terminated LRP Agreement and Extension to Term of Agreement

Attachment 2 – Initial Study and Negative Declaration* For the City of Beverly Hills Municipal Water and Public Works Facility Project

Ref# wrm12681057

7-8

REQUEST FOR REINSTATEMENT OF TERMINATED LRP AGREEMENT AND EXTENSION TO TERM OF AGREEMENT

Project Information

LRP Project:	Beverly Hills Desalter Improvements and Upgrades Project
Member Agency:	City of Beverly Hills
Ultimate Yield:	2,600 AF
Started operation:	April 2003
Stopped operation:	September 2015
Agreement expiration:	June 2023
Agreement termination:	June 2020

Member Agency Request:

- 1. Reinstate program agreement
- 2. Extend the agreement term by three years, terminating June 30, 2026

Additional Information:

- Project improvements needed to get project back online are currently under construction.
- Member agency is actively pursuing project.
- Member agency provided revised schedule.
- Member agency affirmed that the project will start operations within three years.

Reasons for Requested Extension:

The Project helped incentivize the first new local supply for the city and when in operation it provided 5-10 percent of Beverly Hills total municipal and industrial demand. At maximum production, the Project can produce up to 25 percent of the city's total needs. Without the Project, Beverly Hills remains 100 percent dependent on Metropolitan for its supply of potable water.

The Project produced about 12,800 AF (25 percent of its contractual volume) and was shut down due to unforeseen changes in groundwater quality. Increased levels of fine sand, iron sulfide and manganese in the Hollywood Groundwater Basin underlying much of Beverly Hills resulted in extreme fouling of the reverse osmosis membranes and eventual shutdown of the plant. The Program agreement was scheduled to expire in 2023. However, the agreement was terminated in June 2020 due to a performance provision that automatically terminates the agreement for five

consecutive years of non-payment. In response to the Project being shut down, Beverly Hills has been continuously working on rehabilitating the plant and constructing improvements necessary to get the Project back online.

To date, Beverly Hills has: (1) conducted water quality testing and issued a final report in April 2017; (2) conducted a water plant pre-treatment pilot project and issued a report in June 2018; (3) commenced construction of plant rehabilitation, including a new raw water pre-treatment filtration system, plant upgrades and improvements; and (4) commenced construction of a new water transmission line and well to secure an additional source of groundwater from the La Brea Subarea Basin.



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA 700 N. Alameda Street, Los Angeles, California 90012

10/12/2021 Board Meeting

Board Letter # 7-8

Adopt framework for amending Local Resources Program Agreements; Review and consider the City of Beverly Hills' approved Final Mitigated Negative Declaration and take related CEQA actions; and authorize the General Manager to reinstate and amend the existing Local Resources Program agreement for the Beverly Hills Desalter Project

Attachment 2 – Initial Study and Negative Declaration For the City of Beverly Hills Municipal Water and Public Works Facility Project

These attachments are not included.

You may review these documents on our website at: http://mwdh2o.com/WhoWeAre/Board/Board-Meeting

OR

By contacting Metropolitan's Board Executive Secretary at: (213) 217-6291 or via email at <u>DL-BoardSupportTeam@mwdh2o.com</u>

INITIAL STUDY

FORTHE

CITY OF BEVERLY HILLS MUNICIPAL WATER

AND

PUBLIC WORKS FACILITY PROJECT

PREPARED FOR:

CITY OF BEVERLY HILLS DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT 455 NORTH REXFORD DRIVE, ROOM G-40 BEVERLY HILLS, CALIFORNIA 90210-4817 (310) 285-1123

PREPARED BY:

JONES & STOKES ASSOCIATES, INC. 2151 MICHELSON DRIVE, SUITE 236 IRVINE, CALIFORNIA 92612

JUNE 1998

* NEGATIVE DECLARATION PREPARED BY THE BEVERLY HILLS DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT



NEGATIVE DECLARATION

Determination Number: ER-20-12-97

An application has been filed with the City of Beverly Hills for approval of the following project:

Name of i	Project:	Groundwater Development & Public Works Facility Project
Project A	Address:	341 N. Foothill Road (Public Works Fa- cility and Water Treatment Plant); Wa- ter Wells and Waterlines located vari- ous locations east of Rexford Drive, between Sunset Boulevard and Burton Way

Name of Applicant: City of Beverly Hills

Project Description:

Development and utilization of three water wells (and utilization of fourth, existing well), water treatment plant, and pipelines connecting the wells, plant, and municipal water system. Also the development of 25,700 square-foot public works facility which would consolidate public works offices and shops located at various locations in the vicinity.

Pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA) and the CEQA Guidelines of the City of Beverly Hills, the Lead Agency has analyzed the project and determined that the project will not have a significant impact on the environment. Based on this finding, the Lead Agency prepared this Negative Declaration.

A copy of the Initial Study, documenting reasons to support the finding, is attached. Mitigation measures included in the project to avoid potentially significant effects are attached.

A period of at least 20 days from the date of publication of the notice of this **NEGATIVE DECLARATION** will be provided to enable public review of the project specifications, the Initial Study and this document prior to the final adoption of the NEGATIVE DECLARATION by the Lead Agency. A copy of the project application and plans is on file in the offices of Planning and Commu-

10/12/2021 Board Meeting Negative Declaration ER-20-12-97 June 26, 1998

nity Development, 455 North Rexford Drive, Room G-40, Beverly Hills, California 90210 (310) 285-1123.

7-8

Prepared: June 26, 1998

KARRY SAKURAI Senior Planner

AUGUST 11, 1998 Adopted: SEPTEMBER 116

LARRY SAKURAI

Senior Planner

Attachment 2, Page 4 of 722

Table of Contents

<u>Secti</u>	onPage
Envir	onmental Checklist
Envir	onmental Evaluation and Annotated Discussion of Impacts
I. II. IV. V. VI. VI. VII. VII. XI. XI. XII. XIV. XV. XVI. Mitiga Int	Land Use and Planning12Population and Housing16Geologic Problems16Water20Air Quality24Transportation/Circulation29Biological Resources35Energy and Mineral Resources35Hazards36Noise38Public Services43Utilities and Service Systems45Aesthetics50Cultural Resources54Recreation55Mandatory Findings of Significance56tion Measures that Have Been Incorporated57
Refere	ences

Appendices

Appendix A - Air Quality Study Appendix B - Noise Study

19

Environmental Checklist

1. Project Title:

Municipal Water Supply and Public Works Facility Project

2. Lead Agency Name and Address:

City of Beverly Hills 455 North Rexford Drive Beverly Hills, CA 90210-4817

3. Contact Person and Phone Number:

Larry Sakurai, Senior Planner (310) 285-1123 Fax (310) 858-5966

4. Project Location:

The proposed project is located in the City of Beverly Hills within Los Angeles County, California. Figure 1 illustrates the regional location of the proposed project. The proposed project includes a series of groundwater wells, all located within the Hollywood Groundwater Basin; a water treatment facility combined with City offices and other City facilities; and related water supply pipelines. Because of the nature of the project, the project area is not contained within a single site. Figure 2 shows the project vicinity and Figure 3 illustrates the locations of the individual project components.

- A total of four wells are proposed. The wells are proposed to be located:
 - in the Burton Way median just west of its intersection with Foothill Road (existing well);
 - in the Burton Way median just west of its intersection with Oakhurst Drive;
 - in Civic Center Drive right-of-way, northeast of the Beverly Boulevard intersection; and
 - in Beverly Gardens Park at Doheny Drive, bound on all sides by the streets Carmelita Avenue, Doheny Drive, Oakhurst Drive, and Santa Monica Boulevard.

Additionally, an alternate well site may be developed if the site within the Civic Center Drive right-of-way is deemed infeasible, which would be located:

■ in Beverly Gardens Park between Palm Drive and Hillcrest Drive.

The proposed water treatment facility will be located at 341 North Foothill Road on City-owned property (currently the City Yard) between 3rd Street and Civic Center Drive. The facility will be combined with other City administration offices, shops, warehouse areas, and other facilities enclosed within an approximately 37,600 square



Not to Scale

Figure 1 Regional Location







Environmental Checklist

2

foot building. Several criteria were considered in the siting of the treatment plant:

- it must be located within a zone which is suitable for industrial operations such as a water treatment plant;
- the site must be far away from residential districts to avoid disturbance to local residences due to increased truck traffic; and
- the plant must be located as close as possible to the proposed water wells to avoid excessive length of pipelines from the wells to the treatment plant.

The proposed pipelines from the wells to the water treatment facility will roughly follow the Civic Center Drive, Burton Way, and Foothill Road. In the event that the alternate well site within Beverly Gardens Park is chosen, an alternate pipeline route will likely traverse through Beverly Gardens Park between the wells in Beverly Gardens Park (see Figure 2). The pipeline from the treatment plant to the connection with the water supply system would extend along Foothill Road, crossing Santa Monica Boulevard and continue northbound along Maple up to Lomitas Avenue, then westbound along Lomitas Avenue, and through the alley between Alpine Drive and Rexford north up to Sunset Boulevard, where the City's Metropolitan Water District connection is located. There is also an alternate route for this pipeline, which would extend directly from Maple Drive north to Sunset, and then west to the City's water system connection (see Figure 2).

5. Project Sponsor's Name and Address:

City of Beverly Hills City Hall 455 North Rexford Drive Beverly Hills, CA 90210-4817

6. General Plan Designation:

The General Plan Designations of the location of the project components are identified below. Because many of the project wells and pipeline facilities are located within circulation rights-of-way, the surrounding General Plan land use designations are identified.

<u>Well sites:</u> High Density Single Family Residential; High Density Multifamily Residential; Park; Scenic Highway <u>Pipelines:</u> High Density Single Family Residential; High Density Multifamily Residential; Medium Density Single Family Residential; Park; Scenic Highway Water Transformert Family Residential; Concerd and Municipal (FAB 15, 20)

<u>Water Treatment Facility:</u> Low Density General and Municipal (FAR 1.5 - 2.0)

7. Zoning:

The Zoning Designations of the location of the project components are identified below. Because the project wells and pipeline facilities are located primarily within circulation rights-of-way, the surrounding land use zoning designations are identified.

<u>Well Sites:</u> R-1 8X (Single Family Residential); R-4 (Multifamily Residential); R-1 X (Single Family Residential); T-1 (Transportation); Municipal Property

<u>Pipelines:</u> R-1 8X (Single Family Residential); R-4 (Multifamily Residential); R-1 X (Single Family Residential); T-1 (Transportation); Municipal Property

Water Treatment Facility: C-5 (Commercial); Municipal Property

1

3

Environmental Checklist

8. Description of Project:

Objectives and Need for the Proposed Project

The City of Beverly Hills (City) is proposing to develop a municipal water project combined with a public works administration facility. The water development component includes utilizing groundwater to meet approximately 20 percent of the water demands of the City. Several circumstances have motivated the development of this groundwater supply project.

As a result of the extended drought in the late 1980's and early 1990's, the Public Works Commission was charged with development of water conservation programs which would meet the short-term goal of reduced water demand. In addition, the Commission recommended that the City staff rethink the development of groundwater resources for local water supply. In the intervening years following the extensive groundwater development program conducted by Boyle Engineering Corporation, a number of significant catastrophic events occurred, which reinforced the recommendation to move the project into reality.

The Northridge earthquake resulted in a significant part of the San Fernando Valley being without water for a week or more. All of Metropolitan Water District of Southern California's (Metropolitan's) imported water facilities cross numerous earthquake faults which could disrupt service for extended periods of time. The Oakland Hills fires were exacerbated by failures of reservoirs and pressure reducing equipment. The Malibu and Laguna fires required large volumes of water immediately to protect lives and property. Metropolitan pipeline failures resulted in the City being without Metropolitan's supply for seven days, causing the City of Beverly Hills to be dependent upon the City of Los Angeles' limited supply.

The local supply will provide for long-term protection against escalating Metropolitan water rates due to historic peaking off of Metropolitan supplies, and will save the City millions of dollars over a 20-year period; it will serve as an emergency supply in the event of loss or reduction of importable water; it will create an additional water supply to supplement fire suppression water reserves; it will provide a "cushion" in future drought cycles which may reduce imported supplies; and it will generally provide a more reliable source of water for residents of Beverly Hills and portions of West Hollywood.

The City of Beverly Hills provides domestic water within the City and in the western portion of the City of West Hollywood to a service area that includes approximately 4,010 acres, of which 3,646 acres are contained in the City of Beverly Hills. The proposed project includes drilling and pumping of three groundwater wells (and an alternate well site if the site in the Civic Center Drive right-of-way is deemed infeasible), and pumping from one existing well; construction of a new water treatment facility, offices, and other City facilities; and new pipelines between the wells, treatment facility, and the municipal water distribution system at Sunset Boulevard near Rexford Drive. In order to blend the product water with the municipal water supply, treatment is required that will remove salt; minerals, such as iron and manganese; and hydrogen sulfide (H_2S) from the extracted groundwater. The proposed project will be developed in two phases as discussed below.

Project Description

Phase I

Phase I of the proposed project is to develop the wells and test the water produced by each well. The proposed well sites are all located within the Hollywood Groundwater Basin, and the locations of the specific sites are described above under "Project Location". The well in the Burton Way median near Foothill Road is the existing well that was constructed as part of a previous groundwater study and pilot testing performed by Boyle Engineering Corporation in 1996. Each of the other three wells would be developed to a depth of between 300 and 600 feet for

4

Environmental Checklist

test purposes. The alternate well site would be developed if the site within the Civic Center Drive right-of-way is deemed infeasible. The wells will be designed to function as production wells for future use if determined feasible following the testing of the pumped groundwater. The wellhead facilities would be subterranean with small venting and electrical service structures visible above ground.

7-8

The subterranean wellhead facilities would consist of:

- well pump, piping, electrical and telemetry equipment, contained within an enclosure;
- submersible pump;
- flush line connection to the storm drain system;
- electrical motor-activated butterfly valves with control logic for the flush line and the connection to the collection system;
- telemetry and control equipment, which will interface with the treatment plant via direct buried fiber optic cable to be installed in the collector pipeline trend;

Above grade facilities would consist of the following:

- six-inch air vent about 7.5 feet high;
- electrical pedestal (18 inches square, 4 feet high) will contain the electric meter and main disconnect switch to allow meter to be read without entering the vault, and provide a means for disconnecting the electrical equipment from the utility supply; and
- well vent which will be 30-inch diameter and 5 feet high. This will be within the same enclosure as the flush line connection to the storm drain.

Well field production would be limited to the safe annual yield of the local aquifers. Data gathered from comparing historical pumpage and groundwater level data, in addition to previous studies, suggest a safe yield of approximately 3,000 acre-feet per year. Each well is anticipated to be capable of drawing approximately 450 gallons of water per minute (gpm) when in service. However, there may be brief periods, such as during summer months, that the well pumping may increase above a constant, uniform pumping rate that is maintained year-round.

Construction of the test/production wells will be accomplished utilizing two forms of rotary drilling. The direct rotary drilling will be used to advance an approximate 30-inch-diameter hole to a depth of at least 50 feet for installation of 24-inch-diameter conductor casing. Drilling of the final well casing borehole will be completed in two phases utilizing the reverse rotary drilling method. Initially a small diameter (approximately 8-inch) pilot hole will be drilled to a depth of approximately 850 feet below land surface in order to determine lithology and water quality within the production zone as well as above and below the production zone. Approximately four intervals will be isolated and sampled for water quality analyses.

Two phases of pump testing will be completed to determine well performance characteristics, water quality, and estimations of aquifer hydraulic coefficients. The wells will be pumped at five discrete rates for a period of 1 hour per step and resultant water level drawdowns will be recorded. The last and highest rate will be approximately 125 to 150 percent of anticipated production rate. Once installation and testing of the production pump is complete, the well will be pumped at a constant discharge rate for at least 24 hours. The pilot hole will later be reamed to a nominal diameter of 23 inches for production if determined feasible following the testing.

Following the development and construction of the wells and wellhead facilities, the sites will be landscaped.

7-8

5

Environmental Checklist

Phase II

Phase II of the proposed project consists of the construction of a water treatment plant in conjunction with a public works facility at the existing City Yard at 341 North Foothill Drive, between 3rd Street and Civic Center Drive. This phase includes the construction of an approximately 37,600 square foot building encompassing approximately 8,000 square feet (sf) of administration space, approximately 8,000 sf of public areas on the first floor, approximately 6,080 sf of shops for public works activities, approximately 3,620 sf of warehouse (to be located on the second floor above the shops), and the water treatment facility would constitute approximately 11,900 sf of space on the first floor.

This phase also includes the construction of pipelines connecting the wells to the treatment facility (raw water pipelines), and pipelines from the treatment facility to the municipal water distribution system (product water pipelines). The proposed product water pipelines will roughly follow the Civic Center Drive, Burton Way, and Foothill Road between the well sites (see Figure 2). However, if the alternate well site in Beverly Gardens Park is developed, rather than the pipelines being developed in Civic Center Drive, the raw water pipelines would traverse Beverly Gardens Park between the two well sites within the Park.

The proposed treatment plant would be sized to deliver a product water flow rate of approximately 3.5 million gallons per day (mgd), with the capacity to treat up to 5 mgd to allow for future expansion. However, the safe annual yield of 3,000 acre-feet would be maintained over the 12-month period. The treatment plant will require 24-hour staffing by 4 persons per shift to operate the plant. Although most processes are automatic and controlled by computers, the control room and some equipment would require continuous observation by qualified operators. An in-plant laboratory would be included at the facility to test daily or weekly samples for general minerals, general physical, and basic bacterial analyses. Complicated analyses such as organics and heavy metals will be contracted to an outside laboratory.

The treatment plant would consist of a series of pumps, membrane modules, filters, chemical storage facilities, and other equipment housed in an open approximately 11,900-square-foot enclosure. A reverse osmosis (RO) process is proposed to treat the water. The treatment of groundwater will require the storage and utilization of several hazardous chemicals, including concentrated sulfuric acid, caustic soda, chlorine, and scale inhibitor.

Following treatment, it is anticipated that approximately 87 percent (based on previous studies) of the water would then be sent via a 16-inch product water pipeline to a connection near Sunset Boulevard and Rexford Drive, where it would be blended with water from Metropolitan. The product water pipeline would extend along Foothill Road, crossing Santa Monica Boulevard, and continue northbound along Maple up to Lomitas Avenue. It would then turn westbound and extend along Lomitas Avenue. The pipeline would then turn north again to extend up to Sunset Boulevard, where the City's Metropolitan Water District connection is located, through the alley between Alpine Drive and Rexford Drive. There is also an alternate route for this product water pipeline, which would generally follow the same route until it reaches the intersection of Maple Drive and Lomitas Avenue. At this intersection, the alternate product water pipeline would continue to extend north along Maple Drive to Sunset, and then west to the City's water system connection (see Figure 2).

The remaining approximately 13 percent of the water would consist of brine that would contain most of the dissolved minerals removed from the treated water by the RO process. It would be discharged into the storm drain system at a concentrated flow rate of 0.3 mgd. A National Pollutant Discharge Elimination System (NPDES) permit will be required from the Regional Water Quality Control Board for the disposal of the brine. This permit will be applied for an approved prior to development of the water treatment facility. Air stripping will be implemented to remove hydrogen sulfide (resulting from H_2S concentrations in the local groundwater) from both the treated water and the brine following the RO process. The removal of iron and manganese, in addition to the air stripping process, produces a residual sludge that will be disposed of in land-fills.

Environmental Checklist

6

In order to reduce any potentially significant impacts associated with the proposed project, the mitigation measures have been incorporated into the project design. These mitigation measures are presented in the respective . sections of the Environmental Evaluation and Annotated Discussion of Impacts, as well as being summarized at the end of this Initial Study.

9. Surrounding Land Uses and Setting:

Surrounding land uses adjacent to the existing and proposed wells and raw water pipelines along Burton Way include high-density multifamily residential uses along the north side of Burton Way, and high-density single-family residential uses to the south. High-density multifamily residential uses also exist in the area to the south of the proposed well site and raw water pipeline alignments that would be located within the Civic Center Drive right-of-way. Just north of the proposed well site and pipelines within Civic Center Drive and between Civic Center Drive and Santa Monica Boulevard, lies a strip of land that includes the railroad right-of-way. Beverly Gardens Park is located along the north side of Santa Monica Boulevard, which is the proposed location for the other well site. The alternate well may also be located within Beverly Gardens Park. In the event that the alternate well site is implemented, the alternate raw water pipeline alignment would also extend through the Park.

The proposed water treatment facility and offices are located within the Industrial Area, which is characteristic of light industrial and other municipal uses. The City Yard and a Southern California Edison electric substation lie directly south, a veterinary office is located adjacent to the proposed site directly to the north, and the City's existing Public Works Department is located directly across Foothill Road to the east. Other uses along Foothill Road in the vicinity of the proposed treatment facility and related pipelines include other municipal uses, offices, a record studio, commercial and industrial uses, and vacant properties.

The proposed product water pipeline that extends from the treatment facility to the Metropolitan and City supply connection passes through residential streets and alley-ways that are located adjacent to medium-density single-family residential land uses.

10. Other agencies whose approval is required:

Los Angeles Regional Water Quality Control Board (LARWQCB) California Department of Health Services (CDHS) Los Angeles County Department of Public Works (LACDPW)

11. Initial Study and Checklist:

The purpose of an Initial Study (IS) is to determine if the proposed project could result in significant adverse unavoidable effects on the environment and to recommend the appropriate environmental clearance document. The IS is a public document that analyzes the environmental effects of the proposed project and presents feasible measures when applicable to reduce or avoid potential environmental damage. It is not the purpose of the IS to recommend approval or denial of the project. The following IS has been prepared to assess the impacts of the City of Beverly Hills Municipal Water and Public Works Facility Project as required by the California Environmental Quality Act (CEQA).

7-8

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Environmental Checklist

Environmental Factors Potentially Affected:

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

x

X

Land Use and Planning Population and Housing

Geological Problems

X Water

Air Quality

Transportation/Circulation

Biological Resources Energy & Mineral Resources

Hazards

X Noise

X

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Mandatory Findings of Significance

Public Services

Utilities & Service Systems

Aesthetics

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Cultural Resources

Recreation

Determination.

On the basis of this initial evaluation:

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

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

AKURAI

Date June 26, 1998

Printed Name

June 23, 1998 97-128

8

Environmental Checklist

Issues (and	d Supporting	Information	Sources):
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- I. LAND USE AND PLANNING. Would the proposal:
 - a. Conflict with general plan designation or zoning?
 - b. Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?
 - c. Be incompatible with existing land use in the vicinity?
- d. Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?
- e. Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?
- II. POPULATION AND HOUSING. Would the proposal:
 - a. Cumulatively exceed official regional or local population projections?
 - b. Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?
 - c. Displace existing housing, especially affordable housing?
- III. GEOLOGIC PROBLEMS. Would the proposal result in or expose people to potential impacts involving:
 - a. Fault rupture?
 - b. Seismic ground shaking?
 - c. Seismic ground failure, including liquefaction?
 - d. Seiche, tsunami, or volcanic hazard?
 - e. Landslides or mudflows?
 - f. Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?
 - g. Subsidence of the land?
- h. Expansive soils?
- i. Unique geologic or physical features?
- IV. WATER. Would the proposal result in:
 - a. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?
 - b. Exposure of people or property to water related hazards such as flooding?
 - c. Discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen or turbidity)?
 - d. Changes in the amount of surface water in any water body?
 - e. Changes in currents, or the course or direction of water movements?

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Less Than Significant Impact Impact

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9

Environmental Checklist

Issues (and Supporting Information Sources):

- f. Change in the quantity of ground water, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations, or through substantial loss of groundwater recharge capability?
- g. Altered direction or rate of flow of groundwater?
- h. Impacts to ground water quality?
- i. Substantial reduction in the amount of groundwater otherwise available for public water supplies?

V. AIR QUALITY. Would proposal:

- a. Violate any air quality standard or contribute to an existing or projected air quality violation?
- b. Expose sensitive receptors to pollutants?
- c. Alter air movement, moisture, or temperature, or cause any change in climate?
- d. Create objectionable odors?

VI. TRANSPORTATION/CIRCULATION. Would the proposal result in:

- a. Increased vehicle trips and traffic congestion?
- b. Hazards to safety from design features (e.g., sharp curves or dangerous intersection) or incompatible uses (e.g., farm equipment)?
- c. Inadequate emergency access or access to nearby uses?
- d. Insufficient parking capacity on-site or off-site?
- e. Hazards or barriers for pedestrians or bicyclists?
- f. Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?
- g. Rail, waterborne or air traffic impacts?

VII. BIOLOGICAL RESOURCES.

Would the proposal result in impacts to:

- a. Endangered, threatened, or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?
- b. Locally designated species (e.g., heritage trees)?
- c. Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?
- d. Wetland habitat (e.g., marsh, riparian, and vernal pool)?
- e. Wildlife dispersal or migration corridors?

Potentially Significant Impact	Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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June 23, 1998 97-128

31

7-8

Environmental Checklist

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VIII. ENERGY AND MINERAL RESOURCES. Would the proposal:

- a. Conflict with adopted energy conservation plans?
- b. Use non-renewable resources in a wasteful and inefficient manner?
- c. Result in the loss of availability of known mineral resources that would be of future value to the region and the residents of the State?
- IX. HAZARDS. Would the proposal involve:
 - a. A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals, or radiation)?
 - b. Possible interference with an emergency response plan or emergency evacuation plan?
 - c. The creation of any health hazard or potential health hazard?
 - d. Exposure of people to existing sources of potential health hazards?
 - e. Increased fire hazard in areas with flammable brush, grass, or trees?
- X. NOISE. Would the proposal result in:
 - a. Increases in existing noise levels?
 - b. Exposure of people to severe noise levels?
- XI. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:
 - a. Fire protection?
 - b. Police protection?
 - c. Schools?
 - d. Maintenance of public facilities, including roads?
 - e. Other governmental services?
- XII. UTILITIES AND SERVICE SYSTEMS. Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:
 - a. Power or natural gas?
 - b. Communications systems?
 - c. Local or regional water treatment or distribution facilities?
 - d. Sewer or septic tanks?
 - e. Storm water drainage?
 - f. Solid waste disposal?
 - g. Local or regional water supplies?



Less Than Significant Impact

No Impact

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Environmental Checklist

Issues (and Supporting Information Sources):

XIII. AESTHETICS. Would the proposal:

- a. Affect a scenic vista or scenic highway?
- b. Have a demonstrable negative aesthetic effect?
- c. Create light or glare?

XIV. CULTURAL RESOURCES. Would the proposal:

- a. Disturb paleontological resources?
- b. Disturb archaeological resources?
- c. Affect historical resources?
- d. Have the potential to cause a physical change which would affect unique ethnic cultural values?
- e. Restrict existing religious or sacred uses within the potential impact area?

XV. RECREATION. Would the proposal:

- a. Increase the demand for neighborhood or regional parks or other recreational facilities?
- b. Affect existing recreational opportunities?

XVI. MANDATORY FINDINGS OF SIGNIFICANCE.

- a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?
- b. Does the project have the potential to achieve short term, over the disadvantage of long-term, environmental goals?
- c. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)
- d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

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No

Impact

Environmental Evaluation and Discussion of Impacts

This section of the Initial Study provides discussions of the environmental resource issues and potential impacts as identified on the preceding checklist. A discussion of the alternate well site and the alternate product water pipeline route are also presented as they are applicable. Impacts would be the same for these alternate facilities and alignments unless otherwise noted.

I. LAND USE AND PLANNING

a. The proposed project does not conflict with general plan designations or zoning. The proposed groundwater well sites and related pipelines are located on City-owned property and within public circulation rights-of-way. Those well sites within public rights-of-way are not designated under the General Plan or Zoning Code. However, the proposed well site and the alternate well site that are located in Beverly Gardens Park are designated as Park use. Provisions for public infrastructure are not subject to general plan designations or zoning regulations. Section 10-3.2754 of Article 20 of the City's Zoning Code (Commercial Zone [C-5]) suggests that "nothing shall restrict the installation of public utility distribution facilities in a public right-of-way". The proposed groundwater wells and pipelines would be compatible within any land use designation throughout the City. No impacts are anticipated.

The site of the proposed water treatment facility is within an area designated Low Density General and Municipal, which falls within the jurisdiction of the City of Beverly Hills Industrial Area Plan. Land use designations are generally consistent throughout the area, providing for the development of commercial office space within a zone designated C-5, and municipal services facilities in a zone designated P-S. The City devotes 20 percent of the Industrial Area to municipal land uses (Industrial Area Plan 1994), including the public works and treatment facility site, which is zoned P-S, allowing for the development of municipal facilities. Therefore, the proposed treatment facility site is compatible with the General Plan and zoning, and does not result in significant impacts.

b. The project falls under the jurisdiction of several applicable plans and policies of the City of Beverly Hills. These include the City of Beverly Hills General Plan, the City of Beverly Hills Industrial Area Plan, and the Water System Master Plan.

The proposed project partially includes development of groundwater wells that are located within Beverly Gardens Park and within the Civic Center Drive right-of-way (ROW) along both sides of Santa Monica Boulevard. Santa Monica Boulevard is designated as a Scenic Highway in the City of Beverly Hills General Plan. The objective of the element is to preserve and enhance aesthetic resources within the scenic corridors and assure that the resources is protected for the future. If the State

13

(California Department of Transportation) were to adopt the City's designation and standards, then Santa Monica Boulevard would receive protection of a scenic highway (City of Beverly Hills General Plan, Scenic Highway Element, 1976). However, at this time there are no policies on scenic highways in Beverly Hills, and therefore the proposed wells are compatible with the General Plan.

The proposed product water pipeline that extends to the Metropolitan and City water supply connection would be located within streets, as well as partially within the alley north of Lomitas Avenue. The Circulation Element of the General Plan identifies one of the roles of the alleys as serving as the primary network for utility locations by permitting a higher degree of efficiency and visual quality along the streets (City of Beverly Hills General Plan, Circulation Element 1977). Placement of the pipeline within the alleys would be compatible with the General Plan, and therefore a significant impact would not result.

Implementation of the Land Use Element of the General Plan recommends that, "alternative locations and criteria should be explored for possible relocation out of the area or consolidation within the area of the existing public service facilities located in the Industrial Area" (City of Beverly Hills General Plan, Land Use Element 1977). The proposed project conforms to this implementation measure by attempting to eliminate potential impacts that may occur by otherwise siting the treatment facility near residential land uses. The proposed public works and water treatment facility will in fact be located within the Industrial Area of the City. Additionally, the project includes the combination of public works offices and shops with the proposed water treatment facility to further consolidate these city functions. Significant land use impacts would not result.

The Conservation Element of the General Plan suggests measures to, "provide a stable, economical supply of potable water while retaining the City's option to tap into existing groundwater supplies should it become necessary or desirable to replace or supplement the City's supply; and to retain the capability to treat locally extracted water, should it be determined that the local groundwater resources are to be utilized" (City of Beverly Hills General Plan, Conservation Element 1979). The proposed project implements this portion of the General Plan, and therefore does not result in a significant impact.

c. The proposed project may not be compatible with existing land uses in the vicinity of some project components. When considering the compatibility of land uses, usually nuisance factors are taken into account with the siting of new projects. For additional discussion of compatibility issues, please refer to the Noise, Air Quality, and Aesthetics sections of this Initial Study. General discussions of land use compatibility are presented below.

June 23, 1998 97-128

35

Environmental Analysis and Discussion of Impacts

14

With respect to the Burton Way well sites, high density multi-family residential uses line the north side of Burton Way, and high density single-family residential uses are located to the south. However, as the wells would be located roughly within the center of the median, the public ROW and automobile circulation would provide a buffer between the residential land uses and the groundwater wells. Thus any impacts resulting from potential noise or other possible nuisance factors would be substantially lessened as a result of the existing site conditions.

The nearest sensitive receptors from the proposed well site within the Civic Center Drive ROW at the intersection with Beverly Boulevard is high density multi-family residential uses that are located directly to the east. The construction of this well site and related pipelines may result in short-term nuisance impacts to the adjacent residents in the way of noise, visual impacts, and immediate fugitive dust impacts during construction. However, due to the heavy traffic near the intersection and along Santa Monica Boulevard, it is not expected that potential impacts would be substantially greater than the existing conditions for the area.

The well site proposed in Beverly Gardens Park at the Doheny site, which is the northeastern most portion of Beverly Gardens Park, is surrounded on all sides by streets. Located at the intersection of Doheny Drive and Santa Monica Boulevard, the area currently experiences high-traffic volumes due to the substantial commercial areas located to the south and east. Medium-density single-family residential land uses lie to the north and west beyond Oakhurst Drive and Carmelita Avenue. Due to the existing high traffic in the area, the buffering streets and the Park, residential areas are not anticipated to be impacted by the proposed groundwater well. However, due to the integrity of the Park as a valuable open space resource, a groundwater well may be considered to be an invasive land use within the Park to local users. Aesthetically, the groundwater well would be located underground with only minimal surface facilities exposed. Because these facilities would be landscaped and mostly concealed, no significant compatibility impacts are anticipated.

The product water pipeline would be located within residential streets and portions of an alley surrounded by medium density single-family residential land uses. Public infrastructure and utilities are not considered to be incompatible with residential land uses. However, temporary short-term impacts to adjacent residents associated with noise, aesthetics, and circulation access may occur during construction and are discussed in the respective sections of this Initial Study. No significant land use impacts associated with the proposed pipelines are anticipated.

The proposed public works facility and water treatment plant is located within the Industrial Area of the City. Surrounding uses in the area consist of commercial and industrial offices, commercial-retail/service, utilities, a veterinary hospital, and other
municipal land uses. According to the City of Beverly Hills Industrial Area Plan, the existing uses and the proposed facility are considered compatible land uses, and therefore a significant land use impact would not result. However, due to the nature of the facility and the 24-hour operations of the treatment processes, some adjacent land uses may express concern of the compatibility of the treatment plant in the area. The design of the treatment plant and office facility will take into consideration potential noise impacts and other compatibility issues to ensure that no impacts occur to adjacent land uses. Extensive acoustic treatment, including vibration isolation, would be implemented. Additionally, all potentially hazardous materials will be handled in compliance with applicable laws to ensure that safety is not unduly compromised. No significant impacts are anticipated.

Alternate Well Site

The alternate well site would be located within Beverly Gardens Park along Santa Monica Boulevard between Hillcrest Drive and Palm Drive. If this site is chosen, land use compatibility impacts may occur due to the proximity of neighboring medium-density single-family residential land uses. Although an approximately 7-foot block wall exists separating the Park from the residential land uses, short-term construction activities may create nuisance impacts to these residents. The existing high traffic volume along Santa Monica Boulevard coupled with the existing block wall, however, would serve as buffers from significant impacts occurring. Measures to reduce any potential impacts would also be implemented as outlined in the following respective Noise, Aesthetics, and Air Quality sections.

Alternate Pipeline Route

The alternate product water pipeline route would generally follow the same route as the proposed product water pipeline up to the intersection of Maple Drive and Lomitas Avenue. At this intersection, rather than extending west down Lomitas Avenue and then north in the alley between Rexford Drive and Alpine Avenue, the pipeline would continue north along Maple Drive up to Sunset Boulevard, and then west to the Metropolitan Water District of Southern California's (Metropolitan's) municipal water supply connection. It is expected that this alternate pipeline route would produce similar compatibility issues as the proposed pipeline route due to the residential character of the area. However, impacts may be slightly less as the pipeline would not be constructed in the alley, which would be more intrusive to the adjacent residents. Additionally, fewer residences would be affected by short-term construction impacts as Sunset Boulevard contains fewer residents, and experiences a substantially larger volume of traffic than Lomitas Avenue. Thus, it is expected that this alternate product water pipeline route would create fewer land use impacts than the proposed pipeline route.

d. The proposed project would not affect agricultural resources or operations. No agricultural land uses exist within the vicinity of the proposed project, therefore, no

Attachment 2, Page 23 of 722

Environmental Analysis and Discussion of Impacts

16

impacts are anticipated.

e. The proposed project would not disrupt or divide the physical arrangement of an established community. The scale of the proposed project would not have the capability to disrupt the physical arrangement of the community. No impacts are anticipated.

II. POPULATION AND HOUSING

a,b. The proposed project would not cumulatively exceed official regional or local population projections. The service area, including the City of Beverly Hills and the western portion of the City of West Hollywood, has nearly reached full development and is expected to reach an ultimate population of only 51,830 (City of Beverly Hills, Water System Master Plan, 1985). The proposed project is not expected to contribute to population growth, but rather attempts to supplement the existing water from Metropolitan with a more reliable and less expensive water supply.

The proposed project is not expected to induce substantial growth in the area either directly or indirectly. Although the proposed project would develop a water supply with increased capacity, it is not expected to be growth inducing. As the service area is mostly built-out, the proposed municipal water supply project's intent is to accommodate the existing population by supplementing 20 percent of the existing Metropolitan water supply with local groundwater. Currently, the City and the surrounding service area is completely reliant upon the Metropolitan supply. The purpose of the proposed project is to develop a more reliable water supply for the service area, and to reduce the cost associated with peaking charges from Metropolitan; not to expand the service area, or the capacity of the water supply system in the area. Currently, the service area could be adequately served by existing Metropolitan supplies. However, it is the goal of the City, as well as Metropolitan, to develop a supplemental source of water to supply local customers. No significant population impacts are anticipated.

c. The proposed project would not displace existing housing. The propose project does not include the displacement of housing for the construction of the project elements. Therefore, no significant housing impacts are anticipated.

III. GEOLOGIC PROBLEMS

The City of Beverly Hills is located in the northwest portion of the Los Angeles Coastal Plain. The City overlies portions of the Santa Monica, Hollywood and Central Groundwater Basins. The major structural features in the study area consist of the Hollywood fault, located

Attachment 2, Page 24 of 722

17

along the northern boundary of the Hollywood Groundwater Basin, the Santa Monica Fault extending east-west across the southern end of the City, and the Newport-Inglewood Zone of Deformation (City of Beverly Hills, Geotechnical Report 1987). High groundwater levels in the City increase the probability of liquefaction during seismic activity (City of Beverly Hills, General Plan, Seismic Safety Element 1975). The three dominant potential seismic hazards that affect the City are ground shaking, ground breakage due to faulting, and soil liquefaction (City of Beverly Hills, Geotechnical Report 1987). The potential impacts associated with seismic hazards are presented below.

a. Fault Rupture

Fault rupture is caused by the actual breakage of the ground surface overlying a fault in the event of seismic activity. This can range in offsets from less than one inch up to twenty feet depending on the fault and earthquake magnitude. Impacts resulting from fault rupture generally occur within the immediate vicinity overlying the fault. Although the local faults are not within a special Alquist-Priolo Special Study Zone, this does not preclude the faults from serving as a potential seismic hazard. This may merely be due to the lack of evidence that exists along the surface. Additionally, there are uncertainties in the precise locations of these faults, which may be the reason for the range in the caution zones established. The two wells along Burton Way lie in a caution zone for fault rupture hazards from the Santa Monica Fault (City of Beverly Hills Geotechnical Report 1987). With the exception of potential occasional maintenance activities, the well facilities would not be inhabited. While this may be of minor concern to the City, the project would not result in a significant increase in exposure to fault rupture hazards.

b. Ground Shaking

Southern California is a seismically active region and prone to earthquakes, which may result in hazardous conditions to people within the region. Earthquakes and ground motion can affect a wide-spread area. Nineteen individual faults or fault zones within 50 miles of the area, including the three local faults, are capable of generating earthquakes of Richter magnitude 6.25 to 8.5 (City of Beverly Hills Industrial Area Plan Draft EIR 1990). The potential severity of ground shaking depends on many factors, including the distance from the originating fault, the earthquake magnitude and the nature of the earth materials beneath the site. The most serious impacts associated with ground shaking would occur if the structures were not properly constructed according to seismic engineering standards. Buildings have been designed to withstand strong earthquakes. The proposed building and structures will adhere to the applicable building codes and undergo engineering checks in compliance with State and City standards. These necessary compliance strategies will reduce potentially significant impacts to less than significant levels.

June 23, 1998 97-128

7-8

18

c. <u>Liquefaction</u>

The potential for liquefaction depends on the levels of shaking, groundwater conditions, the relative density of the soils, and the age of the geologic units. Seismic-induced liquefaction occurs when a saturated, low relative density granular deposit is subject to extreme shaking and loses strength or stiffness due to increased pore water pressure. The Geotechnical Report prepared by Woodward-Clyde (1987) identifies the areas covered by the proposed project elements as being across very low- to high-potential areas. Although precise boundaries for liquefaction zones are not certain, the general boundaries are discussed below.

7-8

The public works facility and most of the pipelines would be located within Zone C (low potential). It appears that the wellhead facilities in Burton Way and in Beverly Gardens Park would be located within Zone B (moderate potential). However, the well to be located in the Civic Center Drive ROW would be within liquefaction Zone A (high potential). This high potential area may be due to the shallow groundwater levels and relatively younger sediments (City of Beverly Hills 1987). The consequences of liquefaction are expected to be predominantly characterized by settlement, uplift on structures and increase in lateral pressure on buried structures. If not designed properly the effects of severe liquefaction during seismic conditions could produce failure of building foundations leading to substantial structural damage and injury or loss of life. Significant impacts are not anticipated as the public works facility is located within a low potential liquefaction zone. The other well head facilities would not be inhabited with the exception of occasional maintenance activities. However, seismic safety standards will be adhered to in building engineering and design, which will mitigate any potential impacts to less-thansignificant levels.

Even though the public works facility site is located within a low potential liquefaction zone, there is a potential for liquefaction impacts because the precise boundaries are not known. The Industrial Area Plan Draft EIR (1990) suggests that site-specific studies should be conducted to determine specific groundwater level, liquefaction consequences, level of damage and level of risk prior to construction of major facilities in the Industrial Area. The effects of liquefaction can be mitigated to less-than-significant levels. However, the potential hazards associated with liquefaction must first be identified. Depending on the severity of the potential for liquefaction to occur, some or all of the mitigation measures presented below could be implemented. A geotechnical study is currently being prepared to identify potential geotechnical hazards and recommend sound construction measures. Any geotechnical recommendations will be incorporated into the project design and adhered to during the construction of the facility. Implementation of these measures will ensure that a less-than-significant impact results.

19

Mitigation Measures

- *MM III-1.* Use of driven pile foundations may mitigate settlements; piling should be designed for downdrag loads imposed by settlement of soil.
- MM III-2. Underground elements of substructures can be designed for increased lateral pressure and uplift pressure caused by liquefaction.
- MM III-3. Where appropriate, in-place densification techniques such as: vibroflotation, dynamic compaction, combined densification/drainage (compaction piles), and vertical drains (stone columns) may be used to improve subsurface soil stability.
- d, e. The proposed project would not expose people to seiches, tsunamis, landslides, mudflows, or volcanic hazards. These hazards to not exist in the vicinity of the project site, and would therefore not have the potential to result in exposure to such hazardous conditions. No impacts are anticipated.
- f. The proposed project may result in erosion impacts during the construction phase of the proposed project. Excavation of the wells, and grading activities during construction of the public works facility and pipelines could result in temporary, short-term erosion impacts. Although excavated material and debris would be retained on-site and eventually hauled off-site during drilling and excavation of the well sites, there is a potential for erosion to occur offsite as a result of construction vehicles entering and exiting the site. Additionally, potential precipitation could result in erosion occurring offsite.

During the drilling phases of the project, water containing mud and other sedimentary materials could erode the immediate sites and discharge offsite. However, measures have been incorporated into the project to divert muddy water resulting from well drilling and pumping to the storm drain system to avoid erosion impacts off-site. Short-term erosion impacts associated with construction of the treatment plant and pipelines would be negligible and would not be considered significant.

As part of the project, the following mitigation measures would be implemented to further reduce off-site erosion impacts to less-than-significant impacts:

Mitigation Measures

MM III-4. During construction phases, the contractor will implement wheel washing for trucks and other construction equipment prior to the equipment and vehicles exiting the construction site.

41

20

MM III-5. During construction phases, the contractor will be responsible for street cleaning in the construction areas at least once per week as needed.

7-8

Implementation of these mitigation measures would also reduce potential air quality impacts associated with construction activities.

- g. The proposed project would not result in or expose people to subsidence of the land. Subsidence has not been identified as a problem within the City of Beverly Hills (General Plan, Seismic Safety Element 1975). However, extraction of groundwater is a common cause that has been associated with subsidence problems. The proposed project would pump approximately 3,000 acre-feet of groundwater on an annual basis. This has been identified as the safe yield determined for the groundwater basin to avoid potential impacts to the basin (City of Beverly Hills 1985, 1992). Pumping an amount equal to or less than the safe yield is not anticipated to result in subsidence impacts. No significant impacts are anticipated.
- h. The proposed project is not anticipated to result in impacts involving expansive soils. The potential for expansive soils has not been identified and thus no significant impacts are anticipated.
- i. The proposed project is not anticipated to result in impacts associated with unique geologic or physical features. No unique geologic or physical features are known to be present in the vicinity of the proposed project.

IV. WATER

- a. The proposed project may result in minimal changes in absorption rates, drainage patterns or the rate and amount of surface runoff. Implementation of the proposed project will result in a minimal increase in the amount of paved surfaces to the area. The public works facility site is currently paved and serving as a parking lot for City vehicles. Therefore, no net increase in paved surfaces is expected to occur at this site. The well head facilities would be subterranean covering approximately 200 square feet and would result in negligible impediment to absorption. This increase will not significantly contribute to the rate or amount of surface runoff, and therefore would result in a less than significant impact.
- b. The proposed project may expose people or property to water related hazards such as flooding. The proposed project is located within Flood Zone C (relatively low risk) as designated by the Federal Emergency Management Agency (FEMA) and is not expected to be subject to flooding in the area (Sakurai pers comm). However, the City recognizes that certain parts of the community may potentially be vulnerable to

21

100-year floods (Sakurai pers comm). With respect to the proposed project, the well head facilities for the wells located in the Civic Center Drive ROW and the Beverly Gardens Park site, as well as the alternate well site in Beverly Gardens Park, may be subject to 100-year flood hazards. This would not be considered to result in a significant impact as the well head facilities would not be inhabited, with the exception of occasional maintenance activities. This inhabitation would be short term and would not likely occur during storm events. Therefore, this would result in a less than significant impact.

c. The proposed project may result in discharge into surface waters or other alteration of surface water quality. The proposed well drilling and testing phase of the project would involve discharge of water into area storm drains for a few days per well, which ultimately discharge into the Pacific Ocean. This discharged water contains minerals and levels of Hydrogen sulfide (H₂S). The water will be treated with chlorine prior to discharge to oxidize the H₂S. Based on the Pilot Testing Report (1996), other minerals appear to be within levels of allowable discharge by the Los Angeles Regional Water Quality Control Board (LARWQCB). A National Pollutant Discharge Elimination System (NPDES) permit would be obtained prior to discharge. Monitoring would also be conducted to assure that the level of treatment is in compliance with the NPDES permit.

The operation of the treatment plant would involve the use of reverse osmosis (RO) units which will discharge a brine to a local storm drain. Although a stripping unit will result in the removal of H_2S , the brine will still be high in salts and other minerals, but much lower than the concentration of sea water. An NPDES permit will be required for this discharge of this brine to the storm drain. This discharge will also be monitored to assure compliance with the NPDES permit. These incorporated mitigation measures are presented below.

Mitigation Measures

- *MM IV-1.* Prior to issuance of the building permit for the public works facility, the City shall obtain an NPDES permit;
- *MM IV-2.* Prior to construction of the well head facilities and groundwater testing, the contractor shall obtain an NPDES permit for temporary discharge of test water into the storm drainage system.
- *MM IV-3.* During the operations of the project, the City shall conduct ongoing monitoring efforts to assure that the level of treatment is in compliance with the NPDES permit.

22

- d. The proposed project would not result in substantial changes in the amount of surface water in any water body. The project would result in discharges of groundwater during testing phase and brine during the plant operations phase to the storm drainage system. This storm drainage eventually discharges into flood control channels and ultimately the Pacific Ocean. However, the amount of surface flow from the project would be negligible and would not be expected to result in a significant impact.
- e. The proposed project would not result in changes in currents or the course or direction of water movements. While the project may contribute to storm drainage water flows, this would not affect water movements or currents. No direct alterations to the water courses would be implemented. No significant impacts are anticipated.
- f. The proposed project would result in change in the quantity of ground water either through direct additions or withdrawals, or through interception of an aquifer.

The principal groundwater units in the Beverly Hills area are the Hollywood Basin and the Central Basin. Historically, the City of Beverly Hills extracted groundwater from both the Hollywood and Central Ground Water Basins. This water was treated at two treatment plants and delivered to the City's customers. During these previous exercises in groundwater withdrawals, the City extracted an average of 3,015 acre feet per year from the Hollywood Basin from 13 wells between 1950-1975. Water quality and cost issues associated with rebuilding the treatment facilities caused the City to abandon this source in 1976 and used exclusively imported water (Water System Master Plan 1985). Ground water is proposed to be obtained from the Hollywood Basin because it is of better quality than the Central Basin. The California Department of Water Resources (DWR) has identified six major aquifers in the Hollywood Basin. From top to bottom, these include the Exposition, Gage, Jefferson, Lynwood, Silverado and Sunnyside. Depth to groundwater in this area is approximately 215 below ground surface (City of Beverly Hills Municipal Water Supply and Groundwater Study 1992).

DWR has defined the safe yield of a groundwater basin as the maximum quantity of water that can be continuously withdrawn without adverse effect. The safe yield therefore approximates the recharge to the basin. Several studies have been conducted on the groundwater resources of the area and estimates of the safe yield have been provided by a number of sources. For example, Bookman-Edmonston estimated the safe yield to be 3,000 acre-feet per year, James M. Montgomery Engineers also estimate safe yield at 3,000 acre-feet per year, Geotechnical Consultants estimated safe yield at 3,500 acre-feet per year and DWR estimated the safe-yield at 4,400 acre-feet per year (Municipal Water Supply and Groundwater Study 1992).

23

The proposed project involves the extraction and treatment of up to 3,000 acre-feet per year in Phase II assuming that well tests and water quality analysis indicates that the project is feasible. This groundwater use is within the most conservative estimates of the safe yield of the basin. Since the City would be the only user of this basin, the impact to groundwater resources is considered less than significant.

- g. The proposed project would not result in the substantial altered direction or rate of flow of groundwater. Since the proposed project will only extract groundwater at or below the estimated safe yield, no substantial well draw-down on a basin wide basis is expected. Also it can be assumed that substantial changes in groundwater rate of flow or direction would not occur. Therefore any impact to groundwater resources are expected to be less than significant.
- h. The proposed project may result in impacts to groundwater quality. Currently, there are existing groundwater quality problems within the Hollywood Basin. These include total dissolved solids (TDS) levels of 463 to 622 mg/L, iron, manganese, and odor. Normal TDS drinking water standards would be 500 mg/L. Iron and manganese levels are two to three times higher than recommended levels, and hydrogen sulfide provides a significant source of odor (Municipal Water Supply and Groundwater Study 1992).

The proposed project would ensure that the groundwater resources are adequately treated prior to being mixed with the Metropolitan water supply. Water pumped from the proposed project will be fully treated using RO and H_2S stripping in order to meet all drinking water standards. The well drilling and pumping of the ground water is not anticipated to cause any substantial degradation of the existing water quality of the aquifer. Short-term construction impacts to the local aquifers may occur during the drilling phases. However, initial pumped groundwater would not be immediately transferred for treatment. Substantial well pumping and testing would first be implemented. This phase is expected to remove all debris resulting from construction and well drilling activities prior to transmission to the treatment facility. The treatment of the groundwater will provide potable water from an aquifer which does not currently meet drinking water standards.

i. The proposed project would not result in substantial reduction in the amount of groundwater otherwise available for public water supplies. The proposed project will remove approximately 3,000 acre-feet per year for public water supplies. This amount has determined to be the safe yield for extraction from the Hollywood Groundwater Basin. Although the groundwater would not be available for other uses, its use for the proposed project is for public supplies and is consistent with water resource planning for southern California. Furthermore, the City is the only agency that currently has plans to withdraw groundwater from the basin. This impact is considered to be less than significant.

45

24

V. AIR QUALITY

A detailed Air Quality report is presented in Appendix A. A summary of the detailed Air Quality report is presented below identifying the air quality impacts that may be associated with the proposed project.

a,b. The proposed project may violate air quality standards or contribute to an existing or projected air quality violation. Air quality in the South Coast Air Basin (SCAB), which is inclusive of the City of Beverly Hills and most of Los Angeles County, is regulated by the South Coast Air Quality Management District (SCAQMD). The SCAB region has been in non-attainment for several air pollutants, including carbon monoxide and ozone, for some time, and is working toward improving air quality within the region.

Existing levels of ambient air quality and historical trends and projects in the project area are best documented by measurements made by the SCAQMD at its West Los Angeles air monitoring station. Monitored air pollutants include ozone (O_3) , carbon monoxide (CO), and nitrogen oxides (NO_x) (as NO_2). Sulfur oxides (SO_x) (as SO_2) and particulate matter (PM_{10}) are monitored from the North Main Street station in Los Angeles, which is the closest station that regularly monitors this parameter. It is expected that the project area would have lower readings than the North Main Street station readings due to its more coastal location.

Recent monitoring data from these two stations (shown in Appendix A, Table A-2) show recurring violations of both the federal and State hourly standard for ozone and State standard for PM_{10} . No first-stage smog alerts have been reported in the past 5 years at either monitoring station. While the summer ozone levels are occasionally unhealthful for all receptor populations, they are lower than inland communities. Levels of primary automobile pollutants, such as CO, have not exceeded their standards in the last 5 years. In general, data shows that improvement has occurred throughout the 1990s in the western coastal portions of the Los Angeles Basin. However, desirable levels have not yet been attained for some pollutants.

Air quality analyses were performed separately for potential construction and operational impacts. Detailed calculations and discussions of assumptions can be found in Appendix A. Threshold standards established by the SCAQMD differ between construction and operational phases. Construction of the proposed project would be performed in two phases and the emissions from the construction of the wells would not be expected to be additive of those associated with the construction of the piping and public works facility. Additionally, if the anticipated volume and quality of water is unobtainable, the construction of the pipelines would not likely occur.

Well Construction

Construction activities and deliveries produce combustion pollutants from vehicles and construction equipment both at the site and along haul routes. Dust would also be produced locally at the construction site due to excavation activities. The area to be disturbed is estimated at approximately 0.1 acre per well site.

Well construction emissions are shown in Table A-3 of Appendix A. The projected emissions are well below the significance criteria standards, and are sufficiently low such that two wells could be constructed simultaneously without exceeding either the daily or quarterly significance criteria. Additionally, because the number of pieces of equipment involved in the construction effort is relatively small as are the number of related vehicles, and the area is open allowing for pollutant dispersion, no criteria pollutant concentrations in excess of State or federal standards will be produced and no significant "hot spots" will be created. All emissions associated with the project are typical of internal combustion engines. No hazardous pollutants are created in significant quantities and no significant impacts will result.

Mitigation Measure

MM V-1. During Phase I construction, construction activities shall be limited to the development of not more than two wells simultaneously. If the City wishes to construct all four wells simultaneously, then the heavy construction equipment is recommended to be calibrated with 2-4 degrees of fuel injection retard and equipped with high pressure fuel injectors¹. The City could also opt to restrict construction of the wells to no more than 24 total hours (or 6 hours for each well) on a daily basis².

<u>Pipeline Construction</u>

At this time, the exact type of equipment to be used for construction of the pipelines in unknown and will vary from contractor to contractor. However, it can be assumed that a generic type of equipment to perform activities will be utilized.

1

Based on an emissions threshold of 100 lbs./day or 2.5 tons/quarter for NOx. Well construction equipment would emit approximately 4.1 lbs./hour of NOx for each well.

Fuel injection retardation can be performed on heavy construction equipment diesel engines and would require recalibration of the engines' fuel injection system. Provision of high pressure fuel injectors for the construction equipment would require that the existing injectors be removed by disconnecting the fuel rail of individual fuel lines (depending on the engine design), removing the existing injectors, and replacing these with the high pressure units. To supply the high pressure necessary to make the replaced injectors work properly could require the recalibration of the fuel pressure regulator, and perhaps replacement of the fuel pump and resizing of the fuel delivery and return lines. All work should be performed by a competent, certified diesel mechanic.

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The estimated projected emissions for construction of the pipelines is shown in Table A-4 of Appendix A. As the pipelines are to be placed in existing streets and alleys, and no grading is to be performed, fugitive dust emissions would be very limited. Construction emissions are within both the daily and quarterly criteria levels and pipeline construction is not expected to result in any significant air quality impacts. Similarly, based on the relatively small construction work force and number of materials' hauls, no criteria pollutant concentrations in excess of state or federal standards will be produced and not significant "hot spots" will be created.

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Public Works Facility/Treatment Plant Construction

Like the wells and pipelines, construction of the public works facility will require the use of heavy equipment, manpower, and materials hauls, and equipment use would be staged. Equipment used is expected to be more varied than with the well sites or the pipeline installation. The potential for an air quality impact is greatest during the initial phases of construction because the heaviest, and most polluting equipment, is associated with site preparation where dozers, excavators, loaders, compressors, and pavers are used. The assumptions used for calculations of emissions are presented in Appendix A, and estimated emissions are shown in Table A-5.

As the site is already paved, it is level and relatively little grading would be required. To present a reasonable worst case scenario, it is assumed that the entire site undergoes simultaneous grading. Twice daily site watering is estimated to reduce dust (and its associated PM_{10}) emissions by 50 percent. Site watering may be required by SCAQMD Rule 403 for the grading phase of the public works facility. However, even if site watering were not performed, PM_{10} emissions would not exceed with their daily or quarterly significance criteria.

Construction emissions are within both the daily and quarterly criteria levels and public works facility construction is not expected to result in any significant air quality impacts. However, if the public works facility construction is performed simultaneously with pipeline construction, NO₂ emissions could exceed both daily (100 lbs/day) and quarterly (2.5 tons/quarter) criteria levels resulting in a significant air quality impact.

No criteria pollutant concentrations in excess of State or federal standards would be produced from construction of the public works facility and no significant "hot spots" would be created. Additionally, no hazardous pollutants would be created in significant quantities. No significant impacts would occur.

Mitigation Measure

MM V-2. During Phase II of construction, construction site preparation activities shall be limited to the construction of either the public

works facility or the pipelines at any given time. If the City wishes to conduct site preparation activities for both the pipelines and the public works facility simultaneously, then all heavy construction equipment to be used simultaneously should be calibrated with 2-4 degrees of fuel injection retard and equipped with high pressure fuel injectors³. The City could also opt to limit heavy construction equipment use to no more than 88 total hours on a daily basis⁴.

Operational Impacts

Stationary Source Emissions

While construction of the wells, pipelines, and public works facility may occur separately, all will work in unison and their emissions will be additive. With the exception of occasional testing of the emergency generator, minimal on-site exhaust emissions would be produced from project operations for air stripping systems that would remove any H_2S gas that may be present in the extracted groundwater. It cannot be determined at this point how much H_2S gas will be present in the water. However, it is expected that emissions from this activity will be negligible.

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If possible, well water will be obtained in a region of the aquifer that is not contaminated. Well testing will confirm the absence (or presence) of any chemicals which may produce airborne toxins. If the testing of well water shows the need for further treatment beyond that proposed, the water could be subject to the use granular activated carbon adsorption and/or air stripping. Air emissions produced from an air stripper may require subsequent treatment to remove any hazardous compounds. These operations are regulated and permitted through the SCAQMD and SCAQMD will require at least a screening level health risk assessment prior to issuing a Permit to Operate. These measures will reduce any potential health risk impacts to a level that is less than significant.

Past discussions with SCAQMD staff revealed that wastewater treatment facilities produce on the order of 0.1 ton per million gallons per day treated per year. Based on the treatment of 3.5 million gallons of wastewater per day, volatile organic compound (VOC) emissions would be estimated at less than 1.9 lbs/day. The pumping and disinfection of groundwater would be expected to create even fewer quantities of VOC emissions and will not result in a significant impact.

³ Same as Footnote 1.

⁴ If the City will restrict heavy equipment use to no more than 88 total hours on a daily basis, all criteria pollutants should remain within their respective thresholds allowing simultaneous construction site preparation activities for the public works facility and the pipelines. Based on a threshold of 100 lbs./day and 2.5 tons/quarter for NOx. This could best be monitored by requiring the contractor to log daily equipment hours and restrict these hours to 88. This would enable the contractors to be on-site for other construction activities even if they are not using heavy equipment.

Most exhaust emissions are produced off-site during the production of project-related electricity necessary to run both the well pumps and the public works facility/treatment plant. No motors or emissions are associated with pipeline operations. Assuming a continuous 24-hour operation, the total daily electrical consumption for the project is estimated at approximately 10,458 kilowatt-hours. Calculations and assumptions are provided in Table A-6 of Appendix A. The emissions associated with electrical consumption are minimal and alone do not exceed the thresholds for daily or quarterly emission standards.

In addition to electricity, the use of natural gas for space and water heating would be required, which could generate air pollutants. If natural gas would be used, it would likely be used in the lobby/employee facilities, which consists of an area approximately 7,000 square feet. This would require approximately 14,000 cubic feet of gas per month (455 cubic feet per day). All values are less than 0.1 pound per day and are considered negligible.

Mobile Source Emissions

The wells and pipelines would not require regular monitoring and no regular vehicle trips are associated with their use. The treatment plant would be automated and its staff would not be expected to exceed more than 10 employees per day. Trucks required to make regular deliveries and removal of sludge are anticipated at one or two per week. The estimated emissions (shown in Table A-6 of Appendix A), however assume a worst case scenario of one truck per day. Criteria pollutants associated with project operations are well below the significance criteria values and no significant impacts are projected.

- c. The proposed project would not significantly alter air movement, moisture, or temperature, or cause any change in climate. The proposed project includes the development of a two-story (45 feet high), approximately 37,600 square-foot building on a parcel of land that is currently vacant and improved as a parking lot. While not considered to be a substantial structure, the proposed building would alter air movements within the site and potentially to neighboring properties. The property that would likely be most affected would be the adjacent veterinary hospital. Currently, a block wall exists along the north side of the project site separating the site from the veterinary hospital. This currently serves as an obstacle for air flow into the neighboring site. However, construction of the proposed project would further restrict air flow from entering the neighboring veterinary hospital property from the south. This would be considered to be a less-than-significant impact.
- d. The proposed project may result in the creation of objectionable odors. Odors are one of the most obvious forms of air pollution noticed by the general public. Odors can present significant problems for both the source and the surrounding community. Although offensive odors seldom cause physical harm, they can cause agitation,

anger, and concern to the general public. The general public is usually concerned with offensive odors because they associate them with the possibility of also causing adverse health effects. However, because something smells bad does not mean that it is toxic. For instance, H_2S gas smells like a rotten egg, but its odor would not be toxic at the low concentrations that would be found within the ambient air.

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 H_2S gas has been found in previous testing of the groundwater basin and is likely to be present during the well testing phase of the proposed project. This water is proposed to be discharged to the storm drain system. Since there is a potential for odor during this testing phase, the pumped water will be treated with sodium hypochlorite to oxidize the H_2S prior to discharge. This system will be monitored 24 hours per day during well testing to assure no objectionable odors are created. Implementation of these treatment methods and monitoring activities would result in less-than-significant impacts.

The treatment plant will also be required to remove H_2S from the water. While odor threshold varies with an individual's sensitivity, these odors are typically notable in the range of 0.003 to 0.02 parts per million (ppm). The number of "odor units" or "dilution-to-threshold" (D/T) is a measure of odor's intensity, but does not incorporate any possible sense of unpleasantness. The SCAQMD CEQA Handbook notes that a 5 D/T, an unpleasant odor is clearly noticeable to most people of normal sensitivity. At 10 D/T, an unpleasant odor may evoke a rise in public complaint and this levels is recommended as an odor significance threshold. For H_2S as the primary source of odors, 1 D/T is approximately 0.003 ppm. Based on a 10 D/T ratio, an impact would be significant at 0.03 ppm, which is equal to the State's odor based public health threshold for a one-hour average of 0.03 ppm.

At this time it cannot be determined as to whether the received water will contain H_2S in sufficient quantities to create odors that are of a significant level or even detectable at off-site receptor locations. Further testing of the wells once installed will allow a more thorough evaluation of the potential for odor impacts. However, several measures would be incorporated to ensure that any potential impacts remain at less-than-significant levels. Air stripping systems are incorporated into the design of the proposed treatment plant, which will remove any H_2S gas that may be present in the extracted groundwater.

VI. TRANSPORTATION/CIRCULATION

a. The proposed project would not result in a substantial increase in vehicle trips or traffic congestion. Traffic impact analysis is presented below for construction of the wells, pipelines and treatment plant, and operation of the project facilities respectively.

Well Sites

Phase I of construction will involve the drilling and testing of three new water wells. These proposed well locations are shown in Figure 2 and the current roadway traffic in the area is presented in Table 1 below.

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Each of these drilling sites could involve a crew of up to 10 workers in any given day. It is estimated that each site will generate up to 20 vehicular trips per day including drilling personnel, other service workers, truck hauls, and supply vehicles during normal well drilling; and up to 30 vehicle trips per day during well testing. This temporary level of increased traffic will not significantly lead to increased traffic congestion in the area.

Table 1. Existing Traffic Volumes on Major Roadways in the Project Vicinity	
Location	Traffic (vehicles/day)
Burton Way (between Maple and Foothill) ⁽¹⁾	24,500 - 12,250 each direction
Santa Monica Boulevard, SR-2 (near Doheny Drive) ⁽²⁾	40,500 - 20,250 each direction
Foothill Road (south of Civic Center Dr.) ⁽¹⁾	2,100 - both directions
Foothill Road (north of 3rd Street) ⁽¹⁾	3,500 - both directions
Beverly Boulevard (east of Civic Center Dr.) ⁽¹⁾	Eastbound - 12,900; Westbound - 13,700
Source: (1) Bijan Vaziri, City of Beverly Hills, June 2, 1997. Based on 1992 annual traffic count data. (2) Caltrans 1995	

Drilling and testing of the well will have a potential to create substantial temporary traffic congestion associated with lane closure and other construction activities. It is planned that access to the drill sites will be constructed so that there will be a low potential for lane closures. If lane closures are necessary, they will be conducted during non-peak traffic periods to reduce potential for increased congestion. Therefore, the impacts are considered less than significant.

Upon completion of the wells, the wells will be unmanned with only periodic servicing required. There would be no operation related traffic impacts.

Pipeline Construction

Construction of the proposed raw water pipeline will generally follow Civic Center Drive, Burton Way and Foothill Road. If the alternate well site in Beverly Gardens

Park is chosen, then the well pipelines would extend through the Park rather than along Civic Center Drive. The product water pipeline would extend along Foothill Road crossing Santa Monica Boulevard, north along Maple Drive for most of the pipeline length. The proposed pipeline would then extend westbound for a short route along Lomitas Avenue, then north through the alley between Alpine Drive and Rexford Drive, up to Sunset Boulevard where the City's supply connects to Metropolitan's supply. The alternate pipeline route would follow generally the same route until the intersection of Maple Drive and Lomitas Avenue. It would then continue northbound along Maple Drive up to Sunset Boulevard then west to the water supply connection, rather than turning west at Lomitas Avenue and then north in the alley.

It is estimated that a crew of 20 would be required for pipeline construction. Based on service vehicle use and supply trucks, it is estimated that pipeline construction traffic will involve approximately 40 vehicle trips per day. This increased in vehicular traffic is not considered significant when compared to existing traffic counts for the area roadways (See Table 1). No vehicular traffic generation would be associated with normal operation of the pipeline.

Pipeline construction would have the potential to create substantial traffic congestion associated with lane closures and other construction activities. If lane closures are necessary, these will be conducted during non-peak traffic periods to reduce congestion. A small portion of the proposed pipeline route would be through the alley between Rexford Drive and Alpine Drive north of Lomitas Avenue. These pipelines are also proposed within roadway medians and other low volume residential streets. Traffic congestion will not be expected to reach significant levels in these areas. There is a potential for substantial traffic congestion to occur where the pipeline crosses major roadways including Burton Way, Civic Center Drive and Santa Monica Boulevard. Potential congestion impacts from lane closures along Maple Drive and Lomitas Avenue (and Sunset Boulevard if the alternate pipeline route is chosen) may also occur during construction. It is expected that it will take two days for the pipeline to cross the major roadways and may take three to five days for construction along Maple Drive. Although access along Maple Drive may be temporarily restricted during construction activities, this would not substantially deter traffic movements as several parallel streets can easily serve as alternate routes. Temporary access constraints, however, may be felt by the residents along Maple Drive. Measures will be incorporated into project design to reduce this potential congestion related impacts to less-than-significant levels.

Mitigation Measures

MM VI-1. Prior to construction activities, the contractor shall post the occurrence of roadway construction activities well in advance of

32

construction so that motorists can take alternative routes;

MM VI-2. During construction phases, the contractor shall curtail lane closures to the fullest extent possible during peak hours (7:00 a.m. to 9:00 a.m., and 4:00 p.m. to 6:00 p.m.);

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- *MM VI-3.* Prior to construction activities, the contractor in conjunction with the City Public Works Department shall develop detour routes where possible;
- *MM VI-4.* During construction activities, the contractor shall use flag persons where appropriate; and
- MM VI-5. During construction phases, the contractor shall ensure that the pipeline trenches are covered, and access maintained during non-working hours.

Public Works Facility

Construction of the public works facility will involve a construction crew of approximately 40 on any given day. The construction workers plus 8 truck hauls and other construction related traffic is anticipated to generate up to 96 vehicle trips per day. This impact is not considered significant due to the low number and temporary nature of the construction phase.

Operating personnel at the treatment plant will be minimal (one to two person crew). The traffic that would be generated associated with the other public works offices and facilities would result in no net increase. The personnel occupying the building would consist of existing City staff that would be relocated to the proposed site facilities. Traffic and circulation patterns within the area would change to a minimal degree, as some of the City staff's vehicles would likely occupy the new proposed site. The existing parking structure at City Hall would continue to be utilized by most employees of the proposed facility. The proposed site would not, therefore, contribute to a substantial net increase in the local area. Therefore, traffic generation associated with operation of the facility would not result in a significant impact.

b. The proposed project would not result in hazard to safety from design features. The project would not incorporate hazardous design features that would result in traffic problems. During the construction phase of the project, however, temporary street closures and construction equipment may have the potential to result in minimal hazards to automobile drivers, pedestrians, and bicyclists. Implementation of mitigation measures *MM VI-1* through *MM VI-5* as discussed above would assure that potential impacts would be less-than-significant.

33

c. The proposed project may result in temporary emergency access problems during construction. Pipeline construction has the potential to block emergency access during some stages of construction. During construction of the pipelines, temporary obstacles from construction equipment, street closures, pipeline trenches or construction crews may inhibit access to certain areas. This is a potentially significant impact that could be mitigated to non-significant levels through the following:

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Mitigation Measures

- MM VI-6. During construction phases, the contractor in conjunction with City staff shall inform emergency agencies, such as fire and police, as well as affected business and residents, as to any road closure.
- *MM VI-7.* During construction activities, the contractor shall maintain alternative access for emergency vehicles.
- *MM VI-8.* Same as *MM VI-5*. During construction phases, the contractor shall ensure that the pipeline trenches are covered, and access maintained during non-working hours.
- d. The proposed project may result in insufficient parking capacity on site. Off street parking would be provided at each well site for construction vehicles during the drilling process. Onsite parking would also be provided at the public works facility site during construction of the facility. During operations of the public works facility and treatment plant, parking would be provided in an onsite parking lot. The City has determined that the parking demand for the project would require space for service vehicles as well as employee and public parking.

The available parking area on site following construction of the public works facility would comprise approximately 55,600 square feet to accommodate parking and adequate circulation on-site. The total area required for City service vehicles has been determined to be approximately 46,350 square feet. This would result in a surplus of approximately 9,250 square feet for automobile parking for employees and visitors. It is anticipated that most employees and some visitors would utilize the existing parking structure at City Hall which will help to compensate for this shortfall. Additionally, implementation of the following mitigation measure would reduce potential impacts to less-than-significant levels:

Mitigation Measure

MM VI-9. The City Public Works management shall coordinate a parking program to encourage employees at the proposed facility to park in

the existing City parking structure to compensate for the parking deficiency.

Pipeline construction may result in temporary restriction of parking during the construction phase. Pipeline construction workers may also require additional parking during the construction phase. Several of the following measures could be employed into project design to reduce any impact associated with parking:

Mitigation Measures

- MM VI-10. During the construction phases, the contractor in conjunction with the City shall designate parking areas for construction workers to reduce any potential impact on parking capacity;
- *MM VI-11.* During construction activities, the contractor shall implement parking control within pipeline construction areas (i.e., posting signs in advance, notifying residents individually, identifying alternative parking areas, etc.); and
- *MM VI-12.* During construction phases, the contractor in conjunction with the City shall designate alternative parking areas, if necessary.
- e. The proposed project may result in hazards or barriers to pedestrians and/or bicycles. The well drilling and pipeline construction phase could potentially create impacts associated with hazards or barriers to pedestrians and bicycles. Street closures, trenches, construction equipment and activities all have the potential to affect pedestrian and bicycle circulation in construction areas. Several measures to reduce these potential impacts to less-than-significant levels could be incorporated into the project and include the following:

Mitigation Measures

- *MM VI-13.* During the construction phases, the contractor shall place barriers and other protective equipment to preclude bicyclists and pedestrians from entering the construction areas;
- MM VI-14. During the construction phases, the contractor in conjunction with the City shall identify and post alternative bicycle and pedestrian routes (i.e., detour signs, "sidewalk closed" signs, etc.); and
- *MM VI-15.* During the construction phases, the contractor shall notify the schools in the area of potential hazards along school routes to ensure the safety of students.

56

35

f. The proposed project would not conflict with adopted policies supporting alternative transportation. Alternative modes of transportation routes may be affected during the construction phases of the project. However, no long-term effects would occur and no policies would be undermined as a result of the project. No significant impacts are anticipated.

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g. The proposed project would not impacts to rail, waterborne or air traffic. A railroad right-of-way exists in the median between Santa Monica Boulevard and Civic Center Drive in the vicinity of two of the proposed well sites and the alternate well site. However, the rail line has been abandoned and is not anticipated to be redeveloped in the foreseeable future. Waterborne or air traffic do not exist in the project area and would not be affected. No impacts would occur.

VII. BIOLOGICAL RESOURCES

- a,b,c. The proposed project would not result in impacts to endangered, threatened, or rare species or their habitats; locally designated species; or locally designated natural communities. The proposed project is located within a highly urban area of the City and the Los Angeles area. No special-status species or habitats are present in the vicinity of the proposed project. Furthermore, no direct alterations to any wildlife habitat would occur as a result of the project. Therefore, no impacts are anticipated.
- d,e. The proposed project would not result in impacts to wetland habitat or wildlife migration corridors. The proposed project is located within a highly urban area of the City and the Los Angeles area. No wetland habitats or migratory corridors are present in the vicinity of the proposed project. Therefore, no impacts are anticipated.

VIII. ENERGY AND MINERAL RESOURCES

a,b. The proposed project would not conflict with adopted energy conservation plans or use non-renewable resources in a wasteful and inefficient manner. The two feed pumps for the water treatment facility will be run by a 75 horsepower (hp) motor, and each well will be equipped with a 50 hp electric motor to pump the water from the ground to the treatment plant. The proposed project is anticipated to require 500 Kilowatts (Kw) of electricity (Everest pers comm), and consume approximately 10,458 Kwhrs of electricity per day (Synectecology 1998 [Appendix A]). However, exact requirements and connections cannot be determined until the final design phase has been completed and submitted to Southern California Edison for review. Additionally, the design of the public works facility will incorporate energy-efficient lighting, thermal insulation, and other energy conservation measures to reduce energy consumption. It is expected that energy requirements for the proposed project could

Attachment 2, Page 43 of 722

36

be supplied to the well sites and the treatment plant without resulting in significant impacts. Therefore, no significant impacts are anticipated.

c. The proposed project would not result in the loss of availability of a known mineral resource that would be of future value to the region and residents of the State. No known mineral resources are expected to exist within the project vicinity. Therefore, no impacts are anticipated.

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IX. HAZARDS

a. The proposed project may have the potential to involve a risk of release of hazardous substances. The proposed well drilling and testing program would involve the use of fuels, lubricating fluids and similar materials associated with construction. There is a potential that this material could be accidentally released during this phase of the project resulting in impacts. The well testing program will also involve treating the pumped water with sodium hypochlorite (liquid bleach) prior to discharge to the storm drain. This chemical is considered hazardous and its release without clean-up would be considered a significant impact. Mitigation measures have been incorporated into the project design to reduce potential impacts to less-than-significant levels and include the following:

Mitigation Measures

MM IX-1. Prior to construction and issuance of building permits, the designbuild contractor shall develop and have approved a pollution prevention and control plan. This plan shall outline methods for storage and use of hazardous materials to reduce the potential as well as the consequences of any accidental spill. The plan shall also provide procedures for cleanup of any potential release. This plan shall include placement of clean up materials and procedures for minor spills, as well as outlining a series of procedures for notification of neighbors and agencies and clean-up of any spills.

Construction of the proposed water pipeline and treatment plant may also involve the potential for accidental spills of fuels, lubricating oils and hydraulic fluids during the construction process. While this may constitute a significant impact, the development and implementation of the pollution prevention and control plan in *MM IX-1* will reduce potential impacts to less-than-significant levels.

During operations of the facility, the proposed water treatment facility will also use a variety of chemicals for the treatment of the groundwater to drinking water standards. Materials that will be used and stored on site will include concentrated

sulfuric acid, aqueous ammonia or caustic soda, hypochlorite, scale inhibitors and other proprietary chemicals. Hypochlorite, ammonia, caustic soda and sulfuric acid will be stored in bulk storage tanks at the facility. Scale inhibitors and other chemicals will be stored in 55 gallon drums in a chemical storage room. All areas storing chemicals will be constructed with containment structures to contain a full tank of any material should the tanks rupture.

A spill of material may result in potentially significant impacts due to the hazardous and toxic nature of the chemicals involved. However, the project design will assure that any spills will be contained on site. Additionally, any potential for hazardous vapor clouds will be very remote since containment structures will be separate for each type of chemical. Furthermore, a pollution prevention and control plan will be developed to govern clean up of small and major spills as well as procedures for agency and neighbor notifications. These procedures as well as the relative remoteness of the site from residential areas or other sensitive receptors will reduce potential impacts to less-than-significant levels.

- c. The proposed project may result in the creation of health hazards or potential health hazards. As discussed above, the project would involve the use and storage of hazardous and toxic materials that could create a potential health hazard. The method of storage, the relative remote location of the proposed treatment plant site from residential units and the use of pollution prevention and control procedures will reduce these potential impacts to less-than-significant levels.
- d. The proposed project is not expected to expose people to existing sources of potential health hazards. Several underground storage tanks and hazardous waste sites exist in proximity to the proposed public works facility site and should be considered as potential sources of nearby health hazards.

The Industrial Area contains several problematic underground storage tank sites. The closest sources occurring in the City Yard at 331 N. Foothill Road (two 285-gallon tanks containing motor oil, one 285-gallon tank containing hydraulic oil, one 285-gallon tank containing automatic transmission fluid, one 500-gallon waste oil tank, one 5,000-gallon gasoline tank, and one 10,000-gallon gasoline tank), which is directly south of the site (Industrial Area Plan Draft EIR 1990). Historically, soil and groundwater contamination has occurred at this site. Remediation activities are currently under way and have been ongoing for approximately 6 months. It is expected that the clean up process will take approximately 1 year to complete. All contamination would be cleaned up according to acceptable standards. There is also one 285-gallon tank containing waste oil at 342 N. Foothill Road, which is across the street from the proposed site (Industrial Area Plan Draft EIR 1990). No anticipated problems are associated with this site.

59

Several hazardous waste sites also exist in the vicinity of the project. The most notable site containing hazardous waste that is listed by the Department of Health Services, Water Resources Control Board, and the California Waste Management Board include the Beverly Hills Fire Department, located at 445 North Rexford Drive, which is a few blocks east of the site (Industrial Area Plan Draft EIR 1990). Due to the locations of this site and the distance from the project areas, it is not anticipated that localized impacts would occur. However, there is a potential for contaminated groundwater beneath these sites to move beneath adjacent sites (Industrial Area Plan Draft EIR 1990). The proposed project does not include groundwater exploration at adjacent sites to the contaminated areas and thus no significant impact are anticipated.

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In June of 1989, a review by Lindmark Engineering noted that the Southern California Gas Company, located at 400 N. Foothill Road (north and across the street from the site), was also of concern listed as a hazardous waste site (City of Beverly Hills Industrial Area Plan Draft EIR, 1990). However, all necessary site closure reports have been filed and no further impacts are anticipated (Sakurai, pers com).

Because grading activities for the proposed public works facility adjacent to the site at 331 N. Foothill Road would be minimal and current remediation efforts are taking place, the proposed project is not expected to expose persons to existing significant health hazards. This would be considered to be a less-than-significant impact.

e. The proposed project would not result in increased fire hazard in areas with flammable brush, grass or trees. The proposed project area is located within an urbanized area without significant areas of flammable brush, grass or trees. No fire related impacts are anticipated.

X. NOISE

A detailed Noise Analysis report is presented in Appendix B. A summary of the analysis is presented below.

a,b. The proposed project would result in a minimal increase in existing noise levels. Applicable noise criteria are presented in the City of Beverly Hills Noise Element (1975) and methods to enforce these criteria are presented in the City of Beverly Hills Noise Ordinance (1988). As stated in the Noise Element, "Actual standards have not been developed regarding noise in Beverly Hills. However, the City Ordinances on noise imply policies and standards: That the ambient noise levels within Beverly Hills should not be increased by additional specific noise sources. Policies within the Noise Ordinance which specifically relate to the project include Sec.5-1.202, "Machinery, equipment, fans, and air-conditioning," which restricts noise from

exceeding an increase of 5 dBA at any property line, and Sec 5-1.2, "restriction on construction activity," which restricts construction to between the hours of 8:00 a.m. and 6:00 p.m. and disallows construction of Sundays, legal holidays, and Saturdays within 500 feet of residential areas.

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Existing noise levels near the existing and proposed wells, pipelines, and treatment facility are those typical of urban development. Noise sources derive almost exclusively from vehicular traffic. However, other sources of noise can also contribute to ambient noise in an area. For example, at the time of the first field study, Burton Way (along which the existing and one proposed well are located) was undergoing reconstruction and heavy equipment noise added to the ambient noise profile. Additionally, at the City equipment yard (the site of the proposed treatment facility) the dog barking from the adjoining small animal hospital was evident.

To determine ambient noise at the various well sites, at the public works facility site, and at proximate receptor locations, field studies were performed on May 22, 1997 and January 21, 1998. Six noise level measurements were obtained during the first study and an additional five were obtained during the second to characterize the existing noise in the vicinity of the project components. These noise measurements are shown in Table B-1 of Appendix B.

Because it would not be possible to obtain noise level measurements along the entirety of the pipeline route, these areas are inferred from the data included in the City's General Plan Noise Element. Noise along the routes to be situated within the right-of-way along both Burton and Santa Monica would be projected to be similar to the measurements obtained along these routes. Areas along Sunset Boulevard (the alternate product water pipeline route) would be similar to those along Santa Monica Boulevard. Areas with less traffic, such as along Maple are presented in the Noise Element as being between 60 and 69 dBA during the day decreasing to below 60 dBA during the night. Less traveled areas, such as Lomitas Avenue and within the alley between Rexford Drive and Alpine Drive are less influenced by traffic and these areas are estimated at less than 60 dBA throughout the day.

Based on the City of Beverly Hills' adopted noise criteria in the General Plan, impacts are considered to be significant if operational noise adds 5 dBA at the property line as per Sec. 5-1.202. Construction noise would be significant if construction were not performed in accordance with Sec. 5-1.2. Detailed calculations and estimated noise generation methodologies are discussed in Appendix B.

Construction Impacts

Construction noise represents a short-term impact on ambient noise levels, as noise levels produced by construction activities can reach relatively high levels. The

40

projected noise associated with construction at varying distances from the construction effort is presented in Table B-2 in Appendix B.

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Well Installation

Well installation is most proximate to sensitive land uses along Burton Way, at Civic Center Drive and within Beverly Gardens Park where drilling equipment could be located at a distance of approximately 100 feet to nearby residents and the projected noise level from construction equipment could be on the order of 70 dBA. In all cases, this value would be additive with traffic noise and the resultant noise levels could be between 71 and 72 dBA. While noise from construction would be notable, it is well below any level deemed as hazardous to hearing acuity. Thus, while the impact may be adverse, construction would be performed within the guidelines set forth in Sec 5.1-2 of the local Noise Ordinance, thereby resulting in less-thansignificant impacts.

Noise impacts may occur during nighttime hours as well on a few occasions during well testing, which would last for a 24 hour period. This would result in greater impacts than daytime construction impacts due to less traffic, and thus less ambient noise levels. However, implementation of noise curtains and shrouding of motorized equipment during construction and well testing activities (after the designated hours as specified by the City's noise ordinance), would substantially reduce these impacts to less-than-significant levels.

Pipeline Installation

Pipelines would be located more proximate to local residents than wells because they would be placed in existing easements (streets and alleys) and do not have the extra buffer zone provided by the parkways and extended distance associated with the well placement.

Pipelines placed along Burton Way could come to within about 50 feet of local residents and the noise projected at these residential locations would be on the order of 76 dBA L_{eq} . Local traffic could raise this value by about 1 dBA to about 77 dBA L_{eq} . While the noise from construction could be notable, it is well below any level deemed hazardous to hearing acuity. Construction activities would be performed within the guidelines set forth in Sec 5.1-202 of the local Noise Ordinance, which would reduce potential impacts to less-than-significant levels.

Pipeline routes along Santa Monica Boulevard, as well as the alternative route along Sunset Boulevard, are situated further from residential receptors and the resultant noise from this construction would be on the order of 70 dBA. Because traffic along this route is greater, the construction effort would add a lesser volume to the total noise profile, and again would produce an adverse, but not significant impact.

Construction of the pipelines to the north of Santa Monica Boulevard, along Maple Drive and Lomitas Avenue and specifically within the alleys would take equipment more proximate to receptor locations. While local streets are approximately 48 feetwide, the alley between Alpine Drive and Rexford Drive is approximately 25 feetwide. In some cases, zero lot lines are evident, but most residences are located closer to the streets opposite the alley. Accessory structures and tennis courts mostly line the alley. While most of these lots also have walls or fencing, some of the habitable structures have second-story rooms immediately overlooking the alley. In these cases, construction equipment could be located as little as 10 feet from the habitable structures and the projected noise level at the dwelling could be as much as 90 dBA. Structural attenuation provided by the dwelling, with windows closed, is in excess of 20 dBA and a resultant interior noise level of as much as 70 dBA could result. Again, while this level is certainly adverse, the exposure is below any safety-related concerns, is only of a temporary duration, and by City standards, not significant.

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Public Works Facility Construction

The installation of the public works facility is projected to use a larger assemblage of equipment than either the wells or pipeline, and noise levels would be expected to be greater. Here, a value of 80 dBA as measured at a distance of 50 feet is deemed as a reasonable projection for construction noise. The 65 dBA noise level (typically accepted as a desirable exterior noise level), would occur at a distance of approximately 280 feet. The public works facility is not located near any sensitive land uses and when construction is conducted in accordance with City policy, it would not result in a significant impact.

Construction of pipelines and potentially well construction could create nuisance impacts to local residents and should be reduced to the extent feasible. While by City standards no significant adverse impacts would occur, there may be the potential for temporary adverse impacts to occur during construction activities. Thus, the incorporation of the following mitigation measures would further reduce noise impacts.

Mitigation Measures

- MM X-1. During construction phases, the contractor shall ensure that all construction be performed in accordance with Sec. 5-1.202 of the City of Beverly Hills Noise Ordinance.
- MM X-2. During construction phases, the contractor should strive to use the quietest equipment available. All internal combustion powered equipment should be equipped with properly operating mufflers and kept in a proper state of tune to alleviate back-fires. For that equipment installing pipelines north of Santa Monica Boulevard,

42

engines are recommended to be fitted with protective shrouds to reduce motor noise.

- *MM X-3.* During construction activities, portable equipment should be located as far as practicable from the adjacent residents.
- *MM X-4.* During construction phases, equipment should be stored and maintained as far as practicable from the adjacent residents.
- *MM X-5.* During construction activities, noise curtains should be used for construction and testing of wells, and all pipeline construction north of Santa Monica Boulevard.
- *MM X-6.* Prior to construction activities, the contractor, in conjunction with the City, should implement a public awareness program to alert the public of the upcoming construction disturbance.
- *MM X-7.* The City should identify a disturbance coordinator that would be responsible for responding to noise complaints.

Operational Impacts

Noise impacts for project operations are subject to Sec. 5-1.202 of the Noise Ordinance as noted above. To determine if an impact is probable it is necessary to ascertain the noise from similar equipment. Operational impacts were extrapolated from a noise survey that was conducted on June 3, 1997, at the City of Arcadia groundwater extraction well and pumping facility located a 141 East Camino Real within the City of Arcadia. The proposed project utilizes 50 horsepower well pumps and the entire assembly is located within an underground vault. Noise from the pump is expected to be on the order of 40 dBA at a distance of 10 feet. The proposed project's pumps would be entirely underground and their noise could be even less this value.

Well Facilities

The noise from the proposed wells is projected at less than 40 dBA at a distance of 10 feet. Noise from the pumps would not be discernable beyond the parkways in which they are placed and would not add 5 dBA to the ambient noise at the property line. No noise impacts, either adverse or significant, are anticipated from their operation.

64

Pipelines

No mechanical equipment is directly associated with pipeline operation. Furthermore, the pipelines are entirely underground and produce no noise. Therefore, no noise impacts, with adverse or significant, are anticipated from their operation.

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Public Works Facility

In the treatment of water, chemical injection and reverse osmosis procedures do not contribute measurably to plant noise and the noise from the operation of the treatment plant primarily associated with the operation of its pumps. The facility is to be enclosed and the resultant exterior noise is not expected to exceed that measured at the City of Arcadia pumping station (51.5 dBA at a distance of 75 feet). This level is less than that measured in the field survey at the plant site (54.2 dBA) and the resultant noise is calculated at 56.1 dBA. Furthermore, extensive acoustical treatment, including vibration isolation will be implemented for the facility. Therefore, the treatment plant will not add 5 dBA to the ambient noise and does not present a significant impact.

The treatment plant will however operate 24 hours per day. During the night ambient noise could decrease by as much as 10 dBA over those levels measured in the field and a resultant noise level of about 45 dBA could be expected. At a distance of about 150 feet to the street, the noise from the plant would attenuate by 6 dBA and the resultant level would be approximately 45.5 dBA. When added to the projected ambient noise level of 45 dBA, the resultant noise level is calculated at about 48.3 dBA for an increase of about 3.3 dBA. This value is less than the 5 dBA criterion and does not present a significant impact. Any impact would then occur at the small animal hospital located immediately to the north. This facility is not operated during the night and with no receptors, the impact would not be considered significant.

Based on the above criteria, no significant operational noise impacts are projected and no mitigation is warranted.

XI. PUBLIC SERVICES

a. The proposed project would not have an effect upon, or result in a need for new or altered fire protection services. Fire protection and emergency medical services are provided by the City of Beverly Hills Fire Department. The Headquarters Fire Station, which is located at 445 North Rexford Drive approximately .25 miles west of the public works facility site, would be the first responding station in the event of an emergency (Industrial Area Plan 1990). The scope of the proposed project is not expected to result in inadequate services associated with the proposed facilities. The project does not contribute to increased exposure to fire hazards and all construction

would comply with applicable regulations provided in Uniform Fire Code, the California Health and Safety Code and applicable City ordinances which pertain to Fire Protection Systems and Exiting. The City Fire Department would have the opportunity to provide comments on the project design. Any recommendations would be incorporated into project design to maintain fire protection safety.

Emergency access in the project area is currently adequate and would not be affected by the operations of the project. As discussed under Section VI.-"Transportation", emergency access would be maintained in the area during the construction phases of the project. The proposed project is expected to be adequately served by the existing service capabilities of the City of Beverly Hills Fire. No impacts are anticipated.

- b. The proposed project would not have an effect upon, or result in a need for new or altered police protection services. The scope of the proposed project is not expected to result in inadequate services associated with the proposed facilities. Police services is provided by the Beverly Hills Police Department, which is headquartered on North Rexford Drive in the Civic Center. Slightly higher demands may be generated by the proposed project due to the increase in people employed in the area. However, the public works facility is not expected to attract a substantial amount of visitors to the site. Traffic and pedestrian movements in the area would not substantially increase as a result of the project. The Police Department will have the opportunity to provide comments on the project. Any recommendations would be incorporated into the project design to maintain safety and adequate law enforcement activity.
- c. The proposed project would not have an effect upon or result in the need for new or altered school facilities. The proposed project would not increase population in the area or affect existing school facilities. Therefore, no impacts are anticipated.
- d. The proposed project would have an effect upon, or result in a need for new or altered services associated with the maintenance of public facilities. The proposed project consists of the addition of new water supply and office facilities and thus would likely require periodic maintenance and/or repairs of well head facilities, pipelines, the treatment facility, and other maintenance activities necessary that would be associated with the proposed office building. While these maintenance requirements may be long-term, they are not anticipated to be substantial. The City has considered these potential costs in the planning of the proposed facilities and does not consider this to result in a significant impact.
- e. The project would have a minimal effect upon, or result in a need for new or altered government services associated with the operation of the proposed facilities. The City plans to utilize the design-build-operate-finance model for the treatment facility. Thus, a private entity will develop and operate the facility for a period of time (with

66

the intent of recovering its investment) prior to turning it back over to the City. The operation of the system is not expected to result in substantial alterations to the existing government structure. Minimal employment requirements are anticipated to operate the facility (approximately 4 additional personnel). The remaining personnel demand would be accommodated by the existing Public Works Department employees. Therefore, this would not be considered to result in a significant impact.

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XII. UTILITIES AND SERVICE SYSTEMS

a. The proposed project would not result in a need for new systems or supplies, or substantial alterations to existing power or natural gas systems. Southern California Edison Company (SCE) currently provides electrical service to the project area and the Southern California Gas Company (SCGC) provides natural gas to the project area.

A combination of aerial and underground electrical transmission lines exists in the vicinity of the project area. A 16 Kilo-volt (Kv) over head transmission circuit runs along Foothill Road from Third Street beyond Alden Drive near the public works facility site (Industrial Area Plan Draft EIR 1990). Additionally, underground transmission lines exist in Civic Center Drive, Foothill Road, and other roads throughout the project area. Most of these underground lines are 16 KV, with fewer 4 KV and 1 KV lines (Industrial Area Plan Draft EIR 1990). The SCE substation located on Third Street just south of the public works facility site is one of the largest in the Los Angeles basin. It should be noted that Edison is currently in the process of under-grounding the overhead lines within the Industrial Area (Sakurai, pers com). SCE is expected to be able to adequately provide electricity for the proposed project.

Natural gas facilities also exist in the project area. SCGC operates 2-inch mains on Burton Way and sections of Civic Center Drive; 3-inch mains run under sections of Beverly Boulevard, Foothill Drive and Civic Center Drive; and 4-inch mains are located along sections of Civic Center Drive and Third Street in the project area. It is expected that the proposed project can be adequately service without significant impacts on service to existing customers.

The proposed public works facility and well sites would require connection to existing electrical facilities in the area. Electrical pedestals (18" square, 4' high) will be installed above ground at the wellhead facilities, which will contain the electric meter and main disconnect switch to allow meter to be read without entering the vault, and provide means for disconnecting the electrical equipment from the utility supply. Additionally, natural gas would be required for domestic purposes to serve the public works facility.

46

The two feed pumps for the water treatment facility will be run by a 75 horsepower (hp) motor, and each well will be equipped with a 50 hp electric motor to pump the water from the ground to the treatment plant. The proposed project is anticipated to require 500 Kilowatts (Kw) of electricity (Everest pers comm), and consume approximately 10,458 Kwhrs of electricity per day (Synectecology 1998). However, exact requirements and connections cannot be determined until the final design phase has been completed and submitted to Southern California Edison for review. It is expected that electrical and natural gas requirements for the proposed project could be supplied to the project facilities without resulting in significant impacts. No significant impacts are anticipated.

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Construction of the proposed project components may have the potential to impact existing electrical and natural gas facilities. Trenching, excavation, grading, and other construction-related activities may interfere with the buried and overhead facilities. Although significant impacts are not expected, the following mitigation measures would ensure that impacts are substantially reduced:

Mitigation Measures

- *MM XII-1.* Prior to construction activities, the contractor shall coordinate with SCE and SCGC to avoid interference with existing electrical and natural gas facilities.
- MM XII-2. During construction phases, if natural gas or electricity to other nearby areas needs to be interrupted, the contractor shall inform affected property owners/operators well in advance of interruption. These activities should be conducted during non-business hours to avoid conflict with other users.
- b. The proposed project would not result in a need for new systems or supplies, or substantial alterations to existing communication systems in the area. Telephone services in the area are provided by Pacific Telephone and AT&T, and cable television service is provided by Century Cable TV (Industrial Area Plan Draft EIR 1990). Both companies currently have aerial and underground lines in the project area. Both overhead and underground telephone trunk lines and cable television lines extend along Foothill Road near the public works facility site. Telemetry and control equipment will be installed in the wellhead vault facilities, which will interface with the treatment plant via direct communication line in the collector pipeline trench. Existing communications and telephone systems are expected to be adequate to serve the proposed facilities. Because these facilities exist in the project area, connection to the systems should be a minor effort.

June 23, 1998 97-128

47

The construction of the project may affect existing communication facilities due to trenching in streets to accommodate the pipelines. While no adverse impacts are anticipated, the following mitigation measures would help to ensure that no existing facilities are impacted:

Mitigation Measure

MM XII-3. Prior to construction activities, the contractor shall coordinate with Pacific Telephone and Century Cable to minimize the potential for interference with these services.

- c. The proposed project would not result in a need for new systems or supplies, or substantial alterations to existing water treatment or distribution facilities in the area. The project includes the provision of new water supply and treatment facilities consisting of wells, pipeline facilities, and a water treatment plant. No major alterations to existing distribution facilities are expected. However, the product water following treatment would be blended with Metropolitan water at the City supply connection prior to distribution throughout the service area. Minor alterations would occur at the City connection site to construct the product water pipeline to connect with the rest of the Metropolitan water supply. This would ultimately result in the project objectives to supplement 20 percent of the City's water supply with groundwater, thus utilizing less Metropolitan water and reducing peaking charges. This would result in a beneficial impact.
- The proposed project would not result in a need for new systems or supplies, or d. substantial alterations to existing sewer facilities in the area. The City's sanitary sewer system is operated by the Beverly Hills Public Services Department. Existing sewer lines in the project vicinity include eight-inch concrete pipes along Burton Way, Foothill Road, Third Street, Civic Center Drive, Beverly Boulevard, Alden Drive, and Maple Drive (Industrial Area Plan Draft EIR 1990). Additionally, teninch concrete pipes exist along various sections of Maple Drive Third Street, Burton Way and Alden Drive (Industrial Area Plan Draft EIR 1990). The majority of these lines have been around since the mid-1930's and may sewer lines in the area are exhibiting signs of deterioration (Industrial Area Plan Draft EIR 1990). The proposed water treatment facility would be required to connect to the local sewer system for provisions for domestic use. An 8-inch sewer line is currently located along Foothill Road adjacent to the treatment plant site, which feeds into a 10-inch line at the next block. Although these lines have adequate capacity to accommodate sewage flows, the deteriorated conditions may render them inadequate to handle increased flow (Industrial Area Plan Draft EIR 1990). However, Ken Gettler (pers comm) indicated that the existing system has plenty of capacity to service domestic usage from the public works facility without impacts. No significant impacts are anticipated. Implementation of the following mitigation measures will further reduce

impacts:

Mitigation Measures

- *MM XII-4.* If economically feasible, the City shall replace existing deteriorated concrete pipe sewer lines with like-sized vitrified clay pipe for sewer lines serving the project site.
- *MM XII-5.* The design-builder shall implement the use of water conservation measures to reduce the amount of wastewater flow generated by the project. These may include, but are not limited to the following:
 - Use of ultra-low volume toilets (1.5 gallons per flush);
 - Use of low-flow faucet fixtures; and
 - Use of self-canceling faucet handles.

The brine from the water treatment plant will not be discharged into the sewer system, but rather the storm drainage system. A discussion of storm drainage is discussed below. No significant impacts are anticipated.

e. The proposed project would not result in a need for new systems or supplies, or substantial alterations to existing storm water drainage systems in the area. The project area is served by a combination of street flow and underground reinforced concrete pipe storm drains that date back to the 1960s (Industrial Area Plan Draft EIR 1990). Existing storm drains are along Beverly Boulevard, Maple Drive and Foothill Road in the project vicinity. The storm drains under Foothill Road are 18 and 27 inches in diameter. No localized flooding problems are known to exist near the proposed public works facility site. Existing runoff is easily accommodated within the existing storm drainage system (Industrial Area Plan Draft EIR 1990).

The proposed project would not contribute to increased permeability to result in increased surface runoff as the existing condition of the public works facility site is paved concrete. The proposed project would involve construction of a short concentrate disposal line of 8-inch diameter pipe along Foothill Road connecting the treatment plant discharge to the 27-inch Los Angeles County Flood Control District (LACFCD) storm drain at Third Street. Substantial alterations to the storm drain are not anticipated. This disposal method was determined as the least costly and to have the least impact on the environment during previous studies. Storm water near the treatment plant area would drain in a southwesterly direction to the Benedict Canyon Channel and then to the Ballona Creek ending in Playa Del Rey (City of Beverly Hills Municipal Water Supply and Groundwater Study, Preliminary Design Report [PDR] 1993).

June 23, 1998 97-128

70

In early 1994, Los Angeles Regional Water Quality Control Board (LARWQCB) was contacted for guidance about the feasibility of concentrate discharge to the storm drain. The chief of the coastal water section at that time, responded that additional water quality data was required for the potential discharge water and a permit application must be filed before they can issue a statement of acceptability. After completion of the pilot testing and water quality sampling, Boyle Engineering contacted the LARWQCB and submitted water quality data for their review. Dennis Dasker, the staff member responsible for the permit for the City, responded that the water quality of the concentrate meets the general discharge requirements. The staff also indicated that they have no reasons to disapprove the discharge, and recommended that the City file a formal application as soon as the project is in the design phase (City of Beverly Hills Groundwater Development Program, Pilot Testing Report 1996). The proposed project will require approval of an NPDES permit. A temporary construction NPDES permit will be required from the LARWQCB, and a connection permit from LACFCD is also required to discharge water to its storm drain system. Implementation of MM IV-1 through MM IV-3 would reduce any potential impacts to less-than-significant levels.

f. The proposed project would not result in a need for new systems or supplies, or substantial alterations to existing solid waste disposal services in the area. Solid and liquid wastes would be generated from the site during construction and operation of the project.

During the construction phases of the project, solid waste in the form of solid- drill cuttings and debris would be removed by the contractors to an appropriate off-site disposal (landfill). Liquid waste includes muddy water and clean water during development of the well. Approximately 4,000 gallons of muddy water is estimated to be generated from construction and testing of the wells, and would be hauled away by the contractor to an appropriate disposal site. Clean water will be pumped and discharged to a nearby storm drain. A temporary construction NPDES permit will be required from the California LARWQCB, as well as a connection permit from LACFCD to discharge water to its storm drain system. No significant adverse impacts are anticipated.

During operations of the proposed project, a minimal amount of domestic refuse is expected to be generated from the public works facility. It is anticipated that this service can be provided by the existing solid waste disposal services throughout the City. No impact is anticipated.

The operation of the treatment plant would remove iron and manganese from the groundwater. The air stripping process would produce a residual sludge that would be disposed of in land fills. These materials would undergo the proper handling and disposal protocol. The sludge would not be handled by the domestic refuse services.

50

Additional trucks, approximately one per week, would visit the site to collect and dispose of the sludge in nearby landfills. No significant impacts would result.

g. The proposed project would not result in a need for new systems or supplies, or substantial alterations to existing local or regional water supplies. The project includes the provision of a new supplemental water supply consisting of wells, pipeline facilities, and a water treatment plant.

7-8

Minor alterations to existing local and regional water supplies would occur as the project decreases the amount of water dependent from Metropolitan by approximately 20 percent and supplements the supply with groundwater. Both the City and Metropolitan view this proposed project as beneficial as it creates a more reliable water supply for the service area, and it will reduce peaking charges to create an economic benefit for the City. The project will also be considered in Metropolitan's Groundwater recovery program, which maintains a financial incentive program that assists member agencies in the development of alternative water sources by providing a maximum of \$250 per acre-foot of newly developed water. The product water, following treatment, would be blended with Metropolitan water at the City supply connection prior to distribution throughout the service area. The creation of a supplemental water supply system would create a more reliable water supply, and result in beneficial impacts.

XIII. AESTHETICS

- a. The construction of the proposed wells along Santa Monica Boulevard could result in a temporary impact on a scenic highway. The City of Beverly Hills designates Santa Monica Boulevard as a Scenic Highway in the City's General Plan. Temporary aesthetic impacts may occur during construction of the project components as construction equipment, vehicles, blockades, and construction debris may be visible from drivers and pedestrians along Santa Monica Boulevard. Following construction, all areas would be landscaped and surface features would be minimal and unobtrusive. Currently there are no general plan policies in regards to this scenic highway. No significant impacts are anticipated.
- b. The proposed project would not result in a demonstrable negative aesthetic impact. Figure 4 illustrates the existing and proposed well sites; Figure 5 shows the proposed public works facility site and the proposed pipeline routes along Maple Drive and the alley between Alpine Drive and Rexford Drive; and Figure 6 illustrates the alternate well site location and the alternate pipeline routes.

The existing well and one of the proposed well sites (shown in Figure 4, [a] and [b]) are located within the Burton Way median. This area is currently characterized by
its grassy landscape with sparsely populated trees. High density multi-family residential uses line the north side of Burton Way, and high density single-family residential uses are located along the south side of the street in the well locations. A relatively high volume of traffic can be observed along this street with two lanes of traffic in each direction.

One of the other well sites is located in the Civic Center Drive right-of-way just east of its intersection with Beverly Boulevard (shown in Figure 4, [c]). Civic Center Drive at this point has been blocked-off as a dead end street at Beverly Boulevard. High-density multi-family residential property is located adjacent to the southeast of the site. The north of Civic Center Drive along this two lane street exists a virtually bare strip of land containing trees and shrubs lining the south side for its length between Beverly Boulevard and Doheny Drive. This railroad ROW has been abandoned, but remnants of railroad tracks can be found as evidence of its existence.

Beyond the railroad ROW to the north is Santa Monica Boulevard. With two lanes in each direction, it is one of the major thoroughfares through the City. Its intersection with Beverly Boulevard in the immediate area is rather busy. Across Santa Monica Boulevard is Beverly Gardens Park. This unique stretch of open space contains lush landscaping and creates a visually appealing resources for nearly the width of the City from Doheny Drive to Wilshire Boulevard. A pedestrian trail extends the length of the Park and is highly utilized by residents, visitors, and transients in the area. Beverly Gardens Park, while serving as an important recreational resource also provides a valuable passive open space setting along Santa Monica Boulevard. An approximately $6^{1}/_{2}$ -foot block wall lines the northern boundary of the Park separating it from the medium-density single-family residential properties that lie beyond.

The fourth well site would be located in Doheny Park (shown in Figure 4, [d]). This Park sits as an island parcel surrounded on all sides by streets (Carmelita Avenue, Santa Monica Boulevard, Doheny Drive, and Oakhurst Drive). Low-density multifamily residential uses lie to the north of this site and medium-density single-family residential areas lie to the west and northwest. Commercial properties can be found to the south and east, and Beverly Gardens Park extends westbound along Santa Monica Boulevard from this parcel. This location sits amidst the rather busy intersection as a rather highly developed commercial area of West Hollywood extends to the east from this site. This site also contains lush landscaping, with plenty of open grassy areas. A distinctive fountain sits roughly in the middle of this Park, visible from all sides. Several people were observed enjoying the Park during reconnaissance surveys.

Well water pipelines would be located roughly in the areas as described above leading to the public works facility site (shown in Figure 5, [c]) in the Industrial Area

73



A) EXISTING WELL SITE IN BURTON WAY MEDIAN WEST OF FOOTHILL ROAD.



B) PROPOSED WELL SITE IN BURTON WAY MEDIAN JUST WEST OF OAKHURST DRIVE.



C) PROPOSED WELL SITE IN CIVIC CENTER DRIVE RIGHT-OF-WAY JUST EAST OF BEVERLY BOULEVARD.



D) PROPOSED WELL SITE IN DOHENY PARK.





A) PROPOSED PRODUCT WATER PIPELINE ROUTE ALONG MAPLE AVENUE.



B) PROPOSED PRODUCT WATER PIPELINE ROUTE IN ALLEY NORTH OF LOMITAS AVENUE BETWEEN REXFORD DRIVE AND ALPINE DRIVE.



C) PROPOSED TREATMENT PLANT/OFFICE BUILDING SITE.





A) ALTERNATE WELL SITE IN BEVERLY GARDENS PARK.

C) ALTERNATE PRODUCT WATER PIPELINE ROUTE ALONG SUNSET BOULEVARD.



B) ALTERNATE WELL WATER PIPELINE ROUTE THROUGH BEVERLY GARDENS PARK.



of the City. This area is physically distinct district in the City which incorporates a diversity of public and private uses, emphasizing those which support the community. The area is dominated by commercial, industrial and municipal land uses and are aesthetically typical of an urban setting (Industrial Area Plan Draft EIR 1990). An industrial architectural character exists in the area, which is slowly being transitioned to incorporate a higher level of architectural quality. Building heights in the area vary from one to six stories and street trees in the area are abundant and well maintained. The public works facility site is currently vacant and improved with an asphalt parking lot for City vehicles. Multi-story office structures can be seen across the site to the west, in which the occupants have high visibility onto the project site. Adjacent to the north is the veterinary hospital, to the south is the existing City Yard, and the existing Public Works offices are located east across Foothill Road.

The product water pipeline would roughly follow some of the areas described above until it crosses Santa Monica Boulevard. This pipeline would extend northbound along Maple Drive for several blocks through the medium-density multi-family residential area (shown in Figure 5, [a]). The pipeline would then turn west along Lomitas Avenue, and then northbound again through the alley between Rexford Drive and Alpine Drive up to the Metropolitan connection with the City water supply. This residential area is characteristic of unique custom homes and an abundance of street trees that line the entire block. Lush front-yard landscaping in combination with the street trees provides a highly pleasant environment throughout the residential districts.

The short segment of the pipeline proposed within the alley has less visual quality than the tree-lined streets (shown in Figure 5, [b]). The alleys abut the rear end of residential properties in the area and are mostly utilized for utilities, public services such as refuse storage and pick-up, and vehicular and pedestrian access. Some residential structures back up to the rear property line, while others have large rear yards as buffers from the alleys.

The alternate well site could be located within Beverly Gardens Park. A description of the general aesthetic environment for the Park is provided above. Figure 6, [a] shows the location of the alternate well site. Additionally, the alternate groundwater pipeline would extend through Beverly Gardens Park for the length between the proposed site at Doheny Drive and this alternate site. This area is illustrated in Figure 6, [b]. The alternate product water pipeline route could extend west along Sunset Boulevard from Maple Drive, rather than turning west at Lomitas Avenue. Sunset Boulevard is a rather busy four-lane road with wide grassy medians similar to Burton Way (shown in Figure 6, [c]). Most of the residential properties along Sunset Boulevard in this area have large fences and walls to reduce noise from the high traffic volumes.

Construction activities at the well locations, along the pipeline routes, and at the public works facility site would result in temporary aesthetic impacts. These short-term aesthetic impacts may affect nearby residents and by-passers during construction for a period of approximately three months. The most significant of these locations would be the proposed well site in Beverly Gardens Park at the Doheny site and the potential alternate site in Beverly Gardens Park. These park areas are some of the most valuable and most visible aesthetic resources in the area and construction activity would affect the value of these areas temporarily. During construction, 20-foot-high noise reduction enclosures will be placed around the well sites (approximately 60' x 100' area) that will also help to alleviate the potential adverse aesthetic impacts from construction activities. These enclosures will preclude views of the construction equipment and debris from well head development activities. These short-term aesthetic impacts are considered to be less-than-significant due to the temporary nature and the provisions for screening the construction sites further reduce potential impacts.

The development of the public works facility site would be considered to result in fewer aesthetic impacts as the general aesthetic quality of the area is not considered to be as valued. This area is characteristic of an industrial area and construction activities would not be highly visible to sensitive receptors. This is because residents are not located in the immediate area and the area is not frequently traveled (as opposed to the visibility of sites along Santa Monica Boulevard and Burton Way, which have high traffic volumes). However, occupants of the upper floors of the office buildings to the west have a bird's eye view of the project site and may experience temporary effects of construction activities. Because of the existing character of the site as a vacant parking lot and the other surrounding land uses, the construction of the project would not be expected to result in significant aesthetic impacts.

Long-term aesthetic impacts are not anticipated for the well sites. Well facilities that will be located above-ground will be minimal and will consist of an electric pedestal (18" square, 4' high), and venting facilities (six-inch vent about 7.5 feet high, with a well vent in the same enclosure, which will be 30-inch diameter and five feet high). These exposed well head facilities would be unobtrusive because following construction of the proposed wells, the sites will be restored and approved landscape plans will be implemented to screen the above ground facilities from direct view. No significant adverse impacts are anticipated.

The proposed public works facility would be located in the City's Industrial Area, which is surrounded by commercial and industrial office uses, a veterinary hospital, utilities, and other municipal uses, such as the City's Public Works Department and City Yard. Short-term construction impacts may have minor effects on neighboring land uses. However, construction of the proposed facility would not substantially

differ from the construction of other facilities in the area and sensitive receptors would not be affected. The proposed use would be compatible with the surrounding land uses and the structure would adhere to quality architectural standards. No significant adverse impacts are anticipated.

c. The proposed project may create light or glare. During construction and testing at the well sites, workers may be present at the sites on a few occasions for a 24-hour period, which would require lighting during night-time hours. Implementation of the construction screening discussed earlier would reduce potential impacts to adjacent residents to a less than significant level.

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During operation, the proposed well facilities would be located mostly underground. The above-ground components would be screened by landscaping and would not require lighting. It is not expected that night time activities would occur at the well head facilities during operational phases of the project. No impacts are anticipated.

Lighting would be incorporated into the site design of the proposed public works facility for night use and safety. The existence of this proposed facility would add to the overall lighting in the area. However, the proposed lighting would not be an extraordinary amount, and sensitive receptors would not be affected. Substantial glare would not be created by the project. The structure would only be two-stories in height (45 feet) and reflective glass would not be incorporated into the project design. Significant adverse impacts are not anticipated.

XIV. CULTURAL RESOURCES

a,b,c. The proposed project is not anticipated to disturb paleontological, archaeological, or historical resources. During previous surveys for the Industrial Area of the City, 15 structures were recorded that are representative of the styles and type of structures present during the area's prime period of growth, 1922-1940; two of which were found to retain sufficient historic architectural integrity to be representative of the styles and types of structures erected in the area during its period of historical significance (Industrial Area Plan Draft EIR 1990). Within the immediate project area, the Payne Building, located across from the proposed public works facility site at 336 Foothill Road, was listed as "potentially eligible" for inclusion in the National Register of Historic Places. However, at this time it is not officially on the list. No known cultural resources are present at the proposed construction sites. However to ensure that no impacts occur to previously undiscovered cultural resources during construction, the following mitigation measures have been incorporated into the project:

79

Mitigation Measure

- *MM XIV-1.* During construction, the contractor shall halt all construction activities if potential cultural resources are uncovered and a qualified archaeologist shall be contacted to analyze the potential resource to make a determination of its significance. If this were to occur, the archaeologist shall monitor subsequent construction activities at all sites during the excavation and grading phases of the proposed project.
- d,e. The proposed project would not have the potential to cause a physical change which would affect unique ethnic cultural values, or restrict existing religious or sacred uses within the area. No religious or sacred uses would be affected by the proposed project, nor would religious or sacred activities be suppressed through the implementation of the project. No significant impacts would occur.

XV. RECREATION

- a. The proposed project would not result in the demand for neighborhood or regional parks or other recreational opportunities. Generally, demand for new parks would occur if a project would contribute to population growth within an area or existing parks are eliminated. The proposed project would not create a demand for new parks or recreation facilities. No significant impacts would occur.
- b. Existing recreational opportunities may be affected by the proposed project. Construction activities within the Burton Way median and within Beverly Gardens Park may be temporarily affected during construction and testing of the groundwater wells. The Burton Way median, may potentially be utilized as a recreational resource for walkers, runners and other passive recreational activities. Beverly Gardens Park is a valuable recreational resource that is heavily utilized for both passive and active recreational purposes. Construction of the project may result in temporary short-term impacts to the existing recreational amenities and passive open space within the project area. Construction of the proposed well site in Beverly Gardens Park at Doheny Drive would reduce the amount of available space within the park for temporary periods during construction. This would also contribute to potentially adverse aesthetic quality of the park during these construction phases.

If the alternate well site in Beverly Gardens Park is chosen, this would also result in temporary impacts to the Park and its users. This area is heavily traveled by pedestrians along the pedestrian trail that extends the length of the park. Pedestrians utilizing the Park and this trail would experience temporary adverse aesthetic impacts

resulting from construction activities. However, recreational opportunities would not be constrained. Furthermore, following the construction phases of the project, well sites and pipeline routes would be re-landscaped and be camouflaged to integrate into the aesthetic quality of the park. No significant impacts would occur.

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XVI. MANDATORY FINDINGS OF SIGNIFICANCE

- a. The proposed project would not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range or a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. The project area is highly urban in character and does not contain biological resources that would be affected through the implementation of the proposed project. Additionally, no cultural resources, neither historical or prehistorical, would be affected by the proposed project. No significant impacts are anticipated.
- b. The proposed project would not have the potential to achieve short term, over the disadvantage of long term environmental goals. The proposed project would contribute to the long term advantage of environmental goals through creating a supplemental water supply for the service area and reducing overall costs associated with receiving water from Metropolitan. Short-term construction impacts would be terminated following construction phases of the project. No significant impacts are expected to result from the extraction of the safe yield (3,000 acre-feet annually) of groundwater from the Hollywood Basin.
- c. The project would not have impacts that are cumulatively considerable. The City of Beverly Hills is the only agency that has historically extracted groundwater in the area, and is the only agency that is proposing to extract groundwater from the Hollywood Basin in the foreseeable future. No cumulative impacts are anticipated.
- d. The proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. No significant adverse impacts have been identified for the proposed project. Additionally, several mitigation measures have been incorporated into the proposed project which would reduce potential impacts of the project to less-than-significant levels.

Mitigation Measures That Have Been Incorporated Into The Project Design

In order to reduce any potentially significant impacts associated with the proposed project, the following mitigation measures have been incorporated into the proposed project design.

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III. GEOLOGIC PROBLEMS

There is a potential for liquefaction to occur. The effects of liquefaction can be mitigated to lessthan-significant levels. Depending on the severity of the potential for liquefaction to occur, some or all of the mitigation measures presented below could be implemented. Geotechnical studies shall be performed prior to issuance of building permits and specific engineering requirements will be developed to reduce potential impacts of liquefaction. Any geotechnical recommendations shall be incorporated into the project design and adhered to during the construction of the facility.

- *MM III-1.* Use of driven pile foundations may mitigate settlements; piling should be designed for downdrag loads imposed by settlement of soil.
- *MM III-2.* Underground elements of substructures can be designed for increased lateral pressure and uplift pressure caused by liquefaction.
- MM III-3. Where appropriate, in-place densification techniques such as : vibroflotation, dynamic compaction, combined densification/drainage (compaction piles), and vertical drains (stone columns) may be used to improve subsurface soil stability.

The following mitigation measures will reduce potential erosion impacts to less-than-significant levels:

- *MM III-4.* During construction phases, the contractor will implement wheel washing for trucks and other construction equipment prior to the equipment and vehicles exiting the construction site.
- *MM III-5.* During construction phases, the contractor will be responsible for street cleaning in the construction areas at least once per week as needed.

IV. WATER

MM IV-1. Prior to issuance of the building permit for the public works facility, the City shall obtain an NPDES permit;

MM IV-2. Prior to construction of the well head facilities and groundwater testing, the contractor shall obtain an NPDES permit for temporary discharge of test water into the storm drainage system.

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MM IV-3. During the operations of the project, the City shall conduct ongoing monitoring efforts to assure that the level of treatment is in compliance with the NPDES permit.

V. AIR QUALITY

- *MM V-1.* During Phase I construction, construction activities shall be limited to the development of not more than two wells simultaneously. If the City wishes to construct all four wells simultaneously, then all heavy construction equipment to be used simultaneously should be calibrated with 2-4 degrees of fuel injection retard and equipped with high pressure fuel injectors⁵. The City could also opt to restrict construction of the wells to no more than 24 total hours (or 6 hours for each well) on a daily basis⁶.
- *MM V-2.* During Phase II of construction, construction site preparation construction activities shall be limited to the construction of the public works facility or the pipelines at any given time. If the City wishes to conduct site preparation activities for both the pipelines and the public works facility simultaneously, then all heavy construction equipment to be used simultaneously should be calibrated with 2-4 degrees of fuel injection retard and equipped with high pressure fuel injectors⁷. The City could also opt to limit heavy construction equipment use to no more than 88 total hours on a daily basis⁸.

7 Same as Footnote 4.

⁵ Fuel injection retardation can be performed on heavy construction equipment diesel engines and would require recalibration of the engines' fuel injection system. Provision of high pressure fuel injectors for the construction equipment would require that the existing injectors be removed by disconnecting the fuel rail of individual fuel lines (depending on the engine design), removing the existing injectors, and replacing these with the high pressure units. To supply the high pressure necessary to make the replaced injectors work properly could require the recalibration of the fuel pressure regulator, and perhaps replacement of the fuel pump and resizing of the fuel delivery and return lines. All work should be performed by a competent, certified diesel mechanic.

⁶ If the City will restrict well construction equipment use to no more than 24 total hours (6 hours each well) on a daily basis, all criteria pollutants should remain within their respective thresholds allowing simultaneous construction of all four wells. Based on a threshold of 100 lbs./day and 2.5 tons/quarter for NOx.This could best be monitored by requiring the contractor to log daily equipment hours and restrict these hours to 24 This would enable the contractors to be on-site for other construction activities even if they are not using heavy equipment.

⁸ If the City will restrict heavy equipment use to no more than 88 total hours on a daily basis, all criteria pollutants should remain within their respective thresholds allowing simultaneous construction site preparation activities for the public works facility and the pipelines. Based on a threshold of 100 lbs./day and 2.5 tons/quarter for NOx.This could best be monitored by requiring the contractor to log daily equipment hours and restrict these hours to 88. This would enable the contractors to be on-site for other construction activities even if they are not using heavy equipment.

59

VI. TRANSPORTATION/CIRCULATION

MM VI-1. Prior to construction activities, the contractor shall post the occurrence of roadway construction activities well in advance of construction so that motorists can take alternative routes;

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- *MM VI-2.* During construction phases, the contractor shall curtail lane closures to the fullest extent possible during peak hours (7:00 a.m. to 9:00 a.m., and 4:00 p.m. to 6:00 p.m.);
- *MM VI-3. Prior to construction activities, the contractor in conjunction with the City Public Works Department shall develop detour routes where possible;*
- *MM VI-4.* During construction activities, the contractor shall use flag persons where appropriate; and
- *MM VI-5.* During construction phases, the contractor shall ensure that the pipeline trenches are covered, and access maintained during non-working hours.
- *MM VI-6.* During construction phases, the contractor in conjunction with City staff shall inform emergency agencies, such as fire and police, as well as affected business and residents, as to any road closure.
- *MM VI-7.* During construction activities, the contractor shall maintain alternative access for emergency vehicles.
- *MM VI-8.* Same as MM VI-5. During construction phases, the contractor shall ensure that the pipeline trenches are covered, and access maintained during non-working hours.
- *MM VI-9.* The City Public Works management shall coordinate a parking program to encourage employees at the proposed facility to park in the existing City parking structure to compensate for the parking deficiency.
- *MM VI-10.* During the construction phases, the contractor in conjunction with the City shall designate parking areas for construction workers to reduce any potential impact on parking capacity;
- *MM VI-11.* During construction activities, the contractor shall implement parking control within pipeline construction areas (i.e., posting signs in advance, notifying residents individually, identifying alternative parking areas, etc.); and
- *MM VI-12.* During construction phases, the contractor in conjunction with the City shall designate alternative parking areas, if necessary.

MM VI-13. During the construction phases, the contractor shall place barriers and other protective equipment to preclude bicyclists and pedestrians from entering the construction areas;

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- *MM VI-14.* During the construction phases, the contractor in conjunction with the City shall identify and post alternative bicycle and pedestrian routes; and
- *MM VI-15.* During the construction phases, the contractor shall notify the schools in the area of potential hazards along school routes to ensure the safety of students.

IX. HAZARDS

MM IX-1. Prior to construction and issuance of building permits, the design-build contractor shall develop and have approved a pollution prevention and control plan. This plan shall outline methods for storage and use of hazardous materials to reduce the potential as well as the consequences of any accidental spill. The plan shall also provide procedures for cleanup of any potential release. This plan shall include placement of clean up materials and procedures for minor spills, as well as outlining a series of procedures for notification of neighbors and agencies and clean-up of any spills.

X. NOISE

Significant noise impacts would not occur as long as construction is restricted to between the hours of 8:00 a.m. and 6:00 p.m. and not on Sundays, legal holidays, and Saturdays within 500 feet of residential areas. The following mitigation measures have been recommended to further reduce noise impacts, but are not required.

- *MM X-2.* During construction phases, the contractor shall strive to use the quietest equipment available. All internal combustion powered equipment should be equipped with properly operating mufflers and kept in a proper state of tune to alleviate back-fires. For that equipment installing pipelines north of Santa Monica Boulevard, engines are recommended to be fitted with protective shrouds to reduce motor noise.
- *MM X-3.* During construction activities, portable equipment should be located as far as possible from the adjacent residents.
- *MM X-4.* During construction phases, equipment should be stored and maintained as far as possible form the adjacent residents.

61

- *MM X-5.* During construction activities, noise curtains are recommended to be used for construction and testing of wells, and all pipeline construction north of Santa Monica Boulevard.
- *MM X-6. Prior to construction activities, the contractor, in conjunction with the City, should implement a public awareness program to alert the public of the upcoming construction disturbance.*
- *MM X-7.* The City should identify a disturbance coordinator that would be responsible for responding to noise complaints.

XII. UTILITIES AND SERVICE SYSTEMS

- *MM XII-1. Prior to construction activities, the contractor shall coordinate with SCE and SCGC to avoid interference with existing electrical and natural gas facilities.*
- *MM XII-2.* During construction phases, if natural gas or electricity to other nearby areas needs to be interrupted, the contractor shall inform affected property owners/operators well in advance of interruption. These activities should be conducted during non-business hours to avoid conflict with other users.
- *MM XII-3. Prior to construction activities, the contractor shall coordinate with Pacific Telephone and Century Cable to ensure that interference with these services does not occur.*
- *MM XII-4.* If economically feasible, the City shall replace existing deteriorated concrete pipe sewer lines with like-sized vitrified clay pipe for sewer lines serving the project site.
- *MM XII-5.* The design-builder shall implement the use of water conservation measures to reduce the amount of wastewater flow generated by the project. These may include, but are not limited to the following:
 - Use of ultra-low volume toilets (1.5 gallons per flush);
 - Use of low-flow faucet fixtures; and
 - Use of self-canceling faucet handles.

XIV. CULTURAL RESOURCES

MM XIV-1. During construction, the contractor shall halt all construction activities if potential cultural resources are uncovered and a qualified archaeologist shall be contacted to analyze the potential resource to make a determination of its significance. If this

were to occur, the archaeologist shall monitor subsequent construction activities at all sites during the excavation and grading phases of the proposed project.

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APPENDIX A

Air Quality Analysis

AIR QUALITY ANALYSIS PREPARED FOR THE CONSTRUCTION AND OPERATION OF THE CITY OF BEVERLY HILLS MUNICIPAL WATER AND PUBLIC WORKS PROJECT

Prepared For:

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JANUARY, 1998

1.0 OVERVIEW

The following presents the results of an air quality analysis performed in support of the Initial Study prepared for the construction of water wells, associated pipelines, and a treatment facility along with a Public Works office building to be located within the City of Beverly Hills. The project includes the construction and operation of four wells used to supply municipal water for local use. Obtained water would be treated through reverse osmosis. Currently, the treatment facility is projected to process as many as 3.5 million gallons of water per day but shall be designed with a capacity of 5.0 million gallons per day. When complete, the facility would supply approximately 20 percent of the City's water demands. At this time it is estimated that approximately 87 percent of the water (based on previous studies) could be brought up to drinking water standards and this portion of the water would be blended with water from the Metropolitan Water District at its connection near Sunset Boulevard and Rexford Drive. The remaining approximately 13 percent would contain most of the dissolved minerals and would be discharged into the storm drain system.

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The included study is prepared to the level of detail necessary for CEQA review to determine if the project would create any significant air quality impacts. The air quality study includes a discussion of applicable rules and regulations, a description of the existing setting, a discussion of threshold criteria levels, and an impacts analysis for both the construction and subsequent operational phases of the project.

The study concludes while construction has the potential produce significant air quality impacts, implementation of the recommended mitigation measures will reduce these to a level that is less than significant. No significant impacts are associated with project operation and no further mitigation is warranted.

2.0 Environmental Setting

2.1 Meteorology/Climate

The climate in the project area, as with all of Southern California, is largely governed by the semi-permanent high pressure center near Hawaii and the moderating effects of the Pacific Ocean. The climate is characterized by moderate summer temperatures, mild winters, frequent morning coastal clouds, infrequent rainfall confined mainly from late fall to early spring, and moderate onshore breezes. The same conditions that create a desirable living climate also combine to severely restrict the ability of the local air shed to disperse the air pollutants generated by the large population. The project area, being semi-coastal, is protected from the worst of the air pollution problems by the daily sea breeze that brings in clean air and blows pollutants inland, but recirculation of polluted air and incomplete ventilation of the Basin can cause smog alerts even in coastal communities.

Two meteorological parameters are important in assessing the air quality impacts of emissions generated within in the project area. These are the winds which control the rate and trajectory of

horizontal transport and the vertical stability structure (inversions) which control the vertical depth through which the pollutants are mixed.

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Winds across the site travel in two distinct directions: 1) a strong onshore wind by day which is strongest in summer, and 2) a weak offshore wind which is strongest in winter when nights are long and the land becomes cooler than the ocean. The net effect of this wind pattern is that daytime air pollution emissions from near the proposed project site are carried inland toward downtown Los Angeles and then they diverge into the eastern San Fernando Valley and the western San Gabriel Valley.

The nocturnal winds reverse the process as they recycle the previous day's pollution and carry diluted pollutants seaward. In contrast to the strong daytime flow, the weak nocturnal winds also allow for localized stagnation of pollutants near their source such as freeways or other concentrations of emissions.

In addition to the two characteristic wind patterns, there are two corresponding temperature inversions that trap pollution within shallow layers near the ground. The first is created when daytime onshore cool ocean air undercuts a massive dome of warm air within the Pacific high pressure system. This process creates marine/subsidence inversions that form a lid at about 1,000 feet above the surface over the entire Los Angeles Basin. These inversions allow for the mixing of pollutants near their source, but they trap the entire Basin's emissions within the shallow marine layer. As the relatively clean marine air moves inland, pollution sources continually add contaminants from below without any dilution from above. Reactive organic gases and nitrogen oxides combine under abundant sunlight to form photochemical smog. Smog levels increase steadily from the coast inland until the inversion is broken by strong surface heating and by thermal chimneys created along the heated slopes of the mountains surrounding the Basin.

The second major inversion type forms during long, cloudless nights as cold air pools near the surface while the air aloft remains warm. The radiation inversions from this second type are very shallow and contribute to the "hot spot" potential near ground level sources, especially vehicular source concentrations. (A "hot spot" is a high concentration of pollutants trapped in a cooler air pocket with limited dispersion characteristics.) Measurements of inversion frequency at Santa Monica Airport show a strong diurnal and seasonal variation of inversion distributions.

Regional trapping inversions (the first type) occur on about 85 percent of all summer afternoons while ground-level radiation inversions (the second type) are found on about 70 percent of all winter nights and early mornings. Both of these inversion types occur during all seasons and at all times of the day, but they are not as strong, persistent, or frequent as during their summer afternoon and winter morning dominant periods.

A-2

2.2 Air Ouality Setting

2.2.1 Ambient Air Quality Standards (AAQS)

Air quality impacts of the proposed project, combined with existing background air quality levels, must be compared to the applicable ambient air quality standards in order to gauge their significance. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. Those standards currently in effect in California are shown in Table A-1.

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2.3 Existing Air Quality

Existing levels of ambient air quality and historical trends and projections in the project area are best documented by measurements made by the South Coast Air Quality Management District (SCAQMD) at its West Los Angeles air monitoring station. Monitored air pollutants include ozone, carbon monoxide, AND nitrogen oxides (NOx). Sulfur dioxide and PM₁₀ particulates are not monitored at this station and presented data for these pollutant species are from the North Main Street station in Los Angeles, the closest station which regularly monitors this parameter. (Note that Beverly Hills actually straddles these two monitoring areas with La Cienega Boulevard being the dividing line.)

It is expected that the project area would have lower readings than the North Main Street station readings due to its more-coastal location. (All pollutants that are monitored at both stations show lower values for the West Los Angeles station.) Recent monitoring data (1992-1996) from these stations are summarized in Table A-2. These data show recurring violations of both the federal and State hourly standard for ozone (O_3) and State standard for PM_{10} particulate matter. No first stage smog alerts (i.e., 0.20 ppm ozone for an hourly exposure) have been reported in the past 5 years at either the West Los Angeles or Los Angeles monitoring stations. While the summer ozone levels are occasionally unhealthful, they are lower than inland communities.

Levels of primary automobile pollutants, such as CO, have not exceeded their standards in the last 5 years. The data, in general, show that improvement has occurred throughout the 1990s in the western coastal portions of the Los Angeles Basin. However, desirable levels have not yet been attained for some pollutants.

Table A-1

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AMBIENT AIR QUALITY STANDARDS

Pollutont	Averaging Time	California Standards		Federal Standards			
ronutant		Concentration	Method	Primary	Secondary	Method	
Ozone	l Hour	>0.09 ppm (180 ug/m ³)	Ultraviolet Photometry	>0.12 ppm (235 ug/m ³)	Same as Primary Std.	Ethylene Chemiluminescence	
Carbon Monoxide	8 Hour	>9.1 ppm (10 mg/m ³)	Non-dispersive	Non-dispersive ≥9.5 ppm Infrared (10 mg/m ³) Some	Same as	Non-disparsive Infrared	
	1 Hour	>20 ppm (23 mg/m ³)	Spectroscopy (NDIR)	>35 ppm (40 mg/m ³)	Primary Stds.	Spectroscopy (NDIR)	
Nitrogen Dioxide	Annual Average	-	Gas Phase	>0.0534 ppm (100 ug/m ³)	Same os	Gas Phase Chemiluminescence	
	l Hour	>0.25 ppm (470 ug/m³)	Chemilumi-nescence	-	Primary Std.		
Sulfur Dioxide	Annual Average	-		0.03 ppm (80 ug/m ³)	-	anna an	
	24 Hour	0.05 ppm (131 ug/m ³)	Ultraviolet Fluorescence	0.14 ppm (365 ug/m ³)	-	Pararosoaniline	
	Annual Geometric Mean	30 ug/m3	Size Selective Inlet High Volume		~	an	
Suspended Particulate Matter (PM ₁₀)	24 Hour	>50 ug/m3	Sampler and Gravimetric Analysis	>150 ug/m3	Same or	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	-	-	>50 ug/m3	Primary Stds.		
Sulfates	24 Hour	≥25 ug/m3	Turbidimetric Barium Sulfate	-	-	1999 - 1999 -	
Lead	30 Day Average	≥1.5 ug/m3		*	-		
	Calendar Quarter	-	Atomic Absorption	≥1.5 ug/m3	Same as Primary Std.	Atomic Absorption	
Visibility Reducing Particles	1 Observation	In sufficient amount to reduce the prevailing visibility to less than 10 miles when the relative humidity is less than 70 percent		- -	-	-	
* Prepared in accordance with applicable SCAQMD Air Quality Data Cards and ARB Fact Sheet 38 (revised 7/88).							

Table A-2

AIR QUALITY MONITORING SUMMARY (Number of Days Standards Were Exceeded and Maximum Levels During Such Violations)¹

Pollutant/Standard	1992	1993	1994	1995	1996		
Ozone							
1-Hour ≥ 0.09 ppm	45	23	15	19	13		
1-Hour > 0.12 ppm	12	7	2	1	1		
Max. 1-Hour Conc. (ppm)	0.17	0.18	0.16	0.14	0.14		
Carbon Monoxide							
1-Hour > 20 ppm	0	0	0	0	0		
8-Hour > 9.1 ppm	0	0	0	ů 0	0		
Max 1-Hour Conc. (ppm)	11	9	9	8	7		
Max. 8-Hour Conc. (ppm)	5.9	5.4	6.0	5.6	4.5		
Nitrogen Dioxide							
1-Hour \geq 0.25 ppm	1	0	0	0	0		
Max. 1-Hour Conc. (ppm)	0.30	0.17	0.16	0.20	0.25		
Sulfur Dioxide		L	I	[
24-Hour ≥ 0.04 ppm	0	0	0	0	0		
Max. 24-Hour Conc. (ppm)	0.010	0.007	0.011	0.011	0.010		
Inhalable Particulates (PM ₁₀) ²							
24-Hour > 50 ug/m^3	22/61	26/61	20/60	14/60	11/60		
24-Hour > 150 ug/m^3	0/61	0/61	0/60	0/60	0/60		
Max. 24-Hour Conc. (ug/m ³)	137	104	122	141	138		
 All concentrations are as measured at the West Los Angeles Air Monitoring Station except sulfur dioxide and PM₁₀ particulates which are for the Los Angeles Station. ² Violations per number of samples. 							

3.0 Environmental Consequences

3.1 Impact Significance Criteria

Section 15002(g) of the state CEQA Guidelines defines a significant effect on the environment as "a substantial adverse change in the physical condition which exists in the area affected by the proposed project." In order to determine whether or not the proposed project would cause a

7-8

significant effect on the environment, the impact of the proposed project must be determined by examining the types and levels of emissions generated by the proposed project and its impacts on factors that affect air quality. To accomplish this determination of significance, the SCAQMD has established air pollution thresholds against which a proposed project can be evaluated. The SCAQMD has established thresholds to assist lead agencies in determining whether or not the proposed project is significant. If the thresholds are exceeded by a proposed project, then it should be considered significant.

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The SCAQMD recommends that the following two types of air pollution thresholds be used by lead agencies in determining whether the operational phase of a proposed project is significant. However, *the final determination of whether or not a project is significant is within the purview of the lead agency* pursuant to § 15064(b) of the *State CEQA Guidelines* [emphasis added]. If the lead agency finds that the proposed project has the potential to exceed either of the air pollution thresholds, the project should be considered significant. Both of these threshold factors are individually discussed below.

3.1.1 Construction Phase - Thresholds of Significance

Separate threshold standards have been recommended for assessing construction-term impacts, which are averaged over a 3-month period to include only actual working days.

The following significance thresholds for air quality have been established by the SCAQMD on a daily basis for construction emissions:

- (1) 75 pounds per day for ROC;
- (2) 100 pounds per day for NO_x ;
- (3) 550 pounds per day for CO;
- (4) 150 pounds per day for PM_{10} ; and
- (5) 150 pounds per day of SO_X .

The following significance thresholds for air quality have been established by the SCAQMD on a quarterly basis for construction emissions:

- (1) 2.5 tons per quarter of ROC;
- (2) 2.5 tons per quarter of NO_x ;
- (3) 24.75 tons per quarter of CO;
- (4) 6.75 tons per quarter of PM_{10} ; and
- (5) 6.75 tons per quarter of SO_x .

During construction, if any of the identified daily or quarterly air pollutant thresholds are exceeded by the proposed project, then the proposed project's air quality impacts should be considered significant.

A-6

3.1.2 Operational Phase - Thresholds of Significance (Primary Effects)

Specific criteria air pollutants have been identified by the SCAQMD as pollutants of special regional concern. Based upon this categorization, the following significance thresholds for operational emissions have been established by the SCAQMD for project operations:

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- (1) 55 pounds per day of ROC;
- (2) 55 pounds per day of NO_x ;
- (3) 550 pounds per day of CO;
- (4) 150 pounds per day of PM_{10} ; and
- (5) 150 pounds per day of SO_x .

Projects within the SCAB with daily operation-related emissions that exceed any of the above emission thresholds may be considered significant.

The SCAQMD indicates in Chapter 6 of their *CEQA Air Quality Handbook* (Handbook) that a project is considered to be mitigated to a level of insignificance if its primary effects are mitigated below the thresholds provided above.

3.1.3 Operational Phase - Thresholds of Significance (Secondary Effects)

The SCAQMD recommends that "additional indicators" should be used as screening criteria with respect to air quality. Relevant additional factors identified in the Handbook include the following significance criteria:

- (1) interference with the attainment of the federal or State ambient air quality standards by either violating or contributing to an existing or projected air quality violation;
- (2) generation of vehicle trips that cause a CO "hot spot ";
- (3) creation of (or subject receptors to) an objectionable odor over 10 dilution to thresholds; and
- (4) emission of an air toxic contaminant regulated by SCAQMD rules or included on a federal or State air toxic list.

As with primary effects, a project is mitigated to a level of insignificance if its secondary effects are mitigated below the threshold levels provided above.

3.2 Analysis of Impacts

3.2.1 Construction

Construction is proposed in two phases. The first phase involves the construction and testing of the proposed wells. If the anticipated volume and quality of water is unobtainable, there would be little sense in the construction of the pipelines and public works facility. Furthermore, the actual piping and treatment plant specifications will depend on the volume and quality of the water obtained. As

such, construction would be performed in two phases and the emissions from the construction of the wells would not be expected to be additive of those associated with the construction of the piping and public works facility.

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Wells

Construction activities and deliveries produce combustion pollutants both at the site and along haul routes. Additionally, dust will be produced at the construction site due to excavation activities. Well construction is estimated to include three pieces of heavy equipment; a backhoe to dig the vault, a drill rig to drill the hole, and a crane to set the casing and pump in place. A welder is also included to weld casing, vault covers, and any necessary metal work. Obviously, these actions could not be performed simultaneously and in actuality only one or two pieces would be in use at any one time. Emissions for the heavy equipment were obtained from Table A9-8-B of the Handbook. Of the four types of equipment discussed above, the Table A9-8-B shows the drill rig and welder as creating the greatest levels of pollution. For the purposes of this analysis construction is based on an 8-hour per day schedule with both the drill rig and welder in operation. This is probably an overestimation of actual emissions as welding equipment typically does not operate for the duration of the construction day and all equipment is subject to down-time due to failure and worker breaks. Still for the purposes of this analysis, the drill rig and welder are considered to work continuously for an 8-hour period on a daily basis.

A commuting component for construction employee travel and haul trucks has also been included. As many as 10 workers (including foremen, inspectors, etc.) could visit the site on any given day. In accordance with the Handbook, worker commutes are based on a 20.2 mile round-trip. Two truck hauls per day are also included in the analysis, each with a projected round-trip distance of 40 miles. As a reasonable worst-case scenario, all trips are assumed to have cold starts for each direction of travel. Well construction emissions, including heavy equipment and mobile-source emissions are shown in Table A-3. In addition to gaseous emissions, construction also creates fugitive dust. AP-42 A Compilation of Air Pollutant Emission Factors (AP-42) (USEPA, 1995) (from which emission factors in the Handbook were derived), denotes that each acre disturbed during the grading portion of heavy construction creates as much as 1.2 tons of total suspended particulates (PM₃₀) per month or 110 pounds per day. The regulated PM_{10} portion comprises about 45 percent of this value or about 50 pounds per day. Well construction is actually limited to a relatively small area and does not involve grading and in the performance of the contract, to avoid extensive clean-up and revegetation, contractors will typically attempt to disturb as little area as possible. The area to be disturbed is estimated at no more than about 0.1 acre (50 feet by 100 feet). Based on a value of 50 pounds per acre per day, PM_{10} dust emissions are estimated at no more than 5 pounds per day. Note that construction emissions are sufficiently low such that two wells could be constructed simultaneously without exceedance of either the daily or (if construction were to take as long as 3 months), quarterly significance criteria.

Table A-3

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Pollutant	Heavy Equipment ¹ (Lb/day)	Worker Commutes ² (Lb/day)	Heavy Trucks ³ (Lb/day)	Total Emissions (Lb/day)		
Carbon Monoxide	26.5	5.7	2.7	34.9		
Nitrogen Oxides (NOx as NO ₂)	32.4	0.4	0.9	33.7		
Reactive Organics	4.0	0.4	0.3	4.7		
Sulfur Oxides (SOx as SO ₂)	2.8	Neg ⁴	0.1	2.9		
PM ₁₀ Particulate Matter ⁵	7.0	Neg	0.1	7.1		
 ¹ Based upon Tables A9-8-B, A9-8-C, and A9-8-D of the Handbook and considers a well drill rig and welder each operating 8-hours per day. ² Worker commutes are based on 1997 emission factors as included in Table A9-5-J-4 of the Handbook for 10 workers each commuting 20.2 miles at an average speed of 25 mph with two cold starts. ³ Haul trips are based on 1997 emission factors as included in Table A9-5-K-4 of the Handbook for two trucks per day each with a round-trip of 40 miles and two cold starts. ⁴ Neg - Negligible, less than 0.05 pound per day. ⁵ Includes 5 pounds per day for PM due to duet 						

DAILY WELL CONSTRUCTION EMISSIONS

In addition to the daily criteria levels set by the SCAQMD, the project could create a significant impact if it produced CO or NO₂ emissions' "hot spots" in excess of State or federal ambient air quality standards (see Table A-1). However, because the number of pieces of equipment involved in the construction effort is relatively small as are the number of related vehicles (i.e., no more than 10 per well), and the area is open allowing for pollutant dispersion, no criteria pollutant concentrations in excess of State or federal standards will be produced and no significant "hot spots" will be created. Finally, all emissions associated with the project are typical of internal combustion engines. No hazardous pollutants are created in significant quantities and no hazardous pollutant significant impacts will be produced.

Pipelines

Pipelines will be required to convey water from the wells to the treatment facility. At this time, the exact type of equipment to be used to carry out the construction contract is unknown and will vary from contractor to contractor. Furthermore, all details of the construction procedures have not been finalized. However, one can suppose a generic type of equipment to perform on-site activities and

bring in pipe and other necessary building supplies.

Because the pipelines are of a relatively small diameter and are to be placed in existing roadways and alleys, both the number of pieces and sizes of the construction equipment are limited. A pneumatic concrete saw is assumed to cut the asphalt. A trencher would then remove the blacktop and dig the trench. A welder could be used to assemble the pipe sections. A crane would be used lay the pipe. A backhoe/loader would backfill the trench. A pneumatic compactor powered by a compressor would be used to recompact the excavation and a paver would reseal the asphalt. It is assumed that the process is linear and that all of this equipment could conceivably be used on any given day. Emissions for the heavy equipment were obtained from Table A9-8-B of the Handbook and are included in Table A-4 of this report.

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As with well installation, a commuting component for construction employee travel and haul trucks has also been included. As many as 20 workers (including foremen, inspectors, etc.) could be used on any given day. In accordance with the Handbook, worker commutes are again based on a 20.2 mile round-trip. To remove excess soil and deliver materials, four truck hauls per day are also included in the analysis each with a projected round-trip distance of 40 miles. As a reasonable worst-case scenario, all trips are assumed to have cold starts for each direction of travel.

In addition to gaseous emissions, construction also creates fugitive dust. As the pipelines are to be placed in existing streets and alleys, and no grading is to be performed, these emissions would be very limited. Still, as a worst-case scenario, this analysis assumes that at any one time 200 feet of trench are open with a width of 12 feet (probably a gross overestimate). Again using a value of 50 pounds per acre per day, PM_{10} dust emissions are estimated at no more than 3 pounds per day. Note that construction emissions are within both the daily and quarterly criteria levels and pipeline construction is not expected to result in any significant air quality impacts.

Similarly, based on the relatively small construction work force and number of materials' hauls, no criteria pollutants in excess of State or federal standards will be produced and no significant "hot spots" will be created. Finally, all emissions associated with the project are typical of internal combustion engines. No hazardous pollutants are created in significant quantities and no hazardous pollutant significant impacts will be produced.

Public Works Facility

Like the wells and pipelines, construction of the public works facility would require the use of heavy equipment, manpower, and materials' hauls. Like any construction of this type, equipment use is staged. The area is first graded and any subgrade excavation is performed.

When the site is ready, building construction and equipment installation is performed. Here the equipment use is expected to be more varied than with either the well or pipeline installation and equipment use is not so clear-cut. The heaviest, and most polluting equipment, is associated with site preparation where dozers, excavators, loaders, compressors, and pavers are used. During later phases cranes, compressors, and forklifts may be utilized. These latter types of equipment tend to be of lower horsepower and more efficient in the combustion process. Thus, if an air quality impact is to be expected, it would be expected during the initial phases of construction.

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Table A-4

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Heavy Equipment ¹ (Lb/day)	Worker Commutes ² (Lb/day)	Heavy Trucks ³ (Lb/day)	Total Emissions (Lb/day)
24.3	11.4	5.4	41.1
55.6	0.8	1.8	47.2
5.6	0.8	0.6	6.7
4.1	Neg ⁴	0.2	4.6
5.5	Neg	0.2	5.7
	Heavy Equipment ¹ (Lb/day) 24.3 55.6 5.6 4.1 5.5	Heavy Equipment1 (Lb/day)Worker Commutes2 (Lb/day)24.311.455.60.85.60.84.1Neg45.5Neg	Heavy Equipment1 (Lb/day)Worker Commutes2 (Lb/day)Heavy Trucks3 (Lb/day)24.311.4 5.4 55.60.8 1.8 55.60.8 0.6 4.1Neg4 0.2 5.5Neg 0.2

DAILY PIPELINE CONSTRUCTION EMISSIONS

Based upon Tables A9-8-B, A9-8-C, and A9-8-D of the Handbook and considers a trencher, a welder, a crane, a backhoe, a compressor, and a paver each operating 8-hours per day.

Worker commutes are based on 1997 emission factors as included in Table A9-5-J-4 of the Handbook for 20 workers each commuting 20.2 miles at an average speed of 25 mph with two cold starts.

Haul trips are based on 1997 emission factors as included in Table A9-5-K-4 of the Handbook for four trucks per day each with a round-trip of 40 miles and two cold starts.

Neg - Negligible, less than 0.05 pound per day.

Includes 3 pounds per day for PM₁₀ due to dust.

This analysis assumes the simultaneous use of a grader, an excavator, a loader, a roller, a forklift, a compressor, and a paver. Emissions for the heavy equipment were obtained from Table A9-8-B of the Handbook and are included in Table A-5 of this report.

For the commuting component, construction employees are estimated at no more than 40 on any given day. In accordance with the Handbook, worker commutes are based on a 20.2 mile round-trip. To remove any excess soil and deliver materials, eight truck hauls per day are also included in the analysis each with a projected round-trip distance of 40 miles. As a reasonable worst-case scenario, all trips are assumed to have cold starts for each direction of travel.

The public works facility construction would also create fugitive dust. This facility is to occupy approximately one-third of a 3.8 acre parcel or about 1.3 acres. As the site is already paved, it is level and relatively little grading would be required. Still, to present a reasonable worst-case scenario, it is assumed that the entire 1.3 acres undergoes simultaneous grading.

A-11

Table A-5

7-8

Pollutant	Heavy Equipment ¹ (Lb/day)	Worker Commutes² (Lb/day)	Heavy Trucks ³ (Lb/day)	Total Emissions (Lb/day)
Carbon Monoxide	24.5	22.8	10.8	58.1
Nitrogen Oxides (NOx as NO ₂)	55.6	1.6	3.6	60.8
Reactive Organics	5.3	1.6	1.2	8.1
Sulfur Oxides (SOx as SO ₂)	5.0	Neg ⁴	0.4	5.4
PM ₁₀ Particulate Matter ⁵	35.2	Neg	0.4	35.6
 ¹ Based upon Tables A9- grader, an excavator, a operating 8-hours per c ² Worker commutes are the Handbook for 40 we mph with two cold stars ³ Haul trips are based on Handbook for eight tru starts. ⁴ Neg - Negligible, less the 	8-B, A9-8-C, and loader, a roller. lay. based on 1997 e orkers each com ts. 1997 emission cks per day each an 0.05 pound p	d A9-8-D of the Ha , a forklift, a comp mission factors as muting 20.2 miles factors as included h with a round-trij er day.	andbook and con pressor, and a pay included in Tabl at an average sp l in Table A9-5-H p of 40 miles and	siders a ver each e A9-5-J-4 of leed of 25 S-4 of the two cold

DAILY PUBLIC WORKS FACILITY CONSTRUCTION EMISSIONS

Includes 32.5 pounds per day for PM₁₀ due to dust.

5

Again using a value of 50 pounds per acre per day for site preparation, the 1.3 acres would produce 65 pounds per day of PM_{10} associated with fugitive dust. While site watering was not really feasible (nor warranted) for either well or pipeline construction, it is feasible and in all probability required by SCAQMD Rule 403 for the grading phase of public works facility construction. Twice daily site watering is estimated to reduce dust (and its associated PM_{10}) emissions by 50 percent and the resultant value (i.e., 32.5 pounds per day) would be additive with the PM_{10} created as an exhaust by-product. However, even if site watering were not performed, PM_{10} emissions would not exceed either their daily or quarterly significance criteria.

Note that construction emissions are within both the daily and quarterly criteria levels and public works facility construction is not expected to result in any significant air quality impacts. However, if public works facility construction is performed simultaneously with pipeline construction, NO_x emissions could exceed both daily and quarterly criteria levels resulting in a significant air quality impact.

As with well and pipeline construction, no criteria pollutant concentrations in excess of State or federal standards will be produced and no significant "hot spots" will be created. Finally, no hazardous pollutants are created in significant quantities and no hazardous pollutant significant impacts will be produced.

7-8

3.2.2 Operations

Stationary Source Emissions

While construction of the wells, pipeline, and public works facility may occur separately, once operational, all will work in unison and their emissions will be additive. With the exception of occasional testing of the emergency generator, no on-site exhaust emissions are produced from project operations and all exhaust emissions are produced off-site during the production of project-related electricity necessary to run both the well pumps and the public works facility. No motors or emissions are associated with pipeline operation.

To determine the emissions due to the generation of electricity, it is first necessary to calculate the total electrical use associated with the project. Each well is to be equipped with a 50 horsepower electric motor to pump the water from the ground to the treatment plant. Motor efficiency is estimated at 65 percent. The electrical use for each motor is converted into kilowatt-hours as follows:

kilowatts = $\frac{746 \text{ watts/Hp}}{0.65}$ x $\frac{1 \text{ kW}}{1,000 \text{ watts}}$ x 50 Hp

= 57.4 kilowatts per pump

57.4 kilowatts x 4 pumps x 24 hours per day

= 5,508.9 kilowatt-hours per day.

The treatment plant will use two 75 horsepower feed pumps, as well as three transfer pumps and 12 chemical feed pumps. Electricity is also associated with lighting and electronic componentry. No horsepower ratings or electrical use is presented for these other pumps, lighting, or componentry and electrical use was derived from the economic analysis prepared for the project.

Using the same efficiency factors and equations as were used for the well pumps, the two 75 horsepower pumps will consume 4,131.7 kilowatt-hours per day. The economic analysis shows that the two feed pumps require \$0.091 worth of electricity for each 1,000 gallons processed. The remainder of treatment plant's electrical uses require \$0.018 worth of electricity per 1,000 gallons. Therefore, the feed pumps consume 0.091/0.018 or 5.06 times the electricity as the remainder of the facility. Using the estimated value of 4,131,7 kilowatt-hours for the feed pumps, the remainder of the system requires approximately 817.3 kilowatt-hours per day. Assuming a continuous 24-hour operation, the total daily electrical consumption, including four wells, two feed pumps, and all other assorted pumps, lighting, and components is then estimated at 10,457.9 kilowatt-hours. Emissions associated with the production of this electricity were calculated in accordance with Table A9-11-B

of the Handbook and are include in Table A-6 of this report.

Table A-6

7-8

DAILY OPERATIONAL EMISSIONS

Pollutant	Electrical Generation ¹ (Lb/day)	Natural Gas Combustion ² (Lb/day)	Mobile Sources ³ (Lb/day)	Total Emissions (Lb/day)		
Carbon Monoxide	2.1	Neg ⁴	7.0	9.1		
Nitrogen Oxides (NOx as NO ₂)	12.0	0.1	0.8	12.9		
Reactive Organics	0.1	Neg	0.5	2.6 ⁵		
Sulfur Oxides (SOx as SO ₂)	1.3	Neg	Neg	1.3		
PM ₁₀ Particulate Matter	0.4	Neg	Neg	0.4		
¹ Based upon the use of 10 457.0 kilowett hours not downall it is the second state of the second state o						

Based upon the use of 10,457.9 kilowatt-hours per day and emission factors included in Table A9-11-B of the Handbook.
 Possed upon the use of 455. doi: 10.000 for the table A9-11 for ta

² Based upon the use of 455 cubic feet of natural gas per day and emission factors included in Table A9-12-B of the Handbook.
 ³ We determine the second se

Worker commutes are based on 1997 emission factors as included in Table A9-5-J-4 of the Handbook for 10 workers each commuting 20.2 miles at an average speed of 25 mph with two cold starts. Haul trips are based on 1997 emission factors as included in Table A9-5-K-4 of the Handbook for one truck per day each with a round-trip of 40 miles, one cold start and one hot start.

⁴ Neg - Negligible, less than 0.05 pound per day.

⁵ Includes an estimated 2 pounds per day for water treatment and disinfection.

In addition to the use of electricity, natural gas may be used for both space and water heating. If natural gas is to be used, it would be used in the lobby/employee facilities. This area is approximately 7,000 square feet. Table A9-12-A of the Handbook presents natural gas consumption rates for various types of land uses. Office space is estimated at 2.0 cubic feet of gas per square foot of floor space per month. The 7,000 square feet would then require 14,000 cubic feet of gas per month or about 455 cubic feet per day. Emissions associated with the combustion of this gas were calculated in accordance with Table A9-12-B of the Handbook. All values are less than 0.1 pound per day and are negligible.

Mobile Source Emissions

The wells and pipelines require no regular monitoring and no regular vehicle trips are associated with their use. The treatment plant is highly automated and its staff is not expected to exceed 10

employees per day. Additionally, trucks will be required to make regular deliveries of chemicals used in the treatment process and remove sludge. While truck trips are actually only anticipated at one or two per week, as a worst-case scenario, one truck is assumed on a daily basis. These emissions are also included in Table A-6. Note that in accordance with the table, criteria pollutants associated with project operations are well below the significance criteria values and no significant impacts are projected.

7-8

VOC Emissions

Past discussion with Rod Millican, Senior Air Quality Engineer at the SCAQMD (August 6, 1996) revealed that their experience with wastewater treatment facilities shows that fugitive VOC emissions are on the order of 0.1 ton per million gallons per day treated per year. That is, if one million gallons were treated on a daily basis, 0.1 ton or 200 pounds of VOCs would be produced per year or 0.55 pound would be produced per day. Based on the treatment of 3.5 million gallons of wastewater per day, VOC emissions would be estimated at about 1.9 pounds per day. The pumping and disinfection of groundwater would be expected to create an even lesser quantity of VOC emissions.

If possible, well water will be obtained in a region of the aquifer that is not contaminated. Well testing will confirm the absence (or presence) of any chemicals which may produce airborne toxins. If the testing of well water shows the need for further treatment beyond that proposed, the water could be subject to the use granular activated carbon adsorption and/or air stripping. Air emissions produced from an air stripper may require subsequent treatment to remove any hazardous compounds. These operations are regulated and permitted through the SCAQMD and SCAQMD will require at least a screening level health risk assessment prior to issuing a Permit to Operate. These measures will reduce any potential health risk impacts to a level that is less than significant.

<u>Odors</u>

Odors are one of the most obvious forms of air pollution to the general public. Odors can present significant problems for both the source and the surrounding community. Although offensive odors seldom cause physical harm, they can cause agitation, anger, and concern to the general public. Most people determine an odor to be offensive (objectionable) if it is sensed longer than the duration of a human breath; typically 2 to 5 seconds.

The general public is usually concerned with offensive odors because they associate them with the possibility of also causing adverse health effects; that is, the odor could contain some amount of a toxic substance. However, because something smells bad does not mean that it is toxic. For instance, hydrogen sulfide (H_2S) gas smells like a rotten egg, but it's odor would not be toxic at the low concentrations that would be found within the ambient air.

The treatment facility may be required to remove hydrogen sulfide (H_2S) from the water passing through. H_2S is oxidized to sulfur through the addition of caustic soda to increase the alkalinity. H_2S is characterized by its "rotten egg " smell. While odor threshold varies with an individuals sensitivity, these odors are typically notable in the range of 0.003 to 0.02 parts per million. Odor

impact (i.e., nuisance) is subjective and typically only quantifiable through qualitative means such as odor panels (i.e., a group of individuals who "whiff " odors at various concentrations).

7-8

Odor strength is generally characterized by the number of dilutions with unodorized air required until less than one half of all people can detect a given odor. The number of "odor units " or "dilution-to-threshold" (D/T) is a measure of odor's intensity, but does not incorporate any possible sense of unpleasantness.

The Handbook notes that at 5 D/T, an unpleasant odor is clearly noticeable to most people of normal sensitivity. At 10 D/T, an unpleasant odor may evoke a rise in public complaint and this levels is recommended as an odor significance threshold. For H_2S as the primary source of odors, 1 D/T is approximately 0.003 ppm. Based on a 10 D/T ratio, an impact would be significant at 0.03 ppm. This threshold is equal to the State's odor based public health threshold for a one-hour average of 0.03 ppm.

At this time it cannot be determined as to whether the received water will contain H_2S in sufficient quantities to create odors that are of a significant level or even detectable at off-site receptor locations. Further testing of the wells once installed will allow a more thorough evaluation of the potential for odor impacts. However, the proposed measures will ensure that any potential impacts remain at less than significant levels.

4.0 Mitigation Measures

4.1 <u>Construction</u>

As long as well construction is limited to no more than two wells at any given time, no construction impacts are projected and no mitigation is warranted. Similarly, if pipeline installation and public works facility construction site preparation activities are not performed concurrently, no construction impacts are anticipated from this construction and no mitigation is necessary.

4.2 **Operations**

All criteria pollutants are generated at such low rates that the SCAQMD daily significance criteria levels will not be exceeded and no mitigation is warranted.

Any potential for odor impacts will be determined during well testing. If testing determines that there is a potential for H_2S impacts during the treatment process, measures shall be incorporated into the treatment facility's design to reduce these odors to insignificant levels. This may be accomplished through an air stripping system with activated carbon-treatment (or other media) systems to remove any H_2S gas. Furthermore, the Applicant shall comply with all applicable Rules and Regulations as imposed by the SCAQMD and conduct regular air monitoring if directed by the SCAQMD. These measures will ensure that any potential impacts remain below a level of significance.

REFERENCES

Chambers Group, Inc., Final Noise Survey for the Construction and Operation of the International Wastewater Treatment Plant and Outfall Facilities at the Tijuana River San Diego, California, February 1992

7-8

Federal Clean Air Act, 1977

Lewis-Presley Air Quality Act, 1987

South Coast Air Quality Monitoring District, 1992 - 1996, Air Pollution Data Monitoring Cards (1993, 1994, 1995, 1996, and 1997)

South Coast Air Quality Monitoring District, 1993, Rules and Regulations, January 1993

South Coast Air Quality Monitoring District, 1993, SCAQMD CEQA Air Quality Handbook, April 1993

South Coast Air Quality Monitoring District, 1980, A Climatological/Air Quality Profile, California South Coast Air Basin, Prepared by Ralph W. Keith

USEPA 1985, AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, January 1995
APPENDIX B

Noise Analysis

NOISE ANALYSIS PREPARED FOR THE CONSTRUCTION AND OPERATION OF THE CITY OF BEVERLY HILLS MUNICIPAL WATER AND PUBLIC WORKS PROJECT

Prepared For:

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JANUARY, 1998

1.0 OVERVIEW

The following presents the results of a noise analysis performed in support of the Initial Study prepared for the construction water wells, associated pipelines, and a treatment facility to be located within the City of Beverly Hills. The project includes the construction and operation of four wells used to supply municipal water for local use. Obtained water would be treated through reverse osmosis. Currently, the treatment facility is projected to process as many as 3.5 million gallons of water per day but shall be designed with a capacity of 5.0 million gallons per day. When complete, the facility would supply approximately 20 percent of the City's water demands. At this time it is estimated that approximately 87 percent of the water (based on previous studies) could be brought up to drinking water standards and this portion of the water would be blended with water from the Metropolitan Water District at its connection near Sunset Boulevard and Rexford Drive. The remaining approximately 13 percent would contain most of the dissolved minerals and would be discharged into the storm drain system.

7-8

The included study is prepared to the level of detail necessary for CEQA review to determine if the project would create any significant noise impacts. The noise study includes a discussion of applicable rules and regulations, a description of the existing setting, a discussion of threshold criteria levels, and an impacts analysis for both the construction and subsequent operational phases of the project.

The study concludes while construction has the potential produce significant noise impacts, implementation of the recommended mitigation measures will reduce these to a level that is less than significant. No significant impacts are associated with project operation and no further mitigation is warranted.

2.0 Environmental Setting

2.1 Characteristics of Sound and City Policy

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary by over one trillion times within the range of human hearing, a logarithmic loudness scale is used to keep sound intensity numbers at a convenient and manageable level. Since the human ear is not equally sensitive to all frequencies within the entire spectrum, noise measurements are weighted more heavily within those frequencies of maximum human sensitivity in a process called "A-weighting" written as dBA.

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or alternatively, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. The L_{min} and L_{max} represent the 1-second minimum and maximum values. Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or the day/night average noise level (Ldn).

7-8

In many communities where a quiet environment is considered an important asset that enhances the natural setting, a somewhat more stringent land use compatibility guideline (as compared to other urban areas) has been adopted. Applicable noise criteria are presented in the City of Beverly Hills Noise Element (1975) and methods to enforcement these criteria are presented in City of Beverly Hill Noise Ordinance (1988). As stated in the Noise Element "Actual standards have not been developed regarding noise in Beverly Hills. However, the City Ordinances on noise imply policies and standards: That the ambient noise levels within Beverly Hills should not be increased by additional specific noise sources."

Policies within the Noise Ordinance which specifically relate to the project include Sec. 5-1.202, "Machinery, equipment, fans, and air-conditioning" which restricts noise from exceeding an increase of 5 dbA at any property line, and Sec. 5-1.2, "Restrictions on construction activity" which restricts construction to between the hours of 8:00 a.m. and 6:00 p.m. and disallows construction on Sundays, legal holidays, and Saturdays within 500 feet of residential areas.

2.2 Local Noise Levels

Existing noise levels near the proposed wells, pipelines, and public works facility are those typical of urban development. Noise sources derive almost exclusively from vehicular traffic. However, at the time of the first field study (i.e., May 22, 1997) Burton Way (along which two wells are to be placed) was undergoing reconstruction and heavy equipment noise added to the ambient noise profile. Additionally, at the City equipment yard (the site of the proposed public works facility) the barking of dogs from the adjoining small animal hospital was evident.

To determine ambient noise at the various well sites, at the public works facility site, and at proximate receptor locations, field studies were performed on May 22, 1997 and January 21, 1998. Six noise level measurements were obtained during the first study and an additional five were obtained during the second. During both studies, noise monitoring was conducted using a Quest Technologies Model 2900 Type 2 Integrating/logging Sound Level Meter. The unit meets the American National Standards Institute Standard S1.4-1983 for Type 2, International Electrotechnical Commission Standard 651 - 1979 for Type 2, and International Electrotechnical Commission Standard 651 - 1979 for Type 2 sound level meters. The unit was field calibrated at 9:55 a.m. on May 22 and 10:25 a.m. on January 21. In both cases calibration was performed using a Quest Technologies QC-10 calibrator immediately prior to the first set of readings. The accuracy of the calibrator is maintained through a program established through the manufacturer and is traceable to the National Bureau of Standards. The unit meets the requirements of the

American National Standards Institute Standard S1.4-1984 and the International Electrotechnical Commission Standard 942: 1988 for Class 1 equipment.

7-8

The results of each day's monitoring are presented below. Readings NR-1 through NR-6 were obtained on May 22 while NR-7 through NR-11 were obtained on January 21. All readings are discussed below. Results of each survey are included in Table B-1.

NR-1 - Proposed Well Site Along Burton Way West of Foothill Road

This measurement was obtained at the site of a proposed well in the parkway between the eastbound and westbound lanes of Burton Way at the site of the existing test well. The actual monitored location was 56 feet north of the innermost eastbound lane, 48 feet south of the innermost westbound lane, and 179 feet west of the southbound lane of Foothill Road. Single family residential structures are located along the south side of the eastbound lane while multifamily units are located along the north side of the westbound lane of Burton Way.

The dominant noise source during the survey was that of passing vehicles on Burton Way; however, construction to the east across Foothill Road was also audible in the background. Furthermore, City workers were unloading pipe at a distance of about 60 feet during the first 2 minutes of the reading.

NR-2 - Proposed Well Site Along Burton Way West of North Oakhurst Drive

This measurement was obtained at the site of a proposed well also in the parkway between the eastbound and westbound lanes of Burton Way. The actual monitored location was 28 feet north of the innermost eastbound lane, 30 feet south of the innermost westbound lane, and 40 feet west of Oakhurst (which was closed due to the construction). Again, single family residential structures are located along the south side of the eastbound lane while multifamily units are located along the north side of the westbound lane of Burton Way.

While the dominant noise source for this location would typically be from passing vehicles on Burton Way; local construction elevated noise levels well above typical traffic levels. An excavator was trenching the innermost westbound lane of Burton at a distance of 74 feet from the monitored location. This excavator was working its way west and at the end of the monitored period was at a distance of about 105 feet. Additionally, a generator was being used for welding at a distance of about 45 feet to the south of the meter. This welding was intermittent and lasted for about 2 minutes of the reading period. In actuality, the presence of this equipment provides a reasonable indication of construction noise discussed later in this document.

Site	Measurement Period	L _{eq} (dBA)	L _{min} (dBA)	L _{max} (dBA)
NR-1	10:00 - 10:15 a.m.	62.8	54.0	73.9
NR-2	10:34 - 10:49 a.m.	73.3	58.9	86.1
NR-3	11:01 - 11:16 a.m.	54.2	47.1	72.4
NR-4	11:30 - 11:45 a.m.	66.8	54.2	78.6
NR-5	11:50 a.m 12:05 p.m.	63.2	58.8	70.1
NR-6	12:15 - 12:30 p.m.	69.1	56.0	78.6
NR-7	10:30 - 10:45 a.m.	68.9	53.9	81.6
NR-8	10:52 - 11:07 a.m.	67.8	54.9	75.8
NR-9	11:17 - 11:32 a.m.	62.0	55.2	75.1
NR-10	11:45 - 12:00 noon	47.7	44.0	59.7
NR-11	12:09 - 12:24 p.m.	55.3	37.6	71.0

FIELD SURVEY NOISE MEASUREMENTS

NR-3 - Proposed Public Works Facility Site (City Equipment Yard)

This measurement was obtained at the site of a proposed public works facility within the City Maintenance Yard. The actual monitored location was in the vehicle parking area 113 feet west of Foothill Road, 32 feet south of the northern fence line, and approximately 230 east of the western fence line. The adjoining area includes commercial land uses and no residential used are located in proximity. An animal hospital borders the site to the north and the sound of barking dogs was evident during the reading. Other noise sources included vehicles passing on Foothill Road, birds, airplane overflights, and a "hum" associated with the use of high voltage to the west. Minor noise associated with construction to the west was also notable. Additionally, during the reading a pick-up truck drove by the meter and a street sweeper pulled to within about 70 feet of the meter.

NR-4 - Parkway Near Proposed Well Site at Beverly Boulevard, Santa Monica Boulevard, and Civic Center Drive

At the time of the May 22 field study, a well was proposed to be positioned in the parkway located near the confluence of the westbound lane of Beverly Boulevard, the northeast bound lane of Santa Monica Boulevard, and the southwest bound lane of Civic Center

7-8

Drive. The actual monitored location was 133 feet northeast of Beverly Boulevard, 41 feet southeast of Santa Monica Boulevard, and 41 feet northwest of Civic Center Drive. A multifamily unit located 425 Maple Drive is located approximately 135 feet to the southeast and represents the most proximate receptor. Single family units are located across Santa Monica Boulevard with the most proximate being approximately 200 - 250 feet to the west at the corner of Palm Drive and Santa Monica Boulevard and approximately this same distance at the corner of Hillcrest Road and Santa Monica Boulevard. Immediately across Santa Monica Boulevard is the Beverly Gardens Park. Local noise was dominated by traffic along both Santa Monica and Beverly Boulevards.

7-8

NR-5 - West End of Multifamily Residential Unit at 425 Maple

During the measurement at NR-4 it was noted that the noise at the adjacent multifamily unit was further removed from local traffic noise and merited its own measurement. The meter was located along the northwest portion of the structure at a distance of approximately 120 feet east of Beverly Boulevard. Note that the west end of the unit is protected by a block wall and the meter was situated immediately east of the wall near the nearest visible dwelling unit. While traffic noise still dominated, a local ventilation system was also notable.

NR-6 - Proposed Well Site Along Santa Monica Boulevard Southwest of Doheny Drive

This measurement was obtained at the site of a proposed well in the parkway between the northeast and southwest bound lanes of Santa Monica Boulevard southwest of Doheny Drive. The actual location was 25 feet north of the eastbound lane and 24 feet south of the westbound lane of Santa Monica Boulevard and 98 feet west of Doheny Road. The Beverly Terrace Hotel is located on the southwest corner and multifamily units are located to its west. The northeastern-most portion of the Beverly Gardens Park is located immediately to the north across Santa Monica Boulevard. Single family dwellings are also located across Santa Monica Boulevard with the nearest being approximately 200 - 250 feet. As would be expected, traffic-generated noise dominated the measurement.

NR-7 - Civic Center Drive East of Beverly Boulevard

This reading was obtained at the revised location of the well referenced in NR-4, above. The noise measurement was obtained along the centerline of Civic Center Drive 45 feet east of the Beverly Boulevard right-of-way. The multifamily unit located 425 Maple Drive, as noted above, is located approximately 100 feet to east and represents the most proximate receptor. Single family units are located across Santa Monica Boulevard with the most proximate being approximately 250 - 300 feet to the west at the corner of Palm Drive and Santa Monica Boulevard and approximately this same distance to the northeast at the corner of Hillcrest Road and Santa Monica Boulevard. While one jet aircraft overflight was noted, most noise was due to local traffic.

NR-8 - Beverly Gardens Park Northeast of Palm Drive and Northwest of Santa Monica Boulevard

7-8

This reading was obtained almost due north of NR-7 in the Beverly Garden Park. This site represents the alternative well site to that noted in NR-7, above. The noise measurement was obtained 171 feet northeast of Palm Drive, 211 feet southwest of Hillcrest Road, 43 feet northwest of Santa Monica Boulevard, and 58 feet southeast of a 6.5 foot high block wall that separates the park from the adjacent area. The most proximate residents include the single family units across both Palm Drive and Hillcrest Road, and the multifamily units located to the south of Civic Center noted in NR-4 and NR-7 above. All noise was due to local traffic.

NR-9 - Beverly Gardens Park West of Doheny Drive and Northwest of Santa Monica Boulevard

This reading was obtained in the northeastern-most portion of Beverly Garden Park. The noise measurement was obtained 55 feet northeast of Oakhurst Drive, 211 feet west of Doheny Drive, 140 feet northwest of Santa Monica Boulevard, and 75 feet south of a Carmelita Avenue. The most proximate residents include the single family units across both Oakhurst and Carmelita. While two helicopter and one light plane overflights were noted, most noise was due to local traffic.

NR-10 - Alley Between Alpine Drive and Rexford Drive

This reading was obtained along the pipeline route in the alley between Alpine Drive and Rexford Drive approximately 444 feet southeast of Sunset Boulevard. Single family residential units are located along either side of the alley and while some of these units are set back from the alley, others are located adjacent to the alley. Four light aircraft and one jet aircraft overflight were noted during the noise reading. Additionally, traffic traveling along Sunset Boulevard was perceptable in the background.

NR-11 - Maple Drive Southeast of Elevado Avenue

The monitored location was located on the sidewalk in front of the residence located at 613 Maple Drive along the proposed pipeline route. The selected location is approximately midway between Elevado Avenue and Carmelita Avenue. Local noise was typical of a residential setting. During the first approximately 5 minutes of the reading, a refuse collection truck was noted in the background. Also, 14 automobiles were noted to proceed along Maple. One jet aircraft, one helicopter, and four light aircraft overflights were also noted. Additionally, a dog barking at a proximate home was recorded. Finally, the resident of the house at 613 was noted to come out, start his car located in the driveway (approximately 20 feet from the meter), and drive away.

Other Areas Along the Pipeline Routes

Obviously it would not be possible to obtain noise level measurements along the entirety of the proposed pipeline route. These levels are then inferred from the data included in the City's General Plan Noise Element. Noise along the routes to be situated within the right-of-way along both Burton and Santa Monica would be projected to be similar to the measurements obtained along these routes. Sunset Boulevard (along the alternative pipeline route) is estimated to be similar to that of Santa Monica. Areas with less traffic, such as along Foothill are presented in the Noise Element as being between 65 and 69 dBA during the day decreasing to below 60 dBA during the night. Less traveled areas, such as Lomitas Avenue and within the alley between Alpine Drive and Rexford Drive are less influenced by traffic and these areas are estimated at less than 60 dBA throughout the day.

7-8

3.0 Impacts

3.1 Impact Significance Criteria

Based on the City of Beverly Hills' adopted noise criteria in the General Plan, impacts were considered to be significant operational noise adds 5 dBA at the property line as per Sec. 5-1.202, "Machinery, equipment, fans, and air-conditioning." Construction noise would be significant if construction were not performed in accordance Sec. 5-1.2, "Restrictions on construction activity."

3.2 Analysis of Impacts

3.2.1 Construction

Construction noise represents a short-term impact on ambient noise levels, as noise levels produced by construction activities can reach relatively high levels.

Noise generated from well and pipeline construction was extrapolated from on-site pipeline construction monitoring performed by Chambers Group during the installation of the South Bay Land Outfall pipe in the Tijuana River Valley as well as that obtained during the measurement NR-2 discussed above. The Chambers Group survey involved the installation of a 12 foot diameter pipeline using 18 pieces of heavy construction equipment of which 12 to 13 were operating at any one time. Installation of this pipeline created a noise level of 74.1 to 74.7 dBA at a distance of 90 feet from the largest pieces of machinery. This extrapolates to a value of approximately 79.8 dBA at 50 feet. The proposed City of Beverly Hills project's pipeline is to be 16 inches in diameter and would require only about 1/3 of the equipment necessary for the South Bay Land Outfall. Projected noise from this assemblage of equipment would be approximately 75 dBA as

measured at a distance of 50 feet. The noise measurement during the Beverly Hills noise survey at site NR-2 was located approximately 75 feet from a working excavator, 45 feet from a generator, and proximate to passing traffic. Here an L_{eq} value of 73.3 dBA was recorded. If this 73.3 dBA value were generated solely by the excavator, the projected noise at 50 feet from this piece of equipment would be approximately 76.8 dBA. However, passing traffic as well as the operation of the generator contributed greatly to the monitored noise and a value of 76 dBA L_{eq} represents a reasonable worst-case assumption for pipeline and well construction. This value is then used to determine project-generated noise levels at proximate receptor locations. Table B-2 presents the projected noise associated with construction at varying distances from the construction effort.

7-8

Table B-2

NOISE AT VARYING DISTANCES FROM THE CONSTRUCTION EFFORT

Sound Level Distance from Construction Activi	
81 dBA	25 feet
75 dBA	50 feet
70 dBA	100 feet
65 dBA	158 feet
63 dBA	200 feet
60 dBA	281 feet
55 dBA	500 feet

Well Installation

Well installation is most proximate to sensitive land uses along Burton Way, at Civic Center Drive, and within the Beverly Garden Park where drilling equipment could be located at a distance of about 100 feet to proximate residents and the projected noise level from construction equipment could be on the order of 70 dBA. In all cases, this value would be additive with traffic noise and the resultant noise level could be between 71 and 72 dBA. While the noise from construction would be notable, it is well below any level deemed as hazardous to hearing acuity. (Note that the Occupational Safety and Health Administration [OSHA] allows for an 8-hour exposure level of 90 dBA).

Thus, while the impact is adverse, when construction is performed within the guidelines set forth in Sec 5.1-2 of the local Noise Ordinance, it is not significant.

B-8

Pipeline Installation

Pipelines would be located more proximate to local residents than wells because they would be placed in existing easements (i.e., streets and alleys) and do not have the extra the buffer zone provided by the parkways and extended distance associated with well placement.

7-8

Pipelines placed along Burton Way could come to within about 50 feet of local residents and the noise projected at these residential locations would be on the order of 76 dBA L_{eq} . Local traffic could raise this value by about 1 dBA and a resultant value of 77 dBA Leq could result. Again, while the noise from construction would be notable, it is well below any level deemed as hazardous to hearing acuity and when performed within the guidelines set forth in Sec 5.1-2 of the local Noise Ordinance, constitutes an adverse, but not significant, impact.

Pipeline routes along Santa Monica Boulevard, as well as the alternative route along Sunset Boulevard, are situated further from residential receptors and the resultant noise from this construction would be on the order of 70 dBA. Because traffic along these routes is greater, the construction effort would add a lesser volume to the total noise profile, and again would produce an adverse, but not significant impact.

Construction of pipelines to the north of Santa Monica Boulevard along Maple and Lomitas and specifically within the alley would take equipment more proximate to receptor locations. While local streets are approximately 48 feet wide, the alley between Alpine, and Rexford is approximately 25 feet wide. In some cases "zero lot lines" (i.e., the dwelling abuts the alley) were noted in the field survey. While most of these lots have walls or fencing, some of the residents have second story rooms immediately overlooking the alley. In these cases construction equipment could be located as little as 10 feet from the dwelling and the projected noise level at the dwelling could be as much as 90 dBA. Structural attenuation provided by the dwelling, with windows closed, is in excess of 20 dBA and a resultant interior noise level of as much as 70 dBA could result. Again, while this level is certainly adverse, the exposure is below any safety-related concerns, is only of a temporary duration, and by City standards, is not significant.

Public Works Facility Installation

The installation of the public works facility is projected to use a larger assemblage of equipment than either the wells or pipeline, and noise levels would be expected to be greater. Here, a value of 80 dBA as measured at a distance of 50 feet is deemed as a reasonable projection for construction noise. (Note that this level is higher than that monitored in the Tijuana River Noise Study which monitored 12 - 13 pieces of equipment working simultaneously.) The 65 dBA noise level (typically accepted as a desirable exterior noise level), would occur at a distance of approximately 280 feet. The public works facility is not located near any sensitive land uses and when construction is conducted in accordance with City policy, will not present a significant impact.

3.2.2 Operations

Noise impacts for project operations are subject to Sec. 5-1.202 of the Noise Ordinance as noted above. To determine if an impact is probable, it is necessary to ascertain the noise from similar equipment. On June 3, 1997 a noise survey was conducted at the City of Arcadia groundwater extraction well and pumping facility located at 141 East Camino Real within the City of Arcadia. Noise monitoring was performed using the same equipment as described above. The meter was field calibrated immediately prior to the measurement.

The facility is located within an area of single family residential units. The facility includes a well that uses a 75 horsepower motor for water extraction. The pump head is exposed and not contained in a subterranean vault. (Note that the proposed City of Beverly Hills project utilizes 50 horsepower well pumps and the entire assembly is located within an underground vault). Other appurtenant equipment includes a block wall pump house that uses two large pumps in excess of 100 horsepower each. One side of the pump house is louvered for air circulation and all noise emanated from this area. A large water storage tank is also located on-site. The entire site is surrounded by a 6 foot block wall.

Because the well pump was not discernable above the noise produced by the pumps in the pump house, the meter was located at a distance of 10 feet from the well. At this distance the well pump was barely discernable over that from the pump house located at a distance of 75 feet. Other notable noise during the survey was that from a leaf blower being used across Camino Real.

A 5 minute reading was obtained from 10:00 to 10:05 a.m. The measured L_{eq} was 51.5 dBA with L_{min} and L_{max} values of 49.2 and 55.4 dBA, respectively. Again, note that even at a distance of 10 feet, noise from the well pump as not readily discernable over that from the pump house and leaf blower. The human ear can typically discern the noise from two separate events to a difference of about 20 dBA. Thus, the noise from the pump, if it were measured by itself, could be on the order of 40 dBA at a distance of 10 feet. The proposed project's pumps would be entirely underground and their resultant noise would be expected to be even less than this value.

<u>Wells</u>

The noise from the proposed wells is projected at less than 40 dBA at a distance of 10 feet. Noise from the pumps will not be discernable beyond the parkways in which they are placed and will not add 5 dBA to the ambient noise at the property line. Thus, no noise impacts, either adverse or significant, are projected from their operation.

Pipelines

No mechanical equipment is directly associated with pipeline operation. Furthermore, the pipelines are entirely underground and produce no noise. Therefore, no noise impacts, either adverse or significant, are projected from their operation.

Public Works Facility

7-8

In the treatment of water, chemical injection, and reverse osmosis procedures do not contribute measurably to plant noise and the noise from the operation of the treatment plant is primarily associated with the operation of its pumps. The facility is to be enclosed and the resultant exterior noise is not expected to exceed that measured at the City of Arcadia pumping station (i.e., 51.5 dBA at a distance of 75 feet). This level is less than that measured in the field survey at the plant site (i.e., 54.2 dBA) and the resultant noise is calculated at 56.1 dBA. Therefore, the treatment plant will not add 5 dBA to the ambient noise and does not present a significant impact. However, the treatment plant will operate 24 hours per day. During the night ambient noise could decrease by as much as 10 dBA over those levels measured in the field and a resultant noise level of about 45 dBA would be expected. At a distance of about 150 feet to the street, the noise from the plant would attenuate by 6 dBA and the resultant level would be approximately 45.5 dBA. When added to the projected ambient noise level of 45 dBA, the resultant noise level is calculated at about 48.3 dBA for an increase of about 3.3 dBA. This value is less than the 5 dBA criterion and does not present a significant impact. Any impact would then be to the small animal hospital located immediately to the north. This facility is not operated during the night and with no sensitive receptors, the impact would not be considered as significant.

7-8

4.0 Mitigation Measures

Based upon the provided significance criteria, no significant impacts are projected and no mitigation is warranted. However, pipeline and possibly well construction could create nuisance impacts to local residents and should be reduced to the extent reasonably feasible. Applicable measures include:

- All construction shall be performed in accordance with Sec. 5-1.202 of the City of Beverly Hills Noise Ordinance.
- The contractors shall strive to use the quietest equipment available. All internal combustion powered equipment shall be equipped with properly operating mufflers and kept in a proper state of tune to alleviate back-fires. With the exception of the alternative pipeline route to be placed along Sunset Boulevard, equipment installing pipelines north of Santa Monica Boulevard engines shall be fitted with protective shrouds to reduce motor noise.
- Portable equipment shall be located as far as possible from the adjacent residents.
- Equipment shall be stored and maintained as far as possible from the adjacent residents.
- With the exception of the alternative pipeline route to be placed along Sunset Boulevard, noise curtains shall be used for all pipeline construction north of Santa Monica Boulevard.
- A public awareness program will be instituted before construction to alert the public of the up-coming disturbance.

• A disturbance coordinator responsible for responding to noise complaints shall be designated. This person's name and telephone number should be clearly posted along pipeline routes. It would be this person's responsibility to respond to complaints about noise, determine the cause, and implement measures to mitigate the impact if feasible. Examples include enforcing the allowable hours of construction, identifying poorly muffled equipment and requiring its repair or replacement, and recommending any modifications or additions to the temporary construction noise barrier.

7-8

While construction performed in accordance with Sec. 5-1.202 of the City of Beverly Hills Noise Ordinance is not significant, implementation of these, or equally effective measures, would further reduce the construction impact noise to the extent reasonably feasible. Still, the noise from the construction of pipelines north of Santa Monica Boulevard (excepting that along Sunset Boulevard), and specifically within the local alley, remains an adverse, but not significant impact associated with the project.

B-12

Comments and Responses To Comments

7-8

Received During the Public Review Period

Initial Study/Mitigated Negative Declaration

City of Beverly Hills Municipal Water And Public Works Facility Project

Prepared for:

City of Beverly Hills Department of Planning and Community Development 455 North Rexford Drive, Room G-40 Beverly Hills, California 90210-4817 (310) 285-1123

Prepared by:

Jones & Stokes Associates, Inc. 2151 Michelson Drive, Suite 236 Irvine, California 92612 (949) 260-1080 August 1998

Response to Comments

The City of Beverly Hills has prepared an Initial Study and proposed Mitigated Negative Declaration (IS/MND) under the provisions of the California Environmental Quality Act (CEQA) for the City's Municipal Water and Public Works Facility Project. Sections 15073 of the State CEQA Guidelines establishes opportunities for public and agency review of Negative Declarations. Section 15200 of the Guidelines state that the objectives of public review of agency proposals include sharing expertise, disclosing agency analysis, checking for accuracy, detecting omissions, discovering public concern and soliciting counterproposals. Additionally, Section 15088 of the CEQA Guidelines require agencies to respond to public comments received on Environmental Impact Reports. Public Resources Code Section 21091(f) and Section 15074 of the State CEQA Guidelines state that a Lead Agency must consider the Negative Declaration, together with any comments received, before approving the project. This document addresses the consideration of written comments received during the public review period.

A notice of the IS/MND was posted in the Los Angeles County Clerk's office, and a notice and copy of the IS/MND was submitted to the California State Clearinghouse for distribution to responsible agencies. The public review period began on June 26, 1998 when the City began soliciting comments for the project. However, the State granted and started the 20-day comment period on July 22, which ends on August 11, 1998. Only one written comment has been received to date regarding the proposed project. The California Department of Transportation (Caltrans) provided a letter to the City dated July 20, 1998, which is attached for reference. The comments and responses are provided below.

Comment 1: Any transportation of heavy construction equipment and/or materials which requires the use of oversized transport vehicles on State highways will require a Caltrans transportation permit. We recommend that large size truck trips be limited to off-peak commute periods and we acknowledge the contract shall curtail lane closure during peak hours.

Response 1: The construction of the project facilities is not anticipated to require the use of

2

oversized construction equipment or oversized transport vehicles. However, in the event that oversized equipment would be required, the contractor would be advised to comply with Caltrans' standards and the City would obtain a Caltrans transportation permit.

7-8

The curtailment of lane closures during peak hours (between the hours of 7:00-9:00 am, and 4:00-6:00 pm) is included as a mitigation measure that has been incorporated into the project.

No issues with respect to the adequacy of the environmental document have been raised. Therefore, no additional response is necessary.

- **Comment 2:** You state in your July 14, 1998 transmittal letter that elements of the project would encroach upon Rte. 2 (Santa Monica Boulevard). In all instances where the proposed work falls within or affects the State Right-of-Way such as construction, grading, changes to hydraulic run-off, etc., a Caltrans encroachment permit will be needed.
- **Response 2:** The City will apply for and obtain a Caltrans encroachment permit for project elements that fall within the Santa Monica Boulevard (State Route 2) Right-of-Way. The only project components that are expected to require this type of permit would include the extension of the product water pipeline across Santa Monica Boulevard at approximately Beverly Boulevard. No other impacts would be expected to Santa Monica Boulevard.

No issues with respect to the adequacy of the environmental document have been raised. Therefore, no additional response is necessary.

- **Comment 3:** An encroachment permit application and six sets of plans should be sent to this office for Caltrans review (referring to District 7, located at 120 So. Spring Street, Los Angeles, CA 90012-3606).
- **Response 3:** The City will submit a permit application and six sets of plans to Caltrans for review prior to beginning construction on the project pipelines.

No issues with respect to the adequacy of the environmental document have been raised. Therefore, no additional response is necessary.

Comments and Responses to Comments

- **Comment 4:** A shortened review period for the negative declaration (20 days) is acceptable to Caltrans.
- **Response 4:** The project has undergone a 20-day shortened review period and has considered all comments received within the public review period. No issues with respect to the adequacy of the environmental document have been raised. Therefore, no additional response is necessary.



August 25, 1998

To:	Board of Directors (Water Planning and Resources CommitteeAction)
From: Go	General Manager Caucille Megn
Submitted by:	Debra C. Man, Chief Planning and Resources
Subject: Groundwater Recovery Program for the Beverly Hills Desalter Project	

7-8

RECOMMENDATIONS

It is recommended that the Board:

- 1. Authorize the General Manager to execute a Groundwater Recovery Program agreement with the City of Beverly Hills to implement the Beverly Hills Desalter Project consistent with the major terms and conditions in this letter in form approved by the General Counsel, and
- 2. Certify that it has reviewed and considered the information provided in the Mitigated Negative Declaration for the Beverly Hills Desalter Project and adopt the Lead Agency's findings related to the project.

EXECUTIVE SUMMARY

The City of Beverly Hills has requested financial assistance for the Beverly Hills Desalter Project (Project) under the principles of Metropolitan's Groundwater Recovery Program (GRP). The proposed 2,600 acre-feet per year (AFY) project will increase groundwater production by treating groundwater containing high total dissolved solids (TDS), iron, manganese and hydrogen sulfide levels that exceed drinking water standards and then serving that treated water to meet municipal needs.

The proposed project complies with established GRP criteria. Subject to the Board's approval, the proposed project would be eligible for financial contributions adjusted annually to equal those project costs exceeding Metropolitan's treated noninterruptible water rate for up to \$250 per acre-foot of production for a period of 20 years.

Assistance to the Project is consistent with the Local Resources Program (LRP) rules adopted by the Board in June of this year. The transition terms of the LRP allow groundwater recovery applications received prior to December 1, 1997 to be "grandfathered" under the existing GRP rules. The Project application was received in September 1993.

Project operation would help the region meet the year 2020 goal of 500,000 AF for recovered groundwater and recycled water production. Currently, there is an estimated 125,000 AF shortfall in meeting the goal.

-2-

Board of Directors

August 25, 1998

DETAILED REPORT

The City of Beverly Hills (Beverly Hills) has requested financial assistance for the Beverly Hills Desalter Project (Project) under the principles of Metropolitan's Groundwater Recovery Program (GRP). Beverly Hills obtains all of its water supply from Metropolitan.

The proposed Project, located in the city of Beverly Hills, will increase regional groundwater production by treating groundwater pumped from the Hollywood Basin. The groundwater contains elevated levels of total dissolved solids (TDS), iron and manganese levels that do not meet drinking water standards. The treated water will be served to customers in Beverly Hills' service area. Attachment 1 provides a description of the Project's features.

The proposed Project capacity is 2,600 acre-feet per year (AFY). Because of the inherent uncertainty in determining the exact amount of production for a groundwater project, Metropolitan's GRP agreement will include a provision to allow increased production of 20 percent greater than the Project's operating capacity of 2,600 AFY. This could yield as much as 3,120 AFY of production eligible for financial assistance.

Financial assistance would be provided under an agreement term not to exceed 20 years. Metropolitan's financial contribution would be provided to Beverly Hills as a water sales payment through a yield-purchase arrangement similar to that used for previously approved GRP projects. The contribution would be adjusted annually based on the incurred project capital and operation and maintenance (O&M) costs which exceed Metropolitan's treated water rate. The maximum GRP contribution was set by the Board at \$250 per acre-foot. In order to reduce administrative burden for the local agency and Metropolitan, it is anticipated that the agreement may include a pre-established O&M labor estimate.

During the first year of operation (2001-2002), Metropolitan's contribution rate is estimated to be \$250 per acre-foot. A corresponding total contribution of approximately \$650,000 for fiscal year 2001-2002 will be included in future O&M budgets. Attachment 2 is a forecast of Metropolitan's annual contribution to the Project.

Participation in the Project is consistent with the transition terms of the Local Resources Program (LRP) which allows groundwater recovery applications received prior to December 1, 1997 to be "grandfathered" under the existing GRP rules. The transition window closes on December 9, 1998 at which time the GRP agreement must be fully executed. The Project application was received in September 1993 and meets the "grandfather" requirement. The transition terms were adopted by the Board in June 1998.

Project operation would help the region meet the year 2020 goal of 500,000 AFY for recovered groundwater and recycled water production. Currently, there is an estimated 125,000 AFY shortfall in meeting the goal.

Pursuant to the California Environmental Quality Act (CEQA), Beverly Hills, acting as the Lead Agency, has prepared and approved a Mitigated Negative Declaration for the Project. Metropolitan will not be responsible for implementing any of the mitigation measures associated with the Project. Metropolitan, as a Responsible Agency due to its financial participation in the -3-

Board of Directors

Project, is required to review and consider the information provided in the Mitigated Negative Declaration prior to reaching a decision on the Project. Copies of the Initial Study, Mitigated Negative Declaration, and Notice of Determination are available for your review in the office of - the Executive Secretary. No further environmental documentation is necessary for you to act upon in this matter.

AMH:jpa

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Attachment(s)

Attachment 1 for Board Letter 7-10 August 25, 1998 Planning and Resources

Beverly Hills Desalter Project

7-8

Project Description

<u>Overview</u>

Located in the City of Beverly Hills (Beverly Hills), the Project will pump and treat brackish groundwater from the Hollywood Basin to augment Beverly Hills' domestic water supply. The Hollywood Basin is situated in the western part of Los Angeles County and underlies the city of Beverly Hills and community of West Hollywood. Total dissolved solids (TDS) concentrations in the Basin exceed the California Department of Health, Title 22 recommended level of 500 mg/L. Iron and manganese levels are at or above the recommended maximum levels. The proposed treatment plant will use reverse osmosis (RO) as the main treatment process to remove TDS, hardness, iron, manganese and trace organics. Blend water, untreated by RO membranes, will require iron and manganese removal by either oxidative filtration or the manganese greensand process. The Project will provide approximately 2,600 acre-feet per year of potable water to Beverly Hills customers. Proposed project facilities are shown in Figure 1.

Treatment Facilitiesm

The proposed treatment plant will be located on Foothill Road, near the intersection of Third Street on approximately 0.1 acres of land at the northern end of property owned by Beverly Hills. Process equipment, above-ground chemical and waste storage tanks, and emergency power systems will be housed inside a treatment and administration building which may be entered by an existing access on Foothill Road. Only those portions of the building devoted to project treatment facilities are part of the Project. All buildings will be architecturally designed to blend with the surrounding environment.

Treatment Process Design

The proposed primary treatment process is reverse osmosis. Pre-treatment includes a commercial scale inhibitor and acid addition. Post-treatment will include a carbon dioxide air stripper. Water will be pumped from five production wells, all located within Beverly Hills. The approximate locations of the wells are:

- Civic Center Drive at Beverly Boulevard;
- Burton Way at Oakhurst Drive;
- North of Santa Monica Boulevard at Palm Drive;
- Beverly Gardens Park at Santa Monica Boulevard and Carmelita Avenue; and
- Burton Way at North Elm Drive (Well No. 1).

7-8

Attachment 1 for Board Letter 7-10 August 25, 1998 Planning and Resources

Water will be pumped from the wells to the treatment plant through pipelines within street rightsof-way. At the plant, the raw water will be divided into two treatment streams. One stream (about 40 percent) delivers raw water to the membranes for treatment, then air stripping for posttreatment. The second stream will be bypassed to the oxidative filtration or manganese greensand filters for iron and manganese removal and then blended with treated water. Injection of sulfuric acid and a commercial scale inhibitor will be applied to prevent scaling. The expected water production is 2,600 acre-feet per year.

RO Treatment

Pre-treated well water is then pumped through cartridge filters for solids removal. Water from the cartridge filters enters RO feed pumps where the pressure is boosted prior to entering the membrane assemblies. The membrane assemblies (two are proposed) will each have a permeate capacity (output) of 285 gallons per minute. The recovery is estimated to be 70 percent.

Post-Treatment

Permeate from the membrane system will undergo air stripping to remove hydrogen sulfide. Bypass water will also be air stripped for hydrogen sulfide removal. Permeate from the membrane system will then be blended with the bypass stream, where lime or calcium carbonate will be added to raise the alkalinity and buffer capacity of the product water. Sodium hypochlorite will be used for disinfection. The finished water will be retained in a clearwell until it is pumped to the distribution system via a 12-inch diameter pipeline that connects the water treatment plant to Beverly Hills' existing Sunset Reservoir.

Brine Disposal

About 336 acre-feet per year of concentrate (brine) will be discharged from the treatment plant to the local storm drain located on Foothill Road. The storm drain would convey the concentrate for ultimate discharge to Ballona Creek. The Los Angeles Regional Water Quality Control Board (RWQCB) has determined that this discharge complies with National Pollutant Discharge Elimination System requirements. An application for waste discharge will be submitted by Beverly Hills to the RWQCB prior to project design and construction.

Point of Connection

Project facilities terminate at the point of connection to Beverly Hills' existing Sunset Reservoir. Approximately one mile of 12-inch diameter potable water pipeline will be constructed to reach this connection. Brine disposal facilities end at the point of connection to the storm drain system. Depending on the final design, a booster pump station may be required to deliver product water to City customers.



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Attachment 2 for Board Letter 7-10 August 25, 1998 Planning and Resources

Metropolitan's Estimated Contribution

7-8

<u>Fiscal Year</u>	Annual Contribution (\$)
1999-2000	0
2000-2001	0
2001-2002	650,000
2002-2003	650,000
2003-2004	650,000
2004-2005	650,000
2005-2006	650,000
2006-2007	650,000
2007-2008	650,000
2008-2009	650,000
2009-2010	650,000
2010-2011	650,000
2011-2012	650,000
2012-2013	650,000
2013-2014	650,000
2014-2015	650,000
2015-2016	650,000
2016-2017	650,000
2017-2018	650,000
2018-2019	650,000
2019-2020	650,000
2020-2021	650,000

134

-3-

Public Draft

CITY OF BEVERLY HILLS LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT

Initial Study/Mitigated Negative Declaration

Prepared for City of Beverly Hills September 2019



Public Draft

CITY OF BEVERLY HILLS LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT

Initial Study/Mitigated Negative Declaration

Prepared for City of Beverly Hills September 2019

626 Wilshire Boulevard Suite 1100 Los Angeles, CA 90017 213.599.4300 esassoc.com

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Page

TABLE OF CONTENTSCity of Beverly Hills

La Brea Subarea Well and Transmission Main Project

	<u>- 490</u>
Section 1, 1.1 1.2	Introduction
Section 2, 2.1 2.2 2.3 2.4 2.5 2.6	Project Description3Project Background3Project Objectives4Project Location and Setting4Description of Project Elements5Project Implementation12Required Approvals16
Section 3.	Initial Study Checklist
31	Background 17
3.7	Environmental Eactors Potentially Affected
5.2	
Section 4,	Environmental Analysis19
4.1	Aesthetics
4.2	Agricultural and Forest Resources
4.3	Air Quality
4.4	Biological Resources
4.5	Cultural Resources 43
4.6	Energy 49
4 7	Geology Soils and Seismicity 52
4.8	Greenhouse Gas Emissions 64
4 9	Hazards and Hazardous Materials 70
4.10	Hydrology and Water Quality 77
4 11	Land Use and Land Use Planning 83
4 12	Mineral Resources 85
4 13	Noise 87
4 14	Population and Housing 99
4 15	Public Services 101
4 16	Recreation 104
4 17	Transportation 105
4 18	Tribal Cultural Resources 110
4 19	Utilities and Service Systems
4 20	Wildfire 116
20 1 21	Mandatory Findings of Significance
7.21	

i

List of Figures

1	Regional Location	6
2	Project Location	7
3	Proposed Well Site	8
4	Project Land Use	9
5	Well Rendering	
6	School and Recreational Facilities in the Project Area	73
7	Noise Measurement Locations	

List of Tables

1	Construction Phase Duration	12
2	Construction Equipment Mix and No. of Workers	13
3	Maximum Daily Construction Emissions	33
4	Localized Significant Summary Construction	35
5	Annual Project Greenhouse Gas Emissions	67
6	Ambient Noise Levels	90
7	Construction Equipment and Maximum Noise Levels	92
8	Unmitigated Maximum Construction Noise Levels at Sensitive Receptors	93
9	Vibration Source Levels for Construction Equipment	96

List of Appendices

Appendix A: Air Quality, Greenhouse Gas and Energy Information

Appendix B: Biological Resources Data

Appendix C: Cultural Resources and Paleontological Resources Technical Reports,

ii

and AB 52 Consultation Materials

Appendix D: Noise and Vibration Information

List of Acronyms

AFY	acre feet per year		
AQMP	Air Quality Management Plan		
AR4	Fourth Assessment Report		
ATCM	airborne toxic control measures		
AWWA	American Water Works Association		
BACT	Best Available Control Technology		
BC3	Business Council on Climate Change		
BHFD	Beverly Hills Fire Department		
BHPD	Beverly Hills Police Department		
BHUSD	Beverly Hills Unified School District		
BMPs	best management practices		
CAAQS	California Ambient Air Quality Standards		
CalOSHA	California Division of Occupational Safety and Health		
CARB	California Air Resources Board		
CBC	California Building Code		
CCR	California Code of Regulations		
CDC	California Department of Conservation		
CDFW	California Department of Fish and Wildlife		
CEQA	California Environmental Quality Act		
CGP	Construction General Permit		
CGS	California Geologic Survey		
CH4	methane		
CNDDB	California Natural Diversity Database		
CO2	carbon dioxide		
DDW	Division of Drinking Water		
DTSC	California Department of Toxic Substance Control		
EDD	Employment Development Department		
ERP	Emergency Response Plan		
FEMA	Federal Emergency Management Agency		
FHWA	Federal Highway Administration		
GHG	Greenhouse Gas		
GWPs	global warning potential		
НСР	Habitat Conservation Plan		
HFCs	hydrofluorocarbons		
I-10	Interstate 10		
IPCC	United Nations Intergovernmental Panel on Climate Change		
IS	Initial Study		
LACM	Natural History Museum of Los Angeles County		
LADWP	Los Angeles Department of Water and Power		

iii

LAFD	Los Angeles Fire Department		
LAMC	Los Angeles Municipal Code		
LAPD	Los Angeles Police Department		
LAUSD	Los Angeles Unified School District		
LOS	Level of Service		
LST	localized significant threshold		
MBTA	Federal Migratory Bird Treaty Act		
MG	million gallons		
MMT	million metric tons		
MND	Mitigated Negative Declaration		
MRDS	Mineral Resource Data System		
MT	metric ton		
MWD	Metropolitan Water District of Southern California		
N2O	nitrous oxide		
NAAQS	National Ambient Air Quality Standards		
NCCP	Natural Community Conservation Plan		
NOX	primary oxides of nitrogen		
NPDES	National Pollutant Detection and Elimination System		
OEHHA	Environmental Health Hazard Assessment		
PFCs	perfluorocarbons		
PM10	particulate matter 10 microns in diameter or less		
PPV	peak particle velocity		
RCP	Regional Comprehensive Plan		
RMS	root mean square		
RO	Reverse Osmosis		
ROW	right-of-way		
RPS	California Renewables Portfolio Standard		
RTP	Regional Transportation Plan		
SCAB	South Coast Air Basin		
SCAG	Southern California Associate of Governments		
SCAQMD	South Coast Air Quality Management District		
SCS	Sustainable Communities Strategy		
SF6	sulfur hexafluoride		
SMARA	Surface Mining and Reclamation Act		
SOON	Surplus Off-Road Option for NO _X		
SR	State Route		
SRA	source receptor area		
SWPPP	Storm Water Pollution Prevention Plan		
SWRCB	California State Water Resources Control Board		
TACs	toxic air contaminants		
USDA	United States Department of Agriculture		

USEPA	United State	Environmental	Protection Agency
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- USGS United States Geologic Survey
- WEP Water Enterprise Plan
- WTP Water Treatment Plant

v
SECTION 1 Introduction

To expand local water supply, the City of Beverly Hills (City) proposes to develop the La Brea Subarea Well and Transmission Main Project (proposed project or project) by providing an additional net 1,700 acre-feet per year (AFY) of groundwater supply in the La Brea Subarea within the Central Groundwater Basin. The project would include the construction and operation of new pipelines, rehabilitation of an existing abandoned pipeline, and construction of a new groundwater extraction well, as described below. While there may be a need to develop additional wells in the area to accomplish the water production goal, the location and timing of any such wells is unknown at this time.

7 - 8

1.1 Statutory Authority and Requirements

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000–21177) and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Section 15000 et seq.), the City of Beverly Hills, acting in the capacity of Lead Agency, is required to prepare an Initial Study (IS) to determine if the proposed project may have a significant effect on the environment (CEQA Guidelines Section 15063). If a Lead Agency finds that there is no substantial evidence that a project, either as proposed or as modified to include the mitigation measures identified in the IS, may cause a significant effect on the environment, the Lead Agency must prepare a Negative Declaration or Mitigated Negative Declaration (MND) for that project (Public Resources Code Section 21080(c), CEQA Guidelines Section 15070(b)).

This document is prepared in accordance with CEQA and is intended to provide an environmental analysis to support subsequent discretionary actions upon the project (CEQA Guidelines Section 15074). This analysis is not a policy document and its approval by the City neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required. This environmental documentation and supporting analysis is subject to a public review period (CEQA Guidelines Sections 15073, 15105). During this review period, comments on the document should be addressed to the City. The City will consider any comments received as part of the proposed project's environmental review and include them with the CEQA documentation for consideration by the City.

1.2 Purpose

Acting as the CEQA Lead Agency, the City has prepared this IS/MND to provide the public and responsible agencies with information about the potential environmental impacts associated with implementation of the proposed project. This IS/MND was prepared in compliance with Sections

15063 and 15070 through 15075 of the CEQA Guidelines. In accordance with Section 15070 of the CEQA Guidelines, an MND shall be prepared if the IS identifies potentially significant effects, but revisions in the project plans would avoid or mitigate the effects to a point where clearly no significant effects would occur, and there is no substantial evidence that the revised project may have a significant effect on the environment.

SECTION 2 Project Description

The proposed project would include the construction of a groundwater production well in the La Brea Subarea (that would provide approximately 1,700 AFY of new water supply), the rehabilitation of an existing (inactive) 18 and 24-inch pipelines, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main with a diameter of 16inches (collectively, referred to herein as "proposed transmission main"). The proposed transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply. The pipelines would be sized to accommodate 3,000 gallons per minute (gpm), which would be from the currently proposed well and, potentially, other wells in the area although the need for and locations of any such future wells is unknown at this time.

7 - 8

2.1 Project Background

The City's water service area is approximately 6.35 square miles and includes approximately 10,600 service connections. The system includes over 170 miles of pipeline, 16 pressure zones and 10 reservoirs. The service area has a resident population of approximately 43,000 people and a daytime population of up to 250,000 people. The City's service area supplies water from imported sources from the Metropolitan Water District of Southern California (MWD).

Historically, the City relied heavily on groundwater to meet service demands with the first wells developed in the 1880's. The City became a charter member of MWD in 1941 at which point it started to import water from MWD, thereby increasing its reliance on imported water sources. This reliance slowed in the early 1990's when imported water became more expensive and less reliable, at which point the City began reconsidering the use of its local groundwater resources.

Today, the City's water supply is solely dependent on imported water. To add reliability to their water supply portfolio, the City previously constructed four production wells in the Hollywood Basin and a new Reverse Osmosis (RO) treatment plant that was first put into operation in 2003. The groundwater from the four wells is conveyed to the RO treatment plant where it is treated and discharged into the City's distribution system under normal operation, blending with the imported water from MWD. From 2011 to 2015, the approximate average annual flows were 740 acre-feet per year (AFY) produced through local groundwater, while 10,800 AFY was imported from MWD. Therefore, local groundwater production accounted for an average of six percent of the City's average annual water supply (City of Beverly Hills 2016). The 10 reservoirs supporting the system store a combined 43 million gallons (MG).

There are three local groundwater basins near the City: the Hollywood Basin (in which the City is located); the Santa Monica Basin to the west; and the Central Basin, which includes the La Brea Subarea. Due to the adjudication status of the basins and historical groundwater development, various areas within the City's vicinity have been investigated for the expansion of groundwater resources. The City recently completed a 2015 Water Enterprise Plan (WEP) which specifically identified the need to re-establish the well field in the La Brea Subarea to increase the local water contribution to the City (City of Beverly Hills 2015).

2.2 Project Objectives

Project objectives include the following:

- Develop approximately 1,700 AFY of new potable water supply in the La Brea Subarea of the Central Basin;
- Optimally locate a new well to provide the highest feasible level of sustainable groundwater production, and sites that can be purchased and developed in the most efficient manner and permitted by Division of Drinking Water (DDW);
- Use the existing WTP;
- Rehabilitate existing inactive 18 and 24-inch pipelines where possible to minimize construction impacts; and
- Increase operational flexibility through the development of a new water supply.

2.3 Project Location and Setting

The proposed project would be located within two jurisdictions; the City of Beverly Hills and the City of Los Angeles, as depicted on **Figure 1, Regional Location** and **Figure 2, Project Location**. The City of Beverly Hill's Foothill WTP is located on Foothill Road between Alden Drive and Third Street. The Foothill WTP is a developed water treatment plant which contains reverse osmosis (RO) facilities that would treat the raw water received from the proposed groundwater production well (Figure 2).

The proposed Well Site would be implemented on a City-owned property located at 1956 Chariton Street in the City of Los Angeles, as depicted on **Figure 3**, **Proposed Well Site**. The proposed Well Site has a land use designation of Low Medium II Residential and is zoned as Restricted Density Multiple Dwelling Zone (RD2-1). The site is currently developed with a residential structure; however, there are no current residents living in the structure. The site is surrounded by other residences to the north, west and south. To the east is an area designated as Neighborhood Commercial, which consists of City-owned property, and other commercial properties along La Cienega Boulevard. Implementation of the Well Site would require the installation of 15-inch storm drain pipe, which would be located within the paved right-of-way (ROW) along Chariton Street. The storm drain would dispose of water being flushed through the well during well testing and during normal operations.

While there may be a need of additional wells in the area to meet the production goal, the need for and locations of any such future wells have not been determined at this time. The La Brea Subarea is located in the northern unadjudicated portion of the Central Basin.

The proposed transmission main, in its entirety would be approximately four miles long. The proposed rehabilitation area of the transmission main (existing 18 and 24-inch inactive pipelines) would proceed north within La Cienega Boulevard to Olympic Boulevard and within Le Doux Road from Gregory Way to Clifton Way (see Figure 2) and to connect to the proposed 16-inch new pipeline The length of the proposed new 16-inch transmission main would then continue westward until turning north on North Swall Drive, then west on Dayton Way. The transmission main would continue westerly along Dayton Way until turning north on North Palm Drive, then Westward on 3rd street then through the City yard to connect to the utilities inlet side of the Foothill WTP (Figure 2).

Land uses in the project area vary in both the City of Los Angeles and Beverly Hills (**Figure 4**, **Project Land Use**). In the City of Los Angeles, the existing surrounding land uses include community commercial, general commercial, and neighborhood office commercial, where the transmission main alignment would be located along La Cienega Boulevard leading to the Well Site. Other existing land uses in the overall project area located in the City of Los Angeles include: public facilities, low density residential, medium density residential, open space, and industrial. The portion of the transmission main in the City of Beverly Hills is surrounded by single residential, multi-family residential, commercial, and public schools (Figure 4) (City of Beverly Hills 2019; City of Los Angeles 2019).

Zoning in the City of Los Angeles where the proposed transmission main would be located are as follows: Single Family Residential, Multiple Family Residential, Commercial, Manufacturing, Open Space, and Public Facilities. As the proposed transmission main travels through the City of Beverly Hills, it passes through various zones including C-5 (Commercial Zone), P-S (Public Service Zone), R-4 (Multiple Residence Zone), Parks, Reservoirs, Government (Unzoned), R-1.5X (One-Family Residential Zone), C-3 (Commercial Zone), C-3T-3 (Commercial Transition Zone), and R-1 (One-Family Residential Zone).

2.4 Description of Project Elements

The proposed project includes: the demolition of existing structures at the proposed Well Site; the construction of one well within the La Brea Subarea; the rehabilitation of existing inactive 18 and 24-inch transmission main pipelines along La Cienega Boulevard; and the construction of a new 16-inch transmission main that would convey flows from the proposed Well Site to the City's WTP for treatment. Demolition, rehabilitation, and the construction of new facilities associated with the proposed project are described further below.



SOURCE: ESRI

La Brea Subarea Well and Transmission Main Project

Figure 1 Regional Location



7-8

SOURCE: ESRI; City of Beverly Hills

ESA

La Brea Subarea Well and Transmission Main Project

Figure 2 Project Location



SOURCE: Mapbox; City of Beverly Hills

ESA

La Brea Subarea Well and Transmission Main Project

Figure 3 Proposed Well Site



7-8

SOURCE: ESRI; City of Beverly Hills; City of Los Angeles

La Brea Subarea Well and Transmission Main Project

Figure 4 Project Land Use

2.4.1 Production Well

The proposed Well Site would be located on 1956 Chariton Street in the City of Los Angeles (Figure 2). The area is essentially flat and the existing residential structure would be demolished before the construction of the Well. After demolition, a 15-inch storm drain (pump-to-waste pipeline) would be constructed within Chariton Street, to connect to an existing storm drain system within the local streets. When a well is turned on, typical procedure is to "pump-to-waste" for a short duration to flush the well system. This flushing procedure will discharge through the 15-inch storm drain.

The proposed well would include an approximately 150 horsepower (hp) electric pump that would be housed within a new pump building. The pump building would be approximately 700 square feet (sf) with a 3-foot by 3-foot concrete pad underneath. The well-housing would not exceed the height of adjacent structures. Total well depth would be approximately 500 feet. The predicted flow rate for the well is between 500 and 700 gpm. The well-housing would be designed to blend in with the surrounding environment. **Figure 5, Well Rendering** illustrates what the proposed well may look like.

The Well Site has two existing driveways along La Cienega Boulevard as well as access to the Well Site along Chariton Street (see Figure 2). La Cienega Boulevard is a high traffic street given that it provides access to I-10 and is also a truck route.

2.4.2 Rehabilitation and Proposed Transmission Main

The installation of new groundwater production well in the La Brea Subarea would include the rehabilitation of existing inactive 18 and 24-inch transmission pipelines and the construction of a new 16-inch transmission main alignment to convey water to the City distribution system from the proposed Well Site.

The existing, inactive 18-inch transmission main pipeline is located just north of Interstate 10 (I-10) at La Cienega Boulevard and continues north for approximately 8,000 linear feet (lf) to Olympic Boulevard at a depth of approximately 3 feet below the ground surface (bgs). The City has an easement to allow for the rehabilitation and use of this pipeline. The alignment horizontally and vertically varies at intersections; however, the majority of the pipe is located beneath the existing sidewalk on the west side of La Cienega Boulevard. The existing inactive 24inch transmission main is located within Le Doux Road from Gregory Way north approximately 2,250 liner feat (lf) to Clifton Way, and includes the crossing of Wilshire Blvd. The alignment is located approximately 6-feet east of street centerline at a cover depth that varies between 3.5-feet and 6-feet. The existing 18 and 24-inch pipelines would be rehabilitated as part of the overall transmission main of the project, then connect to the newly constructed 16-inch transmission main pipeline The rehabilitated and new portions of the proposed transmission main would be connected and sized appropriately for anticipated flows.



SOURCE: Hazen & Sawyer, 2019

ESA

La Brea Subarea Well and Transmission Main Project

Figure 5 Well Rendering

The projected operational flow rate for the proposed production well is in the range of 500 to 700 gpm. An 8-inch diameter pipe would be used for the individual discharge pipeline from the production well. The transmission main would be sized to handle the flow rate of the optimal flow of approximately (2,100 gpm), to allow for use in conjunction with potential future wells in the area. Many of the streets along the transmission main alignment are single lane roads, with existing utilities such as water, sewer, gas, electric, and storm drain.

2.5 Project Implementation

Implementation of the proposed project would consist of a combination of construction activities as well as the operation and maintenance of facilities once construction and rehabilitation is complete. This section describes the characteristics associated with the construction (including rehabilitation and demolition) and operation and maintenance phases of the proposed project.

2.5.1 Construction Phase Characteristics

Construction Schedule

Project construction would take place for approximately 13 months, from Fall 2019 through Winter 2020, with several activities potentially occurring in parallel. Construction activities would occur during nighttime and weekends for the 24-hour drilling of the production requiring approximately 120 days of drilling and testing. Nighttime construction would also be required for the rehabilitation and construction of the transmission main along La Cienega Boulevard because it is within a commercial area. This nighttime construction would minimize impacts to traffic and construction delays within roadways.

The remainder of the proposed well and transmission main would involve construction typically occurring between 7:00 a.m. and 7:00 p.m., Monday through Friday except on federal holidays. **Table 1** summarizes the proposed construction activities and their estimated durations.

TABLE 1 CONSTRUCTION PHASE DURATION

Type of Construction	Estimated Duration
Wells Site Demolition and Pump-to-Waste	2 months
Well Construction Monitoring	4 months
Well Equipping	7 months
Rehabilitation/Transmission Main Installation	8 months
Total Construction Phase Duration	13 months
Note: Construction phasing/type may not occur concurrently. SOURCE: Hazen 2019	

Construction Activities and Construction Vehicle Trips

All construction activities associated with the proposed project would occur within the Well Site boundaries and within existing public ROWs and sidewalks. Construction equipment, vehicles, personnel, and materials staging areas would be located onsite or immediately adjacent to the site, where such areas can be accommodated. Construction traffic would utilize local streets, primarily La Cienega Boulevard. The following subsections provide descriptions of the various aspects of the proposed project's construction phase. **Table 2** summarizes equipment that are anticipated to be used during construction of the proposed project. Table 2 shows the equipment that could be used during any of the construction phases and is not indicative of the total amount that would be operated onsite at any given time.

7-8

Estimated Construction Workers	Number and Types of Construction Equipment
10	hydraulic excavators, pulverizes, hammers, forklift, front loader, trench boxes, dump truck
4	1 drill rig, 1 pipe trailer, 3 baker-type tanks, 1 frontend loader 1 generator, 1 compressor, 1 gravel pump, 4 sound walls, 1 small crane, 1 water truck, 4 auxiliary materials delivery trucks; 1 pump installation rig; 3 cement trucks; 1 cement pump truck
4	forklift, crane
10	backhoe, excavator, front end loader, trench boxes, dump truck
	Lestimated Construction Workers 10 4 4 10

TABLE 2 CONSTRUCTION EQUIPMENT MIX AND NO. OF WORKERS

Up to 20 workers per day would be required during the peak construction phase of the proposed project. Construction-related transportation activities associated with the proposed project will include haul truck trips, construction material truck trips and employee trips. Table 2, above, summarizes the estimated number of workers necessary for each phase.

Demolition/Site Preparation

The proposed project would demolish existing structures at the Well Site, totaling approximately 6,767 cubic yards of construction material. Generally, ground disturbance during demolition would not extend deeper than 25 feet; concrete below this depth would be left in place. Demolition and site grading activities would require approximately 5 dumpster haul trucks per day and 20 dumpster haul trucks total. Imported soil may be required to level the site after demolition. Construction waste would be disposed of at 365 Disposal & Recycling Landfill located at 11153 Tuxford Street, Sun Valley, CA 91352.

Due to the age of the existing structures at the Well Site, hazardous materials may be encountered during removal. Hazardous materials, including asbestos-containing materials, lead-based paint, and universal wastes¹ were documented in facilities designated for demolition. Removal of these materials would be performed in accordance with federal and state regulations.

New Facilities/Rehabilitation

Production Well

The proposed project would construct a new above-grade well-house and new below-grade production well, as described previously. Construction equipment pertaining to the Well Site would be staged onsite or immediately adjacent to the site, where such areas can be accommodated. Best management practices (BMPs) would be implemented to control erosion. The proposed production well would require continuous 24-hour drilling and testing, and therefore would require temporary overnight lighting. All temporary constructing lighting would be shielded downward and away from the adjacent properties, cars driving along Chariton Street and other roadways, and the surrounding residential neighborhoods.

Well drilling would require the removal of approximately 11 cubic yards of excavated soil for the Well Site. The removal of excavated soil would require four haul truck trips per day at the Well Site. No imported soil would be required. Well installation would require 10 vendor/supply trucks and other vehicles. The total amount of trucks and vehicles required for Well Site would be approximately 84 vehicles.

Transmission Main Rehabilitation and Construction

Pipeline construction equipment will be temporarily staged in areas immediately adjacent to roadways and/or stored off site. The transmission main alignment would be installed primarily within existing roadways and ROW to the extent feasible.

Construction of the proposed transmission main would involve trenching using conventional cut and cover and jack and bore techniques for pipeline portions within the City of Beverly Hills. The transmission main would run along Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street. The trenching technique would include saw cutting of the pavement where applicable, trench excavation, pipe installation, backfill operations, and resurfacing. Open trenches would be between approximately 4 feet wide and 5 feet deep with vertical cuts and trench shoring. Excavation depths would vary depending on location of existing utilities. On average, about 100-200 linear feet of pipeline would be installed per day.

No full road closures are anticipated for the proposed project. Partial road closures may be required. The City would obtain the appropriate encroachment permitting and coordinate with the City of Los Angeles in applicable areas, as needed. Partial road closures would include signage, traffic guidance, and other safety measures. Please see Section 4.17, *Transportation*, below for further details on traffic control measures. Boring methods would be used as needed to avoid full road closures. Implementation of the new 16-inch transmission main would require the

¹ Universal waste is a category of waste materials designated as "hazardous waste", but containing materials that are very common. It is defined in 40 C.F.R. 273.9, by the United States Environmental Protection Agency but states may also have corollary regulations regarding these materials.

excavation of approximately 11,018 cubic yards of soil. All excavated soil would be hauled away and trenches would be backfilled with 2-sack slurry.

Rehabilitation of the existing inactive 18 and 24-inch transmission main pipelines would be executed through the sliplining technique². The rehabilitated portion of the 18 and 24-inch existing pipelines will be sliplined with a 13.5-inch carrier pipe (it gets inserted within the 18 and 24-inch pipes). Typical practice in pipeline design is to use pipe fittings called reducers to connect pipes of different sizes. The rehabilitated 18 and 24-inch pipes will connect to the newly constructed 16-inch portion of the transmission main by using a standard ductile iron mechanical joint (18-inch by 16-inch ductile iron reducer) fittings. The design flow rate for the pipeline is 2100 gpm, but the transmission main in its entirety is sized to accommodate up to 3000 gpm. Rehabilitation would require the excavation of approximately 185 cubic yards of soil.

All impacted areas would be returned to pre-project conditions. Approximately 1,000 sf of various portions of the west sidewalk along La Cienega Boulevard would need to be reinstalled. When a new pipeline is installed, it requires the excavation of a trench through the street/roadway. After a pipeline is installed, the trench should be backfilled and the pavement surface needs to be replaced with new pavement. This is typical construction technique for all segments of a pipeline being installed within an open-trench construction area. Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street would need to be repaved once the new 16-inch transmission main is installed. The total square feet to repaved area is approximately 10,000 sf.

2.5.2 Operation and Maintenance

Full operation of all components of the proposed project is estimated to commence in late 2020, and operate as needed 24 hours per day, 7 days a week. Operation of proposed facilities would only require periodic maintenance with daily staffing similar to the City's existing conditions at similar City facilities. The proposed well and transmission main would not require an increase in the number of City employees; therefore, routine operations, maintenance, and/or repair would be performed by the City's current existing staff. Since the City already owns and operates similar assets, maintenance activities would be performed in the same manner. The proposed well pump would require varying amounts of energy depending on pumping schedules. The proposed well would use a maximum of 112kW of energy when operating. Therefore, the proposed project would not significantly increase the need for energy within the project vicinity.

² The pipeline rehabilitation method sliplining uses High Density Polyethylene (HDPE) with the rolldown method, or traditional sliplining with fusible polyvinyl chloride (PVC). The sliplining method maximizes the internal diameter of the pipe, which maximizes the benefit of utilizing the existing inactive 18 and 24-inch inch transmission main.

2.6 Required Approvals

The proposed project may require approvals from the following agencies:

• City of Los Angeles, demolition permit, grading permit, construction permit within public right-of-way, utility permit;

7-8

- City of Beverly Hills, permit application, encroachment permit for work within public street or right-of-way;
- Los Angeles Regional Water Quality Control Board Region 4, Storm Water Pollution Prevention Plans (SWPPP) and General Construction Permit;
- Division of Drinking Water, Domestic Water Supply Permit; and
- South Coast Air Quality Management District, Permit to construct.

SECTION 3 Initial Study Checklist

3.1 Background

1.	Project Title:	La Brea Subarea Well and Transmission Main Project
2.	Lead Agency Name and Address:	City of Beverly Hills 345 Foothill Road Beverly Hills, CA 90210
3.	Contact Person and Phone Number:	Tristan Malabanan, P.E. City of Beverly Hills, Project Manager (310) 285-2512
4.	Project Location:	City of Beverly Hills and the City of Los Angeles (see Section 2.3, above)
5.	Project Sponsor's Name and Address:	City of Beverly Hills Department of Public Works, Civil Engineering Division 345 Foothill Road Beverly Hills, CA 90210
6.	General Plan Designation(s):	Various (see Section 2.3, above)
7.	Zoning:	Various (see Section 2.3, above)
8.	Description of Project:	

7-8

The project would include the construction of a groundwater production well in the La Brea Subarea, the rehabilitation of existing 18 and 24-inch pipelines, and the connection of the rehabilitated pipeline to a newly 16-inch constructed raw water transmission main. The proposed 16-inch transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply.

9. Surrounding Land Uses and Setting:

Residential and Commercial Uses (See Section 2.3, above for more information)

10. Other public agencies whose approval is required:

See Section 2.6, above.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

See Section 4.18, below.

3.2 Environmental Factors Potentially Affected

The environmental factors checked below include impacts that are "Less Than Significant with Mitigation Incorporated." There are no environmental factors that have an impact that is identified as a "Potentially Significant Impact" because all potential significant impacts can be reduced to less than significant with the incorporation of mitigation measures.

7-8

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

DETERMINATION:

On the basis of this IS:

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

ID Mlabonan

Signature

Tristan Malabanan, P.E., Project Manager Printed Name • •• • ••

Date

<u>City of Beverly Hills</u> For

SECTION 4 Environmental Analysis

Sections 4.1 through 4.21 analyze the potential environmental impacts associated with the Project. The environmental issue areas that are evaluated are:

7-8

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning

- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Services Systems
- Wildfire
- Mandatory Findings of Significance

The environmental analysis in the following sections is patterned after the CEQA Guidelines Appendix G, Environmental Checklist (hereafter referred to as the Initial Study Checklist or IS Checklist),), which was revised by the Office of Planning and Research on December 28, 2018, and used by the City in its environmental review process. The IS Checklist will identify and briefly explain the environmental effects of the project. For any effects that are determined to be potentially significant, the IS Checklist will identify and evaluate feasible measures that may be incorporated into the project to avoid or mitigate any adverse impacts.

For the evaluation of potential impacts, the questions in the IS Checklist are stated and an answer is provided according to the analysis undertaken as part of the IS. The analysis considers the long-term, direct, and indirect impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.
- Less than Significant Impact. The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- Less than Significant with Mitigation Incorporated. The development will have the potential to generate impacts, which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

• **Potentially Significant Impact.** The development could have impacts, which may be considered significant, and therefore additional analysis is required to identify mitigation measures that could reduce potentially significant impacts to less than significant levels.

The following is a discussion of potential project impacts as identified in the IS/Environmental Checklist. Explanations are provided for each item.

4.1 Aesthetics

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1.	AESTHETICS — Except as provided in Public Resources Code Section 21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?			\boxtimes	

Environmental Evaluation

Would the Project:

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

Less Than Significant Impact. The City of Los Angeles General Plan identifies several scenic resources within the city, including but not limited to the San Gabriel and Santa Susana Mountains to the north, the Santa Monica Mountains that extend across the middle of the city, the Palos Verdes Hills and Pacific Ocean to the south and west, and views of the Los Angeles River throughout the city (City of Los Angeles 2001). Similarly, the City of Beverly Hills identifies landscaping and various urban settings as scenic vistas with the city (City of Beverly Hills 2010). The nearest scenic vistas to the project area would be the Pacific Ocean and the Santa Monica Mountains located approximately eight miles to the west and two miles northwest of the proposed project, respectively. Furthermore, a portion of Santa Monica Boulevard (old Route 66) within the City of Beverly Hills is located immediately north of the WTP, where the water will be treated.

The project area is not officially designated as a scenic vista or scenic corridor. Short-term construction impacts would include: equipment staging; well drilling and installation; and transmission main rehabilitation and new pipeline. installation. These construction activities would occur for approximately 13 months. The presence of construction equipment within the project area could temporarily disrupt views of the distant mountains from motorists traveling along local roadways. However, the project area is heavily built-up and urban in nature. Many views of local scenic resources are already obstructed by commercial and residential buildings within the project area. Further, construction is temporary, and would not permanently effect

views of local scenic vistas. Therefore, construction impacts on aesthetics would be less than significant.

Once constructed, the transmission main would be underground and would not affect any existing views of local scenic vistas. The Well Site facilities would be located above-ground on property owned by the City of Beverly Hills. Although, implementation of proposed project would introduce built structures into the project area, the existing Well Site is currently developed. Therefore, implementation of well facilities would not appear substantially different than current land uses. Additionally, the well-housing and ancillary facilities would be designed to conform with surrounding development. Further, the proposed well facilities would not have the scale or massing to significant obstruct views of the surrounding scenic vistas such as the Santa Monica Mountains. Therefore, the proposed project would not result in a substantial adverse effect on a scenic vista and impacts would be considered less than significant.

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

No Impact. Based on a review of the California Department of Transportation (Caltrans) List of Scenic Highways, the project area is not located along an officially Designated State Scenic Highway (Caltrans 2019). The nearest eligible state scenic highway is State Route (SR) 1 which is located approximately 8 miles southwest of the project area. Therefore, the proposed project would not substantially damage scenic resources such as trees, rock outcroppings, or historic buildings within a state scenic highway. No impacts would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. The proposed project would be located in an urbanized area. Construction activities associated with the proposed well and transmission main would result in short-term impacts to the visual character and quality of the project area. Construction activities would require the use of construction equipment and storage of materials within the project sites. Excavated areas, stockpiled soils, and other materials generated during construction could impact the visual character of the surrounding environment. These impacts would be temporary, would occur over the 13-month construction period, and would not permanently affect the existing visual character of the surrounding area.

Once constructed, the transmission main would be underground and would not substantially degrade the visual character or the quality of public view of the site or its surroundings. The proposed well, once constructed, would place permanent above-ground structures within the project area. However, as described previously, the area in which the well would be implemented is highly developed and surrounded by commercial and residential development. The well facilities would be designed to blend in with existing and surrounding development, and will be have the appearance of a single family residence consistent with the neighboring development

(refer to Figure 5).). Specifically, the well height would not exceed the height of surrounding buildings and structures. Therefore, the visual character and quality of the Well Site would not be degraded. Nor would the project conflict with applicable zoning or other regulations governing scenic quality. Thus, no impacts would occur.

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

Less than Significant Impact. Existing light and glare sources within the project area include exterior lighting, glass and building materials of surrounding residential and commercial development. Additionally, the transmission main area is largely adjacent to La Cienega Boulevard, Olympic Boulevard, Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street in both Beverly Hills and Los Angeles. All local roadways contain cars and streetlights that emit light and glare during the day and night.

The presence of construction equipment would not introduce new permanent lighting or glare to the project area. Nighttime lighting would be required for proposed well drilling, which would require 24-hour drilling, and portions of the proposed transmission line within commercial areas, where construction would occur at night. Nighttime construction would be temporary and limited to the area immediately surrounding the active construction areas. All lighting would be shielded and pointed toward the construction activity and away from surrounding sensitive land uses. Therefore, light and glare impacts due to project construction would be considered less than significant.

Once constructed, the proposed transmission main would be located underground and would not result in any impacts to light or glare. The aboveground portions of the proposed well facilities would not have highly reflective surfaces, and would not include large areas of glass on structures/buildings; therefore, the proposed project would have less than significant impacts regarding glare.

The proposed well facilities would be located within existing City property boundaries that currently contain lighting within the interior and exterior of existing structures. The Well Site would be located within an urban area, developed with residential, commercial, and industrial uses. Implementation of the proposed project could result in new exterior nighttime lighting for operational and security purposes within the Well Site. However, the outdoor facility lighting would be confined to the immediate area and would not be directed into adjacent areas or create light beams into the night sky. Onsite security lighting would be directed away from the adjacent residential uses. As a result, the proposed project would not introduce substantial sources of lighting to the project area and impacts regarding lighting would be less than significant.

References

- Caltrans, 2019. California Scenic Highway Mapping System: Los Angeles County. Available online at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed April 2019.
- City of Beverly Hills, 2010. City of Beverly Hills General Plan, Open Space Element. Available online at: http://www.beverlyhills.org/cbhfiles/storage/files/filebank/10282-5 OpenSpace%2001122010.pdf, accessed April 2019.
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4.2 Agricultural and Forest Resources

	Potentially Significant	Less Than Significant with Mitigation	Less-Than- Significant	
Issues (and Supporting Information Sources):	Impact	Incorporated	Impact	No Impact

7-8

2. AGRICULTURAL AND FOREST RESOURCES -

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

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Environmental Evaluation

Would the Project:

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

No Impact. The project area is currently developed and void of any agricultural uses. The California Department of Conservation (CDC) Important Farmland Map for Los Angeles County has not been mapped. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within or adjacent to the project area (CDC 2019). Therefore, no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur.

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

No Impact. A Williamson Act Contract requires private landowners to voluntarily restrict their land to agricultural land and compatible open-space uses. The project area is not located on land zoned for agricultural use (City of Beverly Hills 2008; City of Los Angeles 2019). Additionally, the project area is void of agricultural uses and does not include land enrolled in a Williamson Act Contract (CDC 2016). Therefore, implementation of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

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

No Impact. The proposed project would not conflict with existing zoning of forest land or cause rezoning of forest land, timberland, or timberland zoned for Timberland Production. The proposed project does not involve any changes to current General Plan land use or zoning. Additionally, the City of Beverly Hills and City of Los Angeles zoning maps do not include zoning categories related to forest land, timberland, or timberland zoned as Timberland Production (City of Los Angeles 2001; City of Beverly Hills 2010). Therefore, the proposed project would not conflict with existing zoning for these uses, and would not result in the conversion of forest land. No impact would occur.

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

No Impact. The project area and surrounding areas contain no forest land. Thus, implementation of the proposed project would result in no impacts related to the loss or conversion of forest land to non-forest use.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. Refer to responses above. The project area consists of public right-of-ways, residential and commercial development. No other changes to the existing environment would occur from implementation of the proposed project that could result in conversion of farmland to nonagricultural use or forest land to non-forest use. Thus, no impact would occur.

References

- California Department of Conservation (CDC), 2019. California Important Farmland Finder. DOC). 2017a. Farmland Mapping and Monitoring Program- Los Angeles County Important Farmland 2016. Available online at: https://maps.conservation.ca.gov/DLRP/CIFF/, https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx, , accessed on April 12, 2019.
- CDC, 2016. DOC. 2017b. Los Angeles County Williamson Act FY 2015/2016. Available online at: ftp://ftp.consrv.ca.gov/pub/dlrp/wa/, Division of Land Resource Protection- State of California Williamson Act Contract Land. Available online at: ftp://ftp.consrv.ca.gov/pub/dlrp/wa/2016%20Statewide%20Map/WA_2016_8.5X11.pdf, , accessed on April 12, 2019.
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4.3 Air Quality

Issi	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
3.	AIR QUALITY — Where available, the significance criteria established b control district may be relied upon to make the followin	y the applicable g determinatior	e air quality manag ıs.	ement district o	r air pollution
	Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			\boxtimes	
c)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			\boxtimes	

Environmental Evaluation

Would the Project:

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

Less than Significant Impact. The project area is located within the 6,745-square-mile South Coast Air Basin (SCAB). Air quality planning for the SCAB is under the jurisdiction of the South Coast Air Quality Management District (SCAOMD). The SCAOMD has adopted a series of Air Quality Management Plans (AQMP) to meet the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. The SCAQMD is required, pursuant to the Clean Air Act, to reduce emissions of criteria pollutants for which the Air Basin is in non-attainment of the NAAQS (e.g., ozone $[O_3]$, and particulate matter 2.5 microns in diameter or less [PM2.5]). The SCAQMD, California Air Resources Board (CARB), and United States Environmental Protection Agency (USEPA) have adopted the 2012 AQMP which incorporates scientific and technological information and planning assumptions, regarding air quality, including the Southern California Association of Governments (SCAG) 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and emission inventory methodologies for various source categories (SCAOMD 2013). The AOMP builds upon other agencies' plans to achieve federal standards for air quality in the Air Basin and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, and on-road and off-road mobile sources. In addition, it highlights the significant amount of emission reductions needed and the urgent need to identify additional strategies, especially for mobile sources, to meet all federal criteria pollutant standards in accordance with the Clean Air Act.

The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the NAAQS. These strategies are developed, in part, based on regional

growth projections prepared by the SCAG. As part of its air quality planning, SCAG has prepared the Regional Comprehensive Plan (RCP) and Guide and the RTP/SCS, which provide the basis for the land use and transportation components of the AQMP and are used in the preparation of the air quality forecasts and the consistency analysis included in the AQMP. Both the RCP and AQMP are based, in part, on projections originating with county and city general plans.

The 2012 AQMP was prepared to accommodate growth, reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are consistent with the assumptions used in the AQMP do not interfere with attainment because the growth is included in the projections utilized in the formulation of the AQMP. Thus, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if it would individually exceed the SCAQMD's numeric indicators.

Control strategies in the 2012 AQMP with potential applicability to reducing short-term emissions from construction activities associated with the Project include strategies denoted in the AQMP as ONRD-04 and OFFRD-01, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment. Descriptions of measures ONRD-04 and OFFRD-01 are provided below:

- **ONRD-04 Accelerated Retirement of Older On-Road Heavy-Duty Vehicles:** This measure seeks to replace up to 1,000 heavy-duty vehicles per year with newer or new vehicles that at a minimum, meet the 2010 on-road heavy-duty NO_X exhaust emissions standard of 0.2 grams per brake horsepower-hour (g/bhp-hr).
- **OFFRD-01** Extension of the Soon Provision for Construction/Industrial Equipment: This measure continues the Surplus Off-Road Option for NO_X (SOON) provision of the statewide In-Use Off-Road Fleet Vehicle Regulation beyond 2014 through the 2023 timeframe.

The SCAQMD Governing Board adopted the 2016 AQMP on March 3, 2017 (SCAQMD 2016). CARB approved the 2016 AQMP on March 23, 2017. USEPA approval is pending, but is a necessary requirement before the 2016 AQMP can be incorporated into the State Implementation Plan. Key elements of the 2016 AQMP include implementing fair-share emissions reductions strategies at the federal, state, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit from co-benefits for greenhouse gas (GHG), energy, transportation and other planning efforts. The strategies included in the 2016 AQMP are intended to demonstrate attainment of the NAAQS for the federal O₃ and PM2.5 standards. The 2016 AQMP also incorporates growth projections from the SCAG 2016 RTP/SCS. Until such time as the 2016 AQMP is approved by the USEPA, the 2012 AQMP remains the applicable AQMP for federal air quality planning purposes. However, the 2016 AQMP is used in the analyses in this section, since it has been adopted by both SCAQMD and CARB. The 2016 AQMP incorporates the above-listed 2012 AQMP control strategies, which are designated as MOB-08 and MOB-10.

Construction Emissions

Construction activities associated with the proposed project have the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators and trenchers, and through vehicle trips generated from worker trips and haul trucks traveling to and from the proposed project area. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily oxides of nitrogen (NO_X), would result from the use of construction equipment such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Under this criterion, the SCAOMD recommends that lead agencies demonstrate that a project would not directly obstruct implementation of an applicable air quality plan and that a project be consistent with the assumptions (typically land-use related, such as resultant employment or residential units) upon which the air quality plan are based. The project would result in an increase in short-term employment compared to existing conditions. Being relatively small in number and temporary in nature, construction jobs under the project would not conflict with the long-term employment projections upon which the AQMP is based. As discussed above, emission control strategies in the AQMP with potential applicability to short-term emissions from construction activities include strategies denoted in the 2012 AQMP as ONRD-04 and OFFRD-01 and denoted in the 2016 AOMP as MOB-8 and MOB-10 in the 2016 AOMP, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment by accelerating replacement of older, emissions-prone engines with newer engines meeting more stringent emission standards. Construction contractors utilized for the project would be required to comply with State regulations that require the phase-in of less polluting construction equipment and trucks (Title 13 California Code of Regulations [CCR], Sections 2449 and 2025) and as such, the project would not conflict with implementation of these AQMP emissions reduction strategies. Additionally, the project would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment. The project would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403, which includes watering to suppress dust, covering or stabilizing haul trucks, and other fugitive dust control measures.

Compliance with these requirements is consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Because the project would not conflict with the control strategies intended to reduce emissions from construction equipment, the project would not conflict with or obstruct implementation of the AQMP, and impacts would be less than significant.

Operation

The 2016 AQMP was prepared to accommodate growth, reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP. The proposed project represents an infrastructure project that would have no effect on

long-term population and employment growth. As the project would not conflict with the growth projections in the AQMP, impacts would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The SCAB is currently in extreme nonattainment for ozone (federal and State standards), non-attainment for respirable particulate matter 10 microns in diameter or less (PM10) (State standards) and PM2.5 (federal and State standards). The SCAQMD's approach for assessing cumulative impacts related to operations is based on attainment of ambient air quality standards in accordance with the requirements of the federal and State Clean Air Acts. As discussed above, the SCAQMD has developed a comprehensive plan, the 2016 AQMP, which addresses the region's cumulative air quality condition.

A significant impact may occur if a project were to add a cumulatively considerable contribution of a federal or State non-attainment pollutant. Because the SCAB is currently in nonattainment for ozone, PM10 and PM2.5, related projects could cause ambient concentrations to exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. In particular, CEQA Guidelines Sections 15064(h)(3) provides guidance in determining the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

"A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency..."

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the project's incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted 2016 AQMP. The 2016 AQMP includes demographic growth forecasts for various socioeconomic categories (e.g. population, housing, employment), developed by SCAG for their 2016 Regional Transportation Plan (RTP). As discussed under (a), above, the project would not conflict with the 2016 AQMP.

The project would contribute to local and regional air pollutant emissions during construction (short-term or temporary) and project occupancy (long-term). However, based on the following analysis, construction and operation of the project would result in less than significant impacts relative to the daily significance thresholds for criteria air pollutant emissions established by the SCAQMD for construction and operational phases (SCAQMD 2015).

Daily regional and annual construction and operational source project criteria pollutant emissions (NO_X, volatile organic compounds [VOC], PM10, PM2.5, sulfur oxides [SO_X], and carbon monoxide [CO]) are estimated using the CalEEMod (Version 2016.3.2) software, an emissions inventory software program recommended by the SCAQMD. The model also calculates emissions from direct and indirect sources and quantifies applicable emissions reductions achieved from emissions control strategies and mitigation measures. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles and statewide and regional emissions inventories from all motor vehicles, including passenger cars to heavy-duty trucks, operating on highways, freeways, and local roads in California. The input values used in the CalEEMod modeling analysis were adjusted based on project specific information. Assumptions and modeling output are included in **Appendix A**.

Construction Emissions

Construction activities associated with the project would result in emissions of CO, VOCs, NO_x, SO_X, PM10, and PM2.5. Construction related emissions are expected from the trenching, paving, pump house construction, and construction worker commutes. Construction is expected to commence in October 2019 and would last through December 2020, as described previously in Section 2.5.1 Construction Phase Characteristics. The construction schedule utilized in the Air Quality Impact Analysis represents a "worst-case" scenario. It is assumed that construction for the well would occur concurrently with work for the transmission main line. If project construction commences later than the anticipated start date, air quality impacts would be less than those analyzed herein, because a more energy-efficient and cleaner burning construction equipment fleet mix would be expected in the future, pursuant to State regulations that require construction equipment fleet operators to phase-in less polluting heavy-duty equipment. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Site specific construction fleet may vary due to specific project needs at the time of construction. The analysis utilized construction fleet information and a construction schedule provided by Hazen. A detailed summary of construction equipment assumptions by phase is provided in Table 2 above in Section 2.5.1 Construction Phase Characteristics.

The estimated maximum daily construction emissions are summarized in **Table 3** below. Transmission main installation and well construction may occur simultaneously so the maximum daily emissions is the sum of the overlapping phases. Emissions from the project construction would not exceed any criteria pollutant thresholds established by the SCAQMD. Therefore, impacts would be considered less than significant.

	Emissions (pounds per day)					
Year	voc	NO _x	со	SOx	PM10	PM2.5
Overlapping Phases						
Well Site Demolition and Pump-to-Waste - 2019 and Rehabilitation/Transmission Main Installation - 2019	4	33	30	< 1	3	2
Well Construction Monitoring - 2019 and Rehabilitation/Transmission Main Installation - 2019	6	63	50	< 1	4	3
Well Construction Monitoring - 2020 and Rehabilitation/Transmission Main Installation - 2020	6	58	49	< 1	3	3
Well Equipping - 2020 and Rehabilitation/Transmission Main Installation - 2020	2	20	15	<1	1	1
Maximum Daily Regional Emissions	6	63	50	< 1	4	3
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
SOURCE: ESA 2019.						

TABLE 3
MAXIMUM DAILY CONSTRUCTION EMISSIONS

7-8

Operational Emissions

During operation of the project, there would only be periodic maintenance for the Well and proposed transmission main. The proposed facilities would not require an increase in the number of employees compared to the existing facilities; therefore, routine operations, maintenance, and/or repair would be performed by the City's current existing staff. Additional fuel and emissions for servicing the proposed facilities would be minimal. Therefore, impacts would be considered less than significant.

By applying SCAQMD's cumulative air quality impact methodology, implementation of the project would not result in an addition of criteria pollutants such that cumulative impacts would occur, in conjunction with related projects in the region. In addition, construction of the project is not expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SCAQMD is in non-attainment (ozone, PM10, PM2.5). Therefore, impacts would be considered less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The localized effects from the on-site portion of the emissions are evaluated at nearby sensitive receptor locations potentially impacted by the Proposed Action according to the SCAQMD's Localized Significance Threshold Methodology (June 2003, revised July 2008), which relies on on-site mass emission rate screening tables and project-specific dispersion modeling typically for sites greater than five acres, as appropriate (SCAQMD 2008). The localized significance thresholds are applicable to NO_X, CO, PM10, and PM2.5. For NO_X

and CO, the thresholds are based on the ambient air quality standards. For PM10 and PM2.5, the thresholds are based on requirements in SCAOMD Rule 403 (Fugitive Dust) for construction and Rule 1303 (New Source Review Requirements) for operations. The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The screening criteria depend on: (1) the area in which the project is located, (2) the size of the project area, and (3) the distance between the project area and the nearest sensitive receptor (e.g., residences, schools, hospitals). The screening criteria were utilized in this assessment. For the project, the appropriate Source Receptor Area (SRA) for the localized significant threshold (LST) is the Northwest Los Angeles County Coastal monitoring station (SRA 2). Since the total acreage disturbed is less than five acres per day, SCAOMD's screening look-up tables were used to determine localized significance thresholds. The nearest sensitive receptors to the Well are the residential uses located adjacent to the well. Sensitive receptors would also be located adjacent to the pipeline alignment along La Cienega Boulevard, Le Doux Road, Clifton Way, South Clark Drive, North Swall Drive, Dayton Way, North Elm Street, and Palm Drive as described in Section 2.3 Project Location and Setting, and Figure 2. Receptors adjacent to the pipeline alignment may be exposed to localized emissions on short-term and temporary basis. On average, about 100-200 linear feet of pipeline would be installed per day; therefore, any one specific sensitive receptor adjacent to the pipeline alignment would only be exposed to localized emissions for a few days.

SCAQMD's Methodology clearly states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the LST analysis only emissions included in the CalEEMod "on-site" emissions outputs were considered. The significance thresholds determined conservatively assume that the site is 1 acre and 25 meters away from the nearest sensitive receptor.

Localized Construction Emissions

Table 4 identifies the localized impacts at the nearest receptor location in the vicinity of the project area. The localized emissions during construction activity would not exceed any of the SCAQMD's localized significance thresholds. Therefore, impacts would be considered less than significant.

	Emissions	(pounds per c	lay)	
On-Site Grading Emissions	NO _x	со	PM10	PM2.5
Overlapping Phases				
Well Site Demolition and Pump to Waste - 2019 and Rehabilitation/Transmission Main Installation - 2019	30	29	2.0	1.9
Well Construction Monitoring - 2019 and Rehabilitation/Transmission Main Installation - 2019	60	48	3.1	2.9
Well Construction Monitoring - 2020 and Rehabilitation/Transmission Main Installation - 2020	54	48	2.7	2.5
Well Equipping - 2020 and Rehabilitation/Transmission Main Installation - 2020	17	14	1.0	0.9
Maximum Daily Localized Emissions	60	48	3.1	2.9
SCAQMD Localized Threshold	103	562	4	3
Threshold Exceeded?	No	No	No	No

TABLE 4
LOCALIZED SIGNIFICANT SUMMARY CONSTRUCTION

7-8

Operational Emissions

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may queue and idle at the site (e.g., warehouse or transfer facilities). The proposed transmission main and well are not expected to be a source of air emissions. Therefore, due to the lack of stationary source emissions, no long-term localized significance threshold analysis is needed.

CO "Hot Spot" Analysis

According to SCAQMD ambient air quality monitoring data, existing CO concentrations within the project area (Source Receptor Area 2, Northwest Coastal Los Angeles County) for 2016, 2017, and 2018 were approximately 2.2, 2.0, 1.6 parts per million (ppm), respectively, for the maximum 1-hour average and 1.1, 1.2, 1.3 ppm, respectively, for the maximum 8-hour average (SCAQMD 2016b, 2017, 2018). These measured values are substantially below the most stringent ambient air quality standard of 20 ppm for the 1-hour average and 9.0 ppm for the 8-hour average.

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. Projects may worsen air quality if they increase the percentage of vehicles in cold start modes by two percent or more; significantly increase traffic volumes (by five percent or more) over existing volumes; or worsen traffic flow, defined for signalized intersections as increasing average delay at intersections operating at Level of Service (LOS) E or F or causing an intersection that would operate at LOS D or better without the proposed project, to operate at LOS E or F. While construction-related traffic on the local roadways would occur during construction, the net increase of construction worker vehicle trips to the existing daily traffic volumes on the local roadways would be relatively small (no more
than 20 construction workers at a time) and would not result in CO hotspots. Additionally, the construction-related vehicle trips would only occur in the short-term and intermittently along the approximately 4-mile transmission main alignment and Well Site.

Construction of the project may include lane closures to accommodate the placement of the transmission pipeline within the public street right-of-way. Lane closures for the project would not increase the actual traffic volume on the public street right-of-way but may result in traffic congestion over a greater time duration due to the unavailability of one or more travel lanes and vehicles requiring additional time to travel through the congested area. Lane closures for the project would result in a reduction of physical space available to vehicles. Thus, while a lane closure could result in traffic congestion over a greater duration, there would be a fewer number of vehicles physically occupying a specific area (i.e., within a congested intersection or on a roadway segment) due to the unavailability of one or more travel lanes. The net result with respect to CO hotspots would be that while traffic congestion over a greater time duration may cause CO concentration levels to be incrementally increased over a similarly greater time duration, the reduced number of vehicles physically occupying a specific area (i.e., within a congested intersection or a roadway segment) would act to counterbalance potential increases in CO hotspots concentrations by reducing the number of vehicles emitting CO within an area. With typical atmospheric dispersion of CO emissions, and given that existing CO concentrations are substantially below the ambient air quality standards, lane closures associated with construction of the project would not cause a substantial increase in CO concentrations such that the project would cause CO hotspots in excess of the 1-hour or 8-hour ambient air quality standard.

During operation, only minimal emissions would be generated from vehicle trips by worker staff for periodic inspection and maintenance purposes. The project would not produce the volume of traffic required to generate a CO hotspot. Therefore, impacts would be considered less than significant.

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs) are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

Construction

Intermittent construction activities associated with the proposed project would result in short-term emissions of diesel particulate matter, which the State has identified as a TAC. During construction, the exhaust of off-road heavy-duty diesel equipment would emit diesel particulate matter during general construction activities, such as demolition, site preparation, and well/transmission main construction.

Diesel particulate matter poses a carcinogenic health risk that is generally measured using an exposure period of 30 years for sensitive residential receptors, according to the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment

(OEHHA) Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA Guidance), which was updated in 2015 with new exposure parameters including age sensitivity factors (OEHHA 2015). Sensitive receptors would be located adjacent to the well and along the pipeline alignment; however, localized diesel particulate matter emissions (strongly correlated with PM2.5 emissions) would be minimal and would be below localized thresholds as presented in Table 4. Although the localized analysis does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts. The low level of PM2.5 emissions coupled with the short-term duration of construction activity and the relatively small-scale of the proposed project would result in overall low level of diesel particulate matter concentrations in the project area. Furthermore, compliance with the CARB airborne toxic control measures (ATCM) anti-idling measure, which limits idling to no more than five minutes at any location for diesel-fueled commercial vehicles, would further minimize diesel particulate matter emissions in the project area. The proposed project would utilize a construction contractor(s) that complies with required and applicable BACT and the In-Use Off-Road Diesel Vehicle Regulation. Thus, it is expected that sensitive receptors would be exposed to emissions below thresholds and construction TAC impacts would be less than significant.

Operations

The proposed project would introduce new on-site stationary equipment, such as pumps and generators, and the Well Site. However, the equipment would not generate TAC emissions into the outdoor environment. Therefore, the proposed project would not expose surrounding sensitive receptors to TAC emissions. Impacts would be considered less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. As shown in Table 3, the project would not exceed any criteria pollutant thresholds for which the SCAQMD is in attainment (CO, SOX). Therefore, impacts would be considered less than significant.

Odors

Potential sources that may emit odors during construction activities include construction equipment exhaust, the application of asphalt, and the use of architectural coatings and solvents. According to the SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. SCAQMD Rule 1113 limits the amount of VOCs from architectural coatings and solvents. Further, construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of construction. Through adherence with mandatory compliance with SCAQMD Rules, no construction activities or materials are proposed which would create objectionable odors. Given that the well is located in a single-family residential neighborhood, it is assumed that this would be the worst case scenario as the residence (sensitive receptor) is adjacent to the project.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass

molding facilities. While the project would connect to the existing Foothill Water Treatment Plant, the transmission main and well are not anticipated to generate fugitive or evaporative odor emissions. Therefore, the proposed project would not generate odors affecting a substantial number of people and impacts would be considered less than significant.

References

- Office of Health Hazard Assessment (OEHHA), 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Available at: http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidancemanual-preparation-health-risk-0. Accessed July 2019.
- South Coast Air Quality Management District (SCAQMD), 2008. Final Localized Significance Threshold Methodology. Available at: http://www.aqmd.gov/home/rulescompliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed July 2019.
- SCAQMD, 2013. *Final 2012 Air Quality Management Plan*. Available at: https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2012air-quality-management-plan. Accessed July 2019.
- SCAQMD, 2015. Air Quality Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significancethresholds.pdf. Accessed July 2019.
- SCAQMD, 2016a. Final 2016 Air Quality Management Plan. Available: https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016aqmp. Accessed July 2019.
- SCAQMD, 2016b, 2017, 2018. Historical Data by Year (2016, 2017, and 2018). Available: http://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year. Accessed September 2019.

4.4 Biological Resources

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4.	BIOLOGICAL RESOURCES — Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				\boxtimes
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				\boxtimes
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			\boxtimes	
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				\boxtimes

7-8

Environmental Evaluation

Would the Project:

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

No Impact. The project area is located in a highly urbanized area of the cities of Los Angeles and Beverly Hills, and is currently developed with commercial and residential buildings and associated parking lots. The proposed transmission main would run along major roads and residential streets. The project area with a 500-foot buffer does not include suitable habitat for candidate, sensitive, or special-status species. Due to high levels of human activity and the density of development in the project area, there is no potential for sufficient natural habitat to support candidate, sensitive, or special status species within the project area. As such, the proposed project would not have a substantial adverse effect on candidate, sensitive, or special status species area.

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

No Impact. As discussed under in Question 4.4(a), the project area is currently developed with urban uses. No riparian habitat or designated sensitive natural communities exist on the project sites or in the surrounding area. The proposed Well Site supports ornamental landscaping, including mature trees along streets, hedges, and low shrubs around residential and commercial buildings. The Well Site and areas along the proposed transmission main do not include any vegetation that constitutes a plant community. As such, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community, and no impact would occur in this regard.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. As discussed under Question 4.4(a), the project area is currently developed and located within an urbanized area. The project area is not known to contain any federally protected wetlands as defined by Section 404 of the Clean Water Act or state wetlands as defined by the State Water Resources Control Board, and no proposed project facilities would occur within or state of federal wetlands. As such, the project would not have a substantial adverse effect on state or federally protected wetlands, and no impact would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact with Mitigation Incorporated. The project area is currently developed and located in a highly urbanized area of the cities of Beverly Hills and Los Angeles. No wildlife corridors or native wildlife nursery sites are known to occur on the Well Site, transmission main alignment, or in the surrounding areas. Further, due to the urbanized nature of the project area, the potential for native resident or migratory wildlife species movement through the project area is negligible.

Nonetheless, the proposed Well Site does include ornamental trees and manmade structures that could support raptor and/or songbird nests. As discussed under Question 4.4(b), mature trees are located along La Cienega Boulevard and the other adjacent residential streets. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). Implementation of the proposed project has the potential to interfere with nesting birds during construction activities. Mitigation provided below would reduce this impact to a less than significant level.

Mitigation Measure

BIO-1: The City shall be responsible for the implementation of mitigation to reduce impacts to migratory and/or nesting bird species to below a level of significance through one of the following two ways:

7-8

- 1. Vegetation removal and demolition of structures shall be scheduled outside the avian nesting season which runs from February 15 to August 31 to avoid potential impacts to nesting birds; or
- 2. If avoidance of the avian nesting season (February 15 through August 31) is not feasible then the following shall occur:
 - a) A qualified biologist (i.e. biologist(s) familiar with local nesting bird species and their behavior) shall conduct a preconstruction nesting bird survey no more than 3 days prior to any vegetation removal or demolition of structures. The survey shall be conducted to ensure that impacts to birds, including raptors, protected by the MBTA and/or the California Fish and Game Code and bat maternity colonies are avoided. Survey areas shall include suitable avian nesting habitat.
 - b) If active nests of protected birds are identified during pre-construction surveys, an avoidance buffer area shall be determined at the discretion of the qualified biologist and demarcated for avoidance using flagging, staking, fencing, or another appropriate barrier to delineate construction avoidance until the nest is determined to no longer be active by a qualified biologist (i.e., young have fledged or no longer alive within the nest). An active nest is defined as a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. Construction personnel shall be informed of the active nest and avoidance requirements. A biological monitor shall review the Project Site, at a minimum of one-week intervals, during all construction activities occurring near active nests to ensure that no inadvertent impacts to active nests occur. Pre-construction nesting bird surveys and monitoring results shall be submitted to the City of Beverly Hills Planning Division via email or memorandum upon completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

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

Less than Significant Impact. The proposed Well Site contains mature street trees located on private property within the project area. Therefore, the project would be subject to the provisions of the City of Los Angeles Municipal Code pertaining to the removal and replacement of street trees and trees on privately owned property. It is a violation of the City of Los Angeles Municipal Code (Sec. 5-4.1001) for people who are not official representatives or authorized agents of the City of Los Angeles to prune, remove, make attachment to, or otherwise damage a city street or park tree. However, the Well Site is owned by the City of Beverly Hills and the project is exempt from the City of Los Angeles' municipal and zoning codes and ordinances (see Section 4.11, *Land Use and Planning* of this Draft IS/MND for more information). Therefore, no conflict with

local policies or ordinances protecting biological resources would occur with implementation of the proposed Well Site and mitigation. Impacts would be less than significant.

Vegetation within the transmission main corridor is comprised of mature trees located along local streets, and the removal or modification of city trees is considered a potentially significant impact if this activity conflicts with local policies or ordinances. However, implementation of the proposed project would not remove or prune trees as part of the project, therefore, no impacts would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. There is no adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan in place for the Well Site, the City of Los Angeles, or the City of Beverly Hills. Therefore, the project would have no impact with respect to these plans.

References

California Department of Fish and Wildlife (CDFW), 2019. California Natural Diversity Database (CNDDB) Rarefind 5. Electronic database, Sacramento, California. Available online at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data, accessed on May 29, 2019.

4.5 Cultural Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
5.	CULTURAL RESOURCES — Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?			\boxtimes	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		\boxtimes		
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?		\boxtimes		

Discussion

A Phase I Cultural Resources Assessment was prepared in support of the IS/MND (**Appendix C**). The study included archival research for archaeological, and historic resources within the study area. A records search for the proposed project was conducted on April 11, 2019 at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The records search included a review of all recorded archaeological resources and previous studies within the proposed project area and a 0.5-mile radius, and historic architectural resources within a 0.25-mile radius of the proposed project. For the purposes of this assessment, a study area beyond the project alignment was established by considering all known project components and the optimal zone of the La Brea Subarea.

The records search results indicate that 23 cultural resources have been identified within the proposed project records search area. Three archaeological resources have been previously recorded within a 0.5-mile radius of the proposed project area and four have been previously recorded within the La Brea Subarea. Additionally, a cluster of ten prehistoric village archaeological resources, recorded in the 1950's, is located less than one-mile south and adjacent to the La Brea Subarea. Ten historic architectural resources and one California Historic Landmark (CHL) have been recorded within 0.25 miles of the proposed project and five have been previously recorded within the La Brea Subarea. The three archaeological resources previously recorded within 0.5 miles of the proposed project as well as the four previously recorded within the La Brea Subarea are prehistoric camp or village sites. Of the 11 architectural resources previously recorded within 0.25 miles of the proposed project, four are located within 100 feet of the proposed project (P-19-187281, -187282, -187283, and -189803). Three of the four resources (P-19-187281, -187282, -187283) were demolished in the early 2000s and are no longer extant. Resource P-19-189803 is a wooden utility pole constructed sometime prior to 1966. P-19-189803, is located within 30 feet of the proposed project and has been previously determined ineligible for listing National Register of Historical Resources (NRHP), but has not been previously evaluated for inclusion in the California Register of Historical Resources (CRHR). In addition, ESA conducted extensive historic map research of the project site and vicinity.

43

La Brea Subarea Well and Transmission Main Project Draft Initial Study/Mitigated Negative Declaration As part of this investigation, ESA contacted the Native American Heritage Commission (NAHC) requesting that a Sacred Lands File check be conducted for the proposed project and that contact information be provided for Native American groups or individuals that may have concerns about cultural resources in the study area. The response received on April 25, 2019 which indicated that Naïve American cultural resources are not known to be located within the proposed project area. A cultural resources field survey of the study area was conducted and focused on areas that would be potentially impacted by the proposed project and included survey and documentation of the built environment,

Environmental Evaluation

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant Impact. Two historic architectural resources have been identified within or immediately adjacent to the proposed project and include a wooden utility pole constructed prior to 1966 (P-19-189803) and the residence located at 1956 Chariton Street. The following paragraphs present the significance findings for both resources.

P-19-189803

Resource P-19-189803 has been determined ineligible for listing in the NRHP (Status Code 6Y), but has not been previously evaluated for inclusion in the CRHR. The NRHP evaluation for the resource did not identify that the resource was associated with a significant event (Criteria A/1), nor does it appear to be associated with a significant person or persons (Criterion B/2) (Loftus 2011). The resource is a typical example of a mid-20th century wooden utility pole does not possess qualities of design or distinctive characteristics of design and the work of a master (Criterion C/3) (Loftus 2011). Based on this evaluation, it is recommended that resource P-19-189803 is not eligible for listing in the CRHR and does not qualify as a historical resource. In addition, the resource is not listed for local significance. This resource will not be directly or indirectly impacted by the project and no additional evaluation or recommendations are warranted.

1956 Chariton Street

1956 Chariton Street is a single-family residence, and this building type was evaluated under the historical and architectural themes that follow: the Spanish Colonial Revival Architectural Style (1912-1942), Community and Operative Builders (1888-1940), and Early Single-Family Residential Development (1880-1930). This resource is recommended ineligible for listing in the CRHR, is not listed locally, and does not qualify as historical resources pursuant to CEQA. As such the proposed project would not result in significant impacts to known historical resources.

Therefore, the proposed project would result in less than significant impacts to historical resources and no mitigation measures are required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

7-8

Less Than Significant with Mitigation Incorporated. Review of previous investigations in the vicinity of the project, as well as review of the prehistoric context for the area provides an understanding of the potential for encountering prehistoric archaeological resources in the project site. When completing analysis of buried archaeological site sensitivity, important factors to consider include elevation, soil conditions, proximity to water, proximity to raw materials, and ethnographic and historic information. It is also necessary to evaluate the subsequent land use in determining the possibility for the preservation of prehistoric archaeological materials.

Archaeological Sensitivity

No archaeological resources were identified within or immediately adjacent to the known proposed project area. The proposed project includes the installation of a new transmission main, the rehabilitation of an existing transmission main, and the installation of Well Site. The installation and rehabilitation of the transmission mains would involve cut and cover excavations extending to depths of 5 feet within existing city streets. The installation of the Well Site would require the demolition of the residence at 1956 Chariton Street and excavations associated with the demolition would extend to depths of up to 25 feet. These ground disturbing activities have the potential to encounter unknown, sub-surface historic-period and/or prehistoric archaeological resources that could qualify as historical resource or unique archaeological resources pursuant to CEQA. Given that the rehabilitation of the transmission mains will occur within city streets with existing utilities, the likelihood of encountering intact archaeological deposits is moderate to low. However, the installation of new transmission mains may include trenching in undisturbed or moderately disturbed sediments and so the sensitivity is considered moderate to high. As described above the majority of the project alignment is within historic roads which were built in the 1940's. Historically, road construction did not require substantial excavation and historic and prehistoric sites or resources may be capped and preserved under the roads. A large number of prehistoric sites and villages are known to have been located less than a mile from the southern terminus of the known project alignment and redeposited archaeological material could be encountered during excavation, and intact materials could be encountered in trench sidewalls or if the rehabilitation requires additional excavation. During consultation for AB 52, the Gabrieleño Band of Mission Indians – Kizh Nation expressed concern about the high sensitivity of the project alignment. The demolition work at 1956 Chariton Street also has a high likelihood of encountering historic-period subsurface archaeological deposits associated with the residence such as privies or refuse deposits.

Mitigation Measures

Given the potential to encounter subsurface archaeological deposits during proposed project implementation, ESA provides the following recommended mitigation measures to reduce potential impacts to archaeological deposits that may qualify as historical resources or unique archaeological resources to less than significant.

CUL-1: Retention of Qualified Archaeologist. Prior to the start of any ground disturbing activities, a qualified archaeologist, defined as an archaeologist meeting the

Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior 2008) shall be retained by the City of Beverly Hills to carry out all mitigation measures related to cultural resources. In addition, the City of Beverly Hills will retain a Native American monitor to work in tandem with the archaeologist in the areas and during activities with potential to encounter prehistoric archaeological resources.

CUL-2: Cultural Resources Sensitivity Training. Prior to start of any grounddisturbing activities, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel associated with the proposed project. Construction personnel shall be informed of the types of cultural resources that may be encountered during construction, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City of Beverly Hills shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

CUL-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the qualified archaeologist) shall observe all excavation activities associated with the installation of the Well Site. For the portion of the alignment requiring installation of the new transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring of all excavations including trenching and bore pits. For the portion of the alignment which involves the rehabilitation of existing transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring on all access points along the rehabilitation alignment. Should the soils prove to be too disturbed to contain archaeological resources these spot checks can be reduced or discontinued. Conversely, if the sediments are found to contain archaeological resources, the qualified archaeologist may recommend full time monitoring for such areas along the route. The qualified archaeologist, in coordination with the City of Beverly Hills, may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the proposed project. The archaeological monitor(s) shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed in Mitigation Measure CUL-4). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to the City of Beverly Hills. The qualified archaeologist shall submit a copy of the final report to the SCCIC.

CUL-4: Unanticipated Discoveries. In the event of an unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City of Beverly Hills, and the appropriate Native American representatives for prehistoric resources, on the significance of the resource.

If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to,

avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City of Beverly Hills that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource and makes recommendations for curation or donation to appropriate curation facilities. The qualified archaeologist and the City of Beverly Hills shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.

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

Less than Significant Impact with Mitigation Incorporated. The NAHC was contacted on April 10, 2019 to request a search of the Sacred Lands File (SLF). The NAHC responded to the request in a letter dated April 25, 2019. The results of the SLF search conducted by the NAHC indicate that Native American cultural resources are not known to be located within the proposed project area.

Mitigation Measure

CUL-5: Unanticipated Discovery of Human Remains and Associated Funerary Objects. In the event human remains and/or associated funerary objects are encountered during construction of the proposed project, all activity in the vicinity of the find shall cease (within 100 feet). Human remains discoveries shall be treated in accordance with and California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, requiring assessment of the discovery by the County Coroner, assignment of a Most Likely Descendant by the NAHC, and consultation between the Most Likely Descendant and the landowner regarding treatment of the discovery. Until the landowner has conferred with the Most Likely Descendant, the City of Beverly Hills shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity and that further activities take into account the possibility of multiple burials.

References

- Loftus, Shannon. 2011. Primary Record for P-19-189803. On file at the South Central Coastal Information Center, California State University Fullerton.
- South Central Coastal Information Center (SCCIC). 2019a. Single Property Printout for P-19-187281. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2019b. Single Property Printout for P-19-187282. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2019c. Single Property Printout for P-19-187283. On file at the South Central Coastal Information Center, California State University, Fullerton.

4.6 Energy

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-Than- Significant Impact	No Impact
6.	ENERGY — Would the project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			\boxtimes	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			\boxtimes	

7-8

Environmental Evaluation

Would the Project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. The project would result in consumption of energy resources during project construction and operation. During construction, the project would use heavy construction equipment and require worker, vendor, and hauling trips to install the proposed Well and transmission main. These construction activities would use approximately 59,665 gallons of diesel and 1,827 gallons of gasoline (Appendix A). The project would require construction contractors and truck operators to comply with applicable state regulations governing heavy duty diesel on- and off-road equipment to minimize transportation fuel consumption. As discussed in Section 4.3, *Air Quality*, the CARB anti-idling measure, which limits idling to no more than five minutes at any location for diesel-fueled commercial vehicles, would minimize diesel fuel consumption from on-road trucks in the project area.

During operation, it is assumed that there would not be a substantial increase in mobile trips as the project would not require an increase in the number of employees compared to the existing facilities; therefore, routine operations, maintenance, and/or repair would be performed by the City's current existing staff. The Well Site is located in the City of Los Angeles and the proposed Well would have a 150 hp pump, which would consume a total of 725,089 kWh per year (Appendix A), conservatively assuming a 24-hour per day, 365 days per year operation. Under actual operating conditions, the proposed pump would require varying amounts of energy depending on pumping schedules. The proposed pump would have a maximum rating of 112 kW of electricity (instantaneous power) but would normally require less electricity under normal operating condition or approximately 83 kW assuming a load factor of 0.74, which is equivalent to powering approximately 25 homes.³ This electricity demand is within the capability of LADWP to provide without the need for substantial new energy infrastructure, and as such the

La Brea Subarea Well and Transmission Main Project Draft Initial Study/Mitigated Negative Declaration

³ A load factor of 0.74 is based on the default load factor for pumps in the CalEEMod emissions model. The estimated 83 kW equivalent to power 25 homes is based on conversion of 16.4 megawatt system providing power for nearly 5,000 homes as reported from the Office of the Mayor (see https://www.lamayor.org/mayor-garcetti-announces-completion-world%E2%80%99s-most-powerful-rooftop-solar-project).

project would not significantly increase the need for energy within the project vicinity. Furthermore, compared to the Los Angeles Department of Water and Power (LADWP) Energy and Demand Forecast for 2020, the Project would represent 0.003 percent of the total demand (LADWP 2017; Appendix A).

Therefore, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and would not increase the need for new energy infrastructure and impacts would be considered less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. The State of California, City of Los Angeles, and City of Beverly Hills have implemented energy policies relevant to this project. The California Renewables Portfolio Standard (RPS) was established in 2002 and required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2013. California Senate Bill 350 (Chapter 547, Statues of 2015) is the most recent update to the state's RPS requirements. The RPS requires publicly owned utilities and retail sellers of electricity in California to procure 33 percent of their electricity sales from eligible renewable sources by 2020 and 50 percent by the end of 2030. The project would generate an increase in electricity demand for operation of the well pumps from LADWP; however, the demand would be extremely minimal with respect to LADWP supplies and no additional power generation facilities would be required. The project would not conflict with LADWP or the State's ability to achieve the RPS goals.

The City of Los Angeles' Plan, published in April 2019, sets a goal to supply 55 percent renewable energy by 2025; 80 percent by 2036; and 100 percent by 2045. For energy efficiency, the Plan would reduce building energy use per sq. ft. for all types of buildings 22 percent by 2025; 34 percent by 2035; and 44 percent by 2050 (City of Los Angeles 2019). The City of Beverly Hills' Sustainable City Plan establishes policies to maximize energy efficiency in both City operations and Citywide; maximize use of renewable energy generating systems and other energy efficiency technologies; minimize the use of nonrenewable, polluting transportation fuels; and strive for energy independence as a City (City of Beverly Hills 2009). As the project would install a well and transmission main, it would not conflict with or obstruct either city's plan for renewable energy or energy efficiency. The project would reduce the energy demand for water conveyance as it develops a local supply. Therefore, the project would have a less than significant impact to conflicting with or obstructing a state or local plan for renewable energy or energy efficiency.

References

- California Air Resources Board, 2004. Proposed Regulation Order: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, Appendix A, 2004. Available at https://www.arb.ca.gov/regact/idling/isorappf.pdf. Accessed September 2019.
- City of Beverly Hills, 2009. Sustainable City Plan. Available: http://www.beverlyhills.org/cbhfiles/storage/files/24347783778629768/SustainableCityPla n.pdf. Accessed July 2019.
- City of Los Angeles, 2019. L.A.'s Green New Deal: Sustainable City Plan (Plan). Available: http://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf. Accessed July 2019.
- Los Angeles Department of Water and Power (LADWP). 2017 Retail Electric Sales and Demand Forecast. September 15, 2017. Available: http://rates.ladwp.com/Admin/Uploads/Load%20Forecast/2017/10/2017%20Retails%20Sal es%20Forecast_Final.pdf Accessed: July 2019.

4.7 Geology, Soils, and Seismicity

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
7.	GEOLOGY and Soils — Would the project:				
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.) 				
	ii) Strong seismic ground shaking?			\boxtimes	
	 Seismic-related ground failure, including liquefaction? 			\boxtimes	
	iv) Landslides?				\boxtimes
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			\boxtimes	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				\boxtimes
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		\boxtimes		

Discussion

The following evaluation is based on geologic and seismic information derived from various sources listed below and compiled in this section to develop a comprehensive understanding of the potential constraints and hazards associated with geotechnical exploration activities. Information sources include geologic and soils maps and information prepared by the Department of Conservation, California Geologic Survey (CGS), the county of Los Angeles, and the cities of Los Angeles and Beverly Hills, all of which reflect the most up-to-date understanding of the regional geology and seismicity. Additionally, a paleontological resources fossil locality search was conducted by the Natural History Museum of Los Angeles County (LACM) on April 19, 2019.

American Water Works Association Standards for Proposed Pipelines

Pipelines are constructed to various industry standards. The American Water Works Association (AWWA) is a worldwide nonprofit scientific and educational association that, among its many activities, establishes recommended standards for the construction and operation of public water supply systems, including standards for pipe and water treatment facility materials and sizing, installation, and facility operations. While the AWWA's recommended standards are not enforceable code requirements, they nevertheless can dictate how pipelines for water conveyance are designed and constructed. As part of the proposed project, the construction contractors would incorporate AWWA Standards into the design and construction of the proposed transmission main.

7-8

Seismic Considerations

In California, an earthquake can cause injury or property damage by: (1) rupturing the ground surface, (2) violently shaking the ground, (3) causing the underlying ground to fail due to liquefaction, or (4) causing enough ground motion to initiate slope failures or landslides, any of which could damage or destroy structures. The checklist items in Appendix G of the CEQA Guidelines, which provide the basis for most of the significance criteria above, reflect the potential for large earthquakes to occur in California and recommend analysis of the susceptibility of the project sites to seismic hazards and the potential for the proposed program to exacerbate the effects of earthquake-induced ground motion at the project sites and surrounding areas. Impacts associated with seismic hazards would be considered significant if the potential effects of an earthquake on a particular site could not be mitigated by an engineered solution. The significance criteria do not require elimination of the potential for structural damage from seismic hazards. Rather, the criteria require an evaluation of whether significant seismic hazards could be minimized through engineering design solutions that would reduce the associated risk of loss, injury, or death.

State and local code requirements ensure buildings and other structures are designed and constructed to withstand major earthquakes, thereby reducing the risk of collapse and the associated risks to human health and safety and private property. The code requirements have been developed through years of study of earthquake response and the observed performance of structures during significant local earthquakes and others around the world. The proposed project would be required to comply with the California Building Code (CBC) and the *CGS Guidelines for Evaluating and Mitigating Seismic Hazards* (Special Publication 117A) (CGS 2008) which provides guidance for evaluating and mitigating seismic hazards as required by the Public Resources Code Section 2695(a).

Environmental Evaluation

Would the Project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist

for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)

Less than Significant Impact. The Alquist-Priolo Earthquake Fault Zoning Act, signed into law in December of 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development and prohibit construction on or near active fault traces to reduce hazards associated with fault rupture. The Alquist-Priolo Earthquake Fault Zones (AP Zones) are the regulatory zones delineated on maps that include surface traces of active faults. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones, which include all land divisions and most structures for human occupancy.

Active or potentially active faults within Los Angeles County within one mile of the project area are the Newport-Inglewood, Santa Monica and Hollywood Faults (CGS 2018). The existing Foothill WTP, the proposed Well Site, and various other areas project areas where the proposed well may be implemented within an AP Zones (CGS 2018). Thus, the impacts associated with ground fault rupture resulting from a seismic event could be potentially significant.

However, the proposed well and transmission main would undergo appropriate project sitespecific, design-level geotechnical evaluations prior to final design and construction as required to comply with the CBC. The geotechnical engineer, as a registered professional with the State of California, is required to comply with the CBC and local codes while applying standard engineering practice and the appropriate standard of care required for projects in the Los Angeles County area. The California Professional Engineers Act (Building and Professions Code Sections 6700-6799), and the Codes of Professional Conduct, as administered by the California Board of Professional Engineers and Land Surveyors, provides the basis for regulating and enforcing engineering practice in California. Adherence to the CBC standards would ensure the strongest structure feasible at the proposed locations, with no increased risk to human life. Impacts related to the risk of loss, injury, or death involving fault rupture would be reduced to less than significant.

ii) Strong seismic ground shaking?

Less than Significant Impact. The project area lies within a region that is seismically active. In the event of an earthquake in Southern California, some seismic ground shaking would likely be experienced in the project area sometime during the operational life of the project. As discussed, the Newport-Inglewood, Santa Monica, and Hollywood Faults are known active faults within the project area and are capable of producing earthquakes. Ground shaking could result in structural damage to the proposed well and transmission main, which in turn could affect operation of related systems. The proposed facilities are non-habitable; however, existing City employees may need to access the various facilities for maintenance or manual control purposes. Therefore, structural and mechanical failure of facilities onset by seismic ground shaking would continue to potentially threaten the safety of onsite workers. As discussed above, the City would design the proposed well and transmission main in conformance with applicable standards established by the CBC. These design standards consider proximity to potential seismic sources and the maximum

anticipated groundshaking possible. Compliance with these building safety design standards would reduce the potential to threaten the safety of existing onsite workers, and therefore, reduce the potential impacts associated with groundshaking to less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. According to the City of Los Angeles and City of Beverly Hills General Plans, and the CGS, various portions of the project area are located within liquefaction hazard zones (City of Los Angeles 1996; City of Beverly Hills 2010; CGS 2018). Thus, in the event of a large earthquake with a high acceleration of seismic shaking, the potential for liquefaction exists.

As discussed above, the proposed well and transmission main locations would undergo a geotechnical investigation and be designed to resist damage from seismic shaking. As part of the proposed project, all geotechnical recommendations provided by the project geotechnical engineer and the City would be incorporated into project designs in areas where liquefiable soils are identified. Solutions to rectify liquefaction are modern engineering approaches used throughout California and are considered standard industry practice. Methods to correct liquefiable soils include removal and replacement of problematic soils, the use of pile foundations, and drainage columns to reduce saturated conditions. The geotechnical investigation and corrective actions for potential liquefiable soils, where needed, would be based on the CGS Special Publication 117A (see the discussion above). The project structures would be subject to the CBC which controls the design and location of buildings and structures in order to safeguard the public and reduce potential impacts related to liquefaction to less than significant.

iv) Landslides?

No Impact. The implementation of the proposed project would not result in an increased exposure to landslides. Landslides are deep-seated ground failures (several tens to hundreds of feet deep) in which a large section of a slope detaches and slides downhill. The project area is located in a relatively flat area that has previously been graded and developed. There is no known history of landslides in the general area of the project. Further, the project area is not within a State-Designated Seismic Hazard Zone for Earthquake-Induced Landslides (CGS 2018). Therefore, landslides are not considered a potential hazard within the project area, and no impacts would occur.

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

Less than Significant Impact. Soil exposed by construction activities for the proposed project could be subject to erosion if exposed to heavy rain, winds, or other storm events. Further, as construction could disturb one or more acres of soil, the City would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. In compliance with this permit, a Storm Water Pollution Prevention Program (SWPPP) would be prepared and implemented, which would require erosion control, sediment control, non-stormwater and waste and material management BMPs to minimize the loss of topsoil or substantial erosion.

Furthermore, implementation of the proposed project would need to comply with SCAQMD Rule 403 for dust control that would ensure the prevention and/or management of the loss of topsoils and erosion during construction. Therefore, potential loss of topsoil and substantial soil erosion during construction and operation of the proposed project would be less than significant.

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

Less than Significant Impact. Non-seismically-induced geologic hazards such as landslides, lateral spreading, settlement, and slope failure can be caused by unstable soils. Subsidence of the ground surface occurs under static conditions (i.e., due to consolidation settlement from overlying load or long-term water or mineral extraction), but can also be accelerated and accentuated by earthquakes. The extraction of fluid resources from subsurface sedimentary layers (i.e., water or oil) can result in subsidence from the removal of supporting layers in the geologic formation. Settlement of loose, unconsolidated soils generally occurs slowly, but can cause significant structural damage if structures are not properly designed. According to the Los Angeles and City of Beverly Hills General Plan Safety Elements, the cities have experienced limited subsidence over the years; however, it is still a potential hazard (City of Los Angeles 1996; City of Beverly Hills 2010). Therefore, impacts related to subsidence are potentially significant.

Refer to responses above for discussions of potential impacts related to liquefaction and landslides. The proposed project is located in an area defined as having the potential for liquefaction or collapse. The proposed project would involve grading activities and would construct subterranean facilities that could induce unstable soil activity. Therefore, the project could be located on unstable soils resulting in potentially significant impacts. However, the proposed project would be subject to the CBC which controls the design and location of facilities in order to safeguard the public and reduce potential unstable soils impacts. The proposed project would incorporate engineering design features to remediate potential significant impacts associated with subsidence, liquefaction, collapsible soils, and lateral spreading. Therefore, the implementation of the proposed project would result in less than significant impacts associated with unstable soils.

Furthermore, the City and its contractors would be required to adhere to all California Division of Occupational Safety and Health (CalOSHA) requirements for working within active construction sites, including specific provisions for working within trenches that would ensure the safety of all construction workers onsite. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to unstable soils. Impacts would be less than significant.

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

Less than Significant Impact. Expansive soils are predominantly comprised of clays, which expand in volume when water is absorbed and shrink when the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. Soils with a

moderate to high shrink-swell potential can cause damage to roads, buildings, and infrastructure (USDA 2019). Primary soil types in the project area contain Urban-land complexes comprised of sands and sandy loams. These soils are not typically expansive. However, the two unknown proposed well locations may be located within areas that contain expansive soils. The presence of expansive soils could decrease the structural stability of the proposed project facilities, which could result in structural or operational failure of proposed facilities and or threaten the health and safety of onsite workers. Such impacts are considered potentially significant.

However, as described above, all geotechnical recommendations provided by the project geotechnical engineer would be incorporated into the project's designs. The geotechnical investigation would provide corrective actions for potential expansive soils. The project structures would be subject to the CBC which controls the design and location of facilities in order to safeguard the public and reduce potential impacts related to expansive soils to less than significant levels.

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

No Impact. The proposed project does not include the installation of septic tanks or alternative wastewater disposal systems. During project implementation, the City or the contractor may have portable toilet facilities available onsite temporarily for use by construction workers. Once the proposed well and transmission main are constructed, such portable facilities would be removed and the wastewater properly handled and disposed in accordance with all applicable laws and regulations. There would be no impact associated with wastewater disposal.

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

Less Than Significant Impact with Mitigation Incorporated. On April 19, 2019, ESA requested a database search from the LACM for records of fossil localities in and around the project area. The purpose of the museum records search was to: (1) determine whether any previously recorded fossil localities occur in the Project Site, (2) assess the potential for disturbance of these localities during construction, and (3) evaluate the paleontological sensitivity within the Project Site and vicinity.

The records search identified three fossil localities from within 0.1 miles of the project area and an additional six localities within one mile. While exact coordinate data is not provided by the LACM, it appears that at least one of these sites may fall within the project area. These localities preserve a wide variety of terrestrial vertebrates, such as mammoth, mastodon, bison, horse, birds, and rodents, as well as plants and invertebrate fossils (McLeod 2019). While the depths of several of these localities are unstated, recorded depths range from 13 to 30 ft below ground surface (bgs) (McLeod 2019). These results are consistent with the Pleistocene terrestrial fossil record of the Los Angeles Basin.

Geologic mapping by Dibblee and Ehrenspeck (1991) indicates that the surface of the project area is covered with Holocene-aged younger alluvium, likely overlying older alluvium and marine sediments, which in turn may overlie the Monterey Formation at undetermined depths. These geologic units are discussed below.

Younger Alluvium (Qa). These sediments consist of unconsolidated silt, sand, and gravel and date from modern times to the Holocene (Dibblee and Ehrenspeck 1991). Younger alluvium is mapped as occurring across the entirety of the project area at the surface. Due to the young age of these deposits, they have low paleontological potential at the surface; however, these sediments increase in age with depth, and therefore fossil resources may be encountered in the deeper levels of this unit. While the exact depth at which the transition to older, high potential sediments [>5,000 years old, following the SVP's definition (SVP 2010)] is not known, fossils have been discovered across the Los Angeles Basin as shallowly as 5-10 feet below ground surface (Jefferson 1991a; 1991b). These fossils are similar to those described below from older alluvial fan deposits.

Older Alluvial Fan Deposits (Qae). Older alluvial fan deposits occur just to the east of the project area, as close as 0.1 - 0.2 miles from the project area, indicating these sediments may be present in the subsurface of the project area at relatively shallow depths. These sediments date to the Pleistocene and consist of tan to light reddish brown sand with minor gravel detritus from the highlands to the north (Diblee and Ehrenspeck 1991). These Pleistocene sediments have a rich fossil history in the Los Angeles Basin (Hudson and Brattstrom 1977; Jefferson 1991a and b; McDonald and Jefferson 2008; Miller 1941 and 1971; Roth 1984; Scott 2010, Scott and Cox 2008; Springer et al., 2009). The most common Pleistocene terrestrial mammal fossils include the bones of mammoth, bison, deer, and small mammals, but other taxa, including horse, lion, cheetah, wolf, camel, antelope, peccary, mastodon, capybara, and giant ground sloth, have been reported (Graham and Lundelius 1994), as well as reptiles such as frogs, salamanders, and snakes (Hudson and Brattstrom 1977). In addition to illuminating the striking differences between Southern California in the Pleistocene and today, this abundant fossil record has been vital in studies of extinction (e.g. Sandom et al. 2014; Barnosky et al. 2004), ecology (e.g. Connin et al. 1998), and climate change (e.g. Roy et al. 1996).

Shallow Marine Deposits (Qom). Shallow marine deposits occur to the west of the project area, as close as 0.4 miles. indicating they may be present in the shallow subsurface of the project area. These sediments consist of light gray to light brown sand, pebbly sand gravel, and silt deposited when the area was last submerged by the ocean during the Pleistocene (Diblee and Ehrenspeck 1991). Similar sediments have a rich fossil history in the Los Angeles Basin. In the Cheviot Hills, roughly 1.5 miles west of the southern portion of the project area, over one hundred species of marine invertebrates, primarily mollusks, were identified from Pleistocene marine sediments (Rodda 1957). Across the Los Angeles Basin shallow marine deposits assigned to the San Pedro Sand have a strong record of preserving Pleistocene marine and terrestrial fossils. The San Pedro Sand has yielded a diverse fauna of nearshore marine invertebrates such as crabs, snails, bivalves, gastropods, and echinoids (Kennedy 1975; Valentine 1989; Woodring 1957) and vertebrates such as sharks, bony fish, amphibians, reptiles, birds, whales, antelopes, mammoth, dire wolves, rodents, and bison (Barnes and McLeod 1984; Fitch 1967; Kennedy 1975; Woodring 1957).

Fernando Formation. While the Fernando Formation does not crop out in the vicinity of the project area due to truncation by the Hollywood-Santa Monica Fault Zone to the north of the project area, subsurficial cross sections developed by Diblee and Ehrenspeck (1991) indicate it is likely present in the subsurface underlying alluvial sediments within the range of the depth for the well (500 ft below ground surface [bgs]). The Fernando Formation dates to the Pliocene and consists of marine siltstone, sandstone, pebbly sandstone, and conglomerate (Morton and Miller 2006). The lower part of the Fernando Formation consists of a pebble-cobble conglomerate in a sandstone matrix that fines upwards into a coarse sandstone and then a silty sandstone (Schoellhamer et al. 1981). The upper Fernando Formation consists of coarse grained sandstone with conglomerate lenses (Schoellhamer et al. 1981). The Fernando Formation has an extensive record of preserving scientifically significant fossils, including invertebrates such as mollusks, echinoids, and bryozoans (Groves 1992; Morris 1976; Woodring 1938), fish (Huddleston and Takeuchi 2006), squid (Clarke et al. 1980), and a number of unidentified megafossils (Schoellhamer et al. 1981).

As a result of this study, the surficial sediments of the project site identified as **Younger Alluvium (Qa)** Surficial sediments; **low-to-high potential, increasing with depth**. A wide variety of Ice Age fossils have been found in older alluvial sediments across southern California, as reviewed above, including multiple specimens known from the very near vicinity of the project area (McLeod, 2019). The exact depth at which the transition from low to high potential occurs is unknown in the Project Site, depths of 5-10 feet are common in the region (Jefferson 1991a, 1991b). **Older Alluvial Fan Deposits (Qae)** – Subsurficial sediments; **high potential**. A wide variety of Ice Age fossils have been found in these sediments across the Los Angeles Basin, as reviewed above, including multiple localities known from within one mile of the project area (McLeod 2019). **Shallow Marine Deposits (Qom)** - Subsurficial sediments; **high potential**. Similar sediments have produced extensive marine fossils of both vertebrate and invertebrate animals, some as close as 1.5 miles from the project area (Rodda 1957). **Fernando Formation** – Subsurface; **high potential**. The Fernando Formation is well-known in Southern California for preserving a wide array of marine fossils such as sharks, bony fishes, and marine invertebrates.

As a result of this study, sediments present across the project area identified as younger alluvium are assigned low-to-high paleontological potential, increasing with depth. The underlying older alluvial fan and shallow marine deposits, as well as the Fernando Formation, have high paleontological potential. This classification indicates a high potential for fossils to be present in the subsurface. The following recommendations would serve to protect potentially unique paleontological resources or unique geological features, should they be encountered:

Mitigation Measures

The following mitigation measures are required to reduce impacts to unique paleontological resources or unique geological feature to a less than significant level:

GEO-1: A qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist) shall be retained prior to the approval of demolition or grading permits. The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources,

shall attend the project kick-off meeting and Project progress meetings on a regular basis, and shall report to the project site in the event potential paleontological resources are encountered.

GEO-2: The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training at the project kick-off meeting prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). In the event construction crews are phased, additional training shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the project site and the procedures to be followed if they are found. Documentation shall be retained by the Qualified Paleontologist demonstrating that the appropriate construction personnel attended the training.

GEO-3: The Qualified Paleontologist shall develop a Paleontological Resources Monitoring Plan (PRMP) that shall detail the monitoring program necessary for the project, based off of specific construction methodologies and locations. Construction activities have varying impacts on paleontological resources and may require different monitoring procedures. The PRMP shall take the specific construction plans for the project to tailor a monitoring plan to the types of construction activities and the geologic units each may encounter. In general, ground disturbance across the project site that occurs in undisturbed sediments and exceeds 5-10 feet in depth may impact high potential sediments and therefore should be monitored. This includes; excavation and site preparation at the Well Site, drilling for the production well, cut and cover and entrance and exit pits for jack and bore along the proposed transmission main and at all access points for the rehabilitation of the transmission main. Paleontological resources monitoring shall be performed by a qualified paleontological monitor (meeting the standards of the SVP 2010) under the direction of the Qualified Paleontologist. Depending on the conditions encountered, full-time monitoring can be reduced to parttime inspections or ceased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist shall spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils or potential fossils. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries.

GEO-4: Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries. If there are significant discoveries, fossil locality information and final disposition will be included with the final report which will be submitted to the appropriate repository and the City.

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7-8

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4.8 Greenhouse Gas Emissions

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
8.	GREENHOUSE GAS EMISSIONS — Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	

Environmental Evaluation

Would the Project:

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

Less than Significant Impact. Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long term global temperature increases.

The State defines GHGs as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different global warming potentials (GWPs) and CO₂ is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e). For example, CH₄ has a GWP of 25 (over a 100-year period); therefore, one metric ton (MT) of CH₄ is equivalent to 25 MT of CO₂ equivalents (MTCO₂e). The GWP ratios are available from the United Nations Intergovernmental Panel on Climate Change (IPCC) and are published in the *Fourth Assessment Report* (AR4). By applying the GWP ratios, project-related CO₂e emissions can be tabulated in metric tons (MT) per year. Large emission sources are reported in million metric tons (MMT) of CO₂e.⁴

Some of the potential effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years (CARB 2008). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and

⁴ A metric ton is 1,000 kilograms; it is equal to approximately 1.1 U.S. tons and approximately 2,204.6 pounds.

climate are likely to vary regionally, but are expected to include the following direct effects (IPCC 2001):

7-8

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

California produced 429.4 MMTCO₂e in 2016. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2016, accounting for approximately 41 percent of total GHG emissions in the state. This sector was followed by the industrial sector (23 percent) and the electric power sector (including both in-state and out-of-state sources) (16 percent) (CARB 2018).

Impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and toxic air contaminants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it is clear that the quantity is enormous, and no single project would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

Neither the city of Los Angeles nor city of Beverly Hills has not adopted a threshold of significance for GHG emissions that would be applicable to this project. In December 2008, the SCAQMD adopted a 10,000 MTCO₂e per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. Although SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a proposed project for which SCAQMD is not the lead agency, or a uniform methodology for analyzing impacts related to GHG emissions on global climate change, in the absence of any industry-wide accepted standards, the SCAQMD's significance threshold of 10,000 MTCO₂e per year for projects is the most relevant air district-adopted GHG significance threshold and is used as a benchmark for the proposed project. It should be noted that the SCAQMD's significance threshold of 10,000 MTCO₂e per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project lifetime of 30 years and added to operational emissions and then compared to the threshold (SCAQMD 2008).

The justification for the threshold is provided in SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. As stated by the SCAQMD:

"...the...screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects...the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 [MMTCO₂e per year]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available] Control Technology (BACT)] for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility."

The SCAQMD has applied its 10,000 MTCO₂e/year significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold.⁵ However, for purposes of analysis in this MND, the GHG emissions from all of the project's GHG emissions sources are included in the GHG emissions and are measured against the 10,000 MTCO₂e/year significance threshold. Thus, as explained above, based on guidance from the SCAQMD, if an industrial project would emit GHGs less than 10,000 MTCO₂e per year, the project would not be considered a substantial GHG emitter and GHG emission impact would be less than significant, requiring no additional analysis and no mitigation.

CEQA Guidelines 15064.4 (b)(1) states that a lead agency may use a model or methodology to quantify GHGs associated with a project. In October 2017, the SCAQMD in conjunction with CAPCOA released the latest version of the CalEEMod (Version 2016.3.2). The purpose of this model is to estimate construction-source and operational-source emissions from direct and

⁵ For example, the SJVAPCD "determined that GHG emissions increases that are covered under CARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA ..." (SJVAPCD 2014). Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft EIR that demonstrate the SCAQMD has applied its 10,000 MTCO₂e/year significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold (SCAQMD 2014a, 2014b, 2014c, 2015).

indirect sources. Accordingly, the latest version of CalEEMod has been used for this project to estimate the project's emission impacts (see Appendix A).

Construction Emissions

Construction activities associated with the project would result in emissions of CO_2 and to a lesser extent CH_4 and N_2O . Construction-period GHG emissions were quantified based on the same construction schedule, activities, and equipment list as described in Table 1 and Table 2 above in *Section 2.5.1 Construction Phase Characteristics*. To amortize the emissions over the life of the project, the SCAQMD recommends calculating the total GHG emissions attributable to construction activities, dividing it by the 30-year project life, and then adding that number to a project's annual operational-phase GHG emissions. As such, construction emissions were amortized over a 30-year period (see Appendix A).

Operational Emissions

As described in *Section 4.3 Air Quality*, during operation of the project, there would only be periodic maintenance for the Well and proposed transmission main. The proposed facilities would not require an increase in the number of employees compared to the existing facilities; therefore, routine operations, maintenance, and/or repair would be performed by the City's current existing staff. Additional fuel and emissions for servicing the proposed facilities would be minimal. Furthermore, implementation of the project would increase reliance on local ground water supplies that would reduce the amount of imported water. Importing of water generates higher levels of GHG emissions associated with conveyance as compared to local water supplies that would be generated from this project (at least a 58 percent reduction in water supply electricity, based on CalEEMod default factors⁶). Therefore, impacts to GHG emissions during operation would be considered less than significant.

Emissions Summary

The annual GHG emissions for the project were estimated to be approximately MTCO₂e per year as summarized in **Table 5**. Direct and indirect emissions associated with the project are compared with the SCAQMD proposed screening level for industrial/stationary source projects, which is 10,000 MTCO₂e. As shown in Table 5, the project would result in a less than significant impact with respect to GHG emissions.

Emission Source	Total MTCO₂e/year
Amortized construction emissions	21
Energy (Electricity)	513
Annual CO2e (All Sources)	534
Significance Threshold	10,000
Threshold Exceeded?	No
SOURCE: Appendix B. ESA 2019.	

 TABLE 5

 ANNUAL PROJECT GREENHOUSE GAS EMISSIONS

⁶ See: CalEEMod User's Guide, Appendix D, Table 9.2, 2017.

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

Less than Significant Impact. A significant impact would occur if the project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment by conflicting with applicable regulatory plans and policies to reduce GHG emissions as discussed within CARB's Climate Change Scoping Plan, City of Los Angeles' pLAn, and City of Beverly Hills Sustainable City Plan.

The CARB Scoping Plan Update focused on establishing a greenhouse gas reduction target of 40 percent below 1990 levels by 2030. The Project would provide increased access to local water supplies, which would in turn reduce the need for imported water and resulting energy and emissions that come from water conveyance (at least a 58 percent reduction in electricity, based on CalEEMod default factors⁷). Because the CARB Scoping Plan requires a suite of strategies across multiple sectors to achieve the GHG reduction targets, the proposed Project would be consistent by reducing the energy consumption needed for water pumping and treatment with the installation of a new, local Well and rehabilitated/expanded water pipeline infrastructure.

The City of Los Angeles' pLAn, published in April 2019, sets targets to increase renewable energy, source water locally, reduce building energy, reduce vehicle miles traveled and increase zero emission vehicles, build housing, create green jobs, and reduce GHG emissions. Los Angeles' ultimate goal is to reach carbon neutral by 2050. Specific to the Project, pLAn aims to source 70 percent of water locally by 2035 (City of Los Angeles 2019). This Project would help achieve that goal by installing a new, local Well and rehabilitating and expanding water pipeline infrastructure within the City of Los Angeles.

The City of Beverly Hills Sustainable City Plan, published in 2009, provides a framework for prioritizing policies and programs to achieve sustainability. Contributing factors to sustainability include community participation & civic duty, climate protection & air quality, energy, water, land use, transportation & open space, materials & waste, environmental & public health, sustainable local economy, and social equity. The Project is consistent with the Sustainable City Plan's objective to "use water efficiently and effectively while managing storm and waste water in a beneficial manner" and policy to "maximize the availability and use of alternative water sources." As of 2009, Beverly Hills sourced approximately 10 percent of its water from local ground water and 90 percent from Metropolitan Water District (MWD), which imports water from the California State Water Project and Colorado River (City of Beverly Hills 2009). This Project would be consistent with the City of Beverly Hills policies to provide an alternate water source locally and reduce energy use from water conveyance.

Overall, as the project would be consistent with CARB's Climate Change Scoping Plan, City of Los Angeles' pLAn, and City of Beverly Hills Sustainable City Plan, the project would not conflict with an applicable plan, policy, or regulation to reduce GHG emissions. As such, impacts would be considered less than significant.

⁷ See: CalEEMod User's Guide, Appendix D, Table 9.2, 2017.

References

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4.9 Hazards and Hazardous Materials

Issi	es (and Supporting Information Sources):	Potentially Significant Impact	Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
9.	HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			\boxtimes	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				\boxtimes
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		\boxtimes		
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				\boxtimes

Environmental Evaluation

Would the Project:

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

Less than Significant Impact. The California Office of Emergency Services oversees state agencies and programs that regulate hazardous materials (Health and Safety Code, Article 1, Chapter 6.95). A hazardous material is any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. The proposed project would require the use of construction vehicles and equipment and thus involve the routine transport, use, storage, and disposal of hazardous materials such as diesel fuel, gasoline, oils, grease, equipment fluids, cleaning solutions and solvents, lubricant oils, and adhesives. If such hazardous materials were not handled properly, in accordance with federal, state and local regulations, a potentially significant hazards to the public or environmental could occur.

Existing federal and state law regulates the handling, storage and transport of hazardous materials and hazardous wastes. Pursuant to the federal Hazardous Materials Transportation Act, 49 U.S.C. § 5101 et seq., the United States Department of Transportation promulgated strict regulations applicable to all trucks transporting hazardous materials. Occupational safety standards have been established in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace, including construction sites. The CalOSHA has primary responsibility for developing and enforcing standards for safe workplaces and work practices in California in accordance with regulations specified in California Code of Regulations (CCR) Title 8. For example, under Title 8 CCR 5194 (Hazard Communication Standard), construction workers must be informed about hazardous substances that may be encountered, and under Title 8 CCR 3203 (Injury Illness Prevention Program) workers must be properly trained to recognize workplace hazards and to take appropriate steps to reduce potential risks due to such hazards. Thus, during construction and operation, contractors and/or City staff handling, storing or transporting hazardous materials or wastes must comply with regulations that would reduce the risk of accidental release and provide protocols and notification requirements should an accidental release occur. Therefore, by complying with relevant federal, state, and local laws, the proposed project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials during implementation of the proposed project.

7-8

During operation, the proposed project would not require the routine use of large quantities of hazardous materials at the Well Site. Impacts would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. As discussed above in the response to Question 4.9(a), the proposed project would involve the routine use of hazardous materials during construction and activities; the transport, use, storage and disposal of such hazardous materials would be required to comply with existing applicable federal, state and local regulations. Accidental spills of small amounts of these materials could occur during routine transport, use, storage or disposal, and could potentially injure construction workers, contaminate soil, and/or affect the groundwater below the reservoir. Impacts associated with the accidental release, although localized to the project site, could potentially create a significant hazard to the environment.

In the event of an accidental release during implementation of the proposed project, containment and clean up would be in accordance with existing applicable regulatory requirements. Title 8 CCR 5194 requires preparation of a hazards communication program identifying hazardous materials onsite and reducing the potential for a spill; and 29 CFR 1910.120 includes requirements for emergency response to releases or substantial threats of releases of hazardous substances. Contractors and/or the City would be required to prepare and implement a Hazardous Materials Business Plan, as required under the state Hazardous Materials Release Response Plans and Inventory Act, to manage any hazardous materials they use during construction and operation, respectively. A HMBP is a document containing detailed information on the inventory
of hazardous materials at a facility; Emergency Response Plans (ERP) and procedures in the event of a reportable release or threatened release of a hazardous material; a Site Safety Plan with provisions for training for all workers; a site map that contains north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, hazardous material handling and storage areas, and emergency response equipment. Further, all spent hazardous materials would be disposed of in accordance with California Department of Toxic Substances Control (DTSC) and County regulations. Construction and maintenance specifications prepared for the proposed project would identify best management practices (BMPs) to ensure the lawful transport, use, storage, and disposal of hazardous materials. Therefore, potential impacts to the public or the environment related to reasonably foreseeable accident conditions involving hazardous materials would be less than significant.

During operation, the proposed project would not require the routine use of hazardous materials at the Well Site or along the transmission main, and thus it is not reasonably foreseeable that accident conditions involving the release of hazardous materials into the environment would occur during operation. Conveyed production well water would be treated at the Foothill WTP under existing City of Beverly Hills permits. Impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Less than Significant Impact. The project area is located adjacent to and within one-quarter mile of various schools such as Crescent Heights Boulevard Elementary School (Figure 6, School and Recreational Facilities in the Project Area). Construction activities would use limited quantities of hazardous materials as described above, which would occur within one-quarter mile of the school facilities. However, the City is required to comply with all relevant and applicable federal, state and local laws and regulations that pertain to the release of hazardous materials during construction activities as described in response to Questions 4.9(a) and 4.9(b). Compliance with all applicable federal, state and local regulations would reduce potential impacts to the public or the environment regarding hazardous waste emissions within one-quarter mile of a school. During operation, there would not be routine use of hazardous materials at the proposed well sites. Impacts would be less than significant.



SOURCE: ESRI; City of Beverly Hills; City of Los Angeles

ESA

La Brea Subarea Well and Transmission Main Project

Figure 6 School and Recreational Facilities in the Project Area

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

Less than Significant with Mitigation Incorporated. A review of the Department of Toxic Substances Control's (DTSC) Hazardous Waste and Substances List – Site Cleanup (Cortese List) indicates that there are no identified hazardous material sites located within the proposed Well Site, the Foothill WTP, or within Chariton Street, La Cienega Boulevard, Olympic Boulevard, Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, or 3rd Street where the proposed transmission main would travel (DTSC 2019a). A database search of hazardous materials sites using the online DTSC EnviroStor and State Water Resources Control Board (SWRCB) GeoTracker databases identified zero hazardous clean-up sites within these same project areas (DTSC 2019b; SWRCB 2019). Construction activities associated with the proposed well could encounter contaminated soil and/or groundwater during excavation, thereby posing a health threat to construction workers, the public, and the environment.

As standard procedure for siting groundwater wells, an environmental assessment of the proposed location would be conducted to ensure soil and groundwater contamination is avoided. **Mitigation Measures HAZ-1** and **HAZ-2** would require that these site-specific studies be conducted prior to selecting suitable sites in order to identify local contamination. These studies would identify recommendations and cleanup measures to reduce risk to the public and the environment from existing hazardous waste sites. Therefore, impacts to the public or the environment related to hazardous materials sites would be less than significant.

Mitigation Measures

HAZ-1: Prior to the initiation of any construction requiring ground-disturbing activities, the City shall complete an environmental assessment of the proposed site to locate the potential for soil and groundwater contamination in the project area. The recommendations set forth in the site assessment shall be implemented to the satisfaction of applicable agencies before and during construction.

HAZ-2: If the site assessments determine that the site has contaminated soil and/or groundwater, a Soil and Groundwater Management Plan shall be prepared that specifies the method for handling and disposing of contaminated soil and groundwater prior to demolition, excavation, and construction activities. The City shall be responsible for ensuring implementation of the Plan in compliance with applicable regulations.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest airport to the project area is the Santa Monica Airport, located approximately 4.6 miles southwest of the project area. The proposed project is not located within an airport land use plan or within 2 miles of a public airport or public use airport. No impact would occur.

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

7-8

Less than Significant with Mitigation Incorporated. The proposed Well Site would not impair implementation of or physically interfere with adopted emergency response plans or emergency evacuation plans. There would be no installation of well facilities within public rights-of-way and no possibility of interfering with evacuation routes. During construction, truck haul trips would transport construction and debris materials to and from project sites; however, these trips would not impact the roadway in a way that would impede emergency evacuations. The truck trips would not require closure of any roadways and would only temporary slow traffic near the project sites. Project-related vehicles would not block existing street access to the sites. Therefore, no impacts related to an emergency response or evacuation plan would occur.

Operation of the proposed well facilities would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The facilities all consist of groundwater retrieval infrastructure which, during operation, would not interfere with traffic flows. However, aboveground well facilities would require periodic maintenance. Maintenance activities would be random and require minimal trips that would not significantly impact the surrounding roadways. Impacts related to an adopted emergency plan would be considered less than significant during operation.

The proposed transmission main would be rehabilitated and constructed within public rights-ofway. This construction activity could potentially block access to roadways and driveways for emergency vehicles. The construction-related impacts, although temporary, could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. However, the implementation of **Mitigation Measure HAZ-3** would require the preparation of a Traffic Control Plan with comprehensive strategies to reduce disruption to emergency access. Therefore, with implementation of mitigation measures, potential significant impacts to emergency access would be reduced to less than significant levels.

Following construction, operation of the pipelines would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as they would be located underground. Impacts related to an adopted emergency plan would be less than significant during operation.

Mitigation Measures

HAZ-3: In conjunction with **Mitigation Measure TR-1**, prior to initiating construction of the transmission main within roadway rights-of-way, the City shall prepare and implement a Traffic Control Plan that contains comprehensive strategies for maintaining emergency access. Strategies shall include, but are not limited to, maintaining steel trench plates at the construction sites to restore access across open trenches and identification of alternate routing around construction zones. In addition, police, fire, and other emergency service providers shall be notified of the timing, location, and duration of the construction activities and the location of detours and lane closures. The City shall ensure that the Traffic Control Plan and other construction activities are consistent with the Los Angeles County Operational Area Emergency Response Plan.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. The project area is located within a highly developed area containing little to no vegetation. The project area is located within a State/Federal Responsibility Area (SRA), Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) (CAL FIRE 2011). Therefore, implementation of the proposed project would not create hazardous fire conditions or expose construction workers to wildfire risks. No impacts would occur.

References

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4.10 Hydrology and Water Quality

Issu	es (and Su	upporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
10.	HYDRO Would t	LOGY AND WATER QUALITY — he project:				
a)	Violate a discharg degrade	ny water quality standards or waste e requirements or otherwise substantially surface or ground water quality?			\boxtimes	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				\boxtimes	
c)	Substan site or an course o addition would:	tially alter the existing drainage pattern of the rea, including through the alteration of the of a stream or river or river or through the of imperious surfaces, in a manner which				
	i)	result in substantial erosion or siltation on- or off-site;			\boxtimes	
	ii)	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			\boxtimes	
	iii)	create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			\boxtimes	
	iv)	impede or redirect flood flows?			\boxtimes	
d)	In flood h of polluta	nazard, tsunami, or seiche zones, risk release ants due to project inundation?			\boxtimes	
e)	Conflict quality c manage	with or obstruct implementation of a water ontrol plan or sustainable groundwater ment plan?			\boxtimes	

7-8

Environmental Evaluation

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. Construction and demolition activities including grading, excavation, and backfilling would result in substantial soil disturbance and exposure onsite. Disturbed and exposed soils could be moved by wind and water and result in erosion and sedimentation of stormwater runoff. Construction of the proposed well, 15-inch Stormdrain, transmission main, and demolition equipment would use chemicals and solvents such as fuel and lubricating grease for motorized heavy equipment, which could also come into contact with stormwater by way of inadvertent spills or releases (For more discussion of this topic please refer to Section 4.9, *Hazards and Hazardous Materials*). Due to the age of the residential structure at Well Site, hazardous materials may be encountered during demolition that could also mix with

stormwater. Therefore, proposed project construction and demolition has the potential to affect water quality.

Since construction and demolition would disturb an area greater than an acre, the project would be subject to a Construction General Permit (CGP) under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. As required under the CGP, the City or its contractor would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The objectives of a SWPPP is to identify pollutant sources (such as sediment) that may affect the quality of storm water discharge and to implement best management practices (BMPs) to reduce pollutants in storm water.

In particular, erosion control BMPs would be used to prevent the degradation of water quality in the construction area. Other BMPs that could be used to enhance erosion control include scheduling to avoid wet weather events; preservation of existing vegetation where feasible; hydraulic mulching; hydroseeding; using soil binders; straw mulching; using geotextiles, plastic covers, and erosion control blankets/mats; and wood mulching. Examples of erosion control BMPs are installing a silt fence; creating a sediment/desilting basin; installing sediment traps; installing check dams; using fiber rolls; creating gravel bag berms; street sweeping and vacuuming; creating a sandbag barrier; creating a straw bale barrier; and storm drain inlet protection. BMPs would also include practices for proper handling of chemicals such as avoidance of fueling at the construction site and overtopping during fueling, and installation of containment pans. Further, implementation of the construction BMPs would be consistent with the Los Angeles County Stormwater Program and would begin with the commencement of demolition and construction and continue through the completion of the proposed well and transmission main (LA Public Works 2019). Implementation of the SWPPP and BMPs in compliance with the NPDES permitting requirements would avoid or reduce all erosion and sedimentation impacts to below a level of significance during construction.

The proposed 15-inch storm drain (pump-to-waste pipeline) would be constructed within Chariton Street, to connect to existing utilities within the local streets. Once the well is operational, typical procedure is to "pump-to-waste" for a short duration to flush the well system. Flushed well water and stormwater runoff at the Well Site would be captured to comply with Los Angeles County Stormwater Program and conveyed through the proposed pump-to-waste line to the storm drain. Development water from the proposed well would be discharged to the storm drain pursuant to California Regional Water Quality Control Board Los Angeles Region ORDER NO. R4-2003-0108 (CAG994005), covering Discharges of Groundwater from Potable Supply Wells to Surface Water. Therefore, no substantial adverse impacts to water quality would occur and operational impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact.

Construction

During construction, the project area would be watered during dry and windy conditions to prevent dust and debris from migrating off-site. The demand for construction watering would be minor and temporary during intermittent construction times. Further, historic groundwater levels in the project area suggest that no dewatering would be required during construction of the well facilities or transmission main (LADWP 2011). Therefore, the proposed project facilities would not directly interfere with groundwater supplies or interfere substantially with groundwater recharge during construction. Impacts would be less than significant.

Operation

The objective of the project is to extract available groundwater within the La Brea Subarea within safe and available limits and treat the water at the Foothill WTP for the City of Beverly Hill's use. The project is intended to provide additional water supply to the City as an objective of the City's 2015 Final Urban Water Management Plan (2016) to accommodate planned demand for the City and reduce reliability on imported water from MWD. The City has conducted substantial research to estimate the amount of groundwater currently available in the Subbasin and to quantify the amount that is available for extraction without impacting other groundwater recharge sources. The only known active water well in the La Brea Subarea is a privately-owned well used to supply irrigation water to a few tens of acres of lawns at a condominium complex in the southern portion of the Subarea (Michael Baker International 2017). Very little information is available for this well; however, the City's implementation of the Well Site would not substantially impact local groundwater availability or levels at this existing well due to the distance between the existing and proposed wells in the Subarea. Historically, the City extracted approximately 4,460 AFY of groundwater from 16 wells that operated in the Subarea at various times during the period between 1950 and 1974. In 1976, Beverly Hills decided to discontinue producing water from the La Brea Subarea in favor of purchasing all of their water supply from MWD (Michael Baker International 2017; LADWP 2011). However, the City retained its "rights" to extract groundwater from the Subarea for future use by submitting annual statements to the SWRCB. The safe yield⁸ for the La Brea Subarea was determined to be approximately 3,000 AFY (LADWP 2011; City of Beverly Hills 2016).

The groundwater supply (1,700 AFY) to be provided by the project is not only consistent with the City's projected water demand within their Urban Water Management Plan (City of Beverly Hills 2016). Given that the City is substantially built out/developed and therefore, would not introduce new development or population that would potentially increase the demand for water within the City. Further, 1,700 AFY is within the safe yield of the Subarea (LADWP 2011; City of Beverly

⁸ "Safe yield" refers to the amount of water that can be withdrawn from a groundwater basin aquifer without producing an undesired effect, such as substantially depleting groundwater levels or interfering with groundwater recharge.

Hills 2016). The safe yields of groundwater basins are calculated by water management agencies in order to protect groundwater resources and thus not depleting the groundwater supply. Therefore, implementation of the proposed production well would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the Central Basin (where the La Brea Subarea is located).

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or river or through the addition of imperious surfaces, in a manner which would:

i) result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. Construction and demolition activities would disturb and expose soil, which could be moved by wind and water, resulting in erosion and sedimentation of stormwater runoff. Since construction and demolition would exceed an acre, these activities must comply with the SWRCB Construction General Permit. As discussed in Question 4.7(a) and 4.10(a), above, the City would prepare a SWPPP that includes erosion and sediment control BMPs implemented during construction and demolition to protect water quality. Compliance with the SWPPP would ensure a less than significant impact during construction.

Once constructed, the proposed facilities would not alter drainage from any of the sites. The Well Site is currently developed with impermeable surfaces and drains to the storm drains within Chariton Street. Once constructed, the well facilities would have a smaller scale than the existing structure, but would not make the Well Site more impermeable than existing conditions. Similarly, once constructed, the transmission main would be underground and the disturbed areas would be repaved and return to previous site conditions. Therefore, implementation of the proposed project facilities would not result in substantial erosion or siltation on or offsite. Impacts would be less than significant.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less than Significant Impact. Demolition of existing structures and construction of new facilities at the Well Site would permanently alter the site's topography. The project would demolish existing structures onsite and provide new well facilities and paving. Stormwater runoff at the Well Site would be captured onsite and conveyed through proposed pump-to-waste drains or flow to existing stormdrains within the general area, consistent with the Los Angeles County Stormwater Program. The proposed well facilities would not have the scale or massing to alter flows in a way such that flooding may occur. Further, the proposed transmission main would be implemented within areas currently developed and paved, either within public ROWs or within sidewalks. After transmission main implementation, the pipelines would be underground and the project area would return to existing conditions and repaved. Therefore, implementation of the proposed well facilities and transmission main would not increase surface runoff or flow in a way such that flooding would occur. Therefore, impacts would be less than significant.

iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than Significant Impact. The project would require implementation of a SWPPP, including BMPs for erosion control and for proper handling of chemicals. As such, construction of the proposed project would not provide substantial additional sources of polluted runoff into stormdrain systems.

The Well Site and transmission main project areas are currently largely paved and already contribute stormwater runoff. Implementation of the well facilities and transmission main would not increase the amount of impermeable surfaces or natural drainage direction of stormwater flows. Once constructed, the project would not substantially increase runoff from any of the sites into local stormdrains or the Well Site proposed stormdrain (pump to waste). The proposed Well Site is designed to accommodate stormwater flows and well-flushing water through the proposed stormdrain (pump-to-waste) line. The stormdrain is sized appropriately to capture all flows. As such, the proposed project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. Any impacts would be less than significant.

iv) impede or redirect flood flows?

Less than Significant Impact. The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer for the project area (Panel No. 0637C1595G) shows that the project area is largely within an area of minimal flood hazard. The Well Site and the entirety of the proposed transmission main would not be located within a flood hazard zone (FEMA 2018). Further, none of the new well facilities would have the scale or massing to substantially alter flood flows within the already highly developed project area. Therefore, impacts would be considered less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. The proposed project is largely in an area with no flood risk. A SWPPP would be prepared and implemented during construction activities to ensure proper handling of chemicals and avoid release of pollutants to the project site. As such, impacts due to potential release of pollutants in a flood hazard area would be less than significant.

A seiche is a wave set up on a river, reservoir, pond, or lake when seismic waves from an earthquake pass through the area (USGS 2019a). The project area is not located near a body of water, therefore, there would be no potential impacts associated with the risk of release of pollutants due to project inundation from a seiche.

A tsunami is a sea wave of local or distant origin that results from large-scale seafloor displacements associated with earthquakes, major submarine slides or exploding volcanic islands (USGS 2019b). An event such as an earthquake creates a large displacement of water resulting in a rise or mounding at the ocean surface that moves away from this center as a sea wave. The project area is located approximately 7 miles east of the Pacific Ocean and is not located within the tsunami risk zone. Therefore, the proposed project would not be subject to tsunamis and would not risk release of pollutants due to project inundation from a tsunami. No impacts would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Los Angeles RWQCB Water Quality Control Plan (Basin Plan) sets water quality objectives that are qualitative and quantitative in order to protect the beneficial uses within the basin. The water quality constituents that have numerical limits for groundwater include: arsenic, bacteria, barium, boron, chloride, cyanide, total dissolved solids, fluoride, metals, Methylene Blue-Activated Substances, pH, radioactivity, sodium, and sulfate. As described in Section 4.3 and Question 4.7(b) above, construction activities would require water for dust control; however, all water would be sourced from treated water onsite and not from groundwater. As discussed in Question 4.10(b), the project would not interfere with groundwater management of the La Brea Subbasin. As a result, the project would not conflict with the implementation of a water quality control plan or groundwater management plan, and impacts would be less than significant.

References

- City of Beverly Hills, 2016. Urban Water Management Plan. Available online at http://www.beverlyhills.org/departments/publicworks/utilities/waterservices/urbanwaterma nagementplan/, accessed June 2019.
- Federal Emergency Management Agency (FEMA), 2018. FEMA flood Map Service Center. Available online at: https://msc.fema.gov/portal/home, accessed June 2019.
- Los Angeles County Public Works (LA Public Works), 2019. Stormwater. Available online at: https://dpw.lacounty.gov/epd/cleanla/Stormwater.aspx, accessed June 2019.
- Los Angeles Department of Water and Power, 2011. *Feasibility Report for Development Resources in the Santa Monica and Hollywood Basins*. December 2011.
- Michael Baker International, 2017. La Brea Subarea, Wells, Water Treatment, and Transmission Main Project Preliminary Design Report. May 2017.
- USGS, 2019a. Seismic Seiches. Available at: https://earthquake.usgs.gov/learn/topics/seiche.php, accessed June 2019.
- USGS, 2019b. Earthquake Glossary, Tsunami. Available at: https://earthquake.usgs.gov/learn/glossary/?term=tsunami, accessed June 2019.

4.11 Land Use and Land Use Planning

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
11.	LAND USE AND LAND USE PLANNING — Would the project:				
a)	Physically divide an established community?				\boxtimes
b)	Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			\boxtimes	

7-8

Environmental Evaluation

Would the Project:

a) Physically divide an established community?

No Impact. The proposed project does not propose any action that could divide an established community. The physical division of an established community generally refers to the construction of a feature such as an interstate highway or railroad tracks, or removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area. Given the proposed project would construct the proposed well and a transmission main within a highly developed area, the proposed project would result in no impact to the physical division of an established community.

b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. The proposed transmission main would be installed within or adjacent to local rights-of-way and would not conflict with land use designations or be incompatible with neighboring land uses. In addition, once constructed, the proposed transmission main would not pose long-term incompatibility with land uses. As described above in Section 2.3, the proposed Well Site would be implemented within City-owned property in an area with a land use designation of Low Medium II Residential and zoned RD2-1 (City of Los Angeles 2019). Pursuant to Government Code Sections 53091(d) and (e), building and zoning ordinances of cities or counties do not apply to the location or construction of facilities for the projection, generation, storage, treatment, or transmission of water (California Legislative Information 2003). Therefore, any well facilities that may be inconsistent with the City of Los Angeles General Plan land use designations would not be subject to a conditional use permit or general plan amendment. However, the proposed well would be contained within a well-house designed to blend in with surrounding environment. Further, all operational sounds would be within allowable limits within a residential area (see Section 4.13, *Noise* for more information). The City would coordinate directly with the City of Los Angeles to ensure operations of the well facilities would be compatible with existing adjacent land uses, if necessary. Therefore, impacts would be less than significant.

References

- California Legislative Information, 2003. Government Code, Article f. Regulation of Local Agencies by Counties and Cities. Available online at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§io nNum=53091, accessed June 2019.
- City of Los Angeles, 2019. ZIMAS. Available online at: http://zimas.lacity.org/, accessed June 2019.

4.12 Mineral Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
12.	MINERAL RESOURCES — Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				\boxtimes

7-8

Environmental Evaluation

Would the Project:

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

No Impact. According to the USGS Mineral Resources Data System (USGS 2019), the project area is not identified as a known mineral resource area and does not have a history of mineral extraction uses. In addition, according to the State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, no oil or gas wells exists within the project area (CDC 2019). The Surface Mining and Reclamation (SMARA) Mineral Land Classification prepared by CGS indicates that the project area primarily consists of Mineral Resource Zone 1 (MRZ-1) and MRZ-3 areas (CGS 1994; City of Los Angeles 2001; City of Beverly Hills 2010). An MRZ-1 designation is assigned to CGS study areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence; an MRZ-3 designation is assigned to CGS study areas containing mineral deposits whose significance cannot be evaluated due to inadequate subsurface data (CGS 1994). Therefore, the proposed project would not result in the loss of availability of a known mineral resource, and no impacts would occur.

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

No Impact. The City of Los Angeles and City of Beverly Hills Conservation Elements (City of Los Angeles 2001; City of Beverly Hills 2010) do not identify the project area as a mineral resource recovery zone. Therefore, the implementation of the proposed project would not result in the loss of a locally important mineral resource recovery site. No impacts would occur.

References

- CDC, 2019. DOGGR Well Finder. Available online at: https://www.conservation.ca.gov/dog/Pages/WellFinder.aspx, accessed June 2019.
- CGS, 1994. Update of Mineral Land Classification of Portland Cement Concrete Aggregate in Ventura, Los Angeles, and Orange Counties, CA. Part II, LA County. 1994.
- City of Beverly Hills, 2010. Conservation. Available online at: http://www.beverlyhills.org/cbhfiles/storage/files/filebank/10283--7_Conservation%2001122010.pdf,accessed June 25, 2019.
- City of Los Angeles, 2001.Conservation Element of the City of Los Angeles General Plan. Available online at: https://planning.lacity.org/cwd/gnlpln/consvelt.pdf, accessed June 2019.
- United State Geologic Survey (USGS), 2019. Mineral Resource Data System (MRDS). Available online at: https://mrdata.usgs.gov/mrds/,accessed June 2019.

4.13 Noise

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
13.	NOISE — Would the project result in:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project				\boxtimes

7-8

Discussion

to excessive noise levels?

expose people residing or working in the project area

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If a sound's physical intensity is doubled, the sound level increases by 3 dBA, regardless of the initial sound level; i.e., 60 dBA plus 60 dBA equals 63 dBA. However, where noise levels of different levels are combined, the change in noise level would be less than 3 dB; i.e., 70 dBA plus 60 dBA equals 70.4 dBA.

Noise that is experienced at any receptor can be attenuated by distance or the presence of noise barriers or intervening terrain. Sound from a single source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. For acoustically absorptive, or soft, sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction.

The proposed project would be located within two jurisdictions; the City of Beverly Hills and the City of Los Angeles. The proposed Well Site would be located in the City of Los Angeles, currently developed with a residential structure. The proposed transmission main would be

approximately four miles long located within roadways primarily within the City of Los Angeles, with a portion located in the City of Beverly Hills, as shown in Figure 2.

The Noise Element of the City of Beverly Hills General Plan contains noise goals and policies that address unnecessary, excessive, and annoying noise levels and sources, such as vehicles, construction, and stationary sources (e.g., heating and cooling systems, mechanical rooms, etc.). Potentially sensitive land uses in the City of Beverly Hills include residences (including residences for the elderly), schools, churches, and libraries. Commercial uses are not defined as noise sensitive receptors. The City of Beverly Hills noise ordinance (BHMC Section 5-1-201 and subsequent) includes noise standards and regulations:

Section 5-1-202 prohibits any person from operating machinery or mechanical devices in a manner which creates a noise increase of more than 5 dBA above the ambient noise level at any property outside the hours permitted by the City's noise ordinance for construction activity.

Section 5-1-205 of the BHMC prohibits construction activity between the hours of 6:00 PM and 8:00 AM any day, and on Sundays and public holidays. Further, construction work within 500 feet of a residential zone is prohibited on Saturdays.

Section 5-1-206 of the BHMC prohibits any person to create any noise on any street, sidewalk, or public place adjacent to any school, institution of learning, or church while the same is in use, or adjacent to any hospital; which noise substantially and unreasonably interferes with the workings of such institutions.

The Noise Element of the City of Los Angeles General Plan includes a number of goals, objectives, and policies for land use planning purposes to limit exposure of citizens to excessive noise levels. The City of Los Angeles Municipal Code (LAMC) noise ordinance includes noise standards and regulations.

Section 111.01 and Section 111.03 of the LAMC define the ambient noise as the actual measured ambient noise level or the City's presumed ambient noise level, whichever is greater. The actual ambient noise level is the measured noise level averaged over a period of at least 15 minutes Leq.

Section 111.02 of the LAMC provides procedures and criteria for the measurement of the sound level of "offending" noise sources. In accordance with the LAMC, a noise level increase of 5 dBA over the existing average ambient noise level at an adjacent property line is considered a noise violation. To account for people's increased tolerance for short-duration noise events, the Noise Regulation provides a 5 dBA allowance for noise occurring more than five but less than fifteen minutes in any one-hour period and an additional 5 dBA allowance (total of 10 dBA) for noise occurring five minutes or less in any one-hour period.

Section 112.02 limits increases in noise levels from air conditioning, refrigeration, heating, pumping and filtering equipment. Such equipment may not be operated in such

manner as to create any noise which would cause the noise level on the premises of any other occupied property, or, if a condominium, apartment house, duplex, or attached business, within any adjoining unit, to exceed the ambient noise level by more than 5 dBA.

Section 112.05 of the LAMC sets a maximum noise level for construction equipment of 75 dBA at a distance of 50 feet when operated within 500 feet of a residential zone. Compliance with this standard is required only where "technically feasible."

Section 41.40 of the LAMC prohibits construction between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, 6:00 P.M. and 8:00 A.M. on Saturday, and at any time on Sunday (i.e., construction is allowed Monday through Friday between 7:00 A.M. to 9:00 P.M.; and Saturdays and National Holidays between 8:00 A.M. to 6:00 P.M.). In general, the City's Department of Building and Safety enforces noise ordinance provisions relative to equipment and the Los Angeles Police Department enforces provisions relative to noise generated by people. However, the provisions of Section 41.40(a) shall not apply to any person who performs the construction, repair or excavation work involved pursuant to the express written permission of the Board of Police Commissioners through its Executive Director. The Executive Director on behalf of the Board, may grant this permission, upon application in writing, where the work purposed to be done is in the public interest, or where hardship or injustice, or unreasonable delay would result from its interruption during the hours mentioned above, or where the building or structure involved is devoted or intended to be to be developed to a use immediately related to public defense. The City allows project applicants to obtain permission to conduct construction outside of the hours specified above. In these cases, a project applicant must obtain the express written permission of the Board of Police Commissioners through its Executive Director. The Executive Director, on behalf of the Board, may grant this permission upon application in writing where the work purposed to be done is in the public interest, or where hardship or injustice, or unreasonable delay would result from its interruption during the hours mentioned above.

Environmental Evaluation

Would the Project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant with Mitigation Incorporated. As shown in Table 1 in Section 2, Project Description, construction of the Project would occur in four phases over a total of 13 months from October 2019 to December 2020. The construction of the well components would happen concurrently with the pipeline rehabilitation and transmission main installation. Maximum daily activities would involve up to 10 workers for well-site construction and 10 workers for the pipeline rehabilitation main installation.

The existing land uses surrounding the project area, include community commercial, general commercial, and neighborhood office commercial, where the transmission main alignment would be located along La Cienega Boulevard leading to the proposed location of the Well Site. Other existing land uses in the overall project area include: public facilities, low residential, medium residential, educational, open space, places of worship, and industrial. The portion of the transmission main in the City of Beverly Hills is surrounded by single-family residential, multifamily residential, commercial, and public schools (City of Beverly Hills 2019; City of Los Angeles 2019). The closest noise sensitive receptors to Well Site are the residential uses adjacent on either side of the well site, as close as approximately 25 feet. The closest noise sensitive receptors to the pipeline rehabilitation and transmission main installation are residential, motel, and places of worship along La Cienega Boulevard and mainly residential and open space uses on the other roadways the pipeline travels along. Noise sensitive receptors along the pipeline route are assumed to be as close as approximately 25 feet from the active construction site.

To characterize the ambient noise levels at noise sensitive receptors, ESA conducted eight shortterm (15-minute duration) and one long-term (24-hour duration) ambient noise measurements at the property line of noise sensitive receptors located along the proposed pipeline alignment and the well location, as shown on **Figure 7**, **Noise Measurement Locations**. **Table 6**, *Ambient Noise Levels*, provides the ambient noise levels measured and noise sources observed at each location.

Receptor Location	Approximate Distance to Project Site (feet)	Measured Daytime Ambient Noise Levels, (dBA L _{eq})	Measured Nighttime Ambient Noise Levels, ^a (dBA L _{eq})
R1. Well Location	25	55.9	49.6
R2. Park Cienega Motel	25	78.3	73.8
R3. La Cienega Motel	25	74.4	74.7
R4. Grand Motel	25	75.0	74.0
R5. Multi-family residential/Pressman Academy/Temple Beth Am	25	70.7	74.7
R6. Multi-family residential/La Cienega Park/The Academy Library	25	63.3	N/A ^b
R7. Single-family residential along N. Le Doux Road near Clifton Way/Pentecostal Mission of Beverly Hills	25	61.8	N/A ^b
R8. Single-family residential along Dayton Way near N Oakhurst Drive	25	54.2	N/A ^b
R9. Single-family residential along N Maple Drive near Burton Way	25	57.9	N/A ^b

TABLE 6 AMBIENT NOISE LEVELS

SOURCE: ESA, 2019

^a Nighttime noise measurements were taken at locations where nighttime work is expected to occur and is all assumed within Los Angeles and along La Cienega Boulevard.

^b N/A denotes that no nighttime measurements were taken because no nighttime work would occur at this receptor.



SOURCE: ESRI; City of Beverly Hills; City of Los Angeles

La Brea Subarea Well and Transmission Main Project

Figure 7 Noise Measurement Locations

Noise from on-site construction activities would be generated by the use of equipment involved during various stages of construction. The noise levels generated by construction equipment would vary depending on factors such as the type and number of equipment, the specific model (horsepower rating), the construction activities being performed, and the maintenance condition of the equipment. Individual pieces of construction equipment anticipated to be used during project construction could produce maximum noise levels of 75 to 85 dBA Lmax at a reference distance of 50 feet from the noise source, as shown in **Table 7**, *Construction Equipment and Maximum Noise Levels*. These maximum noise levels would occur when equipment is operating under full power conditions. The estimated usage factor for the equipment is also shown in Table 7. The usage factors are based on the Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide (FHWA 2006).

Source	Estimated Usage Factor (%)	Reference Noise Level at 50 feet (dBA Lmax)
Air Compressor	50%	78
Bore/Drill Rig Truck	20%	79
Crane	40%	81
Dozer	40%	82
Dump/Haul Truck	40%	76
Excavator	40%	81
Forklift	10%	75
Generator Set	50%	81
Jaw Crusher	10%	84
Other Equipment	50%	85
Pump	50%	81
Tractor/Loader/Backhoe	25%	80
SOURCE: FHWA 2006		

TABLE 7 CONSTRUCTION EQUIPMENT AND MAXIMUM NOISE LEVELS

To characterize construction-period noise levels, the hourly Leq noise level associated with each construction phase is estimated based on the quantity, type, and usage factors for each type of equipment used during each construction phase and are typically attributable to multiple pieces of equipment operating simultaneously. Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently.

The estimated noise levels at noise sensitive receptors were calculated using the FHWA's RCNM and were based on a maximum concurrent operation of construction equipment, which is considered a worst-case evaluation because the project would typically use less equipment simultaneously, and as such would generate lower noise levels. See **Appendix D** for the noise calculation worksheets. The nearest sensitive receptors to the construction areas would be residential, educational, motel, and religious land uses. **Table 8**, *Unmitigated Maximum*

Construction Noise Levels at Sensitive Receptors, shows the estimated maximum construction noise levels that would occur at the nearest off-site sensitive uses during a peak day of construction activity.

7-8

Source	Approximate Distance to Project Site (feet)	Maximum Construction Noise Level (dBA Leq)	Daytime Significance Threshold ^a	Significant Impact?	Nighttime Significance Threshold ^b	Significant Impact?
R1. Well Location	25	91	60.9	Yes	54.6	Yes
R2. Park Cienega Motel	25	87	83.3	Yes	78.8	Yes
R3. La Cienega Motel	25	87	79.4	Yes	79.7	Yes
R4. Grand Motel	25	87	80.0	Yes	79.0	Yes
R5. Multi-family residential/ Pressman Academy/Temple Beth Am	25	87	75.7	Yes	79.7	Yes
R6. Multi-family residential/La Cienega Park/The Academy Library	25	87	68.9	Yes	N/A	N/A
R7. Single-family residential along N. Le Doux Road near Clifton Way/Pentecostal Mission of Beverly Hills	25	87	66.8	Yes	N/A	N/A
R8. Single-family residential along Dayton Way near N Oakhurst Drive	25	87	N/A	N/A	N/A	N/A
R9. Single-family residential along N Maple Drive near Burton Way	25	87	N/A	N/A	N/A	N/A

 TABLE 8

 UNMITIGATED MAXIMUM CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS

SOURCE: FHWA 2006, ESA 2019.

^a Daytime thresholds included for City of LA receptors and City of Beverly Hills receptors that are considered sensitive under BHMC Section 5-1-206.

^b Nighttime thresholds included for areas where night work would occur.

Construction in the City of Los Angeles would occur Monday through Friday, within the hours of 7:00 A.M. and 6:00 P.M., but may include 24-hour construction along La Cienega Boulevard. The project construction contractor will obtain a noise variance from the City of Los Angeles for any work occurring outside the hours of 7:00 a.m. and 8:00 p.m., and for any holiday or weekend work, in compliance with local regulations. Construction noise is considered a significant impact if the activity increases the measured ambient noise levels by 5 dBA during any time of the day. Table 8, above, compares the estimated construction noise levels to the ambient noise levels plus 5 dBA as measured at locations R1 through R9.

In the City of Beverly Hills, construction noise is considered a significant impact if the Project construction occurs outside of the allowable construction hours of 8 A.M. to 6 P.M. Furthermore, if the construction activity happens near any institution of learning, hospital, or church at any

time of day, the construction activity may not exceed 5 dBA greater than the measured ambient noise levels.

Additionally, the daytime construction in the City of Beverly Hills would occur near a church and library (R6 and R7), and therefore, is subject to BHMC Section 5-1-206. Activity at other receptors in the City of Beverly Hills (R8 and R9) would comply with the allowable construction hours of 8 A.M. to 6 P.M. Project construction noise could impact noise sensitive receptors during construction. However, implementation of **Mitigation Measures NOISE-1** through **NOISE-4** would reduce construction noise and ensure that noise impacts at sensitive receptors would be minimized. Therefore, construction noise impacts would be less than significant.

On-road haul trucks would be used to transport materials to and from the Project construction areas. The trucks would travel past residences along La Cienega Boulevard, Olympic Boulevard, Le Doux Road, Clifton Way, Clark Drive, Dayton Way, Maple Drive, and 3rd Street. The number of passing trucks would be minimal at approximately 8 trucks per day (with 3 trucks during the A.M. or P.M. peak hour is assumed in the analysis). The temporary addition of these minimal number of trucks per day during project construction activities would not contribute to an audible increase in noise levels above the existing noise levels. As previously stated, a doubling of traffic volumes on a roadway is required to increase traffic noise levels by 3 dBA, which is a barely perceptible increase to a healthy human ear. Since the minimal number of trips would not cause a doubling of traffic volumes, the off-site construction traffic noise impacts would be less than significant.

The existing noise environment in the project area is dominated by traffic noise from vehicle traffic on nearby roadways, as well as from other existing noise sources including airport-related noise. As the project is an infrastructure project that involves pipeline replacement, operation of the project would not result in a net increase in operational noise levels along the pipeline route. Furthermore, the well site would be enclosed within a structure and not cause a perceptible change in ambient noise levels. The project would require periodic maintenance activities, which would involve a few trucks or vehicles per month travelling to the well site and different pipeline segments, but would not require any additional employees. However, given the minimal usage of maintenance vehicles at the project site, project operation would not result in a perceptible increase in noise levels. As such, operation of the project would result in a less than significant impact.

Mitigation Measures

NOISE-1: Prior to construction, the City of Beverly Hills shall ensure that the contractor specifications stipulate that:

- All construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers and other state-required noise attenuation devices capable of up to a 5 dBA reduction.
- When feasible, construction haul routes shall avoid noise-sensitive uses (e.g., residences, convalescent homes).
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from the nearest noise-sensitive receptors.

• The project shall provide noise blanket/temporary noise barriers rated for up to a 10 dBA reduction between the active areas and surrounding sensitive uses.

NOISE-2: Throughout project construction and operation, the City of Beverly Hills shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints as soon as possible.

- The City shall establish and disseminate a 24/7 hotline telephone number for use by the public to report any undesirable project noise conditions. If the telephone number is not staffed 24 hours per day, the City shall include an automatic answering feature with date and time stamp recording to answer calls when the phone is unattended.
- The City shall designate a Noise Disturbance Coordinator during construction and permanently once the facility is operational. The Noise Disturbance Coordinator shall assist in resolving noise complaints to minimize impacts while maintaining the objectives of the construction and operation of the facility. The Noise Disturbance Coordinator shall report all noise complaints to the City program manager.
- For construction noise complaints received outside of the construction hours and days allowed (Monday through Friday, between the hours of 7:00 a.m. and 8:00 p.m.), the Noise Disturbance Coordinator shall take immediate steps to determine whether project construction is causing the noise and, if so, to reduce the noise level of that activity or take other appropriate action to remedy the complaint as quickly as possible.
- For construction activities near local residences, the Noise Disturbance Coordinator shall have the authority to require the installation of a temporary noise barrier to reduce noise impacts to the closest sensitive receptors. The noise barriers shall be tall enough to effectively block sight-lines of the construction to the closest residences. The contractor shall install noise barriers as directed by the Noise Disturbance Coordinator to minimize construction noise and resolve noise complaints.

NOISE-3: Residents of properties shall be offered noise mitigation measures (e.g., hearing protection, sound-proofing, white noise machines, etc.) acceptable to the residents or temporary relocation for the duration of nearby construction that would generate construction noise levels at their property in excess of 45 dBA, L_{eq} during nightime hours, for the duration of time that 24-hour activity occurs. Based on the analyses presented in this IS/MND, this measure shall apply to residences located within approximately 200 feet of the well installation location and pipeline rehabilitation and main transmission activity (i.e. residences along or near Chariton Street and La Cienega Boulevard).

NOISE-4: The contractor shall coordinate with any affected schools, institutions of learning, hospitals, or churches regarding construction schedule and the expected level of disturbance. The contractor shall ensure there are no special events or gatherings that would be affected by construction activity before continuing and will notify any affected institution of the anticipated schedule and completion date. In the event of a conflict, the contractor shall limit the use of equipment in an effort to lower noise levels or cease construction completely until the event or gathering has ended.

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

Less than Significant Impact with Mitigation Incorporated. During project construction, the operation of typical heavy construction equipment for demolition, earth-moving, and excavation would generate localized vibration levels, which, depending upon distance, could potentially affect structures or annoy people. Non-typical heavy impact machinery that could result in excessive vibration conditions, such as pile drivers, would not be used.

Vibration analyses are conducted for potential structural damage to buildings, and annovance to humans in inhabited structures. The closest structures to the construction activities on the project site would be the adjacent residential, commercial, educational, and religious land uses adjacent to the well site and along the path of the pipeline. The closest and most sensitive off-site structures would be residential structures approximately 25 feet from the well site and pipeline alignment.

Construction vibration would have a significant impact if:

- Project construction activities cause groundborne vibration levels to exceed the building damage threshold of 0.2 in/sec PPV at Building Category III Non-engineered timber and masonry buildings (FTA 2018), and
- Project construction activities cause groundborne vibration levels to exceed the human annoyance threshold of 80 VdB at Land Use Category 2 – Residences (FTA 2018).

The vibration levels generated by the general construction equipment that generate the highest vibration levels during the construction of the proposed project are identified in **Table 9**, Vibration Source Levels for Construction Equipment, in terms of peak particle velocity (PPV), expressed in inches per second (in/sec), and root mean square (RMS) velocity, expressed in VdB. As shown, depending on the type of construction equipment used, vibration velocities could reach as high as approximately 0.089 in/sec PPV at 25 feet from the source (e.g., large bulldozer), which corresponds to a RMS velocity level of 87 VdB at 25 feet from the source.

VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT						
Equipment	Approximate PPV (in/sec) at 25 feet	Approximate RMS (VdB) at 25 feet				
Large Bulldozer	0.089	87				
Loaded Trucks	0.076	86				
Jackhammer	0.035	79				
Small Bulldozer	0.003	58				

TABLE 9

As shown in Table 9, operation of a large bulldozer would generate vibration levels that would not structurally impact structures, if operated at approximately 25 feet or greater.

The residences adjacent to the well site and along the pipeline alignment are conservatively considered as non-engineered timber and masonry buildings, and are located at a minimum of 25 feet from the construction activity. Operation of a large bulldozer at 25 feet would not exceed the 0.2 in/sec PPV structural damage threshold for these type of buildings. Therefore, the potential structural damage vibration impact to residential structures from project construction would be less than significant.

In addition to potential structural damage, construction vibration could potentially cause human annoyance at nearby buildings. The vibration impact threshold for human annoyance at a residential structure is 80 VdB. As shown in Table 9, the vibration generated by the operation of a large bulldozer or a loaded haul truck at 25 feet would exceed the human annoyance thresholds of 80 VdB. At 45 feet, the operation of this equipment would not exceed the human annoyance threshold. Therefore, the operation of this equipment at the well site and pipeline would potentially exceed the vibration threshold of human annoyance, resulting in a significant impact.

However, implementation of **Mitigation Measure NOISE-5** would lessen the human annoyance caused by construction vibration and ensure that impacts at sensitive receptors would be minimized. Therefore, construction vibration impacts would be less than significant.

Once construction activities have been completed, there would be no substantial operational sources of vibration activities from the Project site. The primary sources of transient vibration would include well pumps and employee vehicle circulation during maintenance, which also produce limited levels of vibration. These sources would generate substantially lower levels of vibration identified above for construction. Ground-borne vibration generated by each of the abovementioned activities would generate approximately up to 0.005 in/sec PPV adjacent to the project site (FTA 2018). Therefore, vibration impacts during Project operation would not result in substantial adverse environmental impacts.

Mitigation Measure

NOISE-5: The operation of construction equipment that generates high levels of vibration, such as large bulldozers and loaded trucks, shall be prohibited within 45 feet of existing residential structures. Instead, small construction equipment such as small rubber tired bulldozers, small rubber tired excavator, etc., not exceeding 150 horsepower shall be used within this area during demolition, grading, and excavation operations.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. The project site is located approximately 4 miles from the Santa Monica Airport, which has an airport land use commission plan that identifies its airport influence area including noise contours, and that the Project is not located within (Los Angeles County 2003). Therefore, the project would not have the potential to expose people to significant aircraft-generated noise. No impact would occur.

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4.14 Population and Housing

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
14.	POPULATION AND HOUSING — Would the project:				
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			\boxtimes	
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

7-8

Environmental Evaluation

Would the Project:

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

Less than Significant Impact. The proposed project does not include construction of new homes or businesses that would result in a direct increase in population or create a substantial number of jobs. Construction activities would require temporary employment. The maximum number of construction workers at the project site at once would be 28 workers and these opportunities are expected to be filled by workers within the local economy. In May 2019, there was an unemployment average of 4.5 percent, with a County-wide increase of 6.4 percent in construction specifically from 2018 to 2019 (EDD 2019). Given that there was an average of 144,700 persons within the County involved in construction activities, specifically, it is reasonable to assume that there are available workers for the construction activities associated with the proposed project over the 13-month period. Because the majority of the work force is located in the County which is highly populated, there would be an adequate number of local workers that could be available for construction jobs and could commute to the temporary construction jobs rather than relocate and induce growth in the area.

The proposed project is designed to allow the City to continue to provide water services in its service area and to meet forecasted demand and growth in the service area. The proposed project's expansion of water supply is consistent with development anticipated by the City's Urban Water Management Plan, the Southern California Association of Governments (SCAG), the City of Beverly Hills General Plan, and expected population growth. The City has prepared CEQA documentation evaluating potential impacts of growth that could result from implementation of their General Plan. By providing public services to meet population expectations, the City lessens impacts to public services that could result from implementation of land use policies. Localizing water supply in order to provide water supply reliability and public health would occur irrespective of growth rates in the service area.

The project area is substantially developed and would continue to provide water services in an area with similar facilities and services. The project would not be implemented within a

greenfield or undeveloped area where a project such as the proposed would introduce new water services, which could promote growth. Therefore, the implementation of the proposed project would result in less than significant impacts related to indirect inducement of population growth.

Further, operation of the proposed well and transmission main would not require any new City employees. Therefore, implementation of the proposed project would not directly induce substantial population growth in the City's service area. Therefore, the project would result in less than significant impacts to population growth.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. Although there is one existing residence on the Well Site that would be demolished, this structure is not currently being used to house people, nor has it been used as a residence recently. Therefore, the proposed project would not displace people or housing necessitating the construction of replacement housing elsewhere. There would be no impact.

References

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4.15 Public Services

Issues (and Supporting Information Sources):		Potentially Significant Impact	Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact	
15.	PUE	BLIC SERVICES — Would the project:				
a)	Res asso alte phy con env acco perf serv	sult in substantial adverse physical impacts ociated with the provision of new or physically red governmental facilities, need for new or sically altered government facilities, the struction of which could cause significant ironmental impacts, in order to maintain eptable service ratios, response times, or other formance objectives for any of the following public vices:				
	i)	Fire protection?				\boxtimes
	ii)	Police protection?				\boxtimes
	iii)	Schools?				\boxtimes
	iv)	Parks?				\boxtimes
	v)	Other public facilities?				\boxtimes

Environmental Evaluation

Would the Project:

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

i) Fire protection?

No Impact. Fire services for the City of Los Angeles and the City of Beverly Hills are provided by the Los Angeles Fire Department (LAFD) and the Beverly Hills Fire Department (BHFD), respectively. The LAFD and the BHFD provide the primary response for fire suppression and emergency medical services to the project area (LAFD 2019a; City of Beverly Hills 2019a). The nearest station to the project area is LAFD Station 58, located at 1556 South Robertson Boulevard in Los Angeles (LAFD 2019b). The City's Fire department is located at 445 North Rexford Drive (City of Beverly Hills 2019a) The proposed project would not change existing demand for fire protection services because operation would not result in an increase of onsite employees or population. Further, the proposed well facilities and transmission main would not introduce structures or ancillary facilities that increase fire susceptibility as compared to existing structures within the project area. Therefore, the proposed project would not increase the need for new fire department staff or new facilities and no impacts would occur.

ii) Police protection?

No Impact. The City of Los Angeles and the City of Beverly Hills are provided with police protection services by the Los Angeles Police Department (LAPD) and the City of Beverly Hills Police Department (BHPD), respectively (LAFD 2019; City of Beverly Hills 2019b). The proposed project does not include new homes or businesses that would require any additional services or extended response times for police protection services beyond those required with the existing on-site uses. Therefore, the City would not be required to expand or construct new police stations to serve the proposed project. No impacts would occur with the proposed project because additional police protection facilities would not be needed.

iii) Schools?

No Impact. The project area lies within the Los Angeles Unified School District (LAUSD) and Beverly Hills Unified School District (BHUSD) service areas (LAUSD 2019; BHUSD, 2019). The student generation rates within LAUSD and other private schools within the project area would not be affected or altered by the implementation of the proposed project. The proposed project would not affect local school enrollment. No school facilities would be impacted by the proposed project or be required to be constructed.

iv) Parks?

No Impact. The proposed project would not interfere with or have adverse impacts on parks (refer to Figure 6). The proposed project would not involve new housing or employment opportunities that would prompt the need for new parks. A portion of the proposed transmission main would travel adjacent to La Cienega Park; however, construction and operation of the proposed project would not impact the use of nearby recreational uses.

v) Other public facilities?

No Impact. The proposed project would not introduce inhabitants to the project area that would require additional public facilities. No impacts would occur with the proposed project because public facilities would not be needed.

References

- City of Beverly Hills, 2019a. Fire Department. Available online at: http://www.beverlyhills.org/departments/firedepartment/, accessed June 2019.
- City of Beverly Hills, 2019b. Police Department. Available online at: http://www.beverlyhills.org/departments/policedepartment/, accessed June 2019.
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4.16 Recreation

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
16.	RECREATION:				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				\boxtimes
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

Environmental Evaluation

Would the Project:

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

No Impact. The City of Los Angeles and City of Beverly Hills maintain the local parks and provide recreational services for the project area. The nearest recreational facilities located adjacent to the project area are Beverly Gardens Park, La Cienega Park, Frank Fenton Field, Arnaz Park, Hamel Mini Park, and Rexford Mini Park (Figure 6). The proposed project would not directly introduce new residents within the project area. Therefore, the proposed project would not increase the use of these existing recreational facilities within the project area and would result in no impact to the physical deterioration of recreational facilities.

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

No Impact. The implementation of the proposed project would not require recreational facilities to serve the project. Therefore, the proposed project would not result in an adverse physical effect on the environment from the construction or expansion of additional recreational facilities because the proposed project would not require recreational facilities. (For additional discussion of temporary impacts to recreational facilities, refer to Section 4.15 Public Services, Question 4.15(a)(iv).)

4.17 Transportation

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
17.	TRANSPORTATION — Would the project:				
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		\boxtimes		
b)	Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?				\boxtimes
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		\boxtimes		
d)	Result in inadequate emergency access?		\boxtimes		
_					

Environmental Evaluation

Would the Project:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant with Mitigation Incorporated. The project proposed would install a well, pump-to-waste Stormdrain line within Chariton Street adjacent to the Well Site, and a transmission main. The Well Site would be located at 1956 Chariton Street. The proposed transmission main would be approximately four miles long. The proposed rehabilitation portion of the transmission main (existing inactive 18 and 24-inch pipelines) are shown on Figure 2. Construction equipment, vehicles, personnel, and materials staging areas would be located onsite at the Well Site, within adjacent City-owned property, or immediately adjacent to the transmission main construction areas along streets/roadways, where such areas can be accommodated.

There are no bicycle facilities within the project area along the local roadways such as Chariton Street and La Cienega. Transit services in the cities of Los Angeles and Beverly Hills are provided by the Los Angeles County Metropolitan Transportation Authority (Metro) (Metro 2019). There are many transit locations and opportunities for bus services within the project area. The closest bus stop is located at the intersection of La Cienega and Guthrie, which runs along Route 105 in the northern/southward direction.

Construction of the proposed project is anticipated to occur over approximately 13 months, at night and throughout the day. All daytime construction would occur during typical construction hours ranging between 7:00 a.m. to 7:00 p.m., Monday through Friday except on federal holidays. Nighttime construction would be required for 24-hour drilling and testing of the proposed well. Nighttime construction would also take place along various areas of La Cienega for the transmission main rehabilitation, connection and new pipeline construction. Nighttime construction of the transmission main is proposed in order to avoid traffic congestion/interferences as much as possible. Nighttime construction would only occur in various

areas along La Cienega where nighttime construction is permitted due to being located within a commercial area. Nighttime construction would require approval from the City of Los Angeles. Construction activities, scheduling, and number of workers could overlap between the construction of the well, associated storm drain (pump-to-waste).) and the transmission main. Construction truck and vehicle trips would be generated primarily by construction workers commuting to and from the work sites, and by trucks hauling materials and equipment to and from the well and transmission main sites. Construction trucks and vehicles would use the regional circulation system, as well as the main roadways within the cities of Los Angeles and Beverly Hills. Based on the designated construction truck routes established in the cities' General Plans, construction trucks would primarily use La Cienega Boulevard, Sawtelle Boulevard, Venice Boulevard, Sepulveda Boulevard, Manchester, Adams, Olympic Boulevard, 3rd Street, and Santa Monica Boulevard to bring construction materials and construction workers to the project area (City of Los Angeles 2016; City of Beverly Hills 2010).

While construction of the proposed project would temporarily generate additional truck and vehicle trips within the cities and the regional circulation system of Los Angeles County, traffic levels would not substantially increase and would be temporary in nature, as traffic levels would return to pre-construction conditions once construction is complete. Additionally, while local drivers could experience increased travel times if they were traveling behind a heavy truck due to slower movement and turning radii compared to passenger vehicles, these delays would be intermittent throughout the day and would cease once construction activities are completed.

However, while construction of the proposed project would not significantly increase the amount of trucks and vehicles on the local and regional circulation systems, construction activities within roadways could require partial closure of traffic lanes, which could significantly impact the performance of applicable roadways and public transportation. In order to reduce impacts to roadway performance during construction of the proposed transmission main and storm drain pipelines, the City would be required to implement Mitigation Measure TR-1, which would require the preparation and implementation of a Traffic Control Plan. The Traffic Control Plan would include, but not be limited to, signage, striping, delineated detours, flagging operations, changeable message signs, delineators, arrow boards, and K-Rails that would be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles and City of Beverly Hills. The traffic control plan for the proposed project would be coordinated with Los Angeles County and Metro when construction activities affect roadways and public transit under its jurisdiction. Therefore, with implementation of Mitigation Measure TR-1, impacts to the City of Los Angeles, City Beverly Hills, and regional circulation systems during construction of the proposed project would be reduced to less than significant levels.

Once constructed, the proposed transmission main and storm drains (pump-to-waste for the Well Site) would be contained entirely underground and would require minimal maintenance. In addition, all associated aboveground well facilities would require minimal maintenance infrequently, which could generate a few vehicle trips annually. However, the amount of trips generated by operation and maintenance would result in a negligible increase to existing traffic volumes and would be sporadic. Furthermore, the proposed project would not alter the local

roadway configuration or permanently disrupt bus stops or bike lanes once operational, and therefore would be consistent with all applicable transportation and traffic plans. Thus, operation of the proposed project would not affect the performance of the local or regional circulation systems. Operational impacts would be less than significant.

Mitigation Measures

TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas.

The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills and Los Angeles County, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.

b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

No Impact. "Vehicle miles traveled" refers to the amount and distance of automobile travel attributed to a project. An average of 20 construction personnel would be required at the well and transmission main sites within one day. Eight additional workers could potentially be required to haul materials to and from the project sites. This would mean that a maximum of 28 construction workers, in total, would be driving to and from project sites for various construction activities. However, it is very unlikely that 28 workers would be utilizing vehicles during one day. Further, construction workers would be taken from the existing labor pool and therefore, would be driving in from local areas within the County. These trips would be temporary over the approximate 13-month construction period, and would not result in any perceivable increase in vehicle miles traveled that would exceed a City or County threshold of significance.

Further, there are no new permanent vehicle trips associated with the implementation of the proposed project once operational. The well and transmission main may require periodic maintenance. However, maintenance activities would be similar in nature to other maintenance currently being performed at existing City facilities. City staff would be traveling from local existing facilities such as the Foothill WTP. Therefore, maintenance activities would not occur frequently enough as to contribute to a significant increase of vehicle miles traveled throughout
the project area. As a result, the proposed project would be consistent with CEQA Guidelines section 15064.3 subdivision (b), and no impacts would occur.

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

Less than Significant with Mitigation Incorporated. The proposed project includes construction of well facilities and a transmission main within the City of Los Angeles and City of Beverly Hills. The proposed project does not include the construction of a new roadway or intersection, which could be determined to be a hazardous design feature.

Construction of the proposed project would include the use of heavy trucks to bring construction materials to and from the project area. While local drivers could experience temporary congestion due to construction vehicles, delays would be intermittent throughout the day and would cease once construction activities are completed. Construction of the facilities included under the proposed project may require partial road closures, which could result in hazardous driving conditions. However, implementation of Mitigation Measure TR-1 would require the preparation and implementation of a Traffic Control Plan to minimize the effects on roadway safety. Therefore, construction of the proposed project would not result in a hazardous design feature within the project area. Impacts during construction would be less than significant with mitigation.

Operation of the proposed project would require periodic maintenance checks and activities within the cities. City staff would perform routine operations similar to what occurs along other pipelines and well facilities in the project vicinity. Further, operation of the proposed project would not require heavy equipment nor would it impact existing intersections or roadways and as such would not result in a hazardous design feature. Impacts during operation of the proposed project would be less than significant.

d) Result in inadequate emergency access?

Less than Significant with Mitigation Incorporated. Construction of the proposed project would not substantially increase traffic levels or travel times on the surrounding circulation systems. Construction trips would be generated by trucks bringing materials to and from the construction sites and daily construction worker vehicle trips. However, while construction of the proposed project would not significantly increase the amount of trucks and vehicles on the local and regional circulation systems, construction activities within roadways would require partial road closures, which could interfere with emergency access. In order to reduce impacts to emergency access during construction of the proposed project, the City would be required to implement Mitigation Measure TR-1, which would require the preparation and implementation of a Traffic Control Plan. The Traffic Control Plan would include, but not limited to, signage, striping, delineated detours, flagging operations, changeable message signs, delineators, arrow boards, and K-Rails that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate emergency access and circulation to the satisfaction of the City of Los Angeles County and Metro, as necessary, as well

as with emergency responders, which include fire departments, police departments, and ambulances that have jurisdiction within the project area. Therefore, with implementation of Mitigation Measure TR-1, in conjunction with Mitigation Measure HAZ-3, impacts to emergency access during construction of the proposed project would be reduced to less than significant.

Once constructed, the transmission main would be contained entirely underground and the well would be located within City property. These facilities would not interfere with emergency access. The proposed project facilities would require periodic maintenance, which could generate a few vehicle trips annually. The proposed well may need reconditioning which would take place every three to four years which will take approximately three to four days and include one to two vehicles for pump removal and well redevelopment. However, due to the relatively limited amount of vehicle trips associated with operation and maintenance of the proposed project facilities, these trips would not interfere with emergency access. Impacts to emergency access during operation would be less than significant.

References

City of Beverly Hills, 2010. Circulation. Available online at: http://www.beverlyhills.org/cbhfiles/storage/files/filebank/10281--6_Circulation%2001122010.pdf, accessed June 2019.

City of Los Angeles, 2016. Mobility Plan 2035, An Element of the General Plan. Available online at: https://planning.lacity.org/documents/policy/mobilityplnmemo.pdf, accessed June 2019.

Metro, 2019. About Metro. Available online at: https://www.metro.net/, accessed June 2019.

4.18 Tribal Cultural Resources

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
18.	Tribal Cultural Resources — Would the project cause a substantial adverse change in Resources Code section 21074 as either a site, feature, terms of the size and scope of the landscape, sacred pla American tribe, and that is:	the significand place, cultural ce, or object w	ce of a tribal cultura landscape that is g ith cultural value to	ll resource, defi eographically d a California Na	ned in Public efined in tive
a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		\boxtimes		
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Environmental Evaluation

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

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)

Less Than Significant with Mitigation Incorporated. Assembly Bill 52 (AB 52), signed into law on September 25, 2014, requires lead agencies to evaluate a project's potential to impact Tribal cultural resources and establishes a formal consultation process for California Native American Tribes as part of CEQA. Tribal cultural resource includes sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register or included in a local register of historical resources. AB 52 also gives lead agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a Tribal cultural resource. Consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects, and that is traditionally and culturally affiliated with the geographic area of a proposed project.

The analysis of impacts to Tribal cultural resources is based on the consultation between the City and the Tribes, information provided by the Tribes, and the *Cultural Resources Assessment Report* (Appendix C). The potential for the project area to contain Tribal cultural resources was assessed based on information provided by Tribes and supplemented by the findings of the cultural resource records search (i.e., presence and proximity of known resources), the SLF search, land use history research, subsurface geological conditions, and the proposed excavation parameters for the Project. The NAHC was contacted on April 10, 2019 to request a search of the SLF.

The City commenced tribal notification in accordance with AB 52 on June 21, 2019, via a mailing to all of the surrounding tribes on the City's AB 52 notification list. One tribe has commented on the request. The Gabrieleño Band of Mission Indians - Kizh Nation engaged in consultation, and in a consultation phone call with City on August 22, 2019 the Tribe expressed their concerns regarding the proposed project. While the Tribe did not provide locations of any known tribal cultural resources within the project site, they expressed concern for the sensitivity of the area and the possibility of unforeseen and inadvertent discovery of Tribal cultural resources. The tribe requested monitoring, and this monitoring is included in Section 4.5, Cultural Resources mitigation above. The Tribe concurred with this approach and consultation was closed on September 18, 2019. To ensure the proposed project would not result in a potentially significant impact, in the event that objects or artifacts that may be Tribal cultural resources are encountered during the course of any ground-disturbance activities, all such activities would temporarily cease on the specific project site until the potential Tribal cultural resource(s) is properly assessed following specific protocol required by the Los Angeles Department of City Planning. Therefore, impacts would be less than significant with implementation of cultural mitigation measures.

Mitigation Measures

Implement Mitigation Measures CUL-1 through CUL-5.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant with Mitigation Incorporated. Under AB 52, if a lead agency determines that a project may cause a substantial adverse change to a Tribal cultural resource, the lead agency must consider measures to mitigate that impact. PRC Section 21074 provides a definition of a Tribal cultural resource. In brief, in order to be considered a Tribal cultural resource, a resource must be either: 1) listed, or determined to be eligible for listing, on the national, State, or local register of historic resources, or 2) a resource that the lead agency chooses, in its discretion supported by substantial evidence, to treat as a Tribal cultural resource. In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the State register of historic resources or City Designated Cultural Resource. In applying those criteria, a lead agency shall consider the value of the resource to the tribe.

As discussed above, the City provided notice to tribes soliciting requests for consultation on June 21, 2019. So as to ensure any unforeseen and inadvertent discovery of Tribal cultural resources would not result in a potentially significant impact, in the event that objects or artifacts that may be Tribal cultural resources are encountered during the course of any ground-disturbance activities, all such activities would temporarily cease on the specific project site until the potential

Tribal cultural resource(s) is properly assessed following specific protocol required by the Los Angeles Department of City Planning. Therefore, impacts would be less than significant with implementation of cultural mitigation measures.

Mitigation Measures

Implement Mitigation Measures CUL-1 through CUL-5.

4.19 Utilities and Service Systems

lssu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
19.	UTILITIES AND SERVICE SYSTEMS — Would the project:				
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications, the construction of which could cause significant environmental effects?				\boxtimes
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			\boxtimes	
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				\boxtimes
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			\boxtimes	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				\boxtimes

7-8

Environmental Evaluation

Would the Project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications, the construction of which could cause significant environmental effects?

No Impact. The proposed project may require a limited use of potable water during construction activities. Water required for potential dust suppression would be obtained from a support truck. New water facilities or expansion of existing facilities would not be required to support this use. Additionally, the proposed project would not require new electric power, natural gas, or telecommunications facilities.

The existing Foothill WTP is currently sized to accommodate increased flows from well implementation. Implementation of the proposed project would not require the WTP to update RO and other treatment facilities. Further, the proposed project would not substantially alter the local drainage pattern of the proposed Well Site. During operation of the proposed project, the project facilities themselves would not generate wastewater, and therefore would not exceed wastewater treatment requirements. In addition, surface water generated by storms or by construction activities would be collected by the onsite well drainage systems and directed to the storm drain. Compliance with the permit conditions would ensure that all RWQCB requirements would not be exceeded. Therefore, the implementation of the proposed project would not require new or expanded wastewater treatment facilities or stormwater drainage systems. No impacts would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. Water needs of the project during construction would be relatively minor and temporary. Water could be used for various construction related activities, such as dust suppression. After construction, the proposed project would not include uses that would increase the demand for water. Overall water use is not expected to change as a result of this project. The proposed project would have sufficient water supplies available from the City and less than significant impacts would occur.

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

No Impact. The proposed project would result in the generation of wastewater associated with temporary use of portable toilets. During project implementation, the City or the contractor may have portable toilet facilities available onsite temporarily for use by construction workers. Given the relatively small construction workforce of an average of 8 and up to a maximum of 28 workers onsite daily for the 13-month construction period, this amount of waste would be minimal. Once the construction phase is over, such portable facilities would be removed and the wastewater properly handled and disposed in accordance with all applicable laws and regulations.

As discussed above, operation of the proposed project would not generate any wastewater. The City would not be required to provide future capacity as a result of proposed project implementation. The proposed project has adequate capacity to serve current treatment demands. Therefore, the proposed project does not require a wastewater treatment provider to serve the project. No impacts would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. Construction and implementation of the proposed project is not anticipated to generate a significant amount of solid waste. The construction contractor would be required to dispose of excavated soil and solid wastes in accordance with local solid waste disposal requirements. Construction of the proposed project would result in the removal of approximately 200 cubic yards of material during demolition of the three existing structures. The generation of material from proposed project implementation is considered minimal compared to the remaining capacity at the nearest landfill which is the 365 Disposal & Recycling Landfill. The 365 Disposal & Recycling Landfill is located at 11153 Tuxford Street, Sun Valley, CA 91352. The landfill is permitted to accept up to 15 tons per day and processes and transfers solid waste for recycling or to other local landfills (CalRecycle 2019). Because the proposed project would only generate construction waste temporarily and no long-term waste would be generated, the

implementation of the proposed project would result in less than significant impacts on daily permitted capacity of the 365 Disposal & Recycling Landfill. Further, the project would not impair attainment of solid waste reduction goals.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The proposed project would comply with all federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and City of Los Angeles and City of Beverly Hills requirements for solid waste generated during the construction process. No impacts would occur.

References

CalRecycle, 2019. SWIS Facility Detail, 365 Disposal and Recycling Inc (19-AR-1264). Available online at: https://www2.calrecycle.ca.gov/swfacilities/Directory/19-AR-1264/, accessed June 2019.

4.20 Wildfire

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
20.	Wildfire—If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?		\boxtimes		
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				\boxtimes
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				\boxtimes
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				\boxtimes

Environmental Evaluation

Would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant with Mitigation Incorporated. As discussed in response to Question 4.9(f), *Hazards and Hazardous Materials*, implementation of the proposed project is not anticipated to substantially impair an adopted emergency response plan or evacuation plan with implementation of Mitigation Measures HAZ-3 and TR-1. Construction activities would not significantly interfere with emergency response access to the project vicinity. Impacts would be less than significant with mitigation.

Mitigation Measures

Implement Mitigation Measures HAZ-3 and TR-1.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. As discussed in response to Question 4.9(g), *Hazards and Hazardous Materials*, the project area is fully developed with pavement and facilities, and is not located within a fire safety hazard zone. Further, the project area is not located within a valley or somewhere susceptible to prevailing winds, and the project area is flat and does not contain slopes. Therefore, implementation of the proposed project would not construct or operate facilities within an area vulnerable to wildland fires, and would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. No impacts would occur.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The proposed project would not result in the installation of permanent roads, fuel breaks, emergency water sources or new power lines. Construction activities of new well facilities include various piping and electrical controls that may require maintenance. However, as described previously, the project facilities would be implemented within a developed area and not within a fire hazard safety zone. Therefore, implementation of utilities within the already developed properties, would not result in temporary or ongoing impacts to the environment.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. As discussed in Sections 4.7(a)(iv), 4.7(c), 4.10(c)(ii), and 4.10(c)(i), the project would not result in increased drainage or runoff that could contribute to landslide or flooding impacts. No impact would occur.

4.21 Mandatory Findings of Significance

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
21.	MANDATORY FINDINGS OF SIGNIFICANCE —				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		\boxtimes		

Environmental Evaluation

Would the Project:

a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. As discussed in Section 4.4 *Biological Resources*, the project activities have the potential to interfere with nesting birds in nearby mature trees within the project area. Although impacts would be temporary, interfering with nesting birds during the breeding season is considered a potentially significant impact. Implementation of Mitigation Measure BIO-1, would reduce potential impacts to a less than significant level.

Furthermore, as discussed in Section 4.5 *Cultural Resources*, while there are known cultural resources within the project area, construction of the proposed project would not result in direct or indirect impacts to those known resources. However, construction of the proposed project could potentially encounter unknown archaeological, paleontological resources or human remains. With implementation of Mitigation Measures CUL-1 through CUL-5 and GEO-1 through GEO-4, impacts would be reduced to a less than significant level. Once constructed, operation of the proposed project would have no long-term permanent impacts to biological or cultural resources.

Mitigation Measures

Implement Mitigation Measures BIO-1, CUL-1 through CUL-5, and GEO-1 through GEO-4.

b) Have impacts that are individually limited but cumulatively considerable?
 ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant with Mitigation Incorporated. A cumulative impact could occur if the proposed project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area. No direct significant impacts were identified for the proposed project that could not be mitigated to a less than significant level. However, when combined with other projects within the vicinity, the proposed project may result in a contribution to a potentially significant cumulative impact.

The proposed project does not include any agricultural or forestry resources, or mineral resources that could be impacted and the proposed project and would have no effect on land use and planning, population and housing, public services or recreation. In addition, impacts would be less than significant for aesthetics, air quality, energy, GHG emissions, hydrology and water quality, and utilities. As a result, cumulative impacts related to these resources would be less than significant.

Potential impacts to biological resources, cultural resources, and paleontological resources (geology, soils, and seismicity), hazards and hazardous materials, noise, transportation, tribal cultural resources, and wildfire would only occur during construction of the project. These potential construction impacts would be short term and occur over a 13-month period. The construction impacts for the proposed project are limited in nature and scope to the project area in and around the cities of Los Angeles and Beverly Hills. The project work itself will largely occur within the Well Site and along public roadways and will be contained such that off-site impacts do not occur. As a result, the impacts of the proposed project would not combine together with other related projects in the vicinity to produce a significant environmental impact. Furthermore, the operation of the proposed production well and transmission main would not contribute to long-term cumulative impacts and their contribution to impacts would be less than cumulatively considerable.

With implementation of mitigation measures, which aim to reduce project impacts to neighboring sensitive receptors and to sensitive natural resources, impacts related to biological resources, cultural resources, and paleontological resources (geology, soils, and seismicity), hazards and hazardous materials, noise, transportation, tribal cultural resources, and wildfire risks would be less than cumulatively considerable. Therefore, the proposed project would not result in any impacts that would be cumulatively considerable resulting from the proposed project. Cumulative impacts would be considered less than significant with implementation of mitigation.

Mitigation Measures

Implement all mitigation measures contained within this Draft IS/MND (Section 4).

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact with Mitigation Incorporated. The proposed project would not result in substantial adverse effects, either direct or indirect, on human beings. The project would provide the City of Beverly Hills with groundwater that would localize their water supply. As described in Section 4.3 *Air Quality*, air emissions associated with the proposed project would not result in adverse health effects to sensitive receptors. As described in Section 4.13 *Noise*, construction noise also would not result in adverse effects to sensitive receptors with implementation of Mitigation Measures NOISE-1 through NOISE-5. Impacts to human beings would be less than significant with mitigation.

Mitigation Measures

Implement Mitigation Measures NOISE-1 through NOISE-5.

Appendix A Air Quality, Greenhouse Gas and Energy Information

Beverly Hills MND Regional Emissions

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
SUMMER			lh/day			
Well site Demolition and Pump-to-Waste -2019	2 43	19 25	18 90	0.03	1 39	1 25
Well Construction Monitoring -2019	4 84	49 38	38 56	0.08	2 49	2 22
Well Construction Monitoring -2020	4.46	44.60	38.04	0.08	2.16	1.95
Well Equipping - 2020	0.64	7.31	3.62	0.01	0.40	0.32
Rehabilitation / Transmission Main Installation - 2019	1 31	13.90	11 33	0.02	1 18	0.80
Rehabilitation/ Transmission Main Installation - 2020	1.23	12.92	11.22	0.02	1.00	0.71
	200					
	ROG	NOx	CO	\$02	PM10 Total	PM2.5 Total
WINTER			lb/day			
Well Site Demolition and Pump-to-Waste -2019	2.43	19.26	18.86	0.03	1.39	1.25
Well Construction Monitoring -2019	4.85	49.39	38.56	0.08	2.49	2.22
Well Construction Monitoring -2020	4.46	44.61	38.04	0.08	2.16	1.95
Well Equipping - 2020	0.64	7.31	3.62	0.01	0.40	0.32
Rehabilitation/ Transmission Main Installation - 2019	1.32	13.94	11.33	0.02	1.18	0.80
Rehabilitation/ Transmission Main Installation - 2020	1.24	12.95	11.22	0.02	1.00	0.71
	ROG	NOx	CO	502	PM10 Total	PM2.5 Total
Maximum			lb/day			
Well Site Demolition and Pump-to-Waste -2019	2.43	19.26	18.90	0.03	1.39	1.25
Well Construction Monitoring -2019	4.85	49.39	38.56	0.08	2.49	2.22
Well Construction Monitoring -2020	4.46	44.61	38.04	0.08	2.16	1.95
Weil Equipping - 2020	0.64	7.31	3.62	0.01	0.40	0.32
Renabilitation/ Transmission Main Installation - 2019	1.32	13.94	11.33	0.02	1.18	0.80
Rendbilitation/ Transmission Main Installation - 2020	1.24	12.95	11.22	0.02	1.00	0.71
Maximum Daily Emissions	4.85	49.39	38.50	150.00	2.49	2.22
Scalur Sgimicalic Intestitius	(70.15)	(50.61)	(511.44)	(140.02)	(147.51)	(52.79)
Exceder Threeholds?	(70:13)	(50.01)	(JII.44)	(149.92) No	(147.31) No	(32.78) No
Licecus filingationas:	NO	NO	NO	NO	110	NO
	ROG	NOx	0	502	PM10 Total	PM2.5 Total
OVERLAP			lb/day			
Well Site Demolition and Pump to Waste - 2019 and Rehabilitation/Transmission Main Installation - 2019	4	33	30	0	3	2
Well Construction Monitoring - 2019 and Rehabilitation/Transmission Main Installation - 2019	6	63	50	0	4	3
Well Construction Monitoring - 2020 and Rehabilitation/Transmission Main Installation - 2020	6	58	49	0	3	3
Well Equipping - 2020 and Rehabilitation/Transmission Main Installation - 2020	2	20	15	0	1	1
Maximum Daily Emissions	6	63	50	0	4	3
SCAQMD Significance Thresholds	75.00	100.00	550.00	150.00	150.00	55.00
Above/(Under)	(68.83)	(36.67)	(500.11)	(149.89)	(146.33)	(51.98)
Exceeds Thresholds?	No	No	No	No	No	No

7-8

Beverly Hills MND Localized Emissions

	NOx	СО	PM10 Total	PM2.5 Total
SUMMER		lb/d	ау	
Well Site Demolition and Pump-to-Waste -2019	19.1186	18.3943	1.276	1.2187
Well Construction Monitoring -2019	48.4868	38.1598	2.326	2.1763
Well Construction Monitoring -2020	43.7703	37.6732	2.0544	1.9197
Well Equipping - 2020	6.689	3.2956	0.3189	0.2934
Rehabilitation/ Transmission Main Installation - 2019	11.2878	10.2879	0.7349	0.6771
Rehabilitation/ Transmission Main Installation - 2020	10.4666	10.2432	0.666	0.6138

7-8

	NOx	CO	PM10 Total	PM2.5 Total
WINTER		lb/	'day	
Well Site Demolition and Pump-to-Waste -2019	19.12	18.39	1.28	1.22
Well Construction Monitoring -2019	48.49	38.16	2.33	2.18
Well Construction Monitoring -2020	43.77	37.67	2.05	1.92
Well Equipping - 2020	6.69	3.30	0.32	0.29
Rehabilitation/ Transmission Main Installation - 2019	11.29	10.29	0.73	0.68
Rehabilitation/ Transmission Main Installation - 2020	10.47	10.24	0.67	0.61

	NOx	СО	PM10 Total	PM2.5
Maximum		lb/	day	TOTAL
Well Site Demolition and Pump-to-Waste -2019	19.12	18.39	1.28	1.22
Well Construction Monitoring -2019	48.49	38.16	2.33	2.18
Well Construction Monitoring -2020	43.77	37.67	2.05	1.92
Well Equipping - 2020	6.69	3.30	0.32	0.29
Rehabilitation/ Transmission Main Installation - 2019	11.29	10.29	0.73	0.68
Rehabilitation/ Transmission Main Installation - 2020	10.47	10.24	0.67	0.61

	NOx	CO	PM10 Total	PM2.5 Total
OVERLAP		lb/c	Jay	
Well Site Demolition and Pump to Waste - 2019 and Rehabilitation/Transmission Main Installation - 2019	30	29	2.0	1.9
Well Construction Monitoring - 2019 and Rehabilitation/Transmission Main Installation - 2019	60	48	3.1	2.9
Well Construction Monitoring - 2020 and Rehabilitation/Transmission Main Installation - 2020	54	48	2.7	2.5
Well Equipping - 2020 and Rehabilitation/Transmission Main Installation - 2020	17	14	1.0	0.9
Maximum Daily Emissions	60	48	3.1	2.9
SCAQMD Significance Thresholds	103	562	4.0	3.0
Above/(Under)	(43.2)	(513.6)	(0.9)	(0.15)
Exceeds Thresholds?	No	No	No	No

SRA 2, Project Site 1 Acres, 25 m distance to sensitive receptor

10/12/2021 Board Meeting

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 1 of 32

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La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

La Brea Subarea Wells and Transmission Main Project

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	2.70	117,140.00	0

1.2 Other Project Characteristics

Urbanization Urban		Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2021
Utility Company Los Angeles Department of Water & Power					
CO2 Intensity (Ib/MWhr)	1227.89	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity ((Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2

Page 2 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

Project Characteristics -

Land Use - assume 1 well of 660 SF each + (4 miles of new transmission main x 4 LF wide) + (8000 LF proposed rehab x 4 LF wide) = approx 117,140 SF impacted

Construction Phase - per Table 1 in Project Description

Off-road Equipment - per Table 2 Project Description

Off-road Equipment - per Table 2 of Project Description

Off-road Equipment - per Table 2 Project Description

Off-road Equipment - per Table 2 of Project Description

Demolition - 67 CY construction material (assume wood, uncompacted) => 400 lbs/CY * 67 CY = 26,800 lbs = 12 metric tons Conversion source: CalRecycle

Trips and VMT - one well only

Well construction/equipping: 76 hauling trucks * 2 = 152 truck trips

Transmission main: 11,018 CY + 185 CY soil = 11203 CY soil / 16 CY/truck = 700 trucks or 1400 hauling truck trips.

Concrete- 10,000 SF * 1/3 LF thick = 3,333 CF * 1 CY/27 CF = 123 CY / 16 CY/truck = 7.7 trucks for vendor or less than 1 per day

Grading - 11 CY soil excavated for wells, 11,018 CY soil excavated for new transmission, 185 CY soil excavated for rehab = 11214 CY

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	174.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	6.00	153.00
tblConstructionPhase	NumDays	3.00	87.00
tblGrading	MaterialExported	0.00	11,214.00
tblLandUse	LandUseSquareFeet	0.00	117,140.00
tblLandUse	LotAcreage	0.00	2.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

Page 3 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and	Transmission Main Project	 Los Angeles-South 	Coast County, Annual
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Equipping
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Well Equipping
tblOffRoadEquipment	PhaseName		Well Construction Monitoring

Page 4 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	4.00	14.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,400.00
tblTripsAndVMT	HaulingTripNumber	0.00	152.00
tblTripsAndVMT	HaulingTripNumber	0.00	152.00
tblTripsAndVMT	VendorTripNumber	19.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	50.00	10.00
tblTripsAndVMT	WorkerTripNumber	30.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2

Page 5 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr											МТ	/yr			
2019	0.1501	1.4291	1.2126	2.3100e- 003	0.0204	0.0781	0.0985	5.0500e- 003	0.0735	0.0785	0.0000	207.2945	207.2945	0.0471	0.0000	208.4707
2020	0.2600	2.7128	2.1181	4.6500e- 003	0.0285	0.1274	0.1559	7.3600e- 003	0.1187	0.1260	0.0000	413.0153	413.0153	0.1042	0.0000	415.6192
Maximum	0.2600	2.7128	2.1181	4.6500e- 003	0.0285	0.1274	0.1559	7.3600e- 003	0.1187	0.1260	0.0000	413.0153	413.0153	0.1042	0.0000	415.6192

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tor	ns/yr					MT/yr					
2019	0.1501	1.4291	1.2126	2.3100e- 003	0.0191	0.0781	0.0972	4.8900e- 003	0.0735	0.0784	0.0000	207.2943	207.2943	0.0471	0.0000	208.4705
2020	0.2600	2.7128	2.1181	4.6500e- 003	0.0273	0.1274	0.1547	7.2100e- 003	0.1187	0.1259	0.0000	413.0148	413.0148	0.1042	0.0000	415.6188
Maximum	0.2600	2.7128	2.1181	4.6500e- 003	0.0273	0.1274	0.1547	7.2100e- 003	0.1187	0.1259	0.0000	413.0148	413.0148	0.1042	0.0000	415.6188
	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
					PM10	PM10	Total	PM2.5	PM2.5	Total						
Percent Reduction	0.00	0.00	0.00	0.00	5.19	0.00	0.99	2.50	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00

10/12/2021 Board Meeting

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 6 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2019	12-31-2019	1.5474	1.5474
2	1-1-2020	3-31-2020	2.0561	2.0561
3	4-1-2020	6-30-2020	0.5562	0.5562
4	7-1-2020	9-30-2020	0.2610	0.2610
		Highest	2.0561	2.0561

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					MT/yr					
Area	0.4782	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4782	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

276

CalEEMod Version: CalEEMod.2016.3.2

Page 7 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NC)x	CO	SO2	Fug PM	itive 110	Exhaust PM10	PM10 Total	Fug PN	itive Ex I2.5 P	haust M2.5	PM2.5 Total	Bio	- CO2 N	IBio- CO2	Total C	CO2 C	CH4	N2O	CC	2e
Category							tons	s/yr										MT/yr				
Area	0.4782	0.00	000	0.0000	0.0000			0.0000	0.0000)	0.	0000	0.0000	0.0	0000	0.0000	0.000	00 0.0	0000	0.0000	0.0	000
Energy	0.0000	0.00	000	0.0000	0.0000			0.0000	0.0000)	0.	0000	0.0000	0.0	0000	0.0000	0.000	00 0.0	0000	0.0000	0.0	000
Mobile	0.0000	0.00	000	0.0000	0.0000	0.0	000	0.0000	0.0000) 0.0	000 0.	0000	0.0000	0.0	0000	0.0000	0.000	00 0.0	0000	0.0000	0.0	000
Waste	,				1 1 1 1 1			0.0000	0.0000)	0.	0000	0.0000	0.0	0000	0.0000	0.000	00 0.0	0000	0.0000	0.0	000
Water	,				1 1 1 1 1			0.0000	0.0000)	0.	0000	0.0000	0.0	0000	0.0000	0.000	00 0.0	0000	0.0000	0.0	000
Total	0.4782	0.00	000	0.0000	0.0000	0.0	000	0.0000	0.0000) 0.0	000 0.	0000	0.0000	0.0	0000	0.0000	0.000	00 0.0	0000	0.0000	0.0	000
	ROG		NOx	C	0	SO2	Fugi PM	itive Exh 110 P	naust M10	PM10 Total	Fugitive PM2.5	Exha PM	aust PN 2.5 T	12.5 otal	Bio- CO	02 NBio-	CO2 T	otal CO2	CH4	N	20	CO2e
Percent Reduction	0.00		0.00	0.	.00	0.00	0.0	00 0	.00	0.00	0.00	0.0	00 0	.00	0.00	0.0	00	0.00	0.00	0	.00	0.00

3.0 Construction Detail

Construction Phase

Page 8 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Site Demolition and Pump- to-Waste	Demolition	10/1/2019	11/29/2019	5	44	
2	Rehabilitation/Transmission Main Installation	Building Construction	10/1/2019	5/29/2020	5	174	
3	Well Construction Monitoring	Site Preparation	12/2/2019	3/31/2020	5	87	
4	Well Equipping	Grading	4/1/2020	10/30/2020	5	153	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Page 9 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and	Transmission Main	Project - Los	Angeles-South Co	bast County, Annual
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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Site Demolition and Pump-to- Waste	Crushing/Proc. Equipment	2	8.00	85	0.78
Well Site Demolition and Pump-to- Waste	Dumpers/Tenders	1	8.00	16	0.38
Well Site Demolition and Pump-to- Waste	Excavators	1	8.00	158	0.38
Well Site Demolition and Pump-to- Waste	Forklifts	1	8.00	89	0.20
Well Site Demolition and Pump-to- Waste	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Well Site Demolition and Pump-to- Waste	Trenchers	1	8.00	78	0.50
Well Construction Monitoring	Air Compressors	1	8.00	78	0.48
Well Construction Monitoring	Bore/Drill Rigs	2	8.00	221	0.50
Well Construction Monitoring	Cranes	1	8.00	231	0.29
Well Construction Monitoring	Generator Sets	1	8.00	84	0.74
Well Construction Monitoring	Off-Highway Trucks	1	8.00	402	0.38
Well Construction Monitoring	Other Construction Equipment	1	8.00	172	0.42
Well Construction Monitoring	Other Material Handling Equipment	3	8.00	168	0.40
Well Construction Monitoring	Pumps	1	8.00	84	0.74
Well Construction Monitoring	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Well Equipping	Cranes	1	8.00	231	0.29
Well Equipping	Forklifts	1	8.00	89	0.20
Rehabilitation/Transmission Main Installation	Dumpers/Tenders	1	6.00	16	0.38
Rehabilitation/Transmission Main Installation	Excavators	1	7.00	158	0.38
Rehabilitation/Transmission Main Installation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Rehabilitation/Transmission Main Installation	Trenchers	1	8.00	78	0.50

Trips and VMT

Page 10 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Site Demolition	7	10.00	0.00	14.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Construction	12	4.00	3.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Equipping	2	4.00	3.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rehabilitation/Transmi	5	10.00	1.00	1,400.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Site Demolition and Pump-to-Waste - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					1.3000e- 004	0.0000	1.3000e- 004	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0523	0.4206	0.4047	6.1000e- 004		0.0280	0.0280		0.0268	0.0268	0.0000	53.7639	53.7639	0.0105	0.0000	54.0266
Total	0.0523	0.4206	0.4047	6.1000e- 004	1.3000e- 004	0.0280	0.0282	2.0000e- 005	0.0268	0.0268	0.0000	53.7639	53.7639	0.0105	0.0000	54.0266

CalEEMod Version: CalEEMod.2016.3.2

Page 11 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.2 Well Site Demolition and Pump-to-Waste - 2019

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	ſ/yr		
Hauling	7.0000e- 005	2.2200e- 003	4.7000e- 004	1.0000e- 005	1.2000e- 004	1.0000e- 005	1.3000e- 004	3.0000e- 005	1.0000e- 005	4.0000e- 005	0.0000	0.5451	0.5451	4.0000e- 005	0.0000	0.5460
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e- 003	9.2000e- 004	9.9900e- 003	3.0000e- 005	2.4100e- 003	2.0000e- 005	2.4300e- 003	6.4000e- 004	2.0000e- 005	6.6000e- 004	0.0000	2.3174	2.3174	8.0000e- 005	0.0000	2.3194
Total	1.1700e- 003	3.1400e- 003	0.0105	4.0000e- 005	2.5300e- 003	3.0000e- 005	2.5600e- 003	6.7000e- 004	3.0000e- 005	7.0000e- 004	0.0000	2.8625	2.8625	1.2000e- 004	0.0000	2.8654

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust			1 1 1		5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0523	0.4206	0.4047	6.1000e- 004		0.0280	0.0280		0.0268	0.0268	0.0000	53.7638	53.7638	0.0105	0.0000	54.0266
Total	0.0523	0.4206	0.4047	6.1000e- 004	5.0000e- 005	0.0280	0.0281	1.0000e- 005	0.0268	0.0268	0.0000	53.7638	53.7638	0.0105	0.0000	54.0266

CalEEMod Version: CalEEMod.2016.3.2

Page 12 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.2 Well Site Demolition and Pump-to-Waste - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	7.0000e- 005	2.2200e- 003	4.7000e- 004	1.0000e- 005	1.2000e- 004	1.0000e- 005	1.3000e- 004	3.0000e- 005	1.0000e- 005	4.0000e- 005	0.0000	0.5451	0.5451	4.0000e- 005	0.0000	0.5460
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e- 003	9.2000e- 004	9.9900e- 003	3.0000e- 005	2.4100e- 003	2.0000e- 005	2.4300e- 003	6.4000e- 004	2.0000e- 005	6.6000e- 004	0.0000	2.3174	2.3174	8.0000e- 005	0.0000	2.3194
Total	1.1700e- 003	3.1400e- 003	0.0105	4.0000e- 005	2.5300e- 003	3.0000e- 005	2.5600e- 003	6.7000e- 004	3.0000e- 005	7.0000e- 004	0.0000	2.8625	2.8625	1.2000e- 004	0.0000	2.8654

3.3 Rehabilitation/Transmission Main Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Off-Road	0.0391	0.3725	0.3395	4.8000e- 004		0.0243	0.0243		0.0224	0.0224	0.0000	43.1656	43.1656	0.0134	0.0000	43.4999
Total	0.0391	0.3725	0.3395	4.8000e- 004		0.0243	0.0243		0.0224	0.0224	0.0000	43.1656	43.1656	0.0134	0.0000	43.4999

CalEEMod Version: CalEEMod.2016.3.2

Page 13 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.3 Rehabilitation/Transmission Main Installation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	2.5200e- 003	0.0840	0.0179	2.1000e- 004	0.0102	3.0000e- 004	0.0105	2.6300e- 003	2.9000e- 004	2.9200e- 003	0.0000	20.6754	20.6754	1.4600e- 003	0.0000	20.7119
Vendor	1.4000e- 004	3.9000e- 003	1.0700e- 003	1.0000e- 005	2.1000e- 004	2.0000e- 005	2.3000e- 004	6.0000e- 005	2.0000e- 005	8.0000e- 005	0.0000	0.8252	0.8252	6.0000e- 005	0.0000	0.8266
Worker	1.6500e- 003	1.3800e- 003	0.0150	4.0000e- 005	3.6200e- 003	3.0000e- 005	3.6500e- 003	9.6000e- 004	3.0000e- 005	9.9000e- 004	0.0000	3.4761	3.4761	1.2000e- 004	0.0000	3.4791
Total	4.3100e- 003	0.0893	0.0339	2.6000e- 004	0.0140	3.5000e- 004	0.0144	3.6500e- 003	3.4000e- 004	3.9900e- 003	0.0000	24.9767	24.9767	1.6400e- 003	0.0000	25.0176

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	/yr		
Off-Road	0.0391	0.3725	0.3395	4.8000e- 004	J	0.0243	0.0243		0.0224	0.0224	0.0000	43.1656	43.1656	0.0134	0.0000	43.4999
Total	0.0391	0.3725	0.3395	4.8000e- 004		0.0243	0.0243		0.0224	0.0224	0.0000	43.1656	43.1656	0.0134	0.0000	43.4999

CalEEMod Version: CalEEMod.2016.3.2

Page 14 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.3 Rehabilitation/Transmission Main Installation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	ſ/yr		
Hauling	2.5200e- 003	0.0840	0.0179	2.1000e- 004	0.0102	3.0000e- 004	0.0105	2.6300e- 003	2.9000e- 004	2.9200e- 003	0.0000	20.6754	20.6754	1.4600e- 003	0.0000	20.7119
Vendor	1.4000e- 004	3.9000e- 003	1.0700e- 003	1.0000e- 005	2.1000e- 004	2.0000e- 005	2.3000e- 004	6.0000e- 005	2.0000e- 005	8.0000e- 005	0.0000	0.8252	0.8252	6.0000e- 005	0.0000	0.8266
Worker	1.6500e- 003	1.3800e- 003	0.0150	4.0000e- 005	3.6200e- 003	3.0000e- 005	3.6500e- 003	9.6000e- 004	3.0000e- 005	9.9000e- 004	0.0000	3.4761	3.4761	1.2000e- 004	0.0000	3.4791
Total	4.3100e- 003	0.0893	0.0339	2.6000e- 004	0.0140	3.5000e- 004	0.0144	3.6500e- 003	3.4000e- 004	3.9900e- 003	0.0000	24.9767	24.9767	1.6400e- 003	0.0000	25.0176

3.3 Rehabilitation/Transmission Main Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Off-Road	0.0598	0.5652	0.5531	7.9000e- 004		0.0360	0.0360	1 1	0.0331	0.0331	0.0000	69.1543	69.1543	0.0219	0.0000	69.7013
Total	0.0598	0.5652	0.5531	7.9000e- 004		0.0360	0.0360		0.0331	0.0331	0.0000	69.1543	69.1543	0.0219	0.0000	69.7013

CalEEMod Version: CalEEMod.2016.3.2

Page 15 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.3 Rehabilitation/Transmission Main Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	3.8300e- 003	0.1290	0.0284	3.4000e- 004	0.0109	4.0000e- 004	0.0113	2.8900e- 003	3.8000e- 004	3.2800e- 003	0.0000	33.4892	33.4892	2.3300e- 003	0.0000	33.5475
Vendor	2.0000e- 004	5.8500e- 003	1.5800e- 003	1.0000e- 005	3.4000e- 004	3.0000e- 005	3.7000e- 004	1.0000e- 004	3.0000e- 005	1.2000e- 004	0.0000	1.3415	1.3415	9.0000e- 005	0.0000	1.3436
Worker	2.4900e- 003	2.0100e- 003	0.0222	6.0000e- 005	5.9200e- 003	5.0000e- 005	5.9700e- 003	1.5700e- 003	5.0000e- 005	1.6200e- 003	0.0000	5.5153	5.5153	1.7000e- 004	0.0000	5.5196
Total	6.5200e- 003	0.1369	0.0523	4.1000e- 004	0.0172	4.8000e- 004	0.0176	4.5600e- 003	4.6000e- 004	5.0200e- 003	0.0000	40.3460	40.3460	2.5900e- 003	0.0000	40.4107

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	/yr		
Off-Road	0.0598	0.5652	0.5531	7.9000e- 004		0.0360	0.0360		0.0331	0.0331	0.0000	69.1542	69.1542	0.0219	0.0000	69.7012
Total	0.0598	0.5652	0.5531	7.9000e- 004		0.0360	0.0360		0.0331	0.0331	0.0000	69.1542	69.1542	0.0219	0.0000	69.7012

CalEEMod Version: CalEEMod.2016.3.2

Page 16 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.3 Rehabilitation/Transmission Main Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	3.8300e- 003	0.1290	0.0284	3.4000e- 004	0.0109	4.0000e- 004	0.0113	2.8900e- 003	3.8000e- 004	3.2800e- 003	0.0000	33.4892	33.4892	2.3300e- 003	0.0000	33.5475
Vendor	2.0000e- 004	5.8500e- 003	1.5800e- 003	1.0000e- 005	3.4000e- 004	3.0000e- 005	3.7000e- 004	1.0000e- 004	3.0000e- 005	1.2000e- 004	0.0000	1.3415	1.3415	9.0000e- 005	0.0000	1.3436
Worker	2.4900e- 003	2.0100e- 003	0.0222	6.0000e- 005	5.9200e- 003	5.0000e- 005	5.9700e- 003	1.5700e- 003	5.0000e- 005	1.6200e- 003	0.0000	5.5153	5.5153	1.7000e- 004	0.0000	5.5196
Total	6.5200e- 003	0.1369	0.0523	4.1000e- 004	0.0172	4.8000e- 004	0.0176	4.5600e- 003	4.6000e- 004	5.0200e- 003	0.0000	40.3460	40.3460	2.5900e- 003	0.0000	40.4107

3.4 Well Construction Monitoring - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
Fugitive Dust					2.0100e- 003	0.0000	2.0100e- 003	2.4000e- 004	0.0000	2.4000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	0.0527	0.5334	0.4198	9.0000e- 004		0.0254	0.0254		0.0239	0.0239	0.0000	79.7407	79.7407	0.0212	0.0000	80.2716			
Total	0.0527	0.5334	0.4198	9.0000e- 004	2.0100e- 003	0.0254	0.0274	2.4000e- 004	0.0239	0.0242	0.0000	79.7407	79.7407	0.0212	0.0000	80.2716			

CalEEMod Version: CalEEMod.2016.3.2

Page 17 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.4 Well Construction Monitoring - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr											MT/yr						
Hauling	1.8000e- 004	6.0800e- 003	1.2900e- 003	2.0000e- 005	1.0600e- 003	2.0000e- 005	1.0900e- 003	2.7000e- 004	2.0000e- 005	2.9000e- 004	0.0000	1.4965	1.4965	1.1000e- 004	0.0000	1.4992		
Vendor	1.4000e- 004	3.9000e- 003	1.0700e- 003	1.0000e- 005	2.1000e- 004	2.0000e- 005	2.3000e- 004	6.0000e- 005	2.0000e- 005	8.0000e- 005	0.0000	0.8252	0.8252	6.0000e- 005	0.0000	0.8266		
Worker	2.2000e- 004	1.8000e- 004	2.0000e- 003	1.0000e- 005	4.8000e- 004	0.0000	4.9000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4635	0.4635	2.0000e- 005	0.0000	0.4639		
Total	5.4000e- 004	0.0102	4.3600e- 003	4.0000e- 005	1.7500e- 003	4.0000e- 005	1.8100e- 003	4.6000e- 004	4.0000e- 005	5.0000e- 004	0.0000	2.7852	2.7852	1.9000e- 004	0.0000	2.7896		

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
Fugitive Dust					7.8000e- 004	0.0000	7.8000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	0.0527	0.5334	0.4198	9.0000e- 004		0.0254	0.0254		0.0239	0.0239	0.0000	79.7406	79.7406	0.0212	0.0000	80.2715			
Total	0.0527	0.5334	0.4198	9.0000e- 004	7.8000e- 004	0.0254	0.0262	1.0000e- 004	0.0239	0.0240	0.0000	79.7406	79.7406	0.0212	0.0000	80.2715			

CalEEMod Version: CalEEMod.2016.3.2

Page 18 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.4 Well Construction Monitoring - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
Hauling	1.8000e- 004	6.0800e- 003	1.2900e- 003	2.0000e- 005	1.0600e- 003	2.0000e- 005	1.0900e- 003	2.7000e- 004	2.0000e- 005	2.9000e- 004	0.0000	1.4965	1.4965	1.1000e- 004	0.0000	1.4992			
Vendor	1.4000e- 004	3.9000e- 003	1.0700e- 003	1.0000e- 005	2.1000e- 004	2.0000e- 005	2.3000e- 004	6.0000e- 005	2.0000e- 005	8.0000e- 005	0.0000	0.8252	0.8252	6.0000e- 005	0.0000	0.8266			
Worker	2.2000e- 004	1.8000e- 004	2.0000e- 003	1.0000e- 005	4.8000e- 004	0.0000	4.9000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4635	0.4635	2.0000e- 005	0.0000	0.4639			
Total	5.4000e- 004	0.0102	4.3600e- 003	4.0000e- 005	1.7500e- 003	4.0000e- 005	1.8100e- 003	4.6000e- 004	4.0000e- 005	5.0000e- 004	0.0000	2.7852	2.7852	1.9000e- 004	0.0000	2.7896			

3.4 Well Construction Monitoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
Fugitive Dust					2.0100e- 003	0.0000	2.0100e- 003	2.4000e- 004	0.0000	2.4000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	0.1435	1.4225	1.2244	2.6500e- 003		0.0662	0.0662		0.0623	0.0623	0.0000	231.6508	231.6508	0.0625	0.0000	233.2120			
Total	0.1435	1.4225	1.2244	2.6500e- 003	2.0100e- 003	0.0662	0.0682	2.4000e- 004	0.0623	0.0626	0.0000	231.6508	231.6508	0.0625	0.0000	233.2120			
CalEEMod Version: CalEEMod.2016.3.2

Page 19 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.4 Well Construction Monitoring - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	5.0000e- 004	0.0169	3.7200e- 003	4.0000e- 005	1.2200e- 003	5.0000e- 005	1.2800e- 003	3.3000e- 004	5.0000e- 005	3.8000e- 004	0.0000	4.3766	4.3766	3.0000e- 004	0.0000	4.3843
Vendor	3.5000e- 004	0.0106	2.8600e- 003	3.0000e- 005	6.1000e- 004	5.0000e- 005	6.6000e- 004	1.8000e- 004	5.0000e- 005	2.2000e- 004	0.0000	2.4222	2.4222	1.5000e- 004	0.0000	2.4260
Worker	6.0000e- 004	4.8000e- 004	5.3500e- 003	1.0000e- 005	1.4200e- 003	1.0000e- 005	1.4400e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.3278	1.3278	4.0000e- 005	0.0000	1.3288
Total	1.4500e- 003	0.0279	0.0119	8.0000e- 005	3.2500e- 003	1.1000e- 004	3.3800e- 003	8.9000e- 004	1.1000e- 004	9.9000e- 004	0.0000	8.1266	8.1266	4.9000e- 004	0.0000	8.1391

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					7.8000e- 004	0.0000	7.8000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1435	1.4225	1.2244	2.6500e- 003		0.0662	0.0662		0.0623	0.0623	0.0000	231.6505	231.6505	0.0625	0.0000	233.2117
Total	0.1435	1.4225	1.2244	2.6500e- 003	7.8000e- 004	0.0662	0.0670	1.0000e- 004	0.0623	0.0624	0.0000	231.6505	231.6505	0.0625	0.0000	233.2117

CalEEMod Version: CalEEMod.2016.3.2

Page 20 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.4 Well Construction Monitoring - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	5.0000e- 004	0.0169	3.7200e- 003	4.0000e- 005	1.2200e- 003	5.0000e- 005	1.2800e- 003	3.3000e- 004	5.0000e- 005	3.8000e- 004	0.0000	4.3766	4.3766	3.0000e- 004	0.0000	4.3843
Vendor	3.5000e- 004	0.0106	2.8600e- 003	3.0000e- 005	6.1000e- 004	5.0000e- 005	6.6000e- 004	1.8000e- 004	5.0000e- 005	2.2000e- 004	0.0000	2.4222	2.4222	1.5000e- 004	0.0000	2.4260
Worker	6.0000e- 004	4.8000e- 004	5.3500e- 003	1.0000e- 005	1.4200e- 003	1.0000e- 005	1.4400e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.3278	1.3278	4.0000e- 005	0.0000	1.3288
Total	1.4500e- 003	0.0279	0.0119	8.0000e- 005	3.2500e- 003	1.1000e- 004	3.3800e- 003	8.9000e- 004	1.1000e- 004	9.9000e- 004	0.0000	8.1266	8.1266	4.9000e- 004	0.0000	8.1391

3.5 Well Equipping - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0457	0.5117	0.2521	5.6000e- 004		0.0244	0.0244		0.0225	0.0225	0.0000	49.0531	49.0531	0.0159	0.0000	49.4497
Total	0.0457	0.5117	0.2521	5.6000e- 004	0.0000	0.0244	0.0244	0.0000	0.0225	0.0225	0.0000	49.0531	49.0531	0.0159	0.0000	49.4497

CalEEMod Version: CalEEMod.2016.3.2

Page 21 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.5 Well Equipping - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	6.7000e- 004	0.0226	4.9700e- 003	6.0000e- 005	1.3100e- 003	7.0000e- 005	1.3800e- 003	3.6000e- 004	7.0000e- 005	4.3000e- 004	0.0000	5.8579	5.8579	4.1000e- 004	0.0000	5.8682
Vendor	8.3000e- 004	0.0249	6.7300e- 003	6.0000e- 005	1.4500e- 003	1.2000e- 004	1.5600e- 003	4.2000e- 004	1.1000e- 004	5.3000e- 004	0.0000	5.7014	5.7014	3.6000e- 004	0.0000	5.7104
Worker	1.4100e- 003	1.1400e- 003	0.0126	3.0000e- 005	3.3500e- 003	3.0000e- 005	3.3800e- 003	8.9000e- 004	3.0000e- 005	9.2000e- 004	0.0000	3.1253	3.1253	1.0000e- 004	0.0000	3.1278
Total	2.9100e- 003	0.0486	0.0243	1.5000e- 004	6.1100e- 003	2.2000e- 004	6.3200e- 003	1.6700e- 003	2.1000e- 004	1.8800e- 003	0.0000	14.6847	14.6847	8.7000e- 004	0.0000	14.7064

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Fugitive Dust		1 1 1			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0457	0.5117	0.2521	5.6000e- 004		0.0244	0.0244		0.0225	0.0225	0.0000	49.0530	49.0530	0.0159	0.0000	49.4496
Total	0.0457	0.5117	0.2521	5.6000e- 004	0.0000	0.0244	0.0244	0.0000	0.0225	0.0225	0.0000	49.0530	49.0530	0.0159	0.0000	49.4496

CalEEMod Version: CalEEMod.2016.3.2

Page 22 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

3.5 Well Equipping - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	6.7000e- 004	0.0226	4.9700e- 003	6.0000e- 005	1.3100e- 003	7.0000e- 005	1.3800e- 003	3.6000e- 004	7.0000e- 005	4.3000e- 004	0.0000	5.8579	5.8579	4.1000e- 004	0.0000	5.8682
Vendor	8.3000e- 004	0.0249	6.7300e- 003	6.0000e- 005	1.4500e- 003	1.2000e- 004	1.5600e- 003	4.2000e- 004	1.1000e- 004	5.3000e- 004	0.0000	5.7014	5.7014	3.6000e- 004	0.0000	5.7104
Worker	1.4100e- 003	1.1400e- 003	0.0126	3.0000e- 005	3.3500e- 003	3.0000e- 005	3.3800e- 003	8.9000e- 004	3.0000e- 005	9.2000e- 004	0.0000	3.1253	3.1253	1.0000e- 004	0.0000	3.1278
Total	2.9100e- 003	0.0486	0.0243	1.5000e- 004	6.1100e- 003	2.2000e- 004	6.3200e- 003	1.6700e- 003	2.1000e- 004	1.8800e- 003	0.0000	14.6847	14.6847	8.7000e- 004	0.0000	14.7064

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2

Page 23 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 24 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated	r,					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 25 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	- - - -	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	7/yr	
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 26 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.4782	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.4782	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2

Page 27 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0549			1 1 1		0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4233					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4782	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0549					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4233					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4782	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2

Page 28 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
User Defined Industrial	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 29 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
User Defined Industrial	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 30 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

<u>Unmitigated</u>

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

Mitigated

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

9.0 Operational Offroad

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

CalEEMod Version: CalEEMod.2016.3.2

Page 31 of 32

Date: 8/20/2019 4:46 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2

Page 1 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

La Brea Subarea Wells and Transmission Main Project

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	2.70	117,140.00	0

1.2 Other Project Characteristics

Urbanization	Jrban Wind Speed (m/s)		2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2021
Utility Company	Los Angeles Department of	f Water & Power			
CO2 Intensity (Ib/MWhr)	1227.89	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity ((Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2

Page 2 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

Project Characteristics -

Land Use - assume 1 well of 660 SF each + (4 miles of new transmission main x 4 LF wide) + (8000 LF proposed rehab x 4 LF wide) = approx 117,140 SF impacted

Construction Phase - per Table 1 in Project Description

Off-road Equipment - per Table 2 Project Description

Off-road Equipment - per Table 2 of Project Description

Off-road Equipment - per Table 2 Project Description

Off-road Equipment - per Table 2 of Project Description

Demolition - 67 CY construction material (assume wood, uncompacted) => 400 lbs/CY * 67 CY = 26,800 lbs = 12 metric tons Conversion source: CalRecycle

Trips and VMT - one well only

Well construction/equipping: 76 hauling trucks * 2 = 152 truck trips

Transmission main: 11,018 CY + 185 CY soil = 11203 CY soil / 16 CY/truck = 700 trucks or 1400 hauling truck trips.

Concrete- 10,000 SF * 1/3 LF thick = 3,333 CF * 1 CY/27 CF = 123 CY / 16 CY/truck = 7.7 trucks for vendor or less than 1 per day

Grading - 11 CY soil excavated for wells, 11,018 CY soil excavated for new transmission, 185 CY soil excavated for rehab = 11214 CY

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	174.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	6.00	153.00
tblConstructionPhase	NumDays	3.00	87.00
tblGrading	MaterialExported	0.00	11,214.00
tblLandUse	LandUseSquareFeet	0.00	117,140.00
tblLandUse	LotAcreage	0.00	2.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

CalEEMod Version: CalEEMod.2016.3.2

Page 3 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and	d Transmission Main Pr	oject - Los Angeles-South	Coast County, Summer
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Equipping
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Well Equipping
tblOffRoadEquipment	PhaseName		Well Construction Monitoring

CalEEMod Version: CalEEMod.2016.3.2

Page 4 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	4.00	14.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,400.00
tblTripsAndVMT	HaulingTripNumber	0.00	152.00
tblTripsAndVMT	HaulingTripNumber	0.00	152.00
tblTripsAndVMT	VendorTripNumber	19.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	50.00	10.00
tblTripsAndVMT	WorkerTripNumber	30.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2

Page 5 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/c	lay					
2019	6.1562	63.2884	49.8851	0.1067	0.6419	3.0581	3.7000	0.1609	2.8658	3.0267	0.0000	10,560.66 24	10,560.66 24	2.6460	0.0000	10,626.81 21
2020	5.6887	57.5242	49.2648	0.1066	0.4724	2.7146	3.1870	0.1193	2.5430	2.6623	0.0000	10,382.21 00	10,382.21 00	2.6338	0.0000	10,448.05 56
Maximum	6.1562	63.2884	49.8851	0.1067	0.6419	3.0581	3.7000	0.1609	2.8658	3.0267	0.0000	10,560.66 24	10,560.66 24	2.6460	0.0000	10,626.81 21

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	′day							lb/	′day		
2019	6.1562	63.2884	49.8851	0.1067	0.6137	3.0581	3.6718	0.1575	2.8658	3.0233	0.0000	10,560.66 24	10,560.66 24	2.6460	0.0000	10,626.81 21
2020	5.6887	57.5242	49.2648	0.1066	0.4442	2.7146	3.1588	0.1159	2.5430	2.6589	0.0000	10,382.21 00	10,382.21 00	2.6338	0.0000	10,448.05 56
Maximum	6.1562	63.2884	49.8851	0.1067	0.6137	3.0581	3.6718	0.1575	2.8658	3.0233	0.0000	10,560.66 24	10,560.66 24	2.6460	0.0000	10,626.81 21
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	5.06	0.00	0.82	2.45	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 6 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Area	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.6202	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Area	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Energy	0.0000	0.0000	0.0000	0.0000	1	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.6202	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2

Page 7 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Site Demolition and Pump- to-Waste	Demolition	10/1/2019	11/29/2019	5	44	
2	Rehabilitation/Transmission Main Installation	Building Construction	10/1/2019	5/29/2020	5	174	
3	Well Construction Monitoring	Site Preparation	12/2/2019	3/31/2020	5	87	
4	Well Equipping	Grading	4/1/2020	10/30/2020	5	153	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

CalEEMod Version: CalEEMod.2016.3.2

Page 8 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells an	d Transmission Mair	n Project - Los	Angeles-South	Coast County, Summer
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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Site Demolition and Pump-to- Waste	Crushing/Proc. Equipment	2	8.00	85	0.78
Well Site Demolition and Pump-to- Waste	Dumpers/Tenders	1	8.00	16	0.38
Well Site Demolition and Pump-to- Waste	Excavators	1	8.00	158	0.38
Well Site Demolition and Pump-to- Waste	Forklifts	1	8.00	89	0.20
Well Site Demolition and Pump-to- Waste	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Well Site Demolition and Pump-to- Waste	Trenchers	1	8.00	78	0.50
Well Construction Monitoring	Air Compressors	1	8.00	78	0.48
Well Construction Monitoring	Bore/Drill Rigs	2	8.00	221	0.50
Well Construction Monitoring	Cranes	1	8.00	231	0.29
Well Construction Monitoring	Generator Sets	1	8.00	84	0.74
Well Construction Monitoring	Off-Highway Trucks	1	8.00	402	0.38
Well Construction Monitoring	Other Construction Equipment	1	8.00	172	0.42
Well Construction Monitoring	Other Material Handling Equipment	3	8.00	168	0.40
Well Construction Monitoring	Pumps	1	8.00	84	0.74
Well Construction Monitoring	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Well Equipping	Cranes	1	8.00	231	0.29
Well Equipping	Forklifts	1	8.00	89	0.20
Rehabilitation/Transmission Main Installation	Dumpers/Tenders	1	6.00	16	0.38
Rehabilitation/Transmission Main Installation	Excavators	1	7.00	158	0.38
Rehabilitation/Transmission Main Installation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Rehabilitation/Transmission Main Installation	Trenchers	1	8.00	78	0.50

Trips and VMT

CalEEMod Version: CalEEMod.2016.3.2

Page 9 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Site Demolition	7	10.00	0.00	14.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Construction	12	4.00	3.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Equipping	2	4.00	3.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rehabilitation/Transmi	5	10.00	1.00	1,400.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Site Demolition and Pump-to-Waste - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					5.8400e- 003	0.0000	5.8400e- 003	8.8000e- 004	0.0000	8.8000e- 004			0.0000			0.0000
Off-Road	2.3751	19.1186	18.3943	0.0280		1.2737	1.2737		1.2183	1.2183		2,693.841 9	2,693.841 9	0.5266		2,707.008 0
Total	2.3751	19.1186	18.3943	0.0280	5.8400e- 003	1.2737	1.2796	8.8000e- 004	1.2183	1.2192		2,693.841 9	2,693.841 9	0.5266		2,707.008 0

CalEEMod Version: CalEEMod.2016.3.2

Page 10 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.2 Well Site Demolition and Pump-to-Waste - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/e	day		
Hauling	2.9900e- 003	0.0975	0.0208	2.5000e- 004	5.5600e- 003	3.6000e- 004	5.9200e- 003	1.5200e- 003	3.4000e- 004	1.8700e- 003		27.5072	27.5072	1.8900e- 003		27.5546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0500	0.0367	0.4822	1.2200e- 003	0.1118	9.6000e- 004	0.1127	0.0296	8.9000e- 004	0.0305		121.2953	121.2953	4.1700e- 003		121.3995
Total	0.0530	0.1342	0.5029	1.4700e- 003	0.1173	1.3200e- 003	0.1187	0.0312	1.2300e- 003	0.0324		148.8025	148.8025	6.0600e- 003		148.9540

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust					2.2800e- 003	0.0000	2.2800e- 003	3.4000e- 004	0.0000	3.4000e- 004			0.0000			0.0000
Off-Road	2.3751	19.1186	18.3943	0.0280		1.2737	1.2737		1.2183	1.2183	0.0000	2,693.841 9	2,693.841 9	0.5266		2,707.008 0
Total	2.3751	19.1186	18.3943	0.0280	2.2800e- 003	1.2737	1.2760	3.4000e- 004	1.2183	1.2187	0.0000	2,693.841 9	2,693.841 9	0.5266		2,707.008 0

CalEEMod Version: CalEEMod.2016.3.2

Page 11 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.2 Well Site Demolition and Pump-to-Waste - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	Jay		
Hauling	2.9900e- 003	0.0975	0.0208	2.5000e- 004	5.5600e- 003	3.6000e- 004	5.9200e- 003	1.5200e- 003	3.4000e- 004	1.8700e- 003		27.5072	27.5072	1.8900e- 003		27.5546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0500	0.0367	0.4822	1.2200e- 003	0.1118	9.6000e- 004	0.1127	0.0296	8.9000e- 004	0.0305		121.2953	121.2953	4.1700e- 003	,	121.3995
Total	0.0530	0.1342	0.5029	1.4700e- 003	0.1173	1.3200e- 003	0.1187	0.0312	1.2300e- 003	0.0324		148.8025	148.8025	6.0600e- 003		148.9540

3.3 Rehabilitation/Transmission Main Installation - 2019

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/d	lay		
Off-Road	1.1833	11.2878	10.2879	0.0147		0.7349	0.7349		0.6771	0.6771		1,441.877 4	1,441.877 4	0.4466		1,453.043 4
Total	1.1833	11.2878	10.2879	0.0147		0.7349	0.7349		0.6771	0.6771		1,441.877 4	1,441.877 4	0.4466		1,453.043 4

CalEEMod Version: CalEEMod.2016.3.2

Page 12 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.3 Rehabilitation/Transmission Main Installation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0756	2.4644	0.5254	6.4300e- 003	0.3148	9.0400e- 003	0.3238	0.0813	8.6500e- 003	0.0899		695.5842	695.5842	0.0479		696.7818
Vendor	4.1600e- 003	0.1157	0.0307	2.6000e- 004	6.4000e- 003	7.4000e- 004	7.1400e- 003	1.8400e- 003	7.1000e- 004	2.5500e- 003		27.8815	27.8815	1.7900e- 003		27.9261
Worker	0.0500	0.0367	0.4822	1.2200e- 003	0.1118	9.6000e- 004	0.1127	0.0296	8.9000e- 004	0.0305		121.2953	121.2953	4.1700e- 003		121.3995
Total	0.1297	2.6168	1.0383	7.9100e- 003	0.4329	0.0107	0.4437	0.1128	0.0103	0.1230		844.7609	844.7609	0.0539		846.1074

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.1833	11.2878	10.2879	0.0147		0.7349	0.7349		0.6771	0.6771	0.0000	1,441.877 4	1,441.877 4	0.4466	ſ	1,453.043 4
Total	1.1833	11.2878	10.2879	0.0147		0.7349	0.7349		0.6771	0.6771	0.0000	1,441.877 4	1,441.877 4	0.4466		1,453.043 4

CalEEMod Version: CalEEMod.2016.3.2

Page 13 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.3 Rehabilitation/Transmission Main Installation - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	day		
Hauling	0.0756	2.4644	0.5254	6.4300e- 003	0.3148	9.0400e- 003	0.3238	0.0813	8.6500e- 003	0.0899		695.5842	695.5842	0.0479		696.7818
Vendor	4.1600e- 003	0.1157	0.0307	2.6000e- 004	6.4000e- 003	7.4000e- 004	7.1400e- 003	1.8400e- 003	7.1000e- 004	2.5500e- 003		27.8815	27.8815	1.7900e- 003		27.9261
Worker	0.0500	0.0367	0.4822	1.2200e- 003	0.1118	9.6000e- 004	0.1127	0.0296	8.9000e- 004	0.0305		121.2953	121.2953	4.1700e- 003		121.3995
Total	0.1297	2.6168	1.0383	7.9100e- 003	0.4329	0.0107	0.4437	0.1128	0.0103	0.1230		844.7609	844.7609	0.0539		846.1074

3.3 Rehabilitation/Transmission Main Installation - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Off-Road	1.1082	10.4666	10.2432	0.0147		0.6660	0.6660		0.6138	0.6138		1,411.6580	1,411.6580	0.4467		1,422.825 0
Total	1.1082	10.4666	10.2432	0.0147		0.6660	0.6660		0.6138	0.6138		1,411.658 0	1,411.658 0	0.4467		1,422.825 0

CalEEMod Version: CalEEMod.2016.3.2

Page 14 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.3 Rehabilitation/Transmission Main Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0703	2.3136	0.5127	6.3600e- 003	0.2057	7.3800e- 003	0.2131	0.0545	7.0600e- 003	0.0616		688.6003	688.6003	0.0469		689.7721
Vendor	3.5600e- 003	0.1064	0.0279	2.6000e- 004	6.4000e- 003	5.0000e- 004	6.9000e- 003	1.8400e- 003	4.8000e- 004	2.3200e- 003		27.7025	27.7025	1.6900e- 003		27.7447
Worker	0.0460	0.0327	0.4378	1.1800e- 003	0.1118	9.3000e- 004	0.1127	0.0296	8.6000e- 004	0.0305		117.6113	117.6113	3.7100e- 003		117.7040
Total	0.1199	2.4527	0.9784	7.8000e- 003	0.3239	8.8100e- 003	0.3327	0.0860	8.4000e- 003	0.0944		833.9141	833.9141	0.0523		835.2208

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Off-Road	1.1082	10.4666	10.2432	0.0147		0.6660	0.6660		0.6138	0.6138	0.0000	1,411.658 0	1,411.658 0	0.4467		1,422.825 0
Total	1.1082	10.4666	10.2432	0.0147		0.6660	0.6660		0.6138	0.6138	0.0000	1,411.658 0	1,411.658 0	0.4467		1,422.825 0

CalEEMod Version: CalEEMod.2016.3.2

Page 15 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.3 Rehabilitation/Transmission Main Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	day		
Hauling	0.0703	2.3136	0.5127	6.3600e- 003	0.2057	7.3800e- 003	0.2131	0.0545	7.0600e- 003	0.0616		688.6003	688.6003	0.0469		689.7721
Vendor	3.5600e- 003	0.1064	0.0279	2.6000e- 004	6.4000e- 003	5.0000e- 004	6.9000e- 003	1.8400e- 003	4.8000e- 004	2.3200e- 003		27.7025	27.7025	1.6900e- 003		27.7447
Worker	0.0460	0.0327	0.4378	1.1800e- 003	0.1118	9.3000e- 004	0.1127	0.0296	8.6000e- 004	0.0305		117.6113	117.6113	3.7100e- 003		117.7040
Total	0.1199	2.4527	0.9784	7.8000e- 003	0.3239	8.8100e- 003	0.3327	0.0860	8.4000e- 003	0.0944		833.9141	833.9141	0.0523		835.2208

3.4 Well Construction Monitoring - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					0.0463	0.0000	0.0463	5.6300e- 003	0.0000	5.6300e- 003			0.0000			0.0000
Off-Road	4.7943	48.4868	38.1598	0.0815		2.3079	2.3079		2.1741	2.1741		7,990.820 5	7,990.820 5	2.1281		8,044.022 0
Total	4.7943	48.4868	38.1598	0.0815	0.0463	2.3079	2.3542	5.6300e- 003	2.1741	2.1797		7,990.820 5	7,990.820 5	2.1281		8,044.022 0

CalEEMod Version: CalEEMod.2016.3.2

Page 16 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.4 Well Construction Monitoring - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/e	day		
Hauling	0.0164	0.5351	0.1141	1.4000e- 003	0.0988	1.9600e- 003	0.1008	0.0251	1.8800e- 003	0.0270		151.0411	151.0411	0.0104		151.3012
Vendor	0.0125	0.3472	0.0921	7.8000e- 004	0.0192	2.2100e- 003	0.0214	5.5300e- 003	2.1200e- 003	7.6500e- 003		83.6444	83.6444	5.3600e- 003		83.7784
Worker	0.0200	0.0147	0.1929	4.9000e- 004	0.0447	3.9000e- 004	0.0451	0.0119	3.6000e- 004	0.0122		48.5181	48.5181	1.6700e- 003		48.5598
Total	0.0489	0.8970	0.3991	2.6700e- 003	0.1627	4.5600e- 003	0.1673	0.0425	4.3600e- 003	0.0469		283.2036	283.2036	0.0174		283.6394

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust					0.0181	0.0000	0.0181	2.2000e- 003	0.0000	2.2000e- 003			0.0000			0.0000
Off-Road	4.7943	48.4868	38.1598	0.0815		2.3079	2.3079		2.1741	2.1741	0.0000	7,990.820 5	7,990.820 5	2.1281		8,044.022 0
Total	4.7943	48.4868	38.1598	0.0815	0.0181	2.3079	2.3260	2.2000e- 003	2.1741	2.1763	0.0000	7,990.820 5	7,990.820 5	2.1281		8,044.022 0

CalEEMod Version: CalEEMod.2016.3.2

Page 17 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.4 Well Construction Monitoring - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	day		
Hauling	0.0164	0.5351	0.1141	1.4000e- 003	0.0988	1.9600e- 003	0.1008	0.0251	1.8800e- 003	0.0270		151.0411	151.0411	0.0104		151.3012
Vendor	0.0125	0.3472	0.0921	7.8000e- 004	0.0192	2.2100e- 003	0.0214	5.5300e- 003	2.1200e- 003	7.6500e- 003		83.6444	83.6444	5.3600e- 003		83.7784
Worker	0.0200	0.0147	0.1929	4.9000e- 004	0.0447	3.9000e- 004	0.0451	0.0119	3.6000e- 004	0.0122		48.5181	48.5181	1.6700e- 003		48.5598
Total	0.0489	0.8970	0.3991	2.6700e- 003	0.1627	4.5600e- 003	0.1673	0.0425	4.3600e- 003	0.0469		283.2036	283.2036	0.0174		283.6394

3.4 Well Construction Monitoring - 2020

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					0.0463	0.0000	0.0463	5.6300e- 003	0.0000	5.6300e- 003			0.0000			0.0000
Off-Road	4.4163	43.7703	37.6732	0.0815		2.0363	2.0363		1.9175	1.9175		7,856.961 4	7,856.961 4	2.1181		7,909.914 9
Total	4.4163	43.7703	37.6732	0.0815	0.0463	2.0363	2.0826	5.6300e- 003	1.9175	1.9231		7,856.961 4	7,856.961 4	2.1181		7,909.914 9

CalEEMod Version: CalEEMod.2016.3.2

Page 18 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.4 Well Construction Monitoring - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0153	0.5024	0.1113	1.3800e- 003	0.0384	1.6000e- 003	0.0400	0.0103	1.5300e- 003	0.0118		149.5246	149.5246	0.0102		149.7791
Vendor	0.0107	0.3191	0.0836	7.8000e- 004	0.0192	1.5000e- 003	0.0207	5.5300e- 003	1.4400e- 003	6.9700e- 003		83.1074	83.1074	5.0700e- 003		83.2342
Worker	0.0184	0.0131	0.1751	4.7000e- 004	0.0447	3.7000e- 004	0.0451	0.0119	3.4000e- 004	0.0122		47.0445	47.0445	1.4800e- 003		47.0816
Total	0.0443	0.8346	0.3701	2.6300e- 003	0.1023	3.4700e- 003	0.1058	0.0277	3.3100e- 003	0.0310		279.6766	279.6766	0.0167		280.0949

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust			1 1 1		0.0181	0.0000	0.0181	2.2000e- 003	0.0000	2.2000e- 003			0.0000			0.0000
Off-Road	4.4163	43.7703	37.6732	0.0815		2.0363	2.0363		1.9175	1.9175	0.0000	7,856.961 4	7,856.961 4	2.1181		7,909.914 9
Total	4.4163	43.7703	37.6732	0.0815	0.0181	2.0363	2.0544	2.2000e- 003	1.9175	1.9197	0.0000	7,856.961 4	7,856.961 4	2.1181		7,909.914 9

CalEEMod Version: CalEEMod.2016.3.2

Page 19 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.4 Well Construction Monitoring - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Hauling	0.0153	0.5024	0.1113	1.3800e- 003	0.0384	1.6000e- 003	0.0400	0.0103	1.5300e- 003	0.0118		149.5246	149.5246	0.0102		149.7791
Vendor	0.0107	0.3191	0.0836	7.8000e- 004	0.0192	1.5000e- 003	0.0207	5.5300e- 003	1.4400e- 003	6.9700e- 003		83.1074	83.1074	5.0700e- 003		83.2342
Worker	0.0184	0.0131	0.1751	4.7000e- 004	0.0447	3.7000e- 004	0.0451	0.0119	3.4000e- 004	0.0122		47.0445	47.0445	1.4800e- 003		47.0816
Total	0.0443	0.8346	0.3701	2.6300e- 003	0.1023	3.4700e- 003	0.1058	0.0277	3.3100e- 003	0.0310		279.6766	279.6766	0.0167		280.0949

3.5 Well Equipping - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5974	6.6890	3.2956	7.2900e- 003		0.3189	0.3189		0.2934	0.2934		706.8205	706.8205	0.2286		712.5355
Total	0.5974	6.6890	3.2956	7.2900e- 003	0.0000	0.3189	0.3189	0.0000	0.2934	0.2934		706.8205	706.8205	0.2286		712.5355

CalEEMod Version: CalEEMod.2016.3.2

Page 20 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.5 Well Equipping - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	8.6800e- 003	0.2857	0.0633	7.8000e- 004	0.0174	9.1000e- 004	0.0183	4.7600e- 003	8.7000e- 004	5.6300e- 003		85.0238	85.0238	5.7900e- 003		85.1685
Vendor	0.0107	0.3191	0.0836	7.8000e- 004	0.0192	1.5000e- 003	0.0207	5.5300e- 003	1.4400e- 003	6.9700e- 003		83.1074	83.1074	5.0700e- 003		83.2342
Worker	0.0184	0.0131	0.1751	4.7000e- 004	0.0447	3.7000e- 004	0.0451	0.0119	3.4000e- 004	0.0122		47.0445	47.0445	1.4800e- 003		47.0816
Total	0.0378	0.6179	0.3221	2.0300e- 003	0.0813	2.7800e- 003	0.0841	0.0222	2.6500e- 003	0.0248		215.1757	215.1757	0.0123		215.4843

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5974	6.6890	3.2956	7.2900e- 003		0.3189	0.3189		0.2934	0.2934	0.0000	706.8205	706.8205	0.2286		712.5355
Total	0.5974	6.6890	3.2956	7.2900e- 003	0.0000	0.3189	0.3189	0.0000	0.2934	0.2934	0.0000	706.8205	706.8205	0.2286		712.5355

CalEEMod Version: CalEEMod.2016.3.2

Page 21 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

3.5 Well Equipping - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	8.6800e- 003	0.2857	0.0633	7.8000e- 004	0.0174	9.1000e- 004	0.0183	4.7600e- 003	8.7000e- 004	5.6300e- 003		85.0238	85.0238	5.7900e- 003		85.1685
Vendor	0.0107	0.3191	0.0836	7.8000e- 004	0.0192	1.5000e- 003	0.0207	5.5300e- 003	1.4400e- 003	6.9700e- 003		83.1074	83.1074	5.0700e- 003		83.2342
Worker	0.0184	0.0131	0.1751	4.7000e- 004	0.0447	3.7000e- 004	0.0451	0.0119	3.4000e- 004	0.0122		47.0445	47.0445	1.4800e- 003		47.0816
Total	0.0378	0.6179	0.3221	2.0300e- 003	0.0813	2.7800e- 003	0.0841	0.0222	2.6500e- 003	0.0248		215.1757	215.1757	0.0123		215.4843

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2

Page 22 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 23 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day										lb/day							
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	
7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 24 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/c	lay		
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Mitigated	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

CalEEMod Version: CalEEMod.2016.3.2

Page 25 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day								lb/day							
Architectural Coating	0.3009					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000		1 1 1	0.0000
Consumer Products	2.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/	day							lb/o	day		
Architectural Coating	0.3009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Page 26 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Summer

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type Number

11.0 Vegetation

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 1 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

La Brea Subarea Wells and Transmission Main Project

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	2.70	117,140.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2021
Utility Company	Los Angeles Department of	f Water & Power			
CO2 Intensity (Ib/MWhr)	1227.89	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity ((Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2

Page 2 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

Project Characteristics -

Land Use - assume 1 well of 660 SF each + (4 miles of new transmission main x 4 LF wide) + (8000 LF proposed rehab x 4 LF wide) = approx 117,140 SF impacted

Construction Phase - per Table 1 in Project Description

Off-road Equipment - per Table 2 Project Description

Off-road Equipment - per Table 2 of Project Description

Off-road Equipment - per Table 2 Project Description

Off-road Equipment - per Table 2 of Project Description

Demolition - 67 CY construction material (assume wood, uncompacted) => 400 lbs/CY * 67 CY = 26,800 lbs = 12 metric tons Conversion source: CalRecycle

Trips and VMT - one well only

Well construction/equipping: 76 hauling trucks * 2 = 152 truck trips

Transmission main: 11,018 CY + 185 CY soil = 11203 CY soil / 16 CY/truck = 700 trucks or 1400 hauling truck trips.

Concrete- 10,000 SF * 1/3 LF thick = 3,333 CF * 1 CY/27 CF = 123 CY / 16 CY/truck = 7.7 trucks for vendor or less than 1 per day

Grading - 11 CY soil excavated for wells, 11,018 CY soil excavated for new transmission, 185 CY soil excavated for rehab = 11214 CY

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	174.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	6.00	153.00
tblConstructionPhase	NumDays	3.00	87.00
tblGrading	MaterialExported	0.00	11,214.00
tblLandUse	LandUseSquareFeet	0.00	117,140.00
tblLandUse	LotAcreage	0.00	2.70
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

CalEEMod Version: CalEEMod.2016.3.2

Page 3 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and	Transmission Main Project	t - Los Angeles-South	Coast County, Winter
		U	

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Equipping
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Well Equipping
tblOffRoadEquipment	PhaseName		Well Construction Monitoring

CalEEMod Version: CalEEMod.2016.3.2

Page 4 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Construction Monitoring
tblOffRoadEquipment	PhaseName		Well Site Demolition and Pump-to- Waste
tblOffRoadEquipment	PhaseName		Rehabilitation/Transmission Main Installation
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	4.00	14.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,400.00
tblTripsAndVMT	HaulingTripNumber	0.00	152.00
tblTripsAndVMT	HaulingTripNumber	0.00	152.00
tblTripsAndVMT	VendorTripNumber	19.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	50.00	10.00
tblTripsAndVMT	WorkerTripNumber	30.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00

2.0 Emissions Summary

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 5 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/o	day							lb/d	lay		
2019	6.1667	63.3345	49.8853	0.1064	0.6419	3.0583	3.7002	0.1609	2.8661	3.0270	0.0000	10,533.37 36	10,533.37 36	2.6484	0.0000	10,599.58 24
2020	5.6985	57.5654	49.2639	0.1064	0.4724	2.7148	3.1872	0.1193	2.5432	2.6625	0.0000	10,355.13 00	10,355.13 00	2.6360	0.0000	10,421.03 09
Maximum	6.1667	63.3345	49.8853	0.1064	0.6419	3.0583	3.7002	0.1609	2.8661	3.0270	0.0000	10,533.37 36	10,533.37 36	2.6484	0.0000	10,599.58 24

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	′day				lb	′day					
2019	6.1667	63.3345	49.8853	0.1064	0.6137	3.0583	3.6720	0.1575	2.8661	3.0236	0.0000	10,533.37 36	10,533.37 36	2.6484	0.0000	10,599.58 24
2020	5.6985	57.5654	49.2639	0.1064	0.4442	2.7148	3.1590	0.1159	2.5432	2.6591	0.0000	10,355.13 00	10,355.13 00	2.6360	0.0000	10,421.03 09
Maximum	6.1667	63.3345	49.8853	0.1064	0.6137	3.0583	3.6720	0.1575	2.8661	3.0236	0.0000	10,533.37 36	10,533.37 36	2.6484	0.0000	10,599.58 24
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	5.06	0.00	0.82	2.45	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 6 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	ay		
Area	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.6202	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Area	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Total	2.6202	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2

Page 7 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well Site Demolition and Pump- to-Waste	Demolition	10/1/2019	11/29/2019	5	44	
2	Rehabilitation/Transmission Main Installation	Building Construction	10/1/2019	5/29/2020	5	174	
3	Well Construction Monitoring	Site Preparation	12/2/2019	3/31/2020	5	87	
4	Well Equipping	Grading	4/1/2020	10/30/2020	5	153	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

CalEEMod Version: CalEEMod.2016.3.2

Page 8 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells an	d Transmission Main Proje	ct - Los Angeles-South	Coast County, Winter
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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well Site Demolition and Pump-to- Waste	Crushing/Proc. Equipment	2	8.00	85	0.78
Well Site Demolition and Pump-to- Waste	Dumpers/Tenders	1	8.00	16	0.38
Well Site Demolition and Pump-to- Waste	Excavators	1	8.00	158	0.38
Well Site Demolition and Pump-to- Waste	Forklifts	1	8.00	89	0.20
Well Site Demolition and Pump-to- Waste	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Well Site Demolition and Pump-to- Waste	Trenchers	1	8.00	78	0.50
Well Construction Monitoring	Air Compressors	1	8.00	78	0.48
Well Construction Monitoring	Bore/Drill Rigs	2	8.00	221	0.50
Well Construction Monitoring	Cranes	1	8.00	231	0.29
Well Construction Monitoring	Generator Sets	1	8.00	84	0.74
Well Construction Monitoring	Off-Highway Trucks	1	8.00	402	0.38
Well Construction Monitoring	Other Construction Equipment	1	8.00	172	0.42
Well Construction Monitoring	Other Material Handling Equipment	3	8.00	168	0.40
Well Construction Monitoring	Pumps	1	8.00	84	0.74
Well Construction Monitoring	Tractors/Loaders/Backhoes	 1	8.00	97	0.37
Well Equipping	Cranes	1	8.00	231	0.29
Well Equipping	Forklifts	1	8.00	89	0.20
Rehabilitation/Transmission Main Installation	Dumpers/Tenders	1	6.00	16	0.38
Rehabilitation/Transmission Main Installation	Excavators	1	7.00	158	0.38
Rehabilitation/Transmission Main Installation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Rehabilitation/Transmission Main Installation	Trenchers	1	8.00	78	0.50

Trips and VMT

CalEEMod Version: CalEEMod.2016.3.2

Page 9 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well Site Demolition	7	10.00	0.00	14.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Construction	12	4.00	3.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Equipping	2	4.00	3.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rehabilitation/Transmi	5	10.00	1.00	1,400.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Well Site Demolition and Pump-to-Waste - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					5.8400e- 003	0.0000	5.8400e- 003	8.8000e- 004	0.0000	8.8000e- 004			0.0000			0.0000
Off-Road	2.3751	19.1186	18.3943	0.0280		1.2737	1.2737		1.2183	1.2183		2,693.841 9	2,693.841 9	0.5266		2,707.008 0
Total	2.3751	19.1186	18.3943	0.0280	5.8400e- 003	1.2737	1.2796	8.8000e- 004	1.2183	1.2192		2,693.841 9	2,693.841 9	0.5266		2,707.008 0

CalEEMod Version: CalEEMod.2016.3.2

Page 10 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.2 Well Site Demolition and Pump-to-Waste - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day				lb/e	day					
Hauling	3.0600e- 003	0.0988	0.0222	2.5000e- 004	5.5600e- 003	3.6000e- 004	5.9300e- 003	1.5200e- 003	3.5000e- 004	1.8700e- 003		27.0407	27.0407	1.9700e- 003		27.0898
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0407	0.4425	1.1500e- 003	0.1118	9.6000e- 004	0.1127	0.0296	8.9000e- 004	0.0305		114.2131	114.2131	3.9300e- 003		114.3113
Total	0.0584	0.1394	0.4647	1.4000e- 003	0.1173	1.3200e- 003	0.1187	0.0312	1.2400e- 003	0.0324		141.2538	141.2538	5.9000e- 003		141.4012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Fugitive Dust					2.2800e- 003	0.0000	2.2800e- 003	3.4000e- 004	0.0000	3.4000e- 004			0.0000			0.0000
Off-Road	2.3751	19.1186	18.3943	0.0280		1.2737	1.2737		1.2183	1.2183	0.0000	2,693.841 9	2,693.841 9	0.5266		2,707.008 0
Total	2.3751	19.1186	18.3943	0.0280	2.2800e- 003	1.2737	1.2760	3.4000e- 004	1.2183	1.2187	0.0000	2,693.841 9	2,693.841 9	0.5266		2,707.008 0

CalEEMod Version: CalEEMod.2016.3.2

Page 11 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.2 Well Site Demolition and Pump-to-Waste - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	3.0600e- 003	0.0988	0.0222	2.5000e- 004	5.5600e- 003	3.6000e- 004	5.9300e- 003	1.5200e- 003	3.5000e- 004	1.8700e- 003		27.0407	27.0407	1.9700e- 003		27.0898
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0407	0.4425	1.1500e- 003	0.1118	9.6000e- 004	0.1127	0.0296	8.9000e- 004	0.0305		114.2131	114.2131	3.9300e- 003	,	114.3113
Total	0.0584	0.1394	0.4647	1.4000e- 003	0.1173	1.3200e- 003	0.1187	0.0312	1.2400e- 003	0.0324		141.2538	141.2538	5.9000e- 003		141.4012

3.3 Rehabilitation/Transmission Main Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Off-Road	1.1833	11.2878	10.2879	0.0147		0.7349	0.7349		0.6771	0.6771		1,441.877 4	1,441.877 4	0.4466	, , , , , , , , , , , , , , , , , , , ,	1,453.043 4
Total	1.1833	11.2878	10.2879	0.0147		0.7349	0.7349		0.6771	0.6771		1,441.877 4	1,441.877 4	0.4466		1,453.043 4

CalEEMod Version: CalEEMod.2016.3.2

Page 12 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.3 Rehabilitation/Transmission Main Installation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0775	2.4972	0.5609	6.3200e- 003	0.3148	9.2100e- 003	0.3240	0.0813	8.8100e- 003	0.0901		683.7871	683.7871	0.0497		685.0303
Vendor	4.3300e- 003	0.1159	0.0339	2.5000e- 004	6.4000e- 003	7.5000e- 004	7.1500e- 003	1.8400e- 003	7.2000e- 004	2.5600e- 003		27.1277	27.1277	1.9100e- 003		27.1754
Worker	0.0554	0.0407	0.4425	1.1500e- 003	0.1118	9.6000e- 004	0.1127	0.0296	8.9000e- 004	0.0305		114.2131	114.2131	3.9300e- 003		114.3113
Total	0.1372	2.6538	1.0373	7.7200e- 003	0.4329	0.0109	0.4439	0.1128	0.0104	0.1232		825.1279	825.1279	0.0556		826.5170

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.1833	11.2878	10.2879	0.0147		0.7349	0.7349		0.6771	0.6771	0.0000	1,441.877 4	1,441.877 4	0.4466		1,453.043 4
Total	1.1833	11.2878	10.2879	0.0147		0.7349	0.7349		0.6771	0.6771	0.0000	1,441.877 4	1,441.877 4	0.4466		1,453.043 4

CalEEMod Version: CalEEMod.2016.3.2

Page 13 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.3 Rehabilitation/Transmission Main Installation - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Hauling	0.0775	2.4972	0.5609	6.3200e- 003	0.3148	9.2100e- 003	0.3240	0.0813	8.8100e- 003	0.0901		683.7871	683.7871	0.0497		685.0303
Vendor	4.3300e- 003	0.1159	0.0339	2.5000e- 004	6.4000e- 003	7.5000e- 004	7.1500e- 003	1.8400e- 003	7.2000e- 004	2.5600e- 003		27.1277	27.1277	1.9100e- 003		27.1754
Worker	0.0554	0.0407	0.4425	1.1500e- 003	0.1118	9.6000e- 004	0.1127	0.0296	8.9000e- 004	0.0305		114.2131	114.2131	3.9300e- 003		114.3113
Total	0.1372	2.6538	1.0373	7.7200e- 003	0.4329	0.0109	0.4439	0.1128	0.0104	0.1232		825.1279	825.1279	0.0556		826.5170

3.3 Rehabilitation/Transmission Main Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Off-Road	1.1082	10.4666	10.2432	0.0147		0.6660	0.6660		0.6138	0.6138		1,411.6580	1,411.6580	0.4467		1,422.825 0
Total	1.1082	10.4666	10.2432	0.0147		0.6660	0.6660		0.6138	0.6138		1,411.658 0	1,411.658 0	0.4467		1,422.825 0

CalEEMod Version: CalEEMod.2016.3.2

Page 14 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.3 Rehabilitation/Transmission Main Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0720	2.3435	0.5448	6.2500e- 003	0.2057	7.5000e- 003	0.2132	0.0545	7.1700e- 003	0.0617		676.7424	676.7424	0.0486		677.9567
Vendor	3.7200e- 003	0.1064	0.0307	2.5000e- 004	6.4000e- 003	5.1000e- 004	6.9100e- 003	1.8400e- 003	4.9000e- 004	2.3300e- 003		26.9449	26.9449	1.8000e- 003		26.9900
Worker	0.0511	0.0363	0.4010	1.1100e- 003	0.1118	9.3000e- 004	0.1127	0.0296	8.6000e- 004	0.0305		110.7420	110.7420	3.4900e- 003		110.8293
Total	0.1268	2.4861	0.9766	7.6100e- 003	0.3239	8.9400e- 003	0.3328	0.0860	8.5200e- 003	0.0945		814.4293	814.4293	0.0539		815.7760

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Off-Road	1.1082	10.4666	10.2432	0.0147		0.6660	0.6660		0.6138	0.6138	0.0000	1,411.6580	1,411.6580	0.4467		1,422.825 0
Total	1.1082	10.4666	10.2432	0.0147		0.6660	0.6660		0.6138	0.6138	0.0000	1,411.658 0	1,411.658 0	0.4467		1,422.825 0

CalEEMod Version: CalEEMod.2016.3.2

Page 15 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.3 Rehabilitation/Transmission Main Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/e	day		
Hauling	0.0720	2.3435	0.5448	6.2500e- 003	0.2057	7.5000e- 003	0.2132	0.0545	7.1700e- 003	0.0617		676.7424	676.7424	0.0486		677.9567
Vendor	3.7200e- 003	0.1064	0.0307	2.5000e- 004	6.4000e- 003	5.1000e- 004	6.9100e- 003	1.8400e- 003	4.9000e- 004	2.3300e- 003		26.9449	26.9449	1.8000e- 003		26.9900
Worker	0.0511	0.0363	0.4010	1.1100e- 003	0.1118	9.3000e- 004	0.1127	0.0296	8.6000e- 004	0.0305		110.7420	110.7420	3.4900e- 003		110.8293
Total	0.1268	2.4861	0.9766	7.6100e- 003	0.3239	8.9400e- 003	0.3328	0.0860	8.5200e- 003	0.0945		814.4293	814.4293	0.0539		815.7760

3.4 Well Construction Monitoring - 2019

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					0.0463	0.0000	0.0463	5.6300e- 003	0.0000	5.6300e- 003			0.0000			0.0000
Off-Road	4.7943	48.4868	38.1598	0.0815		2.3079	2.3079		2.1741	2.1741		7,990.820 5	7,990.820 5	2.1281		8,044.022 0
Total	4.7943	48.4868	38.1598	0.0815	0.0463	2.3079	2.3542	5.6300e- 003	2.1741	2.1797		7,990.820 5	7,990.820 5	2.1281		8,044.022 0

CalEEMod Version: CalEEMod.2016.3.2

Page 16 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.4 Well Construction Monitoring - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Hauling	0.0168	0.5423	0.1218	1.3700e- 003	0.0988	2.0000e- 003	0.1008	0.0251	1.9100e- 003	0.0270		148.4795	148.4795	0.0108		148.7495
Vendor	0.0130	0.3477	0.1015	7.6000e- 004	0.0192	2.2500e- 003	0.0215	5.5300e- 003	2.1500e- 003	7.6800e- 003		81.3831	81.3831	5.7200e- 003		81.5261
Worker	0.0222	0.0163	0.1770	4.6000e- 004	0.0447	3.9000e- 004	0.0451	0.0119	3.6000e- 004	0.0122		45.6852	45.6852	1.5700e- 003		45.7245
Total	0.0520	0.9062	0.4003	2.5900e- 003	0.1627	4.6400e- 003	0.1674	0.0425	4.4200e- 003	0.0469		275.5478	275.5478	0.0181		276.0000

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust			1 1 1		0.0181	0.0000	0.0181	2.2000e- 003	0.0000	2.2000e- 003		1 1 1	0.0000			0.0000
Off-Road	4.7943	48.4868	38.1598	0.0815		2.3079	2.3079		2.1741	2.1741	0.0000	7,990.820 5	7,990.820 5	2.1281		8,044.022 0
Total	4.7943	48.4868	38.1598	0.0815	0.0181	2.3079	2.3260	2.2000e- 003	2.1741	2.1763	0.0000	7,990.820 5	7,990.820 5	2.1281		8,044.022 0

CalEEMod Version: CalEEMod.2016.3.2

Page 17 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.4 Well Construction Monitoring - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0168	0.5423	0.1218	1.3700e- 003	0.0988	2.0000e- 003	0.1008	0.0251	1.9100e- 003	0.0270		148.4795	148.4795	0.0108		148.7495
Vendor	0.0130	0.3477	0.1015	7.6000e- 004	0.0192	2.2500e- 003	0.0215	5.5300e- 003	2.1500e- 003	7.6800e- 003		81.3831	81.3831	5.7200e- 003		81.5261
Worker	0.0222	0.0163	0.1770	4.6000e- 004	0.0447	3.9000e- 004	0.0451	0.0119	3.6000e- 004	0.0122		45.6852	45.6852	1.5700e- 003		45.7245
Total	0.0520	0.9062	0.4003	2.5900e- 003	0.1627	4.6400e- 003	0.1674	0.0425	4.4200e- 003	0.0469		275.5478	275.5478	0.0181		276.0000

3.4 Well Construction Monitoring - 2020

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					0.0463	0.0000	0.0463	5.6300e- 003	0.0000	5.6300e- 003			0.0000			0.0000
Off-Road	4.4163	43.7703	37.6732	0.0815		2.0363	2.0363		1.9175	1.9175		7,856.961 4	7,856.961 4	2.1181		7,909.914 9
Total	4.4163	43.7703	37.6732	0.0815	0.0463	2.0363	2.0826	5.6300e- 003	1.9175	1.9231		7,856.961 4	7,856.961 4	2.1181		7,909.914 9

CalEEMod Version: CalEEMod.2016.3.2

Page 18 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.4 Well Construction Monitoring - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0156	0.5089	0.1183	1.3600e- 003	0.0384	1.6300e- 003	0.0400	0.0103	1.5600e- 003	0.0119		146.9498	146.9498	0.0106		147.2135
Vendor	0.0112	0.3191	0.0922	7.6000e- 004	0.0192	1.5300e- 003	0.0207	5.5300e- 003	1.4600e- 003	6.9900e- 003		80.8347	80.8347	5.4100e- 003		80.9699
Worker	0.0204	0.0145	0.1604	4.4000e- 004	0.0447	3.7000e- 004	0.0451	0.0119	3.4000e- 004	0.0122		44.2968	44.2968	1.4000e- 003		44.3317
Total	0.0472	0.8424	0.3709	2.5600e- 003	0.1023	3.5300e- 003	0.1058	0.0277	3.3600e- 003	0.0310		272.0813	272.0813	0.0174		272.5150

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust					0.0181	0.0000	0.0181	2.2000e- 003	0.0000	2.2000e- 003			0.0000			0.0000
Off-Road	4.4163	43.7703	37.6732	0.0815		2.0363	2.0363		1.9175	1.9175	0.0000	7,856.961 4	7,856.961 4	2.1181		7,909.914 9
Total	4.4163	43.7703	37.6732	0.0815	0.0181	2.0363	2.0544	2.2000e- 003	1.9175	1.9197	0.0000	7,856.961 4	7,856.961 4	2.1181		7,909.914 9

CalEEMod Version: CalEEMod.2016.3.2

Page 19 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.4 Well Construction Monitoring - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/o	day		
Hauling	0.0156	0.5089	0.1183	1.3600e- 003	0.0384	1.6300e- 003	0.0400	0.0103	1.5600e- 003	0.0119		146.9498	146.9498	0.0106		147.2135
Vendor	0.0112	0.3191	0.0922	7.6000e- 004	0.0192	1.5300e- 003	0.0207	5.5300e- 003	1.4600e- 003	6.9900e- 003		80.8347	80.8347	5.4100e- 003		80.9699
Worker	0.0204	0.0145	0.1604	4.4000e- 004	0.0447	3.7000e- 004	0.0451	0.0119	3.4000e- 004	0.0122		44.2968	44.2968	1.4000e- 003		44.3317
Total	0.0472	0.8424	0.3709	2.5600e- 003	0.1023	3.5300e- 003	0.1058	0.0277	3.3600e- 003	0.0310		272.0813	272.0813	0.0174		272.5150

3.5 Well Equipping - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Fugitive Dust		, , ,			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.5974	6.6890	3.2956	7.2900e- 003		0.3189	0.3189		0.2934	0.2934		706.8205	706.8205	0.2286		712.5355
Total	0.5974	6.6890	3.2956	7.2900e- 003	0.0000	0.3189	0.3189	0.0000	0.2934	0.2934		706.8205	706.8205	0.2286		712.5355

CalEEMod Version: CalEEMod.2016.3.2

Page 20 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.5 Well Equipping - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	8.8900e- 003	0.2894	0.0673	7.7000e- 004	0.0174	9.3000e- 004	0.0183	4.7600e- 003	8.9000e- 004	5.6500e- 003		83.5597	83.5597	6.0000e- 003		83.7096
Vendor	0.0112	0.3191	0.0922	7.6000e- 004	0.0192	1.5300e- 003	0.0207	5.5300e- 003	1.4600e- 003	6.9900e- 003		80.8347	80.8347	5.4100e- 003		80.9699
Worker	0.0204	0.0145	0.1604	4.4000e- 004	0.0447	3.7000e- 004	0.0451	0.0119	3.4000e- 004	0.0122		44.2968	44.2968	1.4000e- 003		44.3317
Total	0.0405	0.6229	0.3199	1.9700e- 003	0.0813	2.8300e- 003	0.0841	0.0222	2.6900e- 003	0.0248		208.6912	208.6912	0.0128		209.0112

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.5974	6.6890	3.2956	7.2900e- 003		0.3189	0.3189		0.2934	0.2934	0.0000	706.8205	706.8205	0.2286		712.5355
Total	0.5974	6.6890	3.2956	7.2900e- 003	0.0000	0.3189	0.3189	0.0000	0.2934	0.2934	0.0000	706.8205	706.8205	0.2286		712.5355

CalEEMod Version: CalEEMod.2016.3.2

Page 21 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

3.5 Well Equipping - 2020

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	8.8900e- 003	0.2894	0.0673	7.7000e- 004	0.0174	9.3000e- 004	0.0183	4.7600e- 003	8.9000e- 004	5.6500e- 003		83.5597	83.5597	6.0000e- 003		83.7096
Vendor	0.0112	0.3191	0.0922	7.6000e- 004	0.0192	1.5300e- 003	0.0207	5.5300e- 003	1.4600e- 003	6.9900e- 003		80.8347	80.8347	5.4100e- 003		80.9699
Worker	0.0204	0.0145	0.1604	4.4000e- 004	0.0447	3.7000e- 004	0.0451	0.0119	3.4000e- 004	0.0122		44.2968	44.2968	1.4000e- 003		44.3317
Total	0.0405	0.6229	0.3199	1.9700e- 003	0.0813	2.8300e- 003	0.0841	0.0222	2.6900e- 003	0.0248		208.6912	208.6912	0.0128		209.0112

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2

Page 22 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Aver	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 23 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	Jay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

7-8

CalEEMod Version: CalEEMod.2016.3.2

Page 24 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/c	lay		
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	- - - -	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Mitigated	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

CalEEMod Version: CalEEMod.2016.3.2

Page 25 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/	day							lb/d	day		
Architectural Coating	0.3009			1 1 1		0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/	day							lb/o	day		
Architectural Coating	0.3009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.6202	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Page 26 of 26

Date: 8/20/2019 5:05 PM

La Brea Subarea Wells and Transmission Main Project - Los Angeles-South Coast County, Winter

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type Number

11.0 Vegetation

Beverly Hills MND

GHG Summary - Construction Emissions

		MT/year CO	D₂e		MT CO ₂ e
Phase	Onsite	Hauling	Vendor	Worker	Total
Well Site Demolition and Pump-to-Waste -2019	54	1	0	2	57
Well Construction Monitoring -2019	80	2	1	0	83
Well Construction Monitoring -2020	233	4	2	1	241
Well Equipping - 2020	49	6	6	3	64
Rehabilitation/ Transmission Main Installation - 2019	44	21	1	3	69
Rehabilitation/ Transmission Main Installation - 2020	70	34	1	6	110
Annual Total (2019)	178	23	2	6	208
Annual Total (2020)	352	44	9	10	416
Project Total	530	67	11	16	624
Amoritized Emissions (MT CO2e/year)					21

7-8

GHG Summary - Operational Emissions

Electricity use

Electricity converted to GHG Emissions¹

725,089 kWh/year total - 1 well operating daily 513 MTCO2e/year

¹ https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

Beverly Hills MND

Energy Summary - Construction Fuel Conversion

Fuel Conversion					
Source type	Total MTCO2e/year	Fuel Type	Factor KGCO2/gal	G	allons
Onsite	53) diesel		10.16	52,182
Hauling	6	7 diesel		10.16	6,551
Vendor		ð diesel		10.16	932
Worker	1	5 gasoline		8.89	1,827

7-8

Total Diesel (gal)	59,665
Total Gas (gal)	1,827

Energy Summary - Operation

Mobile Sources

No substantial increase compared to existing maintenance routine

<u>Area, water, waste emissions</u>	Nene		
	None		
<u>Energy Use</u>	Electricity	725 080	Wh war total - 1 well operating daily
	Electricity	725,089	kwii/year totar - 1 wen operating dany
		150	hp pump
		0.74	load factor
		24	hr per day opertion
		0.7457	kW/hp-h
		2664	hp-h per day
		1987	kW hr per day
		725,089	kwh/year per pump
LADWP Total- 2020 Energy and Der	nand Forecast ²	22,492,000,000	kWh/year
		22492	GWh/year
Percentage of Project to LADWP Fo	recast	0.003%	
² http://rates.ladwp.com/Admin/Up	loads/Load%20For	ecast/2017/10/2017%20Reta	ils%20Sales%20Forecast_Final.pdf

Appendix B Biological Resources Data

Selected Elements by Scientific Name Attachment 2, Page 343 of 722



California Department of Fish and Wildlife

California Natural Diversity Database

 Diversity Database

 814) OR Hollywood (3411813)<span</td>

Query Criteria:

Quad IS (Beverly Hills (3411814) OR Hollywood (3411813) OR Topanga (3411815) OR Venice (3311884) OR Inglewood (3311883) OR Van Nuys (3411824) OR Burbank (3411823) OR Canoga Park (3411825))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
tricolored blackbird						
Aglaothorax longipennis	IIORT32020	None	None	G1G2	S1S2	
Santa Monica shieldback katydid						
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Anaxyrus californicus arroyo toad	AAABB01230	Endangered	None	G2G3	S2S3	SSC
Anniella sp.	ARACC01070	None	None	G3G4	S3S4	SSC
California legless lizard						
Anniella stebbinsi southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus	AMACC10010	None	None	G5	S3	SSC
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Astragalus pycnostachyus var. lanosissimus Ventura Marsh milk-vetch	PDFAB0F7B1	Endangered	Endangered	G2T1	S1	1B.1
Astragalus tener var. titi coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
Atriplex pacifica south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
<i>Atriplex parishii</i> Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1

Selected Elements by Scientific Name Attachment 2, Page 344 of 722



California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Bombus crotchii	IIHYM24480	None	None	G3G4	S1S2	
Crotch bumble bee						
Brennania belkini	IIDIP17010	None	None	G1G2	S1S2	
Belkin's dune tabanid fly						
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
California Walnut Woodland						
Calochortus clavatus var. gracilis slender mariposa-lily	PMLIL0D096	None	None	G4T2T3	S2S3	1B.2
Calochortus plummerae	PMLIL0D150	None	None	G4	S4	4.2
Plummer's mariposa-lily						
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Carolella busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
Centromadia parryi ssp. australis	PDAST4R0P4	None	None	G3T2	S2	1B.1
southern tarplant						
Chaenactis glabriuscula var. orcuttiana Orcutt's pincushion	PDAST20095	None	None	G5T1T2	S1	1B.1
Charadrius alexandrinus nivosus	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
western snowy plover						
Chenopodium littoreum	PDCHE091Z0	None	None	G1	S1	1B.2
coastal goosefoot						
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Chorizanthe parryi var. fernandina San Fernando Valley spineflower	PDPGN040J1	Proposed Threatened	Endangered	G2T1	S1	1B.1
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coelus globosus	IICOL4A010	None	None	G1G2	S1S2	
globose dune beetle						
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Danaus plexippus pop. 1	IILEPP2012	None	None	G4T2T3	S2S3	
monarch - California overwintering population						
Deinandra minthornii	PDAST4R0J0	None	Rare	G2	S2	1B.2
Santa Susana tarplant						
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	ARADB10015	None	None	G5T2T3	S2?	

Selected Elements by Scientific Name Attachment 2, Page 345 of 722



California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dithyrea maritima	PDBRA10020	None	Threatened	G1	S1	1B.1
beach spectaclepod						
Dodecahema leptoceras	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
slender-horned spineflower						
Dudleya blochmaniae ssp. blochmaniae	PDCRA04051	None	None	G3T2	S2	1B.1
Blochman's dudleya						
Dudleya cymosa ssp. ovatifolia	PDCRA040A5	Threatened	None	G5T1	S1	1B.1
Santa Monica dudleya						
Dudleya multicaulis	PDCRA040H0	None	None	G2	S2	1B.2
many-stemmed dudleya						
Empidonax traillii extimus	ABPAE33043	Endangered	Endangered	G5T2	S1	
southwestern willow flycatcher						
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
western pond turtle						
Eryngium aristulatum var. parishii	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1
San Diego button-celery						
Eucosma hennei	IILEM0R390	None	None	G1	S1	
Henne's eucosman moth						
Eumops perotis californicus	AMACD02011	None	None	G5T4	S3S4	SSC
western mastiff bat						
Euphilotes battoides allyni	IILEPG201B	Endangered	None	G5T1	S1	
El Segundo blue butterfly						
Helianthus nuttallii ssp. parishii	PDAST4N102	None	None	G5TH	SH	1A
Los Angeles sunflower						
Horkelia cuneata var. puberula	PDROS0W045	None	None	G4T1	S1	1B.1
mesa norkella				0-	000/	
Lasionycteris noctivagans	AMACC02010	None	None	G5	\$3\$4	
		Neze	Neze	05	0.4	
Lasiurus cinereus	AMACC05030	None	None	Go	54	
		Nono	None	C.F.	62	222
western vellow bat	AMACC05070	None	None	65	53	330
Lasthenia alabrata ssp. coulteri		None	None	CAT2	S 2	1B 1
Coulter's coldfields	FDASTSLOAT	None	NULLE	0412	52	10.1
Laterallus iamaicensis coturniculus	ABNME03041	None	Threatened	G3G4T1	S1	FP
California black rail	ADIMIE03041	None	meatened	000411	01	
Malacothamnus davidsonii		None	None	62	S2	1B 2
Davidson's bush-mallow		Hono	Hono	02	02	10.2
Microtus californicus stephensi	AMAFF11035	None	None	G5T1T2	S1S2	SSC
south coast marsh vole						
Monardella hypoleuca ssp. hypoleuca	PDLAM180A5	None	None	G4T3	S3	1B.3
white-veined monardella						
10/12/2021 Board Meeting

Selected Elements by Scientific Name Attachment 2, Page 346 of 722



California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Nama stenocarpa	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
mud nama						
Nasturtium gambelii	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Gambel's water cress						
Navarretia fossalis	PDPLM0C080	Threatened	None	G2	S2	1B.1
spreading navarretia						
Navarretia prostrata	PDPLM0C0Q0	None	None	G2	S2	1B.1
prostrate vernal pool navarretia						
Neotoma lepida intermedia	AMAFF08041	None	None	G5T3T4	S3S4	SSC
San Diego desert woodrat						
Nyctinomops femorosaccus	AMACD04010	None	None	G4	S3	SSC
pocketed free-tailed bat						
Nyctinomops macrotis	AMACD04020	None	None	G5	S3	SSC
big free-tailed bat						
Oncorhynchus mykiss irideus pop. 10	AFCHA0209J	Endangered	None	G5T1Q	S1	
steelhead - southern California DPS						
Onychobaris langei	IICOL4W010	None	None	G1	S1	
Lange's El Segundo Dune weevil						
Onychomys torridus ramona	AMAFF06022	None	None	G5T3	S3	SSC
southern grasshopper mouse						
Orcuttia californica	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
California Orcutt grass						
Panoquina errans	IILEP84030	None	None	G4G5	S2	
wandering (=saltmarsh) skipper						
Passerculus sandwichensis beldingi	ABPBX99015	None	Endangered	G5T3	S3	
Belding's savannah sparrow						
Pelecanus occidentalis californicus	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
California brown pelican						
Perognathus longimembris brevinasus	AMAFD01041	None	None	G5T1T2	S1S2	SSC
Los Angeles pocket mouse						
Perognathus longimembris pacificus	AMAFD01042	Endangered	None	G5T1	S1	SSC
Pacific pocket mouse						
Phacelia stellaris	PDHYD0C510	None	None	G1	S1	1B.1
Brand's star phacelia						
Phrynosoma blainvillii	ARACF12100	None	None	G3G4	S3S4	SSC
coast norned lizard				0.40-700		
Polioptila californica californica	ABPBJ08081	Ihreatened	None	G4G512Q	S2	SSC
				<u> </u>	0)/	
Potentilla multijuga	PDROS1B120	None	None	GX	SX	1A
		News	News	0.4	00	
rseudognapnanium leucocephalum	PDA51440C0	NONE	NONE	64	52	2B.2

10/12/2021 Board Meeting

Selected Elements by Scientific Name Attachment 2, Page 347 of 722



California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Quercus dumosa	PDFAG050D0	None	None	G3	S3	1B.1
Nuttall's scrub oak						
Riparia riparia	ABPAU08010	None	Threatened	G5	S2	
bank swallow						
Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
Riversidian Alluvial Fan Sage Scrub						
Sidalcea neomexicana	PDMAL110J0	None	None	G4	S2	2B.2
salt spring checkerbloom						
Socalchemmis gertschi	ILARAU7010	None	None	G1	S1	
Gertsch's socalchemmis spider						
Sorex ornatus salicornicus	AMABA01104	None	None	G5T1?	S1	SSC
southern California saltmarsh shrew						
Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Coast Live Oak Riparian Forest						
Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Coastal Salt Marsh						
Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	\$3.2	
Southern Cottonwood Willow Riparian Forest						
Southern Dune Scrub	CTT21330CA	None	None	G1	S1.1	
Southern Dune Scrub						
Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Sycamore Alder Riparian Woodland						
Spermolepis lateriflora	PDAPI23080	None	None	G5	SH	2A
western bristly scaleseed						
Sternula antillarum browni	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California least tern						
Streptocephalus woottoni	ICBRA07010	Endangered	None	G1G2	S1S2	
Riverside fairy shrimp						
Symphyotrichum defoliatum	PDASTE80C0	None	None	G2	S2	1B.2
San Bernardino aster				00	00	10.0
Symphyotrichum greatae	PDASTE8000	None	None	G2	S2	1B.3
		Nese	Nese	05	00	000
American hadger	AMAJE04010	None	None	G5	53	550
		Nese	Neza	<u> </u>	0004	000
two-striped garterspake	ARADB30100	None	None	G4	5354	550
		None	Nene	0572	60	0.0
Sonoran maiden fern	PPINE05192	None	None	6513	52	2D.2
		None	Nene	0171	64	
Dorothy's El Segundo Dune weevil	1160L31021	NOTE	NULLE	GIII	31	
		None	None	62	S 2	
mimic tryonia (=California brackishwater snail)	10107007040			02	52	



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Vireo bellii pusillus	ABPBW01114	Endangered	Endangered	G5T2	S2	
least Bell's vireo						

Record Count: 104

Appendix C

Cultural Resources and Paleontological Resources Technical Reports, and AB 52 Consultation Materials

City of Beverly Hills La Brea Subarea Well, Water Treatment, and Transmission Main Project, City of Beverly Hills and Los Angeles, California

7-8

Cultural Resources Assessment Report

Prepared for

September 2019

City of Beverly Hills 455 N. Rexford Dr. Beverly Hills, CA 90210



City of Beverly Hills La Brea Subarea Well, Water Treatment, and Transmission Main Project, City of Beverly Hills and Los Angeles, California

Cultural Resources Assessment Report

Prepared for:

September 2019

City of Beverly Hills 455 N. Rexford Dr. Beverly Hills, CA 90210

Prepared by:

ESA

Project Directors:

Monica Strauss, M.A., RPA Margarita Jerabek, Ph.D.

Report Authors:

Sara Dietler, B.A. Gabrielle Harlan, Ph.D. Hanna Winzenried, M.Sc. Michael Vader, B.A.

Project Location:

Beverly Hills (CA) USGS 7.5-minute Topographic Quad Township 1 South, Range 14 and 15 West, Unsectioned

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STATEMENT OF CONFIDENTIALITY

Cultural resources are nonrenewable, and their scientific, cultural, and aesthetic values can be significantly impaired by disturbance. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the locations of cultural resources are confidential. The legal authority to restrict cultural resources information is in subdivision (r) of Section 6254 and Section 6254.10 of the California Government Code, subdivision (d) of Section 15120 of Title 14 of the California Code of Regulations, Section 304 of the National Historic Preservation Act of 1966, as amended, and Section 9 of the Archaeological Resources Protection Act.

7-8

Table of Contents

City of Beverly Hills La Brea Subarea Well, Water Treatment, and Transmission Main Project

	<u>Page</u>
Executive Summary	ES-1
Introduction Project Location	1 1
Project Description Rehabilitation and Proposed Transmission Main	4 4
Setting Natural Setting Prehistoric Setting Ethnographic Setting Historic Setting History of the Project Area Architectural Themes	
Regulatory Framework State 19 Local 24	19
Archival Research SCCIC Records Search Sacred Lands File Search Historic Maps and Aerial Photographs Building Permits	27
Cultural Resources Survey Methods Results Resource Descriptions	34 34 36 38
Significance Findings P-19-189803 1956 Chariton Street	43 43 43
Recommendations	45
References	49

Appendices

- A. Personnel
- B. Sacred Lands File Search
- C. DPR 523 Forms

List of Figures

Figure 1 Regional Location	2
Figure 2 Project Location	3
Figure 3 Proposed Well Site	7
Figure 4 Southwest Museum, 1912-1914, L.A. HCM No. 283	13
Figure 5 The Outpost II, 1929, LA HCM No. 673	15
Figure 6 Octavius W. Morgan Residence, 1929, LA HCM No. 444	15
Figure 7 Dublin Avenue in the Donna Park Historic District (1937-1938)	16
Figure 8 3861 S. Roxton Avenue (contributor to the Donna Park Historic District),	
1938	16
Figure 9 4256 S. Creed Avenue (contributor to the Leimert Park Historic District),	
1932	17
Figure 10 2861 S. Corning Avenue, 1904	18
Figure 11 5615 W. Homeside Avenue, 1890	18
Figure 12 4711 W. St. Elmo Drive, 1902	19
Figure 13 View of northern portion of the proposed transmission main alignment on	
West 3 rd Street (view facing east)	36
Figure 14 View of southern portion of the proposed rehabilitation alignment on La	
Cienega Boulevard at Pico Boulevard (view facing south)	37
Figure 15 View of southern terminus of the proposed rehabilitation alignment on La	
Cienega Boulevard at the 10 Freeway overpass (view facing south)	37
Figure 16 View of the Primary (west) elevation of 1956 Chariton (view facing west)	38
Figure 17 View of the primary (west) elevation (view facing east)	39
Figure 18 View of the south (side) elevation of the residence (view facing northwest)	40
Figure 19 Rear (east) elevation of the residence (view facing west)	41
Figure 20 Wood casement windows on the north (side) elevation, as viewed from the	
interior (view facing north)	42
Figure 21 Interior view of the living room (view facing west)	42

List of Tables

Table 1 Previous Cultural Resources Investigations	27
Table 2 Previously Recorded Cultural Resources	30
Table 3 City of Los Angeles Building Permits for 1956 Chariton Street	34
Table 4 Owner/Occupancy History for 1956 Chariton Street	
· · · · · · · · · · · · · · · · · · ·	

EXECUTIVE SUMMARY

City of Beverly Hills La Brea Subarea Well, Water Treatment, and Transmission Main Project - Cultural Resources Assessment Report

The City of Beverly Hills has retained Environmental Science Associates (ESA) to prepare a cultural resources assessment in support of an Initial Study Mitigated Negative Declaration (ISMND) being prepared for the La Brea Subarea Well, Water Treatment, and Transmission Main Project (proposed project) pursuant to the California Environmental Quality Act (CEQA). The project proposes to expand local water supply by providing an additional net 1,700 acre-feet per year of groundwater supply in the La Brea Subarea within the Central Groundwater Basin. The proposed project would include the construction of one groundwater production well in the La Brea Subarea, the rehabilitation of an existing 18-inch pipeline, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main. The proposed 16-inch transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply. The Well Site would be located on a property currently owned by the City of Beverly Hills, at 1956 Chariton Street in the City of Los Angeles, and the existing residential structure at the location would be demolished before the construction of Well No. 1. The City is the lead agency responsible for compliance with CEQA. The proposed project would be located within the Los Angeles Basin and overlaps areas within the City of Beverly Hills and the City of Los Angeles.

A records search for the proposed project was conducted on April 11, 2019 by ESA staff at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The records search included a review of all recorded archaeological resources and previous studies within the proposed project area and a 0.5-mile radius, and historic architectural resources within a 0.25-mile radius of the proposed project. For the purposes of this assessment, a study area beyond the project alignment was established by considering all known project components and the optimal zone of the La Brea Subarea and provided additional information on the broader context of the La Brea Subarea.. The records search results indicate that 23 cultural resources have been identified within the proposed project records search area. Three archaeological resources have been previously recorded within a 0.5-mile radius of the proposed project area and four have been previously recorded within the La Brea Subarea. Additionally, a cluster of ten prehistoric village archaeological resources, recorded in the 1950's, is located less than one-mile south and adjacent to the La Brea Subarea. Ten historic architectural resources and one California Historic Landmark (CHL) have been recorded within 0.25 miles of the proposed project and five have been previously recorded within the La Brea Subarea. The three archaeological resources previously

recorded within 0.5 miles of the proposed project as well as the four previously recorded within the La Brea Subarea are prehistoric camp or village sites. Of the 11 architectural resources previously recorded within 0.25 miles of the proposed project, four are located within 100 feet of the proposed project (P-19-187281, -187282, -187283, and -189803). Three of the four resources (P-19-187281, -187282, -187283) were demolished in the early 2000s and are no longer extant. Resource P-19-189803 is a wooden utility pole constructed sometime prior to 1966. P-19-189803, is located within 30 feet of the proposed project and has been previously determined ineligible for listing National Register of Historical Resources (NRHP), but has not been previously evaluated for inclusion in the California Register of Historical Resources (CRHR).

7-8

A Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC) on April 25, 2019 indicated that Native American cultural resources are not known to be located within the proposed project. Consultation has been initiated as required by Assembly Bill 52 (AB 52), and is ongoing between the City of Beverly Hills and Native American tribes and will be summarized in the MND.

A cultural resources survey of the proposed project area was conducted on April 24, 2019 by ESA staff. The survey was aimed at identifying historic architectural resources and archaeological resources within or immediately adjacent to the proposed project. The residence located at 1956 Chariton Street that would be demolished prior to the installation of Well No. 1 was documented and previously recorded resource, P-19-189803 (wooden utility pole,) was revisited to assess its current condition. Both resources were evaluated by ESA, as part of this assessment and are recommended ineligible for listing in the CRHR and do not qualify as historical resources pursuant to CEOA. Ground disturbing activities associated with the proposed project have the potential to encounter unknown, sub-surface historic-period and/or prehistoric archaeological resources that could qualify as historical resource or unique archaeological resources pursuant to CEQA. Sensitivity for archaeological resources has been determined to be moderate to high and these resources could be preserved under the existing streets and historic residential development. Given the potential to encounter subsurface archaeological deposits during proposed project implementation, recommended mitigation measures for the retention of a qualified archaeologist, archaeological resources sensitivity training, archaeological monitoring, and protocols for the inadvertent discovery of archaeological resources and human remains are provided in the *Recommendations* section at the close of this report.

City of Beverly Hills La Brea Subarea Well, Water Treatment, and Transmission Main Project

7-8

Cultural Resources Assessment Report

Introduction

The City of Beverly Hills (City) has retained Environmental Science Associates (ESA) to prepare a cultural resources assessment in support of an Initial Study Mitigated Negative Declaration (ISMND) being prepared for the La Brea Subarea Well, Water Treatment, and Transmission Main Project (proposed project) pursuant to the California Environmental Quality Act (CEQA). The project proposes to expand local water supply by providing an additional net 1,700 acre-feet per year (AFY) of groundwater supply in the La Brea Subarea within the Central Groundwater Basin. The proposed project would include the construction of one groundwater production well in the La Brea Subarea, the rehabilitation of an existing 18-inch pipeline, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main. The proposed 16-inch transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply. The City is the lead agency responsible for compliance with CEQA.

ESA personnel involved in the preparation of this report are as follows: Monica Strauss, M.A., RPA., and Margarita Jerabek, Ph.D., project directors; Sara Dietler, B.A., project manager, surveyor, and report author; Gabrielle Harlan, Ph.D., and Michael Vader, B.A, report authors; Hanna Winzenried, M.Sc., report author and surveyor; and Jason Nielson, GIS specialist. Resumes of key personnel are included in **Appendix A**.

Project Location

The proposed project would be located within the Los Angeles Basin and overlaps areas within the City of Beverly Hills and the City of Los Angeles (**Figure 1**). Specifically, the proposed project is located within unsectioned portions of Township 1 South, Range 14 and 15 West on the Beverly Hills, CA 7.5-minute USGS topographic quadrangle (**Figure 2**).



7-8

SOURCE: ESRI

La Brea Subarea Well and Transmission Main Project

Figure 1 Regional Location



7-8

SOURCE: ESRI; City of Beverly Hills; Beverly Hills and Hollywood Topoquads

ESA

La Brea Subarea Well and Transmission Main Project

Figure 2 Project Location

Project Description

The proposed project includes: the demolition of existing structures at the proposed Well Site; the construction of one well within the La Brea Subarea; the rehabilitation of existing inactive 18 and 24-inch transmission main pipelines along La Cienega Boulevard; and the construction of a new 16-inch transmission main that would convey flows from the proposed Well Site to the City's WTP for treatment. Demolition, rehabilitation, and the construction of new facilities associated with the proposed project are described further below.

7-8

The proposed Well Site would be located on 1956 Chariton Street in the City of Los Angeles (Figure 2). The area is essentially flat and the existing residential structure would be demolished before the construction of the Well. After demolition, a 15-inch storm drain (pump-to-waste pipeline) would be constructed within Chariton Street, to connect to an existing storm drain system within the local streets. When a well is turned on, typical procedure is to "pump-to-waste" for a short duration to flush the well system. This flushing procedure will discharge through the 15-inch storm drain.

The proposed well would include an approximately 150 horsepower (hp) electric pump that would be housed within a new pump building. The pump building would be approximately 700 square feet (sf) with a 3-foot by 3-foot concrete pad underneath. The well-housing would not exceed the height of adjacent structures. Total well depth would be approximately 500 feet. The predicted flow rate for the well is between 500 and 700 gpm. The well-housing would be designed to blend in with the surrounding environment.

Rehabilitation and Proposed Transmission Main

The installation of new groundwater production well in the La Brea Subarea would include the rehabilitation of existing inactive 18 and 24-inch transmission pipelines and the construction of a new 16-inch transmission main alignment to convey water to the City distribution system from the proposed Well Site.

The existing, inactive 18-inch transmission main pipeline is located just north of Interstate 10 (I-10) at La Cienega Boulevard and continues north for approximately 8,000 linear feet (lf) to Olympic Boulevard at a depth of approximately 3 feet below the ground surface (bgs). The City has an easement to allow for the rehabilitation and use of this pipeline. The alignment horizontally and vertically varies at intersections; however, the majority of the pipe is located beneath the existing sidewalk on the west side of La Cienega Boulevard. The existing inactive 24inch transmission main is located within Le Doux Road from Gregory Way north approximately 2,250 liner feat (lf) to Clifton Way, and includes the crossing of Wilshire Blvd. The alignment is located approximately 6-feet east of street centerline at a cover depth that varies between 3.5-feet and 6-feet. The existing 18 and 24-inch pipelines would be rehabilitated as part of the overall transmission main of the project, then connect to the newly constructed 16-inch transmission main pipeline The rehabilitated and new portions of the proposed transmission main would be connected and sized appropriately for anticipated flows. The projected operational flow rate for the proposed production well is in the range of 500 to 700 gpm. An 8-inch diameter pipe would be used for the individual discharge pipeline from the production well. The transmission main would be sized to handle the flow rate of the optimal flow of approximately (2,100 gpm), to allow for use in conjunction with potential future wells in the area. Many of the streets along the transmission main alignment are single lane roads, with existing utilities such as water, sewer, gas, electric, and storm drain.

7-8

Demolition/Site Preparation

The proposed project would demolish existing structures at the Well Site, totaling approximately 6,767 cubic yards of construction material. Generally, ground disturbance during demolition would not extend deeper than 25 feet; concrete below this depth would be left in place. Demolition and site grading activities would require approximately 5 dumpster haul trucks per day and 20 dumpster haul trucks total. Imported soil may be required to level the site after demolition.

New Facilities/Rehabilitation

Production Well

The proposed project would construct a new above-grade well-house and new below-grade production well, as described previously. Construction equipment pertaining to the Well Site would be staged onsite or immediately adjacent to the site, where such areas can be accommodated. Best management practices (BMPs) would be implemented to control erosion. The proposed production well would require continuous 24-hour drilling and testing, and therefore would require temporary overnight lighting. All temporary constructing lighting would be shielded downward and away from the adjacent properties, cars driving along Chariton Street and other roadways, and the surrounding residential neighborhoods.

Transmission Main Rehabilitation and Construction

Pipeline construction equipment will be temporarily staged in areas immediately adjacent to roadways and/or stored off site. The transmission main alignment would be installed primarily within existing roadways and ROW to the extent feasible.

Construction of the proposed transmission main would involve trenching using conventional cut and cover and jack and bore techniques for pipeline portions within the City of Beverly Hills. The transmission main would run along Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street. The trenching technique would include saw cutting of the pavement where applicable, trench excavation, pipe installation, backfill operations, and resurfacing. Open trenches would be between approximately 4 feet wide and 5 feet deep with vertical cuts and trench shoring. Excavation depths would vary depending on location of existing utilities. On average, about 100-200 linear feet of pipeline would be installed per day. Implementation of the new 16-inch transmission main would require the excavation of approximately 11,018 cubic yards of soil. All excavated soil would be hauled away and trenches would be backfilled with 2-sack slurry. Rehabilitation of the existing inactive 18 and 24-inch transmission main pipelines would be executed through the sliplining technique¹. The rehabilitated portion of the 18 and 24-inch existing pipelines will be sliplined with a 13.5-inch carrier pipe (it gets inserted within the 18 and 24-inch pipes). Typical practice in pipeline design is to use pipe fittings called reducers to connect pipes of different sizes. The rehabilitated 18 and 24-inch pipes will connect to the newly constructed 16-inch portion of the transmission main by using a standard ductile iron mechanical joint (18-inch by 16-inch ductile iron reducer) fittings. The design flow rate for the pipeline is 2100 gpm, but the transmission main in its entirety is sized to accommodate up to 3000 gpm. Rehabilitation would require the excavation of approximately 185 cubic yards of soil.

7-8

All impacted areas would be returned to pre-project conditions. Approximately 1,000 sf of various portions of the west sidewalk along La Cienega Boulevard would need to be reinstalled. When a new pipeline is installed, it requires the excavation of a trench through the street/roadway. After a pipeline is installed, the trench should be backfilled and the pavement surface needs to be replaced with new pavement. This is typical construction technique for all segments of a pipeline being installed within an open-trench construction area. Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street would need to be repaved once the new 16-inch transmission main is installed. The total square feet to repaved area is approximately 10,000 sf.

¹ The pipeline rehabilitation method sliplining uses High Density Polyethylene (HDPE) with the rolldown method, or traditional sliplining with fusible polyvinyl chloride (PVC). The sliplining method maximizes the internal diameter of the pipe, which maximizes the benefit of utilizing the existing inactive 18 and 24-inch inch transmission main.



SOURCE: Mapbox; City of Beverly Hills

ESA

La Brea Subarea Well and Transmission Main Project

Figure 3 Proposed Well Site

Setting

Natural Setting

The proposed project is located within residential and commercial areas of Beverly Hills and Los Angeles. Much of the proposed project area is comprised of existing streets lined with residential buildings.

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Prehistoric Setting

The chronology of Southern California is typically divided into three general time periods: the Early Holocene (9,600 cal B.C. to 5,600 cal B.C.), the Middle Holocene (5,600 cal B.C. to 1,650 cal B.C.), and the Late Holocene (1,650 cal B.C. to cal A.D. 1769). This chronology is manifested in the archaeological record by particular artifacts and burial practices that indicate specific technologies, economic systems, trade networks, and other aspects of culture.

While it is not certain when humans first came to California, their presence in Southern California by about 9,600 cal B.C. has been well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 9,150 and 9,000 cal B.C. (Byrd and Raab, 2007). During the Early Holocene (9,600 cal B.C. to 5,600 cal B.C.), the climate of Southern California became warmer and more arid and the human populations, who were represented by small hunter gathers until this point and resided mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources (Byrd and Raab, 2007).

During the Late Holocene (1,650 cal B.C. to cal A.D. 1769), many aspects of Millingstone culture persisted, but a number of socioeconomic changes occurred (Erlandson, 1994; Wallace 1955; Warren, 1968). The native populations of Southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps. Increasing population size necessitated the intensified use of existing terrestrial and marine resources (Erlandson, 1994). Evidence indicates that the overexploitation of larger, high-ranked food resources may have led to a shift in subsistence, towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants (Byrd and Raab, 2007). Between about A.D. 800 and A.D. 1350, there was an episode of sustained drought, known as the Medieval Climatic Anomaly (MCA) (Jones et al., 1999). While this climatic event did not appear to reduce the human population, it did lead to a change in subsistence strategies in order to deal with the substantial stress on resources.

Given the increasing sedentism and growing populations during the Late Holocene, territorial conscription and competition became acute. Primary settlements or village sites were typically established in areas with available freshwater, and where two or more ecological zones intersected (McCawley, 1996). This strategic placement of living space provided a degree of security in that when subsistence resources associated with one ecological zone failed, the resources of another could be exploited (McCawley, 1996). Villages typically claimed and carefully defended fixed territories that may have averaged 30-square miles in size encompassing a variety of ecological zones that could be exploited for subsistence resources (McCawley, 1996).

The Late Holocene marks a period in which specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and non-utilitarian materials were acquired, and travel routes were extended. Trade during this period reached its zenith as asphaltum (tar), seashells, and steatite were traded from Catalina Island (*Pimu* or *Pimugna*) and coastal Southern California to the Great Basin. Major technological changes appeared as well, particularly with the advent of the bow and arrow sometime after cal A.D. 500, which largely replaced the use of the dart and atlatl (Byrd and Raab, 2007).

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Ethnographic Setting

Gabrielino

The proposed project is located in a region traditionally occupied by the Takic-speaking Gabrielino Indians. The term "Gabrielino" is a general term that refers to those Native Americans who were administered by the Spanish at the Mission San Gabriel Arcángel. Prior to European colonization, the Gabrielino occupied a diverse area that included: the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers; the Los Angeles basin; and the islands of San Clemente, San Nicolas, and Santa Catalina (Kroeber, 1925). Their neighbors included the Chumash and Tataviam to the north, the Juañeno to the south, and the Serrano and Cahuilla to the east. The Gabrielino are reported to have been second only to the Chumash in terms of population size and regional influence (Bean and Smith, 1978). The Gabrielino language was part of the Takic branch of the Uto-Aztecan language family.

The Gabrielino Indians were hunter-gatherers and lived in permanent communities located near the presence of a stable food supply. Subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls, rabbit drives, and by burning undergrowth, while larger game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison (Bean and Smith, 1978). The primary plant resources were the acorn, gathered in the fall and processed in mortars and pestles, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly-leafed cherry. Community populations generally ranged from 50 to 100 inhabitants, although larger settlements may have existed. The Gabrielino are estimated to have had a population numbering around 5,000 in the pre-contact period (Kroeber, 1925).

The Late Prehistoric period, spanning from approximately 1,500 years B.P. to the mission era, is the period associated with the florescence of the Gabrielino (Wallace, 1955). Coming ashore near Malibu Lagoon or Mugu Lagoon in October of 1542, Juan Rodriguez Cabrillo was the first European to make contact with the Gabrielino Indians. The Gabrielino are reported to have been second only to their Chumash neighbors in terms of population size, regional influence, and degree of sedentism (Bean and Smith, 1978). Maps produced by early explorers indicate that at least 26 Gabrielino villages were within proximity to known Los Angeles River courses, while an additional 18 villages were reasonably close to the river (Gumprecht, 2001).

The closest village to the proposed project was the village of *Saa'annga*, located south of Ballona Creek approximately 2.5 miles south of the proposed project, (McCawley, 1996). The Kirkman-

Harriman Pictorial and Historical Map of Los Angeles County (Los Angeles Public Library, 1938) depicts three villages located to the north, west, and south of the proposed and are mapped within 2 miles.

7-8

Historic Setting

Spanish Period (1769–1821)

Although Spanish explorers made brief visits to the region in 1542 and 1602, sustained European exploration of southern California began in 1769, when Gaspar de Portolá and a small Spanish contingent began their exploratory journey along the California coast from San Diego to Monterey. This was followed in 1776 by the expedition of Father Francisco Garcés (Johnson and Earle, 1990). In the late 18th century, the Spanish began establishing missions in California and forcibly relocating and converting native peoples. In 1797, Father Fermín Francisco de Lasuen founded the Mission San Fernando Rey de España, located approximately 14.5 miles north of the proposed project (California Missions Resource Center, 2018). Disease and hard labor took a toll on the native population in California; by 1900, the Native Californian population had declined by as much as 90 percent (Cook, 1978). In addition, native economies were disrupted, trade routes were interrupted, and native ways of life were significantly altered.

In an effort to promote Spanish settlement of Alta California, Spain granted several large land concessions from 1784 to 1821. At this time, unless certain requirements were met, Spain retained title to the land (State Lands Commission, 1982).

Mexican Period (1821–1846)

The Mexican Period began when Mexico won its independence from Spain in 1821. Mexico continued to promote settlement of California with the issuance of land grants. In 1833, Mexico began the process of secularizing the missions, reclaiming the majority of mission lands and redistributing them as land grants. According to the terms of the Secularization Law of 1833 and Regulations of 1834, at least a portion of the lands would be returned to the Native populations, but this did not always occur (Milliken et al., 2009).

Many ranchos continued to be used for cattle grazing by settlers during the Mexican Period. Hides and tallow from cattle became a major export for Californios, many of whom became wealthy and prominent members of society. The Californios led generally easy lives, leaving the hard work to vaqueros and Indian laborers (Pitt, 1994; Starr, 2007).

American Period (1846–present)

In 1846, the Mexican-American War broke out. Mexican forces were eventually defeated in 1847 and Mexico ceded California to the United States as part of the Treaty of Guadalupe Hildalgo in 1848. California officially became one of the United States in 1850. While the treaty recognized right of Mexican citizens to retain ownership of land granted to them by Spanish or Mexican authorities, the claimant was required to prove their right to the land before a patent was given. The process was lengthy, and generally resulted in the claimant losing at least a portion of their land to attorney's fees and other costs associated with proving ownership (Starr, 2007).

When the discovery of gold in northern California was announced in 1848, a huge influx of people from other parts of North America flooded into California. The increased population provided an additional outlet for the Californios' cattle. As demand increased, the price of beef skyrocketed and Californios reaped the benefits. However, a devastating flood in 1861, followed by droughts in 1862 and 1864, led to a rapid decline of the cattle industry; over 70 percent of cattle perished during these droughts (McWilliams, 1946; Dinkelspiel, 2008). This event, coupled with the burden of proving ownership of their lands, caused many Californios to lose their lands during this period (McWilliams, 1946). Former ranchos were subsequently subdivided and sold for agriculture and residential settlement.

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The first transcontinental railroad was completed in 1869, connecting San Francisco with the eastern United States. Newcomers poured into northern California. Southern California experienced a trickle-down effect, as many of these newcomers made their way south. The Southern Pacific Railroad extended this line from San Francisco to Los Angeles in 1876. The second transcontinental line, the Santa Fe, was completed in 1886 and caused a fare war, driving fares to an unprecedented low. Settlers flooded into the region and the demand for real estate skyrocketed. As real estate prices soared, land that had been farmed for decades outlived its agricultural value and was sold to become residential communities. The subdivision of the large ranchos took place during this time (Meyer, 1981; McWilliams, 1946).

History of the Project Area

The proposed project is located in an area partially encompassed by the Mexican-era Rancho Rodeo de las Aguas, or the Ranch of the Gathering of the Waters, named for the swamps or "cienegas" that dotted the landscape. The rancho was originally granted to Mexican settlers Maria Rita Valdez and her husband Vicente Valdez in 1822. Vicente, a retired soldier, died in 1828, leaving Maria in charge of the 4,500-acre cattle ranch (PCR Services Corporation, 2011). In 1852 after suffering an Indian attack, Maria moved to the safety of the pueblo of Los Angeles. In 1854, the ranch was sold for \$4,000 to two Americans, Benjamin Davis "Don Benito" Wilson and Major Henry Hancock (PCR Services Corporation, 2011). Don Benito was a major figure in the development of Southern California as well as a founder of the California citrus and viticulture industries. Hancock, a Civil War veteran, surveyed and subsequently acquired large tracts around the La Brea Tar Pits.

In 1862, Hancock sold his interests in the rancho to William Workman, who planned to convert he pasturelands of the rancho to agricultural use. Due to ongoing droughts, Workman's agricultural endeavors failed and much of the rancho lands were sold incrementally for sheep herding. In 1868, much of the rancho was purchased by wool dealer Edward O. Preuss. In 1869, Preuss sold a half-interest in the rancho to Francis F.P. Temple and the two created the De Las Aguas Land Association to subdivide the ranch into 75-acre farms (PCR Services, 2011). The land company failed and the rancho was sold to Henry Hanimel and Charles Denker, managers of the U.S. Hotel in Los Angeles, in 1881. Hanimel and Denker proposed the townsite of Morocco and subdivided the area in 1888. The town was centered around the train station located at present-day Canon Drive and Beverly Drive (PCR Services Corporation, 2011). The townsite of Morocco never materialized and portions of the ranch passed to the Amalgamated Oil Company. However, the oil reserves underlying the area were too deeply buried to be accessed with the technology of the time, and, in 1906, the Amalgamated Oil Company reorganized as the Rodeo Land and Water Company and began to sub-divide the rancho for sale (PCR Services Corporation, 2011). The Rodeo Land and Water Company hired notable California park planner, Wilbur F. Cook, Jr., to plan a community. The community would become Beverly Hills and was one of the earliest planned communities in Southern California.

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The Rodeo Land and Water Company's proposed the construction of a large resort hotel to attract investors and buyers. In 1911, the company commissioned architect Elmer Grey to design the Beverly Hills Hotel (PCR Services Corporation, 2011). In 1914, concern over establishment of a secure water system and the desire to improve the local school system prompted incorporation of City of Beverly Hills. Beginning the 1920s, Beverly Hills became a residential center for stars of the nascent movie industry. In 1920, newlyweds Douglas Fairbanks and Mary Pickford moved to the area, drawing other movie stars including Gloria Swanson, Will Rogers, and Charles Chaplin, creating the "Movie Colony" (PCR Services Corporation, 2011).

The southern portion of the Project Site was originally part of the Rincon De Los Bueyes land grant which means "Corner of the Oxen", it was known as this due to a large ravine at the southeast corner of the grant which served as a natural corral. La Cienega Boulevard, in the present day, follows the former route of this ravine. (Kielbasa 1997:111). Lying immediately south of Ranch Rodeo de las Aguas, Rincon De Los Bueyes was originally public land where citizens from the pueblo could graze their cattle. In 1823the rancho was granted to Bernardo Higuera and Cornelio Lopez. Higuera later bequeathed his ownership in the rancho to his two sons Francisco and Secundino. Franciso then conveyed 100 acres of the rancho to Jose Antonio Rocha II in 1872 who later built the Rocha Adobe which still stands today on Shenandoah Street which continued to be farmland until much of the area and the larger Rancho was repeatedly subdivided, and then later annexed to the City of Los Angeles in 1915as part of the Palms District (Kielbasa 1997:111-114).

Architectural Themes

This report includes an evaluation for a portion of the Project Area located at 1956 Chariton Street and the following themes provide a context for the historic evaluation.

Spanish Colonial Revival, 1912-1942 (SurveyLA, 2018)

By the early 1920s the Mission Revival had given way to the Spanish Colonial Revival. Influential in its spread were the Spanish-style buildings at the 1915 Panama California Exposition in San Diego, designed by Bertram Goodhue and Carleton Winslow, Sr. The buildings in San Diego provided a variety of Spanish forms, including the ornate Churrigueresque, discussed below as a separate sub-theme.

Closer to home is an earlier example of the Spanish Colonial Revival, the Southwest Museum (L.A. Historic-Cultural Monument No. 283) (**Figure 4**). It is located at 234 Museum Drive in the Mount Washington neighborhood of Northeast Los Angeles and constructed of reinforced concrete between 1912 and 1914. Its architects were Sumner Hunt and Silas R. Burns. (It is

reached from Museum Drive by way of a tunnel and elevator, the portal to which was designed by Allison and Allison in a Pre-Columbian Revival style and completed in 1920) (Herr, 2002).

7-8



SOURCE: Los Angeles Public Library

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Figure 4 Southwest Museum, 1912-1914, L.A. HCM No. 283

The Southwest Museum as an institution was founded in 1903 by Charles Lummis, whose home, El Alisal (L.A. Historic-Cultural Monument No. 68) is nearby. The purpose of the museum was to collect, preserve, and exhibit artifacts of the Native Americans of the Southwest. It was the first museum established in Los Angeles and the oldest privately-endowed museum in the state dedicated to Native American culture (Herr, 2002).

The Southwest Museum building illustrates the Spanish Colonial Revival treatment of the structure as a series of picturesquely arranged masses, to be seen in three dimensions. The detailing is austere, with characteristic features limited to expanses of undecorated walls, low-pitched red-tiled gabled roofs, arched windows, and an occasional tower with a parapeted, hipped, or conical roof. This approach was influenced by growing interest in the vernacular architecture of Andalusia, in southern Spain).

Advancing the Spanish Colonial Revival were publications by architects who had studied the historic structures of Mexico and the Mediterranean, in particular that of Andalusia. Typical was *Architectural Details: Spain and the Mediterranean*, published in 1926 by Richard Requa. It stressed the appropriateness of Mediterranean form for a climate such as Southern California and called out the elements of the style. In addition to expanses of unbroken white or pastel-colored walls and low-sloped red tile roofs, Requa noted the importance of enclosed outdoor spaces and the need for details such as wrought iron for balconies and for *rejas*, or window grilles (Polyzoides et al., 1992).

Because of the stress on picturesquely assembled masses, the Spanish Colonial Revival was extremely flexible. It could vary in scale and use. Its only limitation was that it worked best in stand-alone buildings, where its three-dimensional nature could be shown. It was less successful as part of a dense streetscape, tight against neighboring buildings. For that it often employed a variation, the Churrigueresque style (Gebhard and Winter, 2003).

The Spanish Colonial became ubiquitous in 1920s Los Angeles. Most every building type made use of it, employing all forms of construction –wood frame, brick masonry, reinforced concrete, even adobe (discussed in a separate sub-theme). Because of its widespread use, it is best examined by separating examples into building-type categories. These include residential (single-family and multi-family), commercial, industrial, and institutional.

7-8

Single-Family Residential

SOURCE : Office of Historic Resources

The Spanish-Colonial Revival was particularly popular in automobile-oriented residential districts developed during the 1920s. Single family homes ranged from small one-story cottages built on speculation by contractors to large multi-story villas designed by noted architects.² All were characterized by stucco walls, red-tile roofs, simplified detailing, and picturesque massing. An example of a relatively modest architect-designed single-story home is the Octavius W. Morgan Residence of 1929 (L.A. Historic-Cultural Monument No. 444). Located at 181 South Alta Vista Boulevard in the Wilshire district, it was the home of one of the principles in the architectural firm of Morgan, Walls and Clements (Herr, 2002).

Of note is the characteristic asymmetry of the façade, along with the assemblage of low-sloped redtiled gabled roofs and limited openings punched through apparently thick walls. Although construction is stucco on wood frame, Morgan was able to create the feeling of adobe with recessed windows. Also characteristic of the Spanish Colonial Revival are the gable-end attic vents consisting of small-diameter clay pipes arranged in triangles and diamonds (LADBS).

An example of a large two-story single-family residence is the Outpost II from 1929 (L.A. Historic-Cultural Monument No. 673) (**Figure 5**). Located at 1851 Outpost Drive in Hollywood, it occupies the site of the Outpost, an adobe structure in which the Treaty of Cahuenga was signed in 1847, ending California's role in the Mexican War. The architect was R. F. Pierson and construction of the two-story house is of stucco on metal lath over wood frame (Herr, 2002).



-Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

² Neighborhoods of Spanish Colonial Revival style residences are discussed in the Period Revival/Housing the Masses theme of the Architecture and Engineering context.

Figure 5 The Outpost II, 1929, LA HCM No. 673

The vocabulary of stucco walls, low-sloped tiled roofs, and picturesque massing is the same as that found in the Octavius W. Morgan residence (**Figure 6**). Of note are the use of the singleslope or shed roof on the far-left mass, the occasional arched opening, and the stepped enclosure for the exterior stairway at the center left. Of note also is the exterior balcony. It is a feature that is typical of the Monterey Revival Style, discussed below, but here it is treated in a heavier and more ornate manner that is characteristic of the Spanish Colonial Revival.



SOURCE : Office of Historic Resources

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Figure 6 Octavius W. Morgan Residence, 1929, LA HCM No. 444

Community and Operative Builders (1888-1940) (SurvyeLA, 2016)

Single- and multi-family residential districts that were developed by prominent 20th century developer-builders were evaluated using the Developers and the Development Process theme. Within the West Adams-Baldwin Hills-Leimert CPA, there are subdivisions and planned communities developed by significant individuals such as Elwain Steinkamp and Walter Leimert. Resources representing this Context/Theme are located throughout the CPA and generally date to the 1930s (**Figures 7, 8, and 9**). These districts were also evaluated by SurveyLA under the Architecture and Engineering context as significant concentrations of Period Revival style architecture, primarily Spanish Colonial Revival.



SOURCE : SurveyLA

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Figure 7 Dublin Avenue in the Donna Park Historic District (1937-1938)



SOURCE : SurveyLA

Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

Figure 8

3861 S. Roxton Avenue (contributor to the Donna Park Historic District), 1938



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SOURCE : SurveyLA

Figure 9 4256 S. Creed Avenue (contributor to the Leimert Park Historic District), 1932

Early Single-Family Residential Development (1880-1930) (SurveyLA, 2016)

Resources were determined to be eligible as significant examples of early residential development within the CPA if they largely pre-dated the development of surrounding neighborhoods. In the West Adams-Baldwin Hills-Leimert CPA, this included late 19th century and early 20th century residences (**Figures 10, 11, and 12**). These resources are rare remaining examples of the earliest periods of residential development in the area.



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Figure 10 2861 S. Corning Avenue, 1904



Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

Figure 11 5615 W. Homeside Avenue, 1890

SOURCE : SurveyLA

SOURCE : SurveyLA



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SOURCE : SurveyLA

Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

Figure 12 4711 W. St. Elmo Drive, 1902

Regulatory Framework

Numerous laws and regulations require state, and local agencies to consider the effects a project may have on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies.

State

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the state and is codified at *Public Resources Code (PRC) Section 21000 et seq.* CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA (PRC Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The *CEQA Guidelines* (Title 14 California Code of Regulations [CCR] Section 15000 et seq.) recognize in CCR Section 15064.5that historical resources include: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of

the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

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If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 of CEQA and CCR Section 15064.5 of the *CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *CEQA Guidelines*, then the site may be treated in accordance with the provisions of PRC Section 21083, which is as a unique archaeological resource. As defined in PRC Section 21083.2 of CEQA a "unique" archaeological resource is 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:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in PRC Section 21083.2, then the site is to be treated in accordance with the provisions of Section PRC 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (PRC Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. The *CEQA Guidelines* note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (CCR Section 15064.5(c)(4)).

A significant effect under CEQA would occur if a project results in a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5(a). Substantial adverse change is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired" (CCR Section 15064.5(b)(1)). According to CCR Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that:

- A. Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
- B. Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in a historical resources survey meeting the requirements of PCR section 5024.1(g), 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

C. Convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a Lead Agency for purposes of CEQA.

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In general, a project that complies with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Standards) (Grimmer, 2017) is considered to have mitigated its impacts to historical resources to a less-than-significant level (CCR Section 15064.5(b)(3)).

California Register of Historical Resources

The CRHR is "an authoritative guide in California 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 t substantial adverse change" (PRC Section 5024.1(a)). The criteria for eligibility for the CRHR are based upon NRHP criteria (PRC Section 5024.1(b)). Certain resources are determined by the statute to be automatically included in the CRHR, including California properties formally determined eligible for, or listed in, the NRHP.

To be eligible for the CRHR, a prehistoric or historic-period property must be significant at the local, state, and/or federal level under one or more of the following four 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; or
- 4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the CRHR must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the NRHP, but it may still be eligible for listing in the CRHR.

Additionally, the CRHR consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The CRHR automatically includes the following:

- California properties listed on the NRHP and those formally determined eligible for the NRHP;
- California Registered Historical Landmarks from No. 770 onward; and,
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the CRHR.

Other resources that may be nominated to the CRHR include:
• Historical resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the NRHP, the CRHR, and/or a local jurisdiction register);

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- Individual historical resources;
- Historical resources contributing to historic districts; and,
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin, the Coroner is required to contact the California Native American Heritage Commission (NAHC) within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98

California PRC Section 5097.98, as amended, provides procedures in the event human remains of Native American origin are discovered during project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the land owner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

California Government Code Sections 6254(r) and 6254.10

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in PRC Sections 5097.9 and 5097.993 maintained by, or in the possession of, the Native American Heritage Commission, another state agency, or a local agency." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records

that the agency obtains through a consultation process between a California Native American tribe and a state or local agency."

7-8

Assembly Bill 52 and Related Public Resources Code Sections

Assembly Bill (AB) 52 was approved by California State Governor Edmund Gerry "Jerry" Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on December 28, 2018.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information to the public.

7-8

Local

City of Beverly Hills

The City's Historic Preservation Ordinance (Municipal Code Title 10 Chapter 3 Article 32; BHMC 10-3- 32) authorizes the Cultural Heritage Commission (CHC) to recommend the nomination of properties as local landmarks to the City Council. The Council may designate local landmarks and historic districts by the procedures outlined in the ordinance. The Preservation Ordinance also establishes criteria and the process for evaluating and designating properties as potential local landmarks. Under the City's criteria a property must be more than 45 years old, unless it possesses exceptional significance; retain sufficient historical integrity to physically illustrate its significance; and satisfy significance criteria.

To be eligible for local designation as a historic landmark ((Municipal Code Title 10 Chapter 3 Article 32; BHMC 10-3- 3212), properties must satisfy the following criteria:

A. A Landmark must satisfy all of the following requirements:

- 1. It is at least forty five (45) years of age, or is a property of extraordinary significance;
- 2. It possesses high artistic or aesthetic value, and embodies the distinctive characteristics of an architectural style or architectural type or architectural period;
- 3. It retains substantial integrity from its period of significance; and
- 4. It has continued historic value to the community such that its designation as a landmark is reasonable and necessary to promote and further the purposes of this article.

B. In addition to the requirements set forth in Paragraph A above, a landmark must satisfy at least <u>one of the following</u> requirements:

- 1. It is listed on the NRHP of Historic Places;
- 2. It is an exceptional work by a master architect;
- 3. It is an exceptional work that was owned and occupied by a person of great importance, and was directly connected to a momentous event in the person's endeavors or the history

of the nation. For purposes of this paragraph, personal events such as birth, death, marriage, social interaction, and the like shall not be deemed to be momentous;

7-8

- 4. It is an exceptional property that was owned and occupied by a person of great local prominence;
- 5. It is an iconic property; or
- 6. The landmark designation procedure is initiated, or expressly agreed to, by the owner(s) of the property.

City of Los Angeles General Plan

The City of Los Angeles General Plan (adopted 2001) states as its objective, to "protect the City's archaeological and paleontological resources for historical, cultural, research, and/or educational purposes" by continuing "to identify and protect significant archaeological and paleontological resources known to exist or that are identified during land development, demolition, or property modification activities."

In addition, the City will:

continue to protect historic and cultural sites and/or resources potentially affected by proposed land development, demolition, or property modification activities...The City's environmental guidelines require the applicant to secure services of a bona fide archaeologist to monitor excavations or other subsurface activities associated with a development project in which all or a portion is deemed to be of archaeological significance. Discovery of archaeological materials may temporarily halt the project until the site has been assessed, potential impacts evaluated and, if deemed appropriate, the resources protected, documented and/or removed (City of Los Angeles, 2001).

In addition to the NRHP and the CRHR, three additional types of historic designations may apply at a local level:

- 1. Historic-Cultural Monument
- 2. Designation by the Community Redevelopment Agency as being of cultural or historical significance within a designated redevelopment area
- 3. Classification by the City Council as an Historic Preservation Overlay Zone

In addition, the Los Angeles Municipal Code (LAMC) Section 91.106.4.5 states that the Building 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" by a federal, state, or local authority.

City of Los Angeles Cultural Heritage Ordinance

The City of Los Angeles enacted a Cultural Heritage Ordinance in April 1962, which defines Historic-Cultural Monuments as sites, buildings, or structures of particular historic or cultural

significance to the City in which the broad cultural, political, or social history of the nation, state, or City is reflected or exemplified, including sites and buildings associated with important personages or which embody certain distinguishing architectural characteristics and are associated with a notable architect. These Historic-Cultural Monuments are regulated by the City of Los Angeles' Cultural Heritage Commission and the City Council.

7-8

Los Angeles Cultural Heritage Ordinance Eligibility Criteria

The Los Angeles City Council adopted the Cultural Heritage Ordinance in 1967 and amended it in 2007 (Los Angeles Administrative Code, Chapter 9, Division 22, Article 1, Section 22.171.7). The Cultural Heritage Ordinance establishes criteria for designating a local historical resource as an Historic-Cultural Monument (HCM). An HCM 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, including historic structures or sites:

- 1. In which the broad cultural, economic or social history of the nation, State or community is reflected or exemplified; or
- 2. Which is identified with historic personages or with important events in the main currents of national, State or local history; or
- 3. Which embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a study of a period, style or method of construction; or
- 4. Which is a notable work of a master builder, designer, or architect whose individual genius influenced his or her age.

SurveyLA Eligibility Standards

SurveyLA was a citywide survey that identified and documented significant historic resources representing important themes in the City of Los Angeles' history. The survey and resource evaluations were completed by consultant teams under contract to the City of Los Angeles and the supervision of the Office of Historic Resources (OHR). The program was managed by the OHR, which maintains a website for SurveyLA (SurveyLA, 2017). The field surveys covered the period from approximately 1850 to 1980 and included individual resources such as buildings, structures, objects, natural features and cultural landscapes, as well as areas and districts (archaeological resources will be included in a future survey phase). Significant resources reflected important themes in the City of Los Angeles' growth and development in various areas including architecture, city planning, social history, ethnic heritage, politics, industry, transportation, commerce, entertainment, and others. Field surveys, conducted from 2010 to 2017, were completed in three phases by Community Plan Area. All tools and methods developed for SurveyLA met state and federal professional standards for survey work.

Los Angeles' citywide Historic Context Statement (HCS) was designed for use by SurveyLA field surveyors and by all agencies, organizations, and professionals completing historic resources surveys in the City of Los Angeles. The context statement was organized using the Multiple Property Documentation (MPD) format developed by the National Park Service (NPS) for use in nominating properties related by theme to the NRHP. This format provided a consistent framework for evaluating historic resources. It was adapted for local use to evaluate the eligibility

of properties for city, state, and federal designation programs and to facilitate environmental review processes (City of Los Angeles, 2016). The HCS used Eligibility Standards to identify the character defining, associative features, and integrity aspects a property should retain to be a significant example of a type within a defined theme. Eligibility Standards also indicate the general geographic location, area of significance, applicable criteria, and period of significance associated with that type. These Eligibility Standards are guidelines based on knowledge of known significant examples of property types; properties do not need to meet all of them in order to be eligible. Assessment of integrity considers several variables, include the significance criteria under which the resource is eligible.

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Archival Research

SCCIC Records Search

A records search for the proposed project was conducted on April 11, 2019 by ESA staff at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The records search included a review of all recorded archaeological resources and previous studies within the proposed project area and a 0.5-mile radius as well as the optimal zone of the La Brea Subarea where additional wells would later be sited, and historic architectural resources within 0.25 miles of the proposed project. In addition, the California Points of Historical Interest, the California Historical Landmarks, the CRHR, the NRHP, the Archaeological Determinations of Eligibility, and the California State Historic Resources Inventory (HRI) were reviewed.

Previous Cultural Resources Investigations

The records search results indicate that 67 cultural resources studies have been conducted within a 0.5-mile radius of the proposed project area (**Table 1**). Approximately 10 percent of the 0.5-mile records search radius has been included in previous cultural resources surveys. Of the 67 previous studies, eight (LA-01968, -04881, -07088, -08955, -11005, -11363, -11822, and -12522) overlap the proposed project. Approximately 5 percent of the proposed project has been included as part of previous studies.

Authors	Report No. (LA-)	Title	Year
	· · · ·		
Anonymous	03673	Historic Property Survey Report North Outfall Relief Sewer	1987
		Request for Determination of Eligibility for Inclusion in the National Register of Historic	
Anonymous	03678	Places	n.d.
		Request for Determination of Eligibility for Inclusion in the National Register of Historic	
Anonymous	03679	Places	n.d.
		Request for Determination of Eligibility for Inclusion in the National Register of Historic	
Anonymous	03680	Places	n.d.
		San Francisquito Women's Club Park (Special Use Permit SCM302301) Angeles National	
Bartoy, K.	07334	Forest, Los Angeles County, California	2003
Belous, Russell E. and		Preliminary Report on the Archaeology of the La Ballona Creek Area, Los Angeles	
Charles E. Rozaire	00751	County	1950

TABLE 1 PREVIOUS CULTURAL RESOURCES INVESTIGATIONS

Authors	Report No. (LA-)	Title	Year
Billat, Lorna	06520	Nextel Communications Proposed Wireless Telecommunications Service Facilities Southern California	2001
Bissell, Ronald M.	01968*	Cultural Resources Literature Review of Metro Rail Red Line Western Extension Alternatives, Los, Angeles, Los Angeles County, California	1989
Bolin, David P.	06518	Proposed AT&T Wireless Telecommunication Equipment Installation 911 Wilshire Boulevard, Beverly Hill, 90210	2001
Bonner, Wayne	10661	Cultural Resources Records Search and Site Visit Results for AT7T Mobility, LLC Candidate ELO352-01 (Wilshire Medical Center), 9033 Wilshire Boulevard, Beverly Hills, Los Angeles County, California	2010
Bonner, Wayne	11946	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SV11698A (Emack Building), 6330 San Vicente Boulevard, Los Angeles, Los Angeles County, California	2012
Bonner, Wayne	12004	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SV01671B (01671 Amir Development) 8730 Wilshire Boulevard, Beverly Hills, Los Angeles County, California	2012
Bonner, Wayne and Kathleen Crawford	12146	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SV00225A (LA225 Hall Studio) 5005 Washington Boulevard, Los Angeles, Los Angeles County, California	2012
Bonner, Wayne andKathleen Crawford	12114	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SV00065A (SM039 Lexington Ventures) 9350 Wilshire Boulevard, Beverly Hills, Los Angeles County, California	2012
Bonner, Wayne H.	07340	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate La-467-01 (el-044-01) 5035 Coliseum Street, Los Angeles, Los Angeles County, California Records Search Results and Site Visit for Sprint Telecommunications Facility Candidate	2005
Bonner, Wayne H. and Christeen Taniguchi	07344	La60x424a (Louisiana) 5005 West Washington Boulevard, Los Angeles, Los Angeles County, California	2004
Bucknam, Bonnie M.	03583	The Los Angeles Basin and Vicinity: a Gazetteer and Compilation of Archaeological Site Information	1974
Chartkoff, Joe and Kerry Chartkoff	03524	Ucas-073 Venice Boulevard 7-la-187, Los Angeles County	1965
Chartkoff, Kerry and Joe Chartkoff	03525	Ucas-092 Route 2 Freeway Los Angeles County West, Los Angeles, Beverly Hills	1966
Daly, Pam and Nancy Sikes	11642	Westside Subway Extension Project, Historic Properties and Archaeological Resources Supplemental Survey Technical Reports	2012
Dillon, Brian D.	03501	Archaeological Record Search and Impact Evaluation for the Los Angeles Wastewater Program Management Project Los Angeles, California	1990
Duke, Curt	04553	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 619-06, in the County of Los Angeles, California	1999
Duke, Curt	05351	Cultural Resources Assessment for AT&T Fixed Wireless Services Facility Number R315.1, County of Los Angeles, California	2000
Duke, Curt	06483	Cultural Resource Assessment Cingular Wireless Facility No. Sm 022-01 Los Angeles County, California	2001
Duke, Curt	06501	Cultural Resource Assessment Cingular Wireless Facility No. Sm 039-01 Los Angeles County, California	2001
Duke, Curt	06510	Cultural Resource Assessment Cingular Wireless Facility No. Sm 129-02 Los Angeles County, California	2002
Duke, Curt	06513	Cultural Resource Assessment for AT&T Wireless Services Facility Number C924.1, County of Los Angeles, California	2001
Duke, Curt and Judith Marvin	08096	Cultural Resources Assessment Cingular Wireless Facility No. La453-04 City and County of Los Angeles, California	2003
Foster, John M. and Dana Slawson	04667	Historic Resource Evaluation Report Exposition Boulevard Right-of-way Regional Bikeway Project Los Angeles County, California	1999
Greenwood, Roberta S., Scott Savastio, and Peter Messick	10506	Cultural Resources Monitoring: North Outfall Sewer - East Central Interceptor Sewer Project	2004
Hatheway, Roger G.	11822*	Documenting Buildings Located at 143, 145, 147, and 149 N Arnaz Dr, Beverly Hills, California	2001
Hatoff, Brian	10580	Verizon Cellular Communications Tower Site - LTE Beverly Vista, 9033 Wilshire Boulevard, Beverly Hills, CA. 90211	2010
Horne, Melinda C.	11409	Construction Phase Cultural Resources Monitoring and Treatment Plan for the City of Los Angeles North Outfall - East Central Interceptor Sewer Project	2000

Authors	Report No. (LA-)	Title	Year
King, Chester	03587	Prehistoric Native American Cultural Sites in the Santa Monica Mountains	1994
	00055*	Final Report for Year Three Historical and Cultural Resources Survey of Los Angeles:	4000
King, Phil V.	08955*	Sylmar, Watts, Crenshaw, and Vermont/Slauson	1983
Beherec, and Alec Stevenson	13264	La Cienega Interceptor Sewer Rehabilitation Project, Archaeological Survey Report Los Angeles, California	2014
Kyle, Carolyn F.	07088*	Cultural Resource Assessment for Cingular Wireless Facility Sm 226-01 City of Los Angeles Los Angeles County, California	2002
Lanin Bhilinne	05008	Cultural Resource Assessment for Modifications to Pacific Bell Wireless Facility La 281-	2000
	03000	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 225-02, in the	2000
Lapin, Philippe	05328	County of Los Angeles, California	2000
Loftus, Shannon	11363*	Cultural Resource Records search and Site Survey and Historic Architectural Resource- Inventory and Assessment - AT&T Site: EL0417-8 9268 West 3rd Street, Beverly Hills, Los Angeles County, California 90210 CASPR #3551016878	2011
Loffus Shannon	11364	Cultural Resource Records Search and Site Survey and Historic Architectural Resource- Inventory and Assessment, AT&T Site: EL0417-9 424 North Maple Drive, Beverly Hills, Los Angeles County, California 90210 CASPP #2551016878	2011
Londs, Shannon	11304	Cultural Resource Records Search and Site Survey and Historic Architectural Resource-	2011
Loftus, Shannon	11369	Inventory and Assessment, AT&T Site: EL0456-6	2011
Loftus, Shannon	11376	Cultural Resource Records Search and Site Survey - AT&T Site LAC147, Beverly Hills, 464 North Rexford Drive, Beverly Hills, Los Angeles County, California 90210	2011
		Cultural Resource Records Search and Site Survey and Historic Architectural Resource- Inventory and Assessment - AT&T Site: EL0417-10 8950 Beverly Boulevard, West	
Loftus, Shannon	11383	Hollywood, Los Angeles County, California 90210 CASPR #3551016879	2011
		Inventory and Assessment. AT&T Site: EL0459-7 602 North Crescent Drive Beverly Hills,	
Loftus, Shannon	11431	Los Angeles County, California 90210 CASPR#3551016879	2011
	44407	Cultural Resource Records Search and Site Survey and Historic Architectural Resource- Inventory and Assessment. AT&T Site: EL0456-10, 8725 Wilshire Boulevard Beverly	0011
Lottus, Snannon	11437	Cultural Resource Records Search and Site Survey and Historic Architectural Resource-	2011
Loftus, Shannon	11442	Inventory and Assessment. AT&T Site: EL0463-6. West Olympic Boulevard and South Maple Drive Beverly Hills, Los Angeles County, California 90212 CASPR#3551016879	2011
Loftus, Shannon	11445	Cultural Resource Records Search and Site Survey and Historic Architectural Resource- Inventory and Assessment. AT&T Site: EL0463-11. 9001 West Olympic Boulevard Beverly Hills, Los Angeles County, California 90210. CASPR#3551016879	2011
Lattua Channan	10500*	AT&T Site: LAC047, C047 Beverly Hills Ovrelay-C047, 248 North Robertson Boulevard,	2012
Lonus, Shannon	12922	Cultural Resources Records Search and Site Survey AT&T Site EL0462, Wilshire	2012
Loftus, Shannon	12560	Boulevard, 9301 Wilshire Boulevard Beverly Hills, Los Angeles County, California	2013
Malaan Daharah K	04408	Archaeological Assessment for Pacific Bell Mobile Services Telecommunications Facility La 573-01, Located at 3560 South La Cienega Boulevard, City and County of Los	1009
McLean, Deboran K.	04198	Angeles, California	1996
Racer, F.H.	11482	Camp Sites in Harbor District	1939
Robinson, Mark	10860	Exposition Corridor Light Rail Transit Project Construction Phase Cultural Resources Monitoring and Treatment Plan	2007
Robinson, R. W.	00501	Cultural Resources Investigation Prepared for Engineering Services Corporation	1977
Rogers, Leslie	11785	Final Environmental Impact Statement/Final Environmental Impact Report for the Westside Subway Extension	2012
Sirro, Adam	05357	Negative Archaeological Survey Report: 07-la-10-15.4/16.25-07-173-023140, Soundwall on Westbound Route 10 From East of Washington Blvd.	2000
Slawson, Dana	10574	Bridge Evaluation Report: Exposition Boulevard Right-of-way Regional Bikeway Project, Los Angeles County, California	1999
Slawson, Dana and		Historic Property Survey Report - Exposition Boulevard Right of way Regional Bikeway	
John M. Foster	10575	Project, Los Angeles County, California Cold-Planning of 30 Mm of Asphalt Concrete Pavement, Replacing It With Rubberized	1999
Smith, Philomene C.	04881*	Asphalt Pavement in #1 Lane on Route 10	2000
Carlisle, Gail Miller,	10887	Sewer, City of Los Angeles, County of Los Angeles, California	2001

Year
2007
2007
2013
1987
2010
2011
2012
1993
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indicates study overlaps proposed project

Previously Recorded Cultural Resources

The records search results indicate that 23 cultural resources have been identified within the proposed project records search area (**Table 1**). Three archaeological resources have been previously recorded within a 0.5-mile radius of the proposed project area and four have been previously recorded within the La Brea Subarea. Additionally, a cluster of ten prehistoric village archaeological resources, recorded in the 1950's, is located less than one-mile south and adjacent to the La Brea Subarea. Ten historic architectural resources and one CHL have been recorded within 0.25 miles of the proposed project and five have been previously recorded within the La Brea Subarea. The three archaeological resources previously recorded within 0.5 miles of the proposed project as well as the four previously recorded within the La Brea Subarea are prehistoric camp or village sites. Of the 11 architectural resources previously recorded within 0.25 miles of the proposed project, four are located within 100 feet of the proposed project (P-19-187281, -187282, -187283, and -189803). These resources are described in the following paragraphs. A

Primary No (P-19-)	Permanent Trinomial (CA-LAN-)	Other Identifier	Description	Date Recorded	Distance from Project/Within La Brea Subarea	NRHP/CRHR Eligibility
170398	-	2345 Orange Drive	Historic architectural resources: residence constructed in 1918	Not stated	Within La Brea Subarea	Not evaluated
170399	-	Cienega Elementary School	Historic architectural resource: elementary school constructed in 1940	Not stated	Within La Brea Subarea	Not evaluated
170400	-	2838 Orange Drive	Historic architectural resources: residence constructed in 1905	Not stated	Within La Brea Subarea	Not evaluated
175248	-	Los Angeles Center for Enriched Studies	Historic architectural district: multiple buildings associated with Los Angeles Center for Enriched Studies constructed in 1939	1995	0.12 miles	NRHP and CRHR eligible
176946	_	Payne Furnace & Supply Co	Historic architectural resource: industrial building constructed in 1925	1986	180 feet	Appears eligible for NRHP

TABLE 2 PREVIOUSLY RECORDED CULTURAL RESOURCES

177314	-	Regina Theater	Historic architectural resource: theater constructed in 1938	2010	225 feet	Appears eligible for NRHP
177330	-	CHL No.665	California Historic Landmark: plaque commemorating Portola Camp Site	1979	175 feet	Not eligible
187281	-	Salvage Street Maintenance Bldg	Historic architectural resource: public utility building constructed in 1948	1999	50 feet	Determined NRHP ineligible
187282	-	Service Vehicle & Maintenance Bldg	Historic architectural resource: public utility building constructed in 1948	1999	50 feet	Determined NRHP ineligible
187283	-	<u>-</u>	Historic architectural resource: public utility building constructed in 1924	1999	60 feet	Determined NRHP ineligible
187322	-	The Stadium Theater	Historic architectural resource: theater constructed in 1930	2003	0.25 miles	Appears eligible for NRHP
187459	-	LADWP Western District Headquarters	Historic architectural resource: commercial building constructed in 1947	2003	0.21 miles	Not evaluated
187849		3809 61st Street	Historic architectural resources: residence constructed in 1925	2001	Within La Brea Subarea	Recommended not eligible
189803	-		Historic architectural resource: wooden utility pole constructed prior to 1966	2011	30 feet	Determined NRHP ineligible
190145	-	Newton Building	Historic architectural resource: commercial building constructed in 1940	2012	Within La Brea Subarea	Determined NRHP ineligible
190565	-	-	Historic architectural resource: multiple family building constructed in 1930	2013	0.10 miles	Recommended not eligible

Resource Descriptions

P-19-187281 (Salvage Street Maintenance Building)

Resource P-19-187281 is a historic architectural resource consisting of a public utility building constructed in 1948 (SCCIC, 2019a). The resource has been previously evaluated and determined ineligible for listing in the NRHP (Status Code 6Y), but does not appear to have been evaluated for listing in the CRHR. The mapped location of the building is within 50 feet of the proposed transmission main segment on West 3rd Street. A review of Google Earth and confirmed during the survey indicates the building was demolished sometime after 2005 and is no longer present. Therefore, this resource is not considered further in this report.

P-19-187282 (Service Vehicle & Maintenance Building)

Resource P-19-187282 is a historic architectural resource consisting of a public utility building constructed in 1948 (SCCIC, 2019b). The resource has been previously evaluated and determined ineligible for listing in the NRHP (Status Code 6Y), but does not appear to have been evaluated for listing in the CRHR. The mapped location of the building is within 50 feet of the proposed transmission main segment on West 3rd Street. A review of Google Earth and confirmed during the survey indicates the building was demolished sometime after 2005 and is no longer present. Therefore, this resource is not considered further in this report.

P-19-187283 (Public Utility Building)

Resource P-19-187283 is a historic architectural resource consisting of a public utility building constructed in 1924 (SCCIC, 2019c). The resource has been previously evaluated and determined

ineligible for listing in the NRHP (Status Code 6Y), but does not appear to have been evaluated for listing in the CRHR. The mapped location of the building is within 60 feet of the proposed transmission main's northern terminus. A review of Google Earth and confirmed during the survey indicates the building was demolished sometime after 2002 and is no longer present. Therefore, this resource is not considered further in this report.

7-8

P-19-189803 (Wooden Utility Pole)

Resource P-19-189803 is a historic architectural resource consisting of a wooden utility pole constructed sometime prior to 1966 (Loftus, 2011), and meeting the age criteria for a historic resource. The resource has been previously evaluated and determined ineligible for listing in the NRHP (Status Code 6Y), but has not been evaluated for inclusion in the CRHR. The resource is located within 30 feet of the proposed transmission main segment on West 3rd Street.

Sacred Lands File Search

The NAHC maintains a confidential Sacred Lands File (SLF) which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on April 10, 2019 to request a search of the SLF. The NAHC responded to the request in a letter dated April 25, 2019. The results of the SLF search conducted by the NAHC indicate that Native American cultural resources are not known to be located within the proposed project area (**Appendix B**). The City is conducting consultation with appropriate tribes per the requirements AB 52, and the results of this consultation will be summarized in the IS/MND. During consultation for AB 52, the Tribe expressed concern about the high sensitivity of the project alignment.

Historic Maps and Aerial Photographs

Historic maps and aerial photographs were examined to provide historical information about land uses of the proposed project area and to contribute to an assessment of the proposed project's archaeological sensitivity. Available topographic maps include the 1894 and 1900 Los Angeles 30-minute quadrangles, the 1896, 1898, 1902, and 1921 Santa Monica 30-minute quadrangles, the 1924 and 1926 Hollywood 7.5-minute quadrangles, and the 1950 and 1965 Beverly Hills 7.5-minute quadrangles. Sanborn Fire Insurance maps were available for the years 1927 and 1950. Historic aerial photographs were available for the years 1938, 1947, 1953, 1964, 1972, 1989, 1994, 2002, and 2014 (historicaerials.com, 2019).

The 1894, 1896, 1898, 1900, and 1902 maps show little development within the proposed project aside from north-south and east-west oriented roads that bisect the pipeline alignments at various points. A number of swamplands and two tributary of Ballona Creek are depicted in the immediate vicinity of the proposed project. The 1921, 1924, and 1926 maps show the northern half of the proposed project has been developed and is largely comprised of north-south and east-west oriented streets lined with buildings. The Santa Monica via Beverly Hills/Sawtelle Line of the Pacific Electric railway bisects the pipeline alignment near Burton Way in the northern portion of the proposed project. The southern half remains largely undeveloped. The 1955 and 1965 maps show the entirety of the proposed project is developed with north-south and east-west oriented streets. The Pacific Electric railway is no longer depicted bisecting the proposed project.

The Sanborn Fire Insurance Maps largely indicate what is depicted by the historic aerial: that the proposed project area is largely comprised of north-south and east-west oriented streets lined with residential buildings. The maps indicate that the northern terminus of the pipeline alignment was located in the vicinity of a lumber yard, an ice house, and bakery, and that segments of the Pacific Electric railway bisect the present-day streets in which the pipeline alignments would be installed. A large creamery is depicted east of where the proposed pipeline would cross West 18th Street on La Cienega. A residence is depicted at 1956 Chariton Street, where Well No. 1 would be installed, as early as 1927.

7-8

The historic aerial photographs indicate that much of the proposed project was developed with residential streets by 1947. The aerials indicate that the larger buildings adjacent to the proposed project area such as the lumber yard, bakery, ice house, and creamery depicted in the Sanborn maps were demolished at various times and new buildings constructed. The 2002 and 2014 aerial photographs indicate that many of the buildings at the northern terminus of the pipeline alignment were demolished and replaced with the buildings that presently occupy the northern portion of 3rd Street. The 1938 shows the residence at 1956 Chariton Street where Well No. 1 would be installed.

Building Permits

Production Well No. 1 located at 1956 Chariton Street is the only above ground proposed project component that would directly impact a historic architectural resource. Therefore, building permits from the City of Los Angeles's Division of Building and Safety were reviewed to determine the ownership and construction history of the building that could be impacted by well installation (**Table 3**). The first permits on file were the original building permits for the Chariton Street property, which includes both a residence and garage building. These original permits were issued on April 13, 1929 to Timothy R. Kerr. The residence, which was executed in the Spanish Colonial Revival style, was a simple rectangular shape in plan. A permit was also issued at the same time for the construction of a garage, which was square in plan and measured 18 feet by 18 feet. A little more than twenty years after the residence's original construction, a permit was issued on April 5, 1951 for a 12 foot by 17-foot bedroom addition to the rear of the property, flush with the north (side) elevation of the primary residence. A patio roof measuring 14 feet by 14 feet was constructed at the rear of the building and south of the bedroom addition. On September 3, 1982, a permit was issued for another addition measuring 8 feet by 8 feet just south of the location of the previous bedroom addition and where the patio roof was located. This second addition to the building is set back from the south (side) elevation of the primary residence. Other, minor alterations to the residence include the repair of a chimney in 1994 and the re-roofing of the building in 2005.

Issued	Permit#	Owner	Contractor	Architect	Valuation	Description
4/13/1929	10037	Timothy R. Kerr	Owner	Owner	\$2,500	Construction of a new five room residence measuring 34'x28' and 14 feet tall.
4/13/1929	10028	Timothy R. Kerr	Owner	Owner	\$743	Construction of a garage measuring 18'x18' and 10' tall.
4/5/1951	1597	Mr. and Mrs. Hatton	Illegible	-	1,400	Addition to the rear (east) elevation of the building measuring 12'x17' consisting of a bedroom
8/27/1951	LA13359	Mr. and Mrs. Hatton	L.O. Bergum	-	\$250	Construction of a patio roof measuring 14'x14'
9/3/1982	LA49352	Adams	ſ	ſ	\$3,200	Addition to bathroom, located at the rear of the property, south of the previous addition, and set back from the south (side) façade. Measures 8'x8'
11/28/1994	LA33826	Alcuen Adams	-	-	\$2,000	Repair EQ damaged chimney per LA City
7/22/2005	05016- 30000- 15029	Robert A. and Laura M. Adams	Estrada J.C. Roofing Inc.	-	\$4,500	Re-roof with class "a" materials. 16 squares. Tear off existing roofing. Built up roof/hot mop (max 1 overlay total)

TABLE 3
CITY OF LOS ANGELES BUILDING PERMITS FOR 1956 CHARITON STREET

Cultural Resources Survey

Methods

A cultural resources survey of the proposed project area was conducted on April 24, 2019 by ESA staff Sara Dietler, B.A, and Hanna Winzenried, M.Sc. The survey was aimed at identifying

archaeological resources within the proposed project area including the Well Site, and along the Proposed Rehabilitation and Proposed Transmission Main routes. Historic architectural survey focused on the documentation of the building at the Well Site (1956 Chariton Street) and the immediate surroundings. Because the remainder of the project area will include subterranean components, it was not surveyed for historic architectural resources. All resources meeting the OHP's 45-year age threshold were documented on California Department of Parks and Recreation (DPR) 523 forms (**Appendix C**).

7-8

Results

The entirety of the proposed pipeline alignment and rehabilitation is within city streets (**Figure 13 through 15**), surrounded by residential and business development. A windshield survey of the alignment was conducted with periodic inspections of visible ground surfaces adjacent to the roads with landscaping and any ground visibility. The Chariton property was subject to a reconnaissance-level survey and the landscaped surfaces were intensively inspected for the presence of archaeological materials. No archaeological resources were identified as a result of the survey.

7-8



SOURCE : ESA, 2019

-Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

Figure 13

View of northern portion of the proposed transmission main alignment on West 3rd Street (view facing east)



Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

SOURCE : ESA, 2019

Figure 14 View of southern portion of the proposed rehabilitation alignment on La Cienega Boulevard at Pico Boulevard (view facing south)



-Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

SOURCE : ESA, 2019

Figure 15

View of southern terminus of the proposed rehabilitation alignment on La Cienega Boulevard at the 10 Freeway overpass (view facing south)

Resource Descriptions

Previously Recorded Resources

P-19-189803 (Wooden Utility Pole)

Resource P-19-189803 is a historic architectural resource consisting of a wooden utility pole constructed sometime prior to 1966. The resource was visited during the survey and was found to match previous descriptions. The resource has been previously evaluated and determined ineligible for listing in the NRHP (NRHP Status Code 6Y), but has not been evaluated for inclusion in the CRHR or local listing. The resource is located within 30 feet of the proposed transmission main segment located on 3rd Street.

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Newly Recorded Resources

1956 Chariton Street

Architectural Description

1956 Chariton Street (APN 4302-033-273) is a residential building and is a modest example of the Spanish Colonial Revival style of architecture (**Figure 16**). The garage outbuilding that was originally constructed to the rear of the property is no longer extant. 1956 Chariton Street features a rectangular footprint constructed on a concrete foundation. The building has a flat roof, and it is clad in stucco.



Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

SOURCE : ESA, 2019

Figure 16

View of the Primary (west) elevation of 1956 Chariton (view facing west)

Primary Elevation (west)

The residence's primary (west) elevation faces Chariton Street. The front façade of the residence is C-shaped with two projecting wings, the northernmost one features a parapet roof, and the southernmost one has a street-facing gabled roof. On the parapet wing, there are three rounded decorative windows with security bars (alteration). On the south side of the parapet wing is the entrance porch with stucco arches and a shed roof. The front door is non-original. To the south of the door is a large three-paned fixed wood window. A stucco wall partially encloses a patio between the projecting wings. The projecting wing with the street-facing gabled roof (the south wing) has a vinyl hung window with security bars (alteration) (**Figure 17**).

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SOURCE : ESA, 2019

Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

Figure 17 View of the primary (west) elevation (view facing east)

Side Elevation (south)

The side (south) elevation has four windows, one in the rear entry patio, and three on the side elevation. The window by the rear entrance door is a non-original sliding window (alteration). On the side elevation, the easternmost window is a wood casement window with true-divided lites. West of that is a sliding aluminum window (alteration), and the last window on the south elevation is an aluminum sliding window (alteration) (**Figure 18**).



SOURCE : ESA, 2019

Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

Figure 18 View of the south (side) elevation of the residence (view facing northwest)

Rear Elevation (east)

The residence's rear (east) elevation has two additions and a non-original patio roof (alterations). There is a large addition on the north half with wood clearstory sliding windows. On the addition's south elevation there is a rear entrance patio with a non-original door. A smaller bathroom addition is built south of the larger addition. To the south of that is a jalousie window (alteration) (**Figure 18**).



SOURCE : ESA, 2019

Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

Figure 19 Rear (east) elevation of the residence (view facing west)

Side Elevation (north)

The residence's north (side) elevation is largely obscured, due to its close proximity to the neighboring residence. Therefore, observations of the features that define it were made from the interior of the residence, rather than from the exterior. Based upon these observations from the interior, there are two wood casement windows located on the west half of the north elevation, and a vinyl hung window to the west (alteration) (**Figure 20**).



	-Beverly Hills MND Groundwater Well and Pipeline Project/190167.00
SOURCE : ESA, 2019	

Figure 20 Wood casement windows on the north (side) elevation, as viewed from the interior (view facing north)

Interior

The interior of the structure has been altered. However, the main entrance hall and living room have the curved shape of the ceiling, original wood floors, trim, and fireplace, windows, and archways (**Figure 21**).



SOURCE : ESA, 2019

Beverly Hills MND Groundwater Well and Pipeline Project/190167.00

Figure 21 Interior view of the living room (view facing west)

Occupancy and Ownership History

City directories and building permits on file with the City's Building Division, as well as the County Assessor, U. S. Census, and other records, were reviewed to determine if the subject property has any significant associations with the productive lives of historic personages. **Table 4** below summarizes the occupancy and ownership history of 19566 Chariton Street.

Year	Source	Owner/Occupant
1929	Building Permit	Timothy R. Kerr
1942	Los Angeles Directory Co.	Leslie Mellor
1951	Building Permits	Mr. and Mrs. Hatton

 TABLE 4

 Owner/Occupancy History for 1956 Chariton Street

Year	Source	Owner/Occupant
1953-1956	R.L. Polk & Co.	Roger L. Holtan
	Voter Registration	Irene Holtan
	Pacific Telephone	
1980	Pacific Telephone	Sceka Abubakri
1982-1994	Building Permits	Alcuen Adams
1985`	Pacific Bell	Eric S. Bross
2005	Building Permits	Robert A Adams
		Laura M. Adams
2006	Haines Co., Inc.	Junald Bavani

Significance Findings

Two historic architectural resources have been identified within or immediately adjacent to the proposed project and include an wooden utility pole constructed prior to 1966 (P-19-189803) and the residence located at 1956 Chariton Street. The following paragraphs present the significance findings for both resources.

P-19-189803

Resource P-19-189803 has been determined ineligible for listing in the NRHP (Status Code 6Y), but has not been previously evaluated for inclusion in the CRHR. The NRHP evaluation for the resource did not identify that the resource was associated with a significant event (Criteria A/1), nor does it appear to be associated with a significant person or persons (Criterion B/2) (Loftus,2011). The resource is a typical example of a mid-20th century wooden utility pole does not possess qualities of design or distinctive characteristics of design and the work of a master (Criterion C/3) (Loftus, 2011). Based on this evaluation, ESA recommends that resource P-19-189803 is not eligible for listing in the CRHR and does not qualify as a historical resource. In addition, the resource is not listed for local significance. This resource will not be directly or indirectly impacted by the project and no additional evaluation or recommendations are warranted.

1956 Chariton Street

As previously described, 1956 Chariton Street is a single-family residence, and this building type was evaluated under the historical and architectural themes that follow: the Spanish Colonial Revival Architectural Style (1912-1942), Community and Operative Builders (1888-1940), and Early Single-Family Residential Development (1880-1930).

Criterion 1: Events

The subject property is located in Tract 1250 in the West Adams Community Planning Area, and this tract was a medium-sized subdivision first established in 1911. Significant development in the neighborhood primarily included single-family residential construction. However, there was also with some additional commercial development along South La Cienega Boulevard that was built to serve the neighborhood. This tract is one of many developed throughout West Adams in

the early 20th century. Additionally, the primary residence was constructed in 1929 which was roughly around the time the rest of the tract was developed. West Adams-Baldwin Hills-Leimert Community Plan Area (CPA) is largely comprised of single-family residential neighborhoods such as the neighborhood that 1956 Chariton Street is located within. However, Tract 1250 is not a tract with excellent examples of architectural styles, nor is it a significant example of streetcarrelated development. Furthermore, the neighborhood was not developed by any significant individuals such as Elwain Steinkamp or Walter Leimert. 1956 Chariton Street is an example of a relatively early single-family residence, as it was developed in 1929. However, it is not a rare remaining example of the earliest periods of residential development in the area. Therefore, while 1956 Chariton Street is an example of the development patterns of the neighborhood, it does not appear to have made a significant contribution to the settlement patterns of the area as it is not unique or precedent-setting in any way. Additional research on 1956 Chariton Street did not reveal any significant events associated with either the primary residence or the (nowdemolished) garage buildings. Moreover, 1956 Chariton Street was not found to be historically significant in SurveyLA's survey of West Adams-Baldwin Hills-Leimert, which was conducted in 2016, and ESA concurs with the survey's findings. As a result, 1956 Chariton Street does not appear to meet the eligibility requirements as either an individual resource or a contributor to a district under CRHR Criterion 1, or Los Angeles Historic-Cultural Monument Criterion 1.

7-8

Criterion 2: Significant Persons

The occupancy and ownership history for the subject property was researched by reviewing City of Los Angeles directories, building permits, Los Angeles County Assessor records, and the U. S. Census. Archival research did not reveal any significant persons associated with the property. Therefore, 1956 Chariton Street does not appear to be associated with significant personages or events in order to meet the eligibility requirements as either an individual resource or a contributor to a district under CRHR Criterion 2, or Los Angeles Historic-Cultural Monument Criterion 2.

Criterion 3: Design/Construction

The residence is a modest example of a Spanish Colonial Revival style single-family residence. It has some of the character-defining features such as asymmetrical facades, stucco siding, tile trim, and arched openings. However, it does not have higher design elements such as distinctive capped chimneys, or towers used as vertical accents. Further, the building has been altered with changed window types, including one on the front façade on the south wing, and materials as well as large additions to the rear of the residence and the demolition of the original garage. Further, it was not designed by any architect, let alone a master architect. Therefore, 1956 Chariton Street does not appear to meet the eligibility requirements as either an individual resource or a contributor to a district under CRHR Criterion 3, or Los Angeles Historic-Cultural Monument Criterion 3.

Criterion 4: Data Potential

While most often applied to archaeological districts and sites, Criterion 4 can also apply to buildings, structures, and objects that contain important information. In order for these types of properties to be eligible under Criterion 4, they themselves must be, or must have been, the

principal source of the important information. 1956 Chariton Street does not appear to yield significant information that would expand our current knowledge or theories of design, methods of construction, operation, or other information that is not already known. Therefore, 1956 Chariton Street has not yielded or are not likely to yield information important to prehistory or history and do not appear to satisfy CRHR Criterion 4.

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Integrity

The CRHR recognizes a property's integrity through seven aspects or qualities: location, design, setting, materials, workmanship, feeling, and association. Eligible properties should retain several, if not most, of these aspects. Both registers require that a resource retain sufficient integrity to convey its significance, and the property must retain the essential physical features that enable it to convey its historical identity. Integrity is based on significance and understanding why a property is important. *National Register Bulletin 15* states that "only after significance is fully established can you proceed to the issue of integrity" (U.S. Department of the Interior, 2002). Since 1956 Chariton Street was not identified as significant under any of the applicable state criteria, an integrity analysis was not conducted.

Recommendations

As a result of this study, one historic architectural resources, 1956 Chariton Street was identified within the proposed project area. This resource is recommended ineligible for listing in the CRHR, is not listed locally, and does not qualify as historical resources pursuant to CEQA. As such the proposed project would not result in significant impacts to known historical resources.

Prior to project approval, should future wells be added, a review of the record search and other background data on land use shall be reviewed and any areas that were not surveyed as part of this study, should be surveyed by a qualified archaeologist and a qualified architectural historian for the purposes of identifying eligible resources. The survey should identify and evaluate the significance of any potentially eligible resources that may be directly or indirectly impacted by the proposed project, and should be documented in an addendum technical report. Any eligible resources identified in newly surveyed areas should be avoided, where feasible, and appropriate treatment and mitigation procedures implemented where avoidance is not possible.

No archaeological resources were identified within or immediately adjacent to the known proposed project area. The proposed project includes the installation of a new transmission main, the rehabilitation of an existing transmission main, and the installation of Well No. 1. The installation and rehabilitation of the transmission mains would involve cut and cover excavations extending to depths of 5 feet within existing city streets. The installation of Well No. 1 would require the demolition of the residence at 1956 Chariton Street and excavations associated with the demolition would extend to depths of up to 25 feet. These ground disturbing activities have the potential to encounter unknown, sub-surface historic-period and/or prehistoric archaeological resources that could qualify as historical resource or unique archaeological resources pursuant to CEQA. Given that the rehabilitation of the transmission mains will occur within city streets with existing utilities, the likelihood of encountering intact archaeological deposits is moderate to low. However, the installation of new transmission mains may include trenching in undisturbed or

moderately disturbed sediments and so the sensitivity is considered moderate to high. As described above the majority of the project alignment is within historic roads which were built in the 1940's. Historically, road construction did not require substantial excavation and historic and prehistoric sites or resources may be capped and preserved under the roads. A large number of prehistoric sites and villages are known to have been located less than a mile from the southern terminus of the known project alignment and redeposited archaeological material could be encountered during excavation, and intact materials could be encountered in trench sidewalls or if the rehabilitation requires additional excavation. During consultation for AB 52, the Tribe expressed concern about the high sensitivity of the project alignment. The demolition work at 1956 Chariton Street also has a high likelihood of encountering historic-period subsurface archaeological deposits associated with the residence such as privies or refuse deposits.

Given the potential to encounter subsurface archaeological deposits during proposed project implementation, ESA provides the following recommended mitigation measures to reduce potential impacts to archaeological deposits that may qualify as historical resources or unique archaeological resources to less than significant.

Mitigation Measure CUL-1: Retention of Qualified Archaeologist. Prior to the start of any ground disturbing activities, a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2008) shall be retained by the City of Beverly Hills to carry out all mitigation measures related to cultural resources. In addition, the City of Beverly Hills will retain a Native American monitor to work in tandem with the archaeologist in the areas and during activities with potential to encounter prehistoric archaeological resources.

CUL-2: Cultural Resources Sensitivity Training. Prior to start of any ground-disturbing activities, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel associated with the proposed project. Construction personnel shall be informed of the types of cultural resources that may be encountered during construction, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City of Beverly Hills shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance

CUL-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the qualified archaeologist) shall observe all excavation activities associated with the installation of Well No. 1. For the portion of the alignment requiring installation of the new transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring of all excavations including trenching and bore pits. For the portion of the alignment which involves the rehabilitation of existing transmission mains, an archaeological monitor will conduct full time monitoring on all access points along the rehabilitation alignment. Should the soils prove to be too disturbed to contain archaeological resources these spot checks can be reduced or discontinued. Conversely, if the sediments are found to contain archaeological resources, the qualified archaeologist may recommend full time monitoring for such areas along the route.

The qualified archaeologist, in coordination with the City of Beverly Hills, may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the proposed project. The archaeological monitor(s) shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed in Mitigation Measure CUL-4). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to the City of Beverly Hills. The qualified archaeologist shall submit a copy of the final report to the SCCIC.

CUL-4: Unanticipated Discoveries. In the event of an unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City of Beverly Hills, and the appropriate Native American representatives for prehistoric resources, on the significance of the resource.

If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City of Beverly Hills that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource and makes recommendations for curation or donation to appropriate curation facilities. The qualified archaeologist and the City of Beverly Hills shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.

CUL-5: Unanticipated Discovery of Human Remains and Associated Funerary

Objects. In the event human remains and/or associated funerary objects are encountered during construction of the proposed project, all activity in the vicinity of the find shall cease (within 100 feet). Human remains discoveries shall be treated in accordance with and California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, requiring assessment of the discovery by the County Coroner, assignment of a Most Likely Descendant by the NAHC, and consultation between the Most Likely Descendant and the landowner regarding treatment of the discovery. Until the landowner has conferred with the Most Likely Descendant, the City of Beverly Hills shall ensure that the

immediate vicinity where the discovery occurred is not disturbed by further activity and that further activities take into account the possibility of multiple burials.

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EDUCATION

MA, Archaeology, California State University, Northridge

BA, Anthropology, California State University, Northridge

AA, Humanities, Los Angeles Pierce College

22 YEARS OF EXPERIENCE

SPECIALIZED EXPERIENCE

Treatment of Historic and Prehistoric Human Remains

Archaeological Monitoring

Complex Shell Midden Sites

Groundstone Analysis

PROFESSIONAL AFFILIATIONS

Register of Professional Archaeologists (RPA), #12805

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

QUALIFICATIONS

Exceeds Secretary of Interior Standards

CA State BLM Permitted

Monica Strauss, RPA

Director, Southern California Cultural Resources Group

7-8

Monica provides senior oversight to a multi-disciplinary team of cultural resources specialists throughout Southern California, including archaeologists, architectural historians, historians, and paleontologists. During her 22 years of practice, Monica has successfully directed hundreds of cultural resources projects meeting local, state, and/or federal regulatory requirements. Monica's strength lies in assisting clients in navigating complex cultural resources issues in the contexts of the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and Section 106 of the National Historic Preservation Act (NHPA). Monica's experience ranges from large infrastructure projects that are controversial and multi-jurisdictional to smaller development projects that are important to local agencies and stakeholders. She has excellent experience working with agencies to develop creative mitigation to address challenging cultural resources impacts. She directs a staff who conduct Phase 1 archaeological/paleontological and historic architectural surveys, construction monitoring, Native American outreach, archaeological testing and treatment, historic resource significance evaluations, and large-scale data recovery programs. Monica is expert in the area of Assembly Bill 52 and routinely provides training to her clients as well as being a workshop content author and session presenter for the Association of Environmental Professionals on the topic.

Relevant Experience

County of Los Angeles, Department of Public Works, Arroyo Seco Bike Path Phase I Cultural Resources Evaluation, Los Angeles, CA. *Project Director.* Working for the County of Los Angeles, Department of Public Works in connection with a project to make improvements to the Arroyo Seco Channel, Monica managed all aspects of Section 106 review in accordance with Caltrans Cultural Resources Environmental guidelines. Monica and her team evaluated the Arroyo Seco Channel, identified character-defining features, informed the design of channel improvements to retain such features, and addressed the channels' potential for eligibility as part of a larger Los Angeles Country water management district. She developed the research strategy, directed the field teams, and prepared cultural resources assessment documentation for approval by Caltrans and FHWA, as well as the cultural resources section for a Mitigated Negative Declaration.

Los Angeles Department of Water and Power (LADWP) Foothill Trunk Line Project. City of Los Angeles, CA. *Cultural Resources Senior Reviewer*. ESA archaeologists have prepared a Phase I cultural resources study and EIR cultural resources section for the Los Angeles Department of Water and Power (LADWP) Trunk Line Project, located in the City of Los Angeles, CA. The proposed project includes the replacement of 16,600 feet of existing 24-inch-, 26-inch-, and 36-inchdiameter welded steel pipe and 30-inch-diameter riveted steel pipe with a 54inch-diameter welded steel pipe along Foothill Boulevard within the districts of Pacoima and Sylmar. Monica served as the Senior Reviewer for the Phase I cultural resources study and EIR section.

7-8

Los Angeles Department of Water and Power, Scattergood Olympic Transmission Line Monitoring, Los Angeles County, CA. Cultural Resources Principal Investigator. The Los Angeles Department of Water and Power (LADWP) is proposing to construct and operate approximately 11.4 miles of new 230 kilovolt (kv) underground transmission line that would connect the Scattergood Generation Station and Olympic Receiving Station. The project includes monitoring of potential vault location testing. Monica currently coordinates and provides daily oversight to archaeological, Native American, and paleontological monitors. An Archaeological Resources Monitoring Report and a Paleontological Resources Monitoring Report documenting the monitoring findings will be submitted, together with daily monitoring logs, at the close of the project.

Los Angeles County Waterworks District 40 (LACWWD40) Regional Recycled Water Project, Phase 2, Palmdale, CA. *Cultural Resources Project Director.* ESA was retained by LACWWD40 in 2009 to prepare an Initial Study/Environmental Assessment and cultural resources technical study for Phase 2 of the Regional Recycled Water Project. In 2010 and 2011, Monica directed a team of ESA archaeologists who performed a pedestrian survey of the 5.25 linear mile project area and documented archaeological sites encountered. Nine cultural resources were documented during the survey; however, because the project APE was narrowed after the survey, only four are located within the current project area.

Sweetwater Reservoir, Water Main Replacement, San Diego County, CA. *Cultural Resources Principal Investigator*. ESA was retained by Sweetwater Authority to prepare an IS/MND for the replacement of a 36-inch pipeline leading from Sweetwater Dam. Sweetwater Dam was originally constructed in the late 19th century and was subject to upgrades in 1917. ESA conducted a Phase 1 Cultural Resources Assessment including archival research, pedestrian, survey, historical research, Native American outreach, and the preparation of a technical report documenting archaeological and historic-architectural resources that might be impacted by the project. The study concluded that features that would be altered by the project that were contributing elements to the historic dam would need to be replaced in kind. Monica directed the team of researchers which conducted this work, assisted in evaluating project impacts to the dam, and facilitated in the development of appropriate mitigation.

City of Los Angeles, Department of Water and Power, First Street Trunk Line Monitoring and Assessment, Los Angeles, CA. *Project Director.* As a consultant to the City of Los Angeles Department of Water and Power, Monica directed paleontological and archaeological monitoring of utilities installations on a continuous basis for over one year. She responded to monitoring discoveries including historic-period utility pipes and determined the appropriate mitigation in the form of recordation.



EDUCATION

PhD, Art History, University of California, Los Angeles

MA, Architectural History, School of Architecture, University of Virginia

Certificate of Historic Preservation, School of Architecture, University of Virginia

B.A., Art History, Oberlin College

30 YEARS EXPERIENCE

AWARDS

2016 Preservation Design Award, Home Savings and Loan Association Montebello Branch Interpretive Exhibit, California Preservation Foundation

2014 Preservation Award, The Dunbar Hotel, L.A. Conservancy

2014 Westside Prize, The Dunbar Hotel, Westside Urban Forum,

2014 Design Award: Tongva Park & Ken Genser Square, Westside Urban Forum

2012 California Preservation Foundation Award, Queen Mary Conservation Management Plan, California Preservation Foundation

Dr. Jerabek, PhD

7-8

Historic Resources Director

Dr. Jerabek has 30 years of professional practice in the United States with an extensive background in historic preservation, architectural history, art history and decorative arts, and historical archaeology. She specializes in Visual Art and Culture, 19th-20th Century American Architecture, Modern and Contemporary Architecture, Architectural Theory and Criticism, Urbanism, and Cultural Landscape, and is a regional expert on Southern California architecture. Her qualifications and experience meet and exceed the Secretary of the Interior's Professional Qualification Standards in History, Architectural History, and Archaeology.

Dr. Jerabek has managed and conducted a wide range of technical studies in support of environmental compliance projects, developed preservation and conservation plans, and implemented preservation treatment projects for public and private clients throughout California and the United States. She provides expert assistance with environmental review, from due diligence through planning/design review and permitting and when necessary, implements mitigation and preservation treatment measures. Dr. Jerabek regularly performs assessments to ensure conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and assists clients with adaptive reuse/rehabilitation projects by providing preservation design and treatment consultation, agency coordination, legally defensible documentation, construction monitoring and conservation treatment.

As primary investigator and author of hundreds of technical reports, plan review documents, preservation and conservation plans; Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), Historic American Landscapes Survey (HALS) reports; construction monitoring reports; and salvage reports and relocation plans, she is a highly experienced practitioner and expert in addressing historical resources issues while supporting and balancing project goals. Dr. Jerabek is an expert in the evaluation, management and treatment of historic properties for compliance with Sections 106 and 110 of the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), Section 4(f) of the Department of Transportation Act, California Environmental Quality Act (CEQA), and local ordinances and planning requirements.

PROFESSIONAL AFFILIATIONS

California Preservation Foundation

Santa Monica Conservancy

Society of Architectural Historians, Life Member

American Institute of Architects (AIA), National Allied Member

Neutra Institute, Fellow

Cultural Resources Assessment for the Proposed Pasadena Water and Power Recycled Water Project, City of Pasadena, County of Los Angeles, CA. *Project*

7-8

Manager for Historical Resources/Principal Architectural Historian/Cultural Landscape Specialist. Cultural Resources Investigations for EIS/EIR for proposed construction of recycled water project. Prepared Section 106 Effects Evaluation for undertaking that would result in potential adverse effects to two historic districts, Pasadena Arroyo Parks and Recreation District, and Arroyo Seco Flood Control Channel District. Conducted Secretary of the Interior's Standards plan reviews and provided project design recommendations to reduce potential effects. Project Cost: \$20,970 / End Date: 2012

Mills Act Tax Credit Application, 1210 Coldwater Canyon, Beverly Hills, CA.

Project Manager and Principle Investigator. ESA prepared a landmark nomination and Mills Act Tax Credit Application for the Rosenstiel Residence, a Mid-Century Modern style single-family residence designed by the architectural firm of Gruen + Krummeck in 1950. As an exceptional example of Mid-century Modern style residential architecture designed by master architect Victer Gruen, the Rosenstiel Residence was designated City of Beverly Hills. Following the designation of the Rosenstiel Residence, ESA provided preservation consultation to usher the client through the Mills Act process. Working with the client's architect and contractor, ESA provided guidance and consultation regarding the required Rehabilitation/ Restoration Maintenance Plan's compliance with the Secretary of Interior's Standards for Rehabilitation. ESA worked with the city of Beverly Hills' Community Development Department to ensure all Mills Act materials were filled out appropriately and attend the final site walk and Cultural Heritage Commission hearing where the Rosenstiel Residence was successfully awarded a Mills Act contract in July of 2017.

1228 N. Flores Historic Resources Assessment and Mills Act Tax Credit

Application, West Hollywood, CA. *Project Director and Principal Investigator.* ESA conducted a historic resources assessment of a single-family residence located at 1228 North Flores Street in the city of West Hollywood for compliance with CEQA. The proposed project intended to demolish one existing single-family residence for redevelopment of the property site. The property was determined eligible as a contributor to a potential thematic grouping of historic Craftsman residences in the City of West Hollywood. After the property was designated, ESA subsequently prepared a restoration plan and Mills Act application for the property.

603 Doheny Road Landmark Nomination and Mills Act Tax Credit Application, Beverly Hills, CA. *Project Manager and Author*. ESA prepared a Landmark Nomination and Mills Act Tax Credit Application for The William E. Palmer and Liliore Green Palmer Residential Estate, 603 Doheny Road in Beverly Hills, California. Built in 1940, the Regency style estate is the most architecturally significant residence of master builder James F. Dickason in Beverly Hills. Dickason incorporated a pre-existing Canary Pine Forest and natural spring into the project. The property is identified with an important event in local history, creation of the urgency ordinance prohibiting the removal of trees after Merv Griffin sought a permit to remove Canary Pine trees and subdivide the estate. The property embodies the distinctive characteristics and ideals of Regency and Rustic architecture and possesses high artistic values as an example of an interwar-period estate that sought to harmonize with the natural setting. The ESA Mills Act application included maintenance, repair and restoration projects for the residence, pool house, Rustic-style cabin, spring house and Canary Pine



EDUCATION

BA. Anthropology, San Diego State University

20 YEARS OF EXPERIENCE

CERTIFICATIONS/ REGISTRATION

California BLM Permit, Principal Investigator, Statewide

Nevada BLM Permit, Paleontology, Field Agent, Statewide

PROFESSIONAL AFFILIATIONS

Society for American Archaeology (SAA)

Society for California Archaeology (SCA)

Sara Dietler

7-8

Archaeologist

Sara is a senior archaeology and paleontology lead with 20 years of experience in cultural resources management in Southern California. As a senior project manager, she manages technical studies including archaeological and paleontological assessments and surveys, as well as monitoring and fossil salvage for many clients, including public agencies and private developers. She is a cross-trained paleontological monitor and supervisor, familiar with regulations and guidelines implementing the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and the Society of Vertebrate Paleontology guidelines. She has extensive experience providing oversight for long-term monitoring projects throughout the Los Angeles Basin for archaeological, Native American, and paleontological monitoring compliance projects and provides streamlined management for these disciplines.

Relevant Experience

Venice Dual Force Main Project, Venice, CA. *Cultural Resources Lead.* The Venice Dual Force Main Project is an \$88 million sewer force main construction project spanning 2 miles within Venice, Marina del Rey, and Playa del Rey. Contracted to Vadnais Trenchless Services and reporting to the City of Los Angeles, Bureau of Engineering, Environmental Management Group, ESA is serving as the project's environmental resource manager. Sara provides quality control oversight for the archaeological and paleontological mitigation.

Advanced Water Treatment Facility Project Groundwater Reliability Improvement Project, Pico Rivera, CA. Project Manager. ESA is providing environmental compliance monitoring for the Water Replenishment District to ensure compliance with the conditions contained in the Mitigation and Monitoring Reporting Programs associated with three environmental documents, including the Final EIR, a Mitigated Negative Declaration, and a Supplemental EIR, pertaining to three infrastructure components associated with the project. ESA provides general compliance monitoring at varying rates of frequency depending on the nature of the activities and is sometimes on-site for 4-hour spot checks and other times for full 24-hour rotations. The project is located near a residential neighborhood and adjacent the San Gabriel River. Issues of concern include noise, vibration, night lighting, biological resources, cultural resources, and air quality. Sara provides quality assurance and oversight of the field monitoring, and day-to-day response to issues. She oversees archaeological and Native American monitoring for ground disturbance and coordinates all sub-consultants for the project. She provides daily, weekly, and quarterly reporting on project compliance to support permitting and agency oversight.

Scattergood Olympic Transmission Line, Los Angeles, CA. *Report Author.* The Los Angeles Department of Water and Power is proposing to construct and operate approximately 11.4 miles of new 230 kilovolt (kv) underground transmission line that would connect the Scattergood Generation Station and Olympic Receiving Station. The project includes monitoring of construction activities occurring in street rights-of-way. Sara is providing final reporting for the long-term monitoring and QA/QC of the field data.

Hansen Dam Golf Course Water Recycling Project, Los Angeles, CA. Senior Archaeologist and Project Manager. Sara directed a phase I historical assessment for the Hansen Dam Golf Course Water Recycling Project located in the San Fernando Valley, City of Los Angeles, California. The project included the construction of an outdoor pumping station adjacent to the existing Hansen Tank located at the Los Angeles Department of Water and Power's (LADWP's) Valley Generating Station. In addition, a pipeline or distribution line was planned to be installed from the pumping station to the Hansen Dam Golf Course along the Tujunga Wash. The phase I study of this project included mitigation for the effects of the project on the portion of the golf course falling within the area of potential effects, which was potentially sensitive for buried cultural resources as the result of a complex of World War II housing units placed on the site between the 1940s and the 1960s. Sara conducted consultation with the USACE regarding the project.


EDUCATION

Doctor of Philosophy, History of Art and Architecture, University of Virginia

Master of Architectural History, University of Virginia

Certificate in Historic Preservation, University of Virginia

Bachelor of Architecture, University of Arizona

20 YEARS OF EXPERIENCE

AWARDS

Andrew Mellon Foundation Fellowship Recipient, Huntington Library, San Marino, California, 2010

Helen Bing Fellowship Recipient, Huntington Library, San Marino, California, 2010

Du Pont Fellowship Recipient, University of Virginia, Charlottesville, Virginia, 2005

William Rucker Art and Architecture Fellowship Recipient and Du Pont Fellowship Recipient, University of Virginia, Charlottesville, Virginia, 2004

Dean's Forum Fellowship Recipient, University of Virginia, Charlottesville, Virginia, 2003

Arizona Women in Construction Scholarship Recipient, University of Arizona, Tucson, Arizona, 1994

Gabrielle Harlan, Ph.D.

Architectural Historian

7-8

Gabrielle is a senior architectural historian with more than 20 years of academic and professional experience preparing documentation to address the restoration, rehabilitation, and adaptive reuse of historic properties—including historic structures reports, preservation and interpretation plans, and National Register of Historic Places nominations. Gabrielle also has experience contributing to California Environmental Quality Act (CEQA)-level documents. She has worked primarily in California for the last ten years, and she continues to expand upon her knowledge of Southern California history by conducting primary source research and developing historic contexts.

Relevant Experience

Hollywood Burbank Airport Replacement Terminal EIS, Los Angeles County, **CA.** Architectural Historian. The Burbank-Glendale-Pasadena Airport Authority (Authority) is proposing to replace the existing passenger terminal to enhance airport safety and meet ADA standards, to consolidate passenger and baggage screening functions, and to provide a new, modern, energy-efficient passenger terminal. The project would replace the existing 14-gate, 232,000-square-foot passenger terminal with a 14-gate passenger terminal that meets current California seismic design and FAA airport design standards. The replacement passenger terminal would be developed in accordance with modern design standards to provide enhanced passenger amenities; security screening facilities that meet the latest TSA requirements; and other airport facilities (including holdrooms, baggage claim areas, and public areas) that are designed and sized for the kinds of aircraft the airlines routinely operate. Gabrielle is the architectural historian for the project, and is providing peer review of historic resources reports to ensure they meet Section 106 requirements. She will also coauthor the cultural resources section of the EIS, and analyze effects to historic architectural resources.

Pasadena Rose Bowl Lighting Replacement Project, Pasadena, CA.

Architectural Historian. The Rose Bowl Operating Company, the concessioner of a City of Pasadena-owned property, is proposing to replace the exterior polemounted lighting at the site, which is a National Historic Landmark listed on the National Register of Historic Places. The proposed project would modernize and improve the existing lighting at the Rose Bowl Stadium by replacing existing tower light fixtures with new modern fixtures. The overall purpose is to enhance the quality of lighting for events consistent with other stadiums, to improve the viewing experience, and to increase efficiency. In order to facilitate a successful project that would maintain the integrity of the historical resource, ESA prepared a technical memorandum analyzing the project for its conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The technical memorandum provided documentation in support of an application for a categorical exemption under the California Environmental Quality Act (CEQA). Gabrielle conducted a site survey and prepared the technical memorandum.

7-8

Long Beach Landmark List Analysis, Long Beach, CA. Architectural Historian. The City of Long Beach requested that ESA work with its list of locally-designated properties in order to ascertain which properties might be good candidates for both listing on the National Register of Historic Places and potential rehabilitation tax-credits. This effort encompasses an initial research effort to identify which local landmarks are already listed or determined eligible to the National Register of Historic Places, which ones are listed on the California Register, and which properties have previously been surveyed and assigned historical resource status codes that indicate that they are good candidates for listing. Subsequent to this initial effort, further research is being undertaken to identify the historic contexts and criteria under which potential candidates are likely eligible for listing. The intent of this research and inventory effort is so that the City of Long Beach has the necessary information at its disposal to better encourage the full utilization of the federal government's historic tax-credit incentives program for historic preservation projects within the community. Gabrielle developed the research approach and is supervising others in the completion of the research efforts.

Historical Resource Assessment for Mariners' Medical Arts Building, Newport Beach, CA. *Architectural Historian.* This project for the City of Newport Beach established the historic significance of a medical office building complex designed by architect Richard Neutra in the early 1960s. Gabrielle was responsible for writing the historic context and a majority of the historic research effort, as well as for directing and supervising junior staff in archival research tasks and the production of the final document.

Victor Clothing Company Building, Los Angeles, CA. *Architectural Historian.* The project was to assist the owner of an early twentieth-century commercial mid-rise building located in downtown Los Angeles in developing a successful approach for historic restoration of the facade and interior commercial space and elevator lobby in order to comply with the terms of a federal tax-credit. Gabrielle's responsibilities as project manager were to gather and analyze research, to coordinate the work of sub-consultants, to consult with the California Office of Historic Preservation and to prepare the required documentation for the tax-credit application.

Hollywood Historic Resources Survey for the Los Angeles Community Redevelopment Agency, Los Angeles, CA. Architectural Historian. This project was to survey potential historic resources in Hollywood and to prepare multiple historic context statements for the various property types. These ranged from large industrial film and music studios to religious facilities and civic institutions to small-scale domestic architecture. Gabrielle's primary responsibility on the project was to research and write the majority of the historic context statements, and to oversee the preparation of historic context statements by other staff. She also participated as a member of the survey team and trained junior staff on inventory methods.



EDUCATION

BA, Physical Anthropology, University of California, Santa Barbara

M.A., Applied Archaeology (In Progress), California State University San Bernardino

13 YEARS OF EXPERIENCE

PROFESSIONAL AFFILIATIONS

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

Pacific Coast Archaeological Society (PCAS)

SPECIALIZED EXPERIENCE

Analysis of faunal remains including fish and shellfish species

Archaeological Monitoring

Paleontological Monitoring

Environmental Compliance Monitoring

Human osteology and bioarchaeology

Michael Vader

Senior Associate

Michael is cultural resources specialist with experience working on survey, data recovery, and monitoring projects. Michael has experience with project management, has led crews on multiple surveys and excavations, and is familiar with environmental compliance documents. He has worked on a variety of energy and water infrastructure projects throughout California, including projects in Riverside, San Diego, Imperial, San Bernardino, Los Angeles, Orange, Santa Barbara, San Luis Obispo, Kern, Fresno, Madera, and Inyo Counties, as well as in Clark County Nevada. Michael regularly works as part of a team, coordinating with field staff and agency leads.

Relevant Experience

Ventura Water Supply Projects, Ventura County, CA. *Project Manager.* The City of San Buenaventura (City) Water and Wastewater Department (Ventura Water) retained Environmental Science Associates to conduct a cultural resources assessment for the proposed Ventura Water Supply Projects in support of an Environmental Impact Report. The City is proposing to develop reliable potable water supplies for the population of the Ventura Water service area while at the same time complying with the Consent Decree among the City, Wishtoyo Foundation/Ventura Coastkeeper, and Heal the Bay. Michael managed cultural resources staff, led the survey, and authored the cultural resources assessment report.

San Jacinto Valley Raw Water Facilities Project - Cultural Resources

Assessment, Riverside County, CA. *Archaeologist.* The Eastern Municipal Water District (EMWD) retained Environmental Science Associates to conduct a cultural resources assessment for the San Jacinto Valley Raw Water Conveyance Facilities Project in support of an Initial Study/Mitigated Negative Declaration . The Project would provide a water conveyance system to work in conjunction with EMWD's existing facilities, providing additional groundwater recharge and banking capacity. Michael conducted the cultural resources survey and co-authored the cultural resources assessment report.

Sterling Natural Resource Center Project, Highland, CA. *Archaeologist.* The San Bernardino Valley Municipal Water District retained ESA to prepare a Phase I Cultural Resources Study in support of an Environmental Impact Report for the proposed Sterling Natural Resource Center Project. The project includes the construction a new treatment facility in the City of Highland to treat locally generated wastewater for beneficial reuse in the upper Santa Ana River watershed. Michael led the Phase I survey of the project area and assisted in the preparation of the cultural resources study.

City of Escondido MFRO Facility for Agriculture Project, Escondido, CA. *Archaeologist.* The City of Escondido retained ESA to prepare an ISMND for the proposed Micro Filtration Reverse Osmosis Facility (MFRO Facility) for Agriculture Project .The Project includes the construction of an MFRO Facility, to provide advanced treatment for Title 22 quality reuse water. In support of the ISMND, ESA conducted a Phase I cultural resources study that complied with CEQA-Plus guidelines. Michael conducted the Phase I survey of the project area, and prepared the Phase I cultural resources study and IS/MND.

7-8

Richard A. Reynolds Desalination Plant Phase 2 Expansion - Cultural Resources, San Diego, CA. *Archaeologist.* ESA was contracted by the Sweetwater Authority to perform a cultural resources study for the Phase 2 Expansion at the Richard A. Reynolds Desalination Plant. The expansion would increase the desalinated potable water production at the desalination plant from its current 5 million gallons per day (mgd) capacity to 10 mgd. The project requires funding from the United States Bureau of Reclamation (BOR), making it subject to Section 106 of the National Historic Preservation Act. Michael conducted the cultural resources survey, coordinated with the BOR archaeologist, and prepared the cultural resources study for the expansion.

City of Los Angeles Department of Water and Power, City Trunk Line Unit 3 Project, Los Angeles, CA. *Archaeologist.* ESA has conducted a Phase 1 cultural resources assessment for the Los Angeles Department of Water and Power (LADWP), City Trunk Line Unit 3 Project. LADWP plans replacing a portion of the City Trunk Line on Coldwater Canyon Avenue between Vanowen Street and Magnolia Boulevard, within the City of Los Angeles. The proposed Project would involve the installation of approximately 10,250 linear feet of 60-inch diameter water pipeline constructed of welded steel. Michael led the Phase 1 cultural resources survey of the Project area and prepared the technical report and the cultural resources ISMND section.

City of Los Angeles Department of Water and Power, Foothill Trunk Line Project, Los Angeles, CA. *Archaeologist.* ESA was retained by the Los Angeles Department of Water and Power (LADWP) to conduct a Phase 1cultural resources study for the Foothill Trunk Line Project. LADWP proposes to replace 16,600 feet of existing 24-inch, 26-inch, and 36-inch diameter welded steel pipe and 30-inch diameter riveted steel pipe with a 54-inch diameter welded steel pipe along Foothill Boulevard within the districts of Pacoima and Sylmar, in the City of Los Angeles. Michael prepared the Phase 1 technical report for the Project.





EDUCATION

MSc Historic Conservation, Oxford Brookes University

BA, European Studies, Brigham Young University

3 YEARS OF EXPERIENCE

PROFESSIONAL AFFILIATIONS

The Society for the Protection of Ancient Buildings

Historic England

National Trust for Places of Historic Interest or Natural Beauty

Hanna Winzenried

7-8

Architectural Historian

Hanna is an architectural historian with 3 years of academic and professional experience performing building conservation, historic research, and field surveys and conducting plan reviews for conformance with local regulations and ordinances. Prior to joining ESA, she has 1.5 years of experience with the City of Los Angeles, Department of Planning, in the Office of Historic Resources Historic Preservation Overlay Zones (HPOZ) Unit. Her experience and education both in California and abroad have given her a wide set of interdisciplinary skills, including strong technical and research skills.

Relevant Experience

9120 W. Olympic Boulevard Preliminary Assessment and Character Defining Features Analysis for the Harkham Hillel Hebrew Academy, Beverly Hills, CA. *Contributor.* ESA prepared a Phase I Historic Resources Assessment for the modernist educational building at 9120 W. Olympic Boulevard. The purpose of the report is to identify and evaluate potential historic resources. The subject property was built in 1963 as the largest Jewish day school. It was built in the Modernist architectural style by the renowned architect Sydney Eisenshtate. The Academy enrollment has outgrown the existing space, and the school is looking for a way to expand its square footage. Hanna performed research and prepared of the reports.

Universal Hilton Environmental Impacts Report and Historic Resources Technical Report for 555 W Universal Terrace Parkway, Los Angeles, CA. *Contributor.* ESA prepared an Environmental Impacts Report including a Historic Resources Technical Report. The Universal Hilton Hotel was designed by master architect, William L. Pereira in 1983 in the postmodern style. The hotel was designed to accommodate visitors to the Universal Theme Parks. The hotel management wants to expand the number of rooms by building a large addition. Hanna performed research and assisted in the preparation of the report.

361 Myrtle Street Peer Review Letter for the residence at 361 Myrtle Street, Glendale, CA. *Contributor.* ESA prepared a peer review letter to conduct a peer review of previous historic resource evaluations and analyze potential cumulative impacts of the demolition for the property at 361 Myrtle Street. Previous evaluations and the impact of demolishing the residence were reviewed and analyzed. Hanna performed research and assisted with the preparation of the report.

Nestor Way Affordable Housing Project Historical Resources Technical Report, San Diego, CA. *Contributor.* ESA prepared a Historical Resources Technical Report for 1120 and 1130 Nestor Way on behalf of the Federal Housing Administration. The site is improved with a Methodist church built in 1896 in the Gothic Revival architectural style and multiple ancillary buildings. The City of San

Page 2

Diego is planning on constructing permanent supportive housing containing 100 units, consisting of multi-family affordable housing for formerly homeless seniors 55 years of age and older. Hanna performed research and assisted with the preparation of the reports.

Nelles School Site Redevelopment, Whittier, CA. *Contributor.* ESA oversaw the documentation and architectural salvage of the Fred C. Nelles School. Brookfield Residential plans on redeveloping the whole site into a residential neighborhood while maintaining four historically significant structures. Hanna helped draft a documentation and architectural features salvage plan according to the character defining features list and oversaw the deconstruction of the other school buildings to ensure the architectural features were salvaged correctly.

Riverside Cement Company, Crestmore Plant HAER, Jurupa Valley, CA.

Contributor. ESA prepared two Historic American Engineering Records for the Crestmore Plant for the White Cement Mill and for the Stock House. The Riverside Cement Company, Crestmore Plant was a former cement plant that was initially constructed in 1909, although went through multiple periods of alteration. Developers proposed an industrial and open space development at the facility. Hanna helped drafts HAERs which had to be made as a mitigating measure for deconstruction of the historically eligible buildings, the White Cement Mill and the Stock House.

APPENDIX B Sacred Lands File Search



www.esassoc.com

April 10, 2019

Native American Heritage Commission 1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95691 FAX- 916-373-5471

Subject: Sacred Lands File Search Request for the Proposed La Brea Groundwater Project, City of Beverly Hills, California (D190167.00)

To whom it may concern:

Environmental Science Associates (ESA) is conducting a cultural resources assessment for the La Brea Groundwater Project (Project) located in the City of Beverly Hills (City). The City is proposing to construct approximately 11,900 linear feet (LF) of new 16-inch raw water transmission main pipeline, rehabilitate approximately 8,200 LF of an existing, abandoned, 18-inch pipeline, and construct up to three new groundwater extraction wells. The new pipeline would connect the extraction wells to the existing Foothill Water Treatment Plant.

The Project is located within an unsectioned portions of Township 1 South, Range 14 and 15 West on the Beverly Hills and Hollywood, CA U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles (**Figures 1a and 1b**).

In an effort to provide an adequate appraisal of all potential impacts to cultural resources that may result from the proposed Project, ESA is requesting that a records search be conducted for sacred lands or traditional cultural properties that may exist within the Project.

Thank you for your time and assistance regarding this matter. To expedite the delivery of search results, please e-mail them to fclark@esassoc.com. Please contact me at 949.753.7001 or via e-mail me if you have any questions.

Sincerely,

Fatima Clark Archaeologist



SOURCE: ESRI; City of Beverly Hills; Beverly Hills and Hollywood Topoquads

Beverly Hills Groundwater Wells and Pipeline Project

Figure 1a Record Search



SOURCE: ESRI; City of Beverly Hills; Beverly Hills and Hollywood Topoquads

Beverly Hills Groundwater Wells and Pipeline Project

Figure 1b Record Search

Gavin Newsom, Governor

STATE OF CALIFORNIA

NATIVE AMERICAN HERITAGE COMMISSION Cultural and Environmental Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 Phone: (916) 373-3710 Email: <u>nahc@nahc.ca.gov</u> Website: <u>http://www.nahc.ca.gov</u> Twitter: @CA_NAHC

April 25, 2019

Fatima Clark ESA

VIA Email to: <u>fclark@esassoc.com</u>

RE: La Brea Groundwater Project, Los Angeles County.

Dear Ms. Clark:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were <u>negative</u>. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: katy.sanchez@nahc.ca.gov.

Sincerely,

Katy Sanche -3

KATY SANCHEZ Associate Environmental Planner

Attachment



10/12/2021 Board Meeting

^{d Meeting} Native American Heritage Commission^{Attachment 2}, Page 430 of 722 Native American Contacts List 4/24/2019

Gabrieleno Band of Mission Indians - Kizh Nation Andrew Salas, Chairperson P.O. Box 393 Gabrielino Covina ,CA 91723 admin@gabrielenoindians.org (626) 926-4131 Gabrielino-Tongva Tribe Charles Alvarez, Councilmember 23454 Vanowen St. Gabrielino West Hills ,CA 91307 roadkingcharles@aol.com (310) 403-6048

Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson P.O. Box 693 Gabrielino Tongva San Gabriel ,CA 91778 GTTribalcouncil@aol.com (626) 483-3564 Cell (626) 286-1262 Fax

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This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed: La Brea Groundwater Project, Los Angeles County.

City of Beverly Hills La Brea Subarea Wells, Water Treatment, and Transmission Main Project, City of Beverly Hills and Los Angeles, California

Paleontological Resources Assessment Report

City of Beverly Hills

September 11, 2019

ESA

City of Beverly Hills La Brea Subarea Wells, Water Treatment, and Transmission Main Project, City of Beverly Hills and Los Angeles, California

Paleontological Resources Assessment Report

Prepared for: City of Beverly Hills September 11, 2019

Prepared by: ESA 626 Wilshire Blvd. Suite 1100 Los Angeles, CA 90017

Project Directors: Monica Strauss, M.A., RPA

Project Manager:

Sara Dietler, B.A.

Paleontological Principal Investigator and Report Author: Alyssa Bell, Ph.D.

Project Location:

Beverly Hills and Hollywood (CA) USGS 7.5-minute Topographic Quads

626 Wilshire Boulevard Suite 1100 Los Angeles, CA 90017 213.599.4300 www.esassoc.com

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Table of Contents

City of Beverly Hills La Brea Subarea Wells, Water Treatment, and Transmission Main Project – Paleontological Resources Assessment Report

Table of Contents	i
City of Beverly Hills La Brea Subarea Wells, Water Treatment, and Transmission Main Project Project – Paleontological Resources Assessment Report	i
City of Beverly Hills La brea subarea wells, water treatment, and transmission main PROJECT	1
Paleontological Resources Assessment Report	1
Introduction	1
Project Location	1
Project Description	6
Rehabilitation and Proposed Transmission Main	6
Regulatory Framework	8
State and Local Regulations	8
State Regulations	8
Local Regulations	9
Methods and Results	9
Society for Vertebrate Paleontology	9
Archival Research	12
Geologic Setting	12
Geologic Map & Literature Review	13
LACM Records Search	16
Paleontological Sensitivity Analysis	16
Conclusions and Recommendations	16
References	19

Appendices

A. Personnel

DEPARTMENT OF PUBLIC WORKS 345 Foothill Road Beverly Hills, CA 90210

Engineering Division (310) 285-2452 FAX: (310) 278-1838



June 21, 2019

Joseph Ontiveros Cultural Resource Director Soboba Band of Luiseno Indians P.O. Box 487 San Jacinto, CA 92581

Subject: AB 52 Consultation (Public Resources Code Section 21080.3.1)

La Brea Subarea Wells and Transmission Main Project

Dear Mr. Ontiveros:

Pursuant to Assembly Bill 52 (Public Resources Code Section 21080.3.1) and in an effort to fully evaluate potential adverse effects to cultural resources, the City of Beverly Hills is contacting you to elicit information not contained in the present database and to provide an opportunity for California Native American tribes to discuss the proposed La Brea Subarea Wells and Transmission Main Project ("Project").

Project Description: The City of Beverly Hills (City) is proposing to implement the La Brea Subarea Wells and Transmission Main Project (proposed project), and is preparing an Initial Study/Mitigated Negative Declaration (IS/MND) to analyze the environmental effects of the Project. In order to expand the local water supply, the City proposes to develop the proposed project by providing an additional net 1,700 acre-feet per year (AFY) of groundwater supply in the La Brea Subarea within the Central Groundwater Basin. The proposed project would include the construction of three groundwater production wells in the La Brea Subarea, the rehabilitation of an existing 18-inch pipeline, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main. The proposed transmission main would connect the proposed project would be production wells to the existing Foothill Water Treatment Plant (WTP) for treatment and supply.

Project Location: The proposed project would be located within two jurisdictions; the City of Beverly Hills and the City of Los Angeles, as depicted on the attached Figure 1 (Regional Location) and Figure 2 (Project Location). The City of Beverly Hill's Foothill WTP is located on Foothill Road between Alden Drive and Third Street. The Foothill WTP is a developed water treatment plant which contains RO facilities that would treat the raw water received from the proposed groundwater production wells (Figure 2).

Soboba Band of Luiseno Indians June 21, 2019 Page 2 of 2

The proposed Well Site No. 1 would be located at 1945 La Cienega Boulevard within the City of Los Angeles. Well Site No. 1 is owned by the City of Beverly Hills and is currently developed with a residential structure. Implementation of Well No. 1 would require the installation of 15-inch storm drain alignment, which would be located within the paved right-of-way (ROW). The precise locations of the two additional wells have not been determined at this time; however, they would be located within the City of Los Angeles in the La Brea Subarea boundary as illustrated on Figure 2, labeled as "Potential Well Location Area". The proposed transmission main would be approximately four miles long.

In accordance with Public Resources Code Section 21080.3.1, the City is offering you the opportunity to consult on this Project. You may respond regarding the proposed La Brea Subarea Wells and Transmission Main Project within thirty (30) days of receiving this letter. Alternatively, if you find that the nature of this Project does not require consultation, you are requested to sign the bottom of this letter, agreeing that no further consultation is necessary.

Your prompt response would be appreciated. Should you have any further questions regarding this matter, please feel free to contact me at (310) 285-2512 or via email at tmalabanan@beverlyhills.com. Thank you for your consideration of this request.

Sincerely,

1D Mlabonan

Tristan D. Malabanan, P.E. Project Manager

Enclosures

I, _____, agree that no further consultation is necessary due to the nature of the La Brea Subarea Wells and Transmission Main Project.



7-8

SOURCE: ESRI

ESA

La Brea Subarea Wells and Transmission Main Project

Figure 1 Regional Location



7-8

SOURCE: ESRI; City of Beverly Hills

La Brea Subarea Wells and Transmission Main Project

Figure 2 Project Location DEPARTMENT OF PUBLIC WORKS 345 Foothill Road Beverly Hills, CA 90210 Engineering Division (310) 285-2452 FAX: (310) 278-1838



June 21, 2019

Michael Mirelez Cultural Resource Coordinator Torres Martinez Desert Cahuilla Indians P.O. Box 1160 Thermal, CA 92274

Subject: AB 52 Consultation (Public Resources Code Section 21080.3.1)

La Brea Subarea Wells and Transmission Main Project

Dear Mr. Mirelez:

Pursuant to Assembly Bill 52 (Public Resources Code Section 21080.3.1) and in an effort to fully evaluate potential adverse effects to cultural resources, the City of Beverly Hills is contacting you to elicit information not contained in the present database and to provide an opportunity for California Native American tribes to discuss the proposed La Brea Subarea Wells and Transmission Main Project ("Project").

Project Description: The City of Beverly Hills (City) is proposing to implement the La Brea Subarea Wells and Transmission Main Project (proposed project), and is preparing an Initial Study/Mitigated Negative Declaration (IS/MND) to analyze the environmental effects of the Project. In order to expand the local water supply, the City proposes to develop the proposed project by providing an additional net 1,700 acre-feet per year (AFY) of groundwater supply in the La Brea Subarea within the Central Groundwater Basin. The proposed project would include the construction of three groundwater production wells in the La Brea Subarea, the rehabilitation of an existing 18-inch pipeline, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main. The proposed transmission main would connect the proposed production wells to the existing Foothill Water Treatment Plant (WTP) for treatment and supply.

Project Location: The proposed project would be located within two jurisdictions; the City of Beverly Hills and the City of Los Angeles, as depicted on the attached Figure 1 (Regional Location) and Figure 2 (Project Location). The City of Beverly Hill's Foothill WTP is located on Foothill Road between Alden Drive and Third Street. The Foothill WTP is a developed water treatment plant which contains RO facilities that would treat the raw water received from the proposed groundwater production wells (Figure 2).

Torres Martinez Desert Cahuilla Indians June 21, 2019 Page 2 of 2

The proposed Well Site No. 1 would be located at 1945 La Cienega Boulevard within the City of Los Angeles. Well Site No. 1 is owned by the City of Beverly Hills and is currently developed with a residential structure. Implementation of Well No. 1 would require the installation of 15-inch storm drain alignment, which would be located within the paved right-of-way (ROW). The precise locations of the two additional wells have not been determined at this time; however, they would be located within the City of Los Angeles in the La Brea Subarea boundary as illustrated on Figure 2, labeled as "Potential Well Location Area". The proposed transmission main would be approximately four miles long.

In accordance with Public Resources Code Section 21080.3.1, the City is offering you the opportunity to consult on this Project. You may respond regarding the proposed La Brea Subarea Wells and Transmission Main Project within thirty (30) days of receiving this letter. Alternatively, if you find that the nature of this Project does not require consultation, you are requested to sign the bottom of this letter, agreeing that no further consultation is necessary.

Your prompt response would be appreciated. Should you have any further questions regarding this matter, please feel free to contact me at (310) 285-2512 or via email at tmalabanan@beverlyhills.com. Thank you for your consideration of this request.

Sincerely,

JD Mlabonan

Tristan D. Malabanan, P.E. Project Manager

Enclosures

I, _____, agree that no further consultation is necessary due to the nature of the La Brea Subarea Wells and Transmission Main Project.



SOURCE: ESRI

ESA

La Brea Subarea Wells and Transmission Main Project

Figure 1 Regional Location



7-8

SOURCE: ESRI; City of Beverly Hills

La Brea Subarea Wells and Transmission Main Project

Figure 2 Project Location DEPARTMENT OF PUBLIC WORKS 345 Foothill Road Beverly Hills, CA 90210 Engineering Division (310) 285-2452 FAX: (310) 278-1838



June 21, 2019

Andrew Salas Chairman Gabrieleño Band of Mission Indians — Kizh Nation P0 Box 393 Covina, CA 91723

Subject: AB 52 Consultation (Public Resources Code Section 21080.3.1)

La Brea Subarea Wells and Transmission Main Project

Dear Mr. Salas:

Pursuant to Assembly Bill 52 (Public Resources Code Section 21080.3.1) and in an effort to fully evaluate potential adverse effects to cultural resources, the City of Beverly Hills is contacting you to elicit information not contained in the present database and to provide an opportunity for California Native American tribes to discuss the proposed La Brea Subarea Wells and Transmission Main Project ("Project").

Project Description: The City of Beverly Hills (City) is proposing to implement the La Brea Subarea Wells and Transmission Main Project (proposed project), and is preparing an Initial Study/Mitigated Negative Declaration (IS/MND) to analyze the environmental effects of the Project. In order to expand the local water supply, the City proposes to develop the proposed project by providing an additional net 1,700 acre-feet per year (AFY) of groundwater supply in the La Brea Subarea within the Central Groundwater Basin. The proposed project would include the construction of three groundwater production wells in the La Brea Subarea, the rehabilitation of an existing 18-inch pipeline, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main. The proposed transmission main would connect the proposed production wells to the existing Foothill Water Treatment Plant (WTP) for treatment and supply.

Project Location: The proposed project would be located within two jurisdictions; the City of Beverly Hills and the City of Los Angeles, as depicted on the attached Figure 1 (Regional Location) and Figure 2 (Project Location). The City of Beverly Hill's Foothill WTP is located on Foothill Road between Alden Drive and Third Street. The Foothill WTP is a developed water treatment plant which contains RO facilities that would treat the raw water received from the proposed groundwater production wells (Figure 2).

Gabrieleño Band of Mission Indians — Kizh Nation June 21, 2019 Page 2 of 2

The proposed Well Site No. 1 would be located at 1945 La Cienega Boulevard within the City of Los Angeles. Well Site No. 1 is owned by the City of Beverly Hills and is currently developed with a residential structure. Implementation of Well No. 1 would require the installation of 15-inch storm drain alignment, which would be located within the paved right-of-way (ROW). The precise locations of the two additional wells have not been determined at this time; however, they would be located within the City of Los Angeles in the La Brea Subarea boundary as illustrated on Figure 2, labeled as "Potential Well Location Area". The proposed transmission main would be approximately four miles long.

In accordance with Public Resources Code Section 21080.3.1, the City is offering you the opportunity to consult on this Project. You may respond regarding the proposed La Brea Subarea Wells and Transmission Main Project within thirty (30) days of receiving this letter. Alternatively, if you find that the nature of this Project does not require consultation, you are requested to sign the bottom of this letter, agreeing that no further consultation is necessary.

Your prompt response would be appreciated. Should you have any further questions regarding this matter, please feel free to contact me at (310) 285-2512 or via email at tmalabanan@beverlyhills.com. Thank you for your consideration of this request.

Sincerely,

JD Mlabonan

Tristan D. Malabanan, P.E. Project Manager

Enclosures

I, _____, agree that no further consultation is necessary due to the nature of the La Brea Subarea Wells and Transmission Main Project.



7-8

SOURCE: ESRI

ESA

La Brea Subarea Wells and Transmission Main Project

Figure 1 Regional Location



7-8

SOURCE: ESRI; City of Beverly Hills

La Brea Subarea Wells and Transmission Main Project

Figure 2 Project Location



GABRIELENO BAND OF MISSION INDIANS - KIZH NATION Historically known as The San Gabriel Band of Mission Indians recognized by the State of California as the aboriginal tribe of the Los Angeles basin

7-8

Project Name: La Brea Subarea wells and Transmission main project city of Beverly Hills

Dear Tristan D. Malabanan,

Thank you for your letter dated June 24, 2019 regarding AB52 consultation. The above proposed project location is within our Ancestral Tribal Territory; therefore, our Tribal Government requests to schedule a consultation with you as the lead agency, to discuss the project and the surrounding location in further detail.

Please contact us at your earliest convenience. *Please Note :AB 52, "consultation" shall have the same meaning as provided in SB 18 (Govt. Code Section 65352.4).*

Thank you for your time,

eg Se

Andrew Salas, Chairman Gabrieleno Band of Mission Indians – Kizh Nation 1(844)390-0787

List of Figures

Figure 1	Regional Location Map	3
Figure 2	Project Location	4
Figure 3	Proposed Well Site	5
Figure 3	Geology1	5

CITY OF BEVERLY HILLS LA BREA SUBAREA WELLS, WATER TREATMENT, AND TRANSMISSION MAIN PROJECT

Paleontological Resources Assessment Report

Introduction

The City of Beverly Hills (City) proposes to develop the La Brea Subarea Wells, Water Treatment, and Transmission Main Project (proposed project). Environmental Science Associates (ESA) has conducted a paleontological resources assessment in support of an Initial Study/Mitigated Negative Declaration (IS/MND) The proposed project would include the construction of a groundwater production well in the La Brea Subarea (that would provide approximately 1,700 AFY of new water supply), the rehabilitation of an existing (inactive) 18 and 24-inch pipelines, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main with a diameter of 16-inches (collectively, referred to herein as "proposed transmission main"). The proposed transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply. The pipelines would be sized to accommodate 3,000 gallons per minute (gpm), which would be from the currently proposed well and, potentially, other wells in the area although the need for and locations of any such future wells is unknown at this time.

ESA personnel involved in the preparation of this assessment are as follows: Monica Strauss, M.A., RPA, program director; Sara Dietler, B.A., Project Manager; Alyssa Bell, Ph.D., Paleontological Principal Investigator and assessment author; and Jessie Lee, GIS specialist. Resumes of key personnel are included in **Appendix A**.

Project Location

The proposed project would be located within two jurisdictions; the City of Beverly Hills and the City of Los Angeles, as depicted on **Figure 1, Regional Location** and **Figure 2, Project Location**. The City of Beverly Hill's Foothill WTP is located on Foothill Road between Alden Drive and Third Street. The Foothill WTP is a developed water treatment plant which contains reverse osmosis (RO) facilities that would treat the raw water received from the proposed groundwater production well (Figure 2).

The proposed Well Site would be implemented on a City-owned property located at 1956 Chariton Street in the City of Los Angeles, as depicted on **Figure 3**, **Proposed Well Site**. The proposed Well Site has a land use designation of Low Medium II Residential and is zoned as Restricted Density Multiple Dwelling Zone (RD2-1). The site is currently developed with a residential structure; however, there are no current residents living in the structure. The site is surrounded by other residences to the north, west and south. To the east is an area designated as Neighborhood Commercial, which consists of City-owned property, and other commercial properties along La Cienega Boulevard. Implementation of the Well Site would require the installation of 15-inch storm drain pipe, which would be located within the paved right-of-way (ROW) along Chariton Street. The storm drain would dispose of water being flushed through the well during well testing and during normal operations.

7-8

While there may be a need of additional wells in the area to meet the production goal, the need for and locations of any such future wells have not been determined at this time. The La Brea Subarea is located in the northern unadjudicated portion of the Central Basin.

The proposed transmission main, in its entirety would be approximately four miles long. The proposed rehabilitation area of the transmission main (existing 18 and 24-inch inactive pipelines) would proceed north within La Cienega Boulevard to Olympic Boulevard and within Le Doux Road from Gregory Way to Clifton Way (see Figure 2) and to connect to the proposed 16-inch new pipeline The length of the proposed new 16-inch transmission main would then continue westward until turning north on North Swall Drive, then west on Dayton Way. The transmission main would continue westerly along Dayton Way until turning north on North Palm Drive, then westward on 3rd street then through the City yard to connect to the utilities inlet side of the Foothill WTP (Figure 2).



7-8

SOURCE: ESRI

La Brea Subarea Well and Transmission Main Project

Figure 1 Regional Location


7-8

SOURCE: ESRI; City of Beverly Hills

ESA

La Brea Subarea Well and Transmission Main Project

Figure 2 Project Location



SOURCE: Mapbox; City of Beverly Hills

ESA

La Brea Subarea Well and Transmission Main Project

Figure 3 Proposed Well Site

470

Project Description

The proposed project includes: the demolition of existing structures at the proposed Well Site; the construction of one well within the La Brea Subarea; the rehabilitation of existing inactive 18 and 24-inch transmission main pipelines along La Cienega Boulevard; and the construction of a new 16-inch transmission main that would convey flows from the proposed Well Site to the City's WTP for treatment. Demolition, rehabilitation, and the construction of new facilities associated with the proposed project are described further below.

7-8

The proposed Well Site would be located on 1956 Chariton Street in the City of Los Angeles (Figure 2). The area is essentially flat and the existing residential structure would be demolished before the construction of the Well. After demolition, a 15-inch storm drain (pump-to-waste pipeline) would be constructed within Chariton Street, to connect to an existing storm drain system within the local streets. When a well is turned on, typical procedure is to "pump-to-waste" for a short duration to flush the well system. This flushing procedure will discharge through the 15-inch storm drain.

The proposed well would include an approximately 150 horsepower (hp) electric pump that would be housed within a new pump building. The pump building would be approximately 700 square feet (sf) with a 3-foot by 3-foot concrete pad underneath. The well-housing would not exceed the height of adjacent structures. Total well depth would be approximately 500 feet. The predicted flow rate for the well is between 500 and 700 gpm. The well-housing would be designed to blend in with the surrounding environment.

Rehabilitation and Proposed Transmission Main

The installation of new groundwater production well in the La Brea Subarea would include the rehabilitation of existing inactive 18 and 24-inch transmission pipelines and the construction of a new 16-inch transmission main alignment to convey water to the City distribution system from the proposed Well Site.

The existing, inactive 18-inch transmission main pipeline is located just north of Interstate 10 (I-10) at La Cienega Boulevard and continues north for approximately 8,000 linear feet (lf) to Olympic Boulevard at a depth of approximately 3 feet below the ground surface (bgs). The City has an easement to allow for the rehabilitation and use of this pipeline. The alignment horizontally and vertically varies at intersections; however, the majority of the pipe is located beneath the existing sidewalk on the west side of La Cienega Boulevard. The existing inactive 24inch transmission main is located within Le Doux Road from Gregory Way north approximately 2,250 liner feat (lf) to Clifton Way, and includes the crossing of Wilshire Blvd. The alignment is located approximately 6-feet east of street centerline at a cover depth that varies between 3.5-feet and 6-feet. The existing 18 and 24-inch pipelines would be rehabilitated as part of the overall transmission main of the project, then connect to the newly constructed 16-inch transmission main pipeline The rehabilitated and new portions of the proposed transmission main would be connected and sized appropriately for anticipated flows. The projected operational flow rate for the proposed production well is in the range of 500 to 700 gpm. An 8-inch diameter pipe would be used for the individual discharge pipeline from the production well. The transmission main would be sized to handle the flow rate of the optimal flow of approximately (2,100 gpm), to allow for use in conjunction with potential future wells in the area. Many of the streets along the transmission main alignment are single lane roads, with existing utilities such as water, sewer, gas, electric, and storm drain.

7-8

Demolition/Site Preparation

The proposed project would demolish existing structures at the Well Site, totaling approximately 6,767 cubic yards of construction material. Generally, ground disturbance during demolition would not extend deeper than 25 feet; concrete below this depth would be left in place. Demolition and site grading activities would require approximately 5 dumpster haul trucks per day and 20 dumpster haul trucks total. Imported soil may be required to level the site after demolition.

New Facilities/Rehabilitation

Production Well

The proposed project would construct a new above-grade well-house and new below-grade production well, as described previously. Construction equipment pertaining to the Well Site would be staged onsite or immediately adjacent to the site, where such areas can be accommodated. Best management practices (BMPs) would be implemented to control erosion. The proposed production well would require continuous 24-hour drilling and testing, and therefore would require temporary overnight lighting. All temporary constructing lighting would be shielded downward and away from the adjacent properties, cars driving along Chariton Street and other roadways, and the surrounding residential neighborhoods.

Transmission Main Rehabilitation and Construction

Pipeline construction equipment will be temporarily staged in areas immediately adjacent to roadways and/or stored off site. The transmission main alignment would be installed primarily within existing roadways and ROW to the extent feasible.

Construction of the proposed transmission main would involve trenching using conventional cut and cover and jack and bore techniques for pipeline portions within the City of Beverly Hills. The transmission main would run along Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street. The trenching technique would include saw cutting of the pavement where applicable, trench excavation, pipe installation, backfill operations, and resurfacing. Open trenches would be between approximately 4 feet wide and 5 feet deep with vertical cuts and trench shoring. Excavation depths would vary depending on location of existing utilities. On average, about 100-200 linear feet of pipeline would be installed per day. Implementation of the new 16-inch transmission main would require the excavation of approximately 11,018 cubic yards of soil. All excavated soil would be hauled away and trenches would be backfilled with 2-sack slurry. Rehabilitation of the existing inactive 18 and 24-inch transmission main pipelines would be executed through the sliplining technique¹. The rehabilitated portion of the 18 and 24-inch existing pipelines will be sliplined with a 13.5-inch carrier pipe (it gets inserted within the 18 and 24-inch pipes). Typical practice in pipeline design is to use pipe fittings called reducers to connect pipes of different sizes. The rehabilitated 18 and 24-inch pipes will connect to the newly constructed 16-inch portion of the transmission main by using a standard ductile iron mechanical joint (18-inch by 16-inch ductile iron reducer) fittings. The design flow rate for the pipeline is 2100 gpm, but the transmission main in its entirety is sized to accommodate up to 3000 gpm. Rehabilitation would require the excavation of approximately 185 cubic yards of soil.

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All impacted areas would be returned to pre-project conditions. Approximately 1,000 sf of various portions of the west sidewalk along La Cienega Boulevard would need to be reinstalled. When a new pipeline is installed, it requires the excavation of a trench through the street/roadway. After a pipeline is installed, the trench should be backfilled and the pavement surface needs to be replaced with new pavement. This is typical construction technique for all segments of a pipeline being installed within an open-trench construction area. Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street would need to be repaved once the new 16-inch transmission main is installed. The total square feet to repaved area is approximately 10,000 sf.

Regulatory Framework

State and Local Regulations

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value that are afforded protection under state laws and regulations. The following section summarizes the applicable federal and state laws and regulations, as well as professional standards provided by the Society of Vertebrate Paleontology (SVP, 2010).

State Regulations

California Environmental Quality Act

The State CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations, Section 15000 *et seq.*), are prescribed by the Secretary of Resources to be followed by state and local agencies in California in their implementation of the CEQA. Appendix G of the State CEQA Guidelines includes an Environmental Checklist Form with questions that may be used by public agencies in their assessment of impacts on the environment. The question within Appendix G that relates to paleontological resources states: "Will the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" The City of Los Angeles uses this question as its threshold of significance for determining whether impacts of

¹ The pipeline rehabilitation method sliplining uses High Density Polyethylene (HDPE) with the rolldown method, or traditional sliplining with fusible polyvinyl chloride (PVC). The sliplining method maximizes the internal diameter of the pipe, which maximizes the benefit of utilizing the existing inactive 18 and 24-inch inch transmission main.

paleontological resources are significant. CEQA protects paleontological resources by requiring an assessment of a project's potential paleontological impacts.

Public Resources Code Section 5097.5 and Section 30244

Other state requirements for paleontological resource management are included in PRC Section 5097.5 and Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (state, county, city, district) lands.

Local Regulations

City of Los Angeles – General Plan

The Conservation Element of the City of Los Angeles General Plan recognizes paleontological resources in Section 3: "Archeological and Paleontological" (II-3), specifically the La Brea Tar Pits, and identifies protection of paleontological resources as an objective (II-5). The General Plan identifies site protection as important, stating, "Pursuant to CEQA, if a land development project is within a potentially significant paleontological area, the developer is required to contact a bona fide paleontologist to arrange for assessment of the potential impact and mitigation of potential disruption of or damage to the site. If significant paleontological resources are uncovered during project execution, authorities are to be notified and the designated paleontologist may order excavations stopped, within reasonable time limits, to enable assessment, removal or protection of the resources" (City of Los Angeles, 2001²).

Methods and Results

Society for Vertebrate Paleontology

The SVP has established standard guidelines (SVP, 1995, 2010) that outline professional protocols and practices for conducting paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional vertebrate paleontologists adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most state regulatory agencies with paleontological resource-specific Laws, Ordinances, Regulations, and Standards (LORS) accept and use the professional standards set forth by the SVP.

As defined by the SVP (2010:11), significant nonrenewable paleontological resources are:

Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than

² For documents referenced in this Report, please see References for full citations.

recorded human history and/or older than middle Holocene (i. e., older than about 5,000 radiocarbon years).

7-8

As defined by the SVP (1995:26), significant fossiliferous deposits are:

A rock unit or formation which contains significant nonrenewable paleontologic resources, here defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces, and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information (ichnites and trace fossils generated by vertebrate animals, e.g., trackways, or nests and middens which provide datable material and climatic information). Paleontologic resources are considered to be older than recorded history and/or older than 5,000 years BP [before present].

Based on the significance definitions of the SVP (1995), all identifiable vertebrate fossils are considered to have significant scientific value. This position is adhered to because vertebrate fossils are relatively uncommon, and only rarely will a fossil locality yield a statistically significant number of specimens of the same genus. Therefore, every vertebrate fossil found has the potential to provide significant new information on the taxon it represents, its paleoenvironment, and/or its distribution. Furthermore, all geologic units in which vertebrate fossils have previously been found are considered to have high sensitivity. Identifiable plant and invertebrate fossils are considered significant if found in association with vertebrate fossils or if defined as significant by project paleontologists, specialists, or local government agencies.

A geologic unit known to contain significant fossils is considered to be "sensitive" to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either directly or indirectly disturb or destroy fossil remains. Paleontological sites indicate that the containing sedimentary rock unit or formation is fossiliferous. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case (SVP, 1995).

Fossils are contained within surficial sediments or bedrock, and are therefore not observable or detectable unless exposed by erosion or human activity. Therefore, without natural erosion or human-caused exposure, paleontologists cannot know either the quality or quantity of fossils. As a result, even in the absence of surface fossils, it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside of the study area), a similar geologic unit, or based on whether the unit in question was deposited in a type of environment that is known to be favorable for fossil preservation. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if the fossils are significant, that successful mitigation and salvage efforts may be undertaken.

Paleontological Potential

Paleontological potential is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological potential is

derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources," the SVP (2010) defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential:

7-8

- **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcaniclastic formations (e. g., ashes or tephras), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.).
- Low Potential. Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e. g. basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.
- Undetermined Potential. Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.
- No Potential. Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources. [SVP, 2010; 1-2]

For geologic units with high potential, full-time monitoring is generally recommended during any project-related ground disturbance. For geologic units with low potential, protection or salvage efforts will not generally be required. For geologic units with undetermined potential, field surveys by a qualified vertebrate paleontologist should be conducted to specifically determine the paleontologic potential of the rock units present within the study area.

Paleontological Resources Significance Criteria

Numerous paleontological studies have developed criteria for the assessment of significance for fossil discoveries (e.g. Eisentraut and Cooper, 2002; Murphey and Daitch, 2007; Scott and

Springer, 2003, etc.). In general, these studies assess fossils as significant if one or more of the following criteria apply:

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- 1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
- 2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
- 3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
- 4. The fossils demonstrate unusual or spectacular circumstances in the history of life; or
- 5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

In summary, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important (Eisentraut and Cooper, 2002; Murphey and Daitch, 2007; Scott and Springer, 2003). Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer, 2003; Scott et al., 2004).

Archival Research

The Project Site was the subject of thorough background research and analysis. The research included a paleontological records search conducted by the Natural History Museum of Los Angeles County (LACM), as well as geologic map and literature reviews conducted by ESA paleontologist Alyssa Bell, Ph.D.

Geologic Setting

The Project Site is located in the Los Angeles Basin, a structural depression approximately 50 miles long and 20 miles wide in the northernmost Peninsular Ranges Geomorphic Province (Ingersoll and Rumelhart, 1999). The Los Angeles basin developed as a result of tectonic forces and the San Andreas fault zone, with subsidence occurring 18 – 3 million years ago (Ma) (Critelli et al., 1995). While sediments dating back to the Cretaceous (66 Ma) are preserved in the basin, continuous sedimentation began in the middle Miocene (around 13 Ma) (Yerkes et al., 1965). Since that time, sediments have been eroded into the basin from the surrounding highlands, resulting in thousands of feet of accumulation (Yerkes et al., 1965). Most of these sediments are marine, as they eroded from surrounding marine formations, until sea level dropped in the Pleistocene Epoch and deposition of the alluvial sediments that compose the uppermost units in the Los Angeles Basin began.

The Los Angeles Basin is subdivided into four structural blocks, with the Project Site located in the northwestern-most part of the Central Block, where sediments range from 32,000 to 35,000 feet thick (Yerkes et al., 1965). The Central Block is wedge-shaped, extending from the Santa Monica Mountains in the northwest, where it is about 10 miles wide, to the San Joaquin Hills to the southeast, where it widens to around 20 miles across (Yerkes et al., 1965).

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Geologic Map & Literature Review

Geologic mapping by Dibblee and Ehrenspeck (1991) indicates that the surface of the Project Site is covered with Holocene-aged younger alluvium (mapped as Qa in **Figure 3**), likely overlying older alluvium and marine sediments, which in turn may overlie the Monterey Formation at undetermined depths. These geologic units are discussed below.

Younger Alluvium (Qa). These sediments consist of unconsolidated silt, sand, and gravel and date from modern times to the Holocene (Dibblee and Ehrenspeck, 1991). Younger alluvium is mapped as occurring across the entirety of the Project Site at the surface. Due to the young age of these deposits, they have low paleontological potential at the surface; however, these sediments increase in age with depth, and therefore fossil resources may be encountered in the deeper levels of this unit. While the exact depth at which the transition to older, high potential sediments [>5,000 years old, following the SVP's definition (SVP, 2010)] is not known, fossils have been discovered across the LA Basin as shallowly as 5-10 feet below ground surface (Jefferson, 1991a, 1991b). These fossils are similar to those described below from older alluvial fan deposits.

Older Alluvial Fan Deposits (Qae). Older alluvial fan deposits occur just to the east of the Project Site, as close as 0.1 - 0.2 miles from the Project Site, indicating these sediments may be present in the subsurface of the Project Site at relatively shallow depths. These sediments date to the Pleistocene and consist of tan to light reddish brown sand with minor gravel detritus from the highlands to the north (Diblee and Ehrenspeck, 1991). These Pleistocene sediments have a rich fossil history in the Los Angeles Basin (Hudson and Brattstrom, 1977; Jefferson, 1991a and b; McDonald and Jefferson, 2008; Miller, 1941, 1971; Roth, 1984; Scott, 2010, Scott and Cox, 2008; Springer et al., 2009). The most common Pleistocene terrestrial mammal fossils include the bones of mammoth, bison, deer, and small mammals, but other taxa, including horse, lion, cheetah, wolf, camel, antelope, peccary, mastodon, capybara, and giant ground sloth, have been reported (Graham and Lundelius, 1994), as well as reptiles such as frogs, salamanders, and snakes (Hudson and Brattstrom, 1977). In addition to illuminating the striking differences between Southern California in the Pleistocene and today, this abundant fossil record has been vital in studies of extinction (e.g. Sandom et al., 2014; Barnosky et al., 2004), ecology (e.g. Connin et al., 1998), and climate change (e.g. Roy et al., 1996).

Shallow Marine Deposits (Qom). Shallow marine deposits occur to the west of the Project Site, as close as 0.4 miles. indicating they may be present in the shallow subsurface of the Project Site. These sediments consist of light gray to light brown sand, pebbly sand gravel, and silt deposited when the area was last submerged by the ocean during the Pleistocene (Diblee and Ehrenspeck, 1991). Similar sediments have a rich fossil history in the LA Basin. In the Cheviot Hills, roughly 1.5 miles west of the southern portion of the Project Site, over one hundred species of marine invertebrates, primarily mollusks, were identified from Pleistocene marine sediments (Rodda,

1957). Across the LA Basin shallow marine deposits assigned to the San Pedro Sand have a strong record of preserving Pleistocene marine and terrestrial fossils. The San Pedro Sand has yielded a diverse fauna of nearshore marine invertebrates such as crabs, snails, bivalves, gastropods, and echinoids (Kennedy, 1975; Valentine, 1989; Woodring, 1957) and vertebrates such as sharks, bony fish, amphibians, reptiles, birds, whales, antelopes, mammoth, dire wolves, rodents, and bison (Barnes and McLeod, 1984; Fitch, 1967; Kennedy, 1975; Woodring, 1957).

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Fernando Formation. While the Fernando Formation does not crop out in the vicinity of the Project Site due to truncation by the Hollywood-Santa Monica Fault Zone to the north of the Project Site, subsurficial cross sections developed by Diblee and Ehrenspeck (1991) indicate it is likely present in the subsurface underlying alluvial sediments within the range of the depth for the well (500 ft below ground surface [bgs]). The Fernando Formation dates to the Pliocene and consists of marine siltstone, sandstone, pebbly sandstone, and conglomerate (Morton and Miller, 2006). The lower part of the Fernando Formation consists of a pebble-cobble conglomerate in a sandstone matrix that fines upwards into a coarse sandstone and then a silty sandstone (Schoellhamer et al., 1981). The upper Fernando Formation consists of coarse grained sandstone with conglomerate lenses (Schoellhamer et al., 1981). The Fernando Formation has an extensive record of preserving scientifically significant fossils, including invertebrates such as mollusks, echinoids, and bryozoans (Groves, 1992; Morris, 1976; Woodring, 1938), fish (Huddleston and Takeuchi, 2006), squid (Clarke et al., 1980), and a number of unidentified megafossils (Schoellhamer et al., 1981).



SOURCE: USGS 7.5' Topo Quad Beverly Hills 1978, 1981; Hollywood 1978, 1982; Dibblee Geological Foundation

Beverly Hills Groundwater Wells and Pipeline Project Figure 3 Geology

LACM Records Search

On April 19, 2019, ESA requested a database search from the LACM for records of fossil localities in and around the Project Site. The purpose of the museum records search was to: (1) determine whether any previously recorded fossil localities occur in the Project Site, (2) assess the potential for disturbance of these localities during construction, and (3) evaluate the paleontological sensitivity within the Project Site and vicinity.

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The records search identified three fossil localities from within 0.1 miles of the Project Site and an additional six localities within one mile. While exact coordinate data is not provided by the LACM, it appears that at least one of these sites may fall within the Project Site. These localities preserve a wide variety of terrestrial vertebrates, such as mammoth, mastodon, bison, horse, birds, and rodents, as well as plants and invertebrate fossils (McLeod, 2019). While the depths of several of these localities are unstated, recorded depths range from 13 to 30 ft below ground surface (bgs) (McLeod, 2019). These results are consistent with the Pleistocene terrestrial fossil record of the LA Basin, as reported in the literature review above.

Paleontological Sensitivity Analysis

The review of the scientific literature and geologic mapping, as well as the records search from LACM, were used to assign paleontological potentials to the geologic units present at the surface and subsurface of the Project Site that would be subject to ground-disturbing activities, following the guidelines of the SVP (1995, 2010):

- Younger Alluvium (Qa) Surficial sediments; low-to-high potential, increasing with depth. A wide variety of Ice Age fossils have been found in older alluvial sediments across southern California, as reviewed above, including multiple specimens known from the very near vicinity of the Project Site (McLeod, 2019). The exact depth at which the transition from low to high potential occurs is unknown in the Project Site, depths of 5-10 feet are common in the region (Jefferson, 1991a, 1991b).
- Older Alluvial Fan Deposits (Qae) Subsurficial sediments; high potential. A wide variety of Ice Age fossils have been found in these sediments across the Los Angeles Basin, as reviewed above, including multiple localities known from within one mile of the Project Site (McLeod, 2019).
- Shallow Marine Deposits (Qom) Subsurficial sediments; high potential. Similar sediments have produced extensive marine fossils of both vertebrate and invertebrate animals, some as close as 1.5 miles from the Project Site (Rodda, 1957).
- Fernando Formation Subsurface; high potential. The Fernando Formation is wellknown in Southern California for preserving a wide array of marine fossils such as sharks, bony fishes, and marine invertebrates.

Conclusions and Recommendations

As a result of this study, sediments present across the Project Site identified as younger alluvium are assigned low-to-high paleontological potential, increasing with depth. The underlying older

alluvial fan and shallow marine deposits, as well as the Fernando Formation, have high paleontological potential. This classification indicates a high potential for fossils to be present in the subsurface. The following recommendations would serve to protect potentially unique paleontological resources or unique geological features, should they be encountered:

- A qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP, 2010) (Qualified Paleontologist) shall be retained prior to the approval of demolition or grading permits. The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall attend the Project kickoff meeting and Project progress meetings on a regular basis, and shall report to the Project Site in the event potential paleontological resources are encountered.
- 2. The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training at the Project kick-off meeting prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). In the event construction crews are phased, additional training shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the Project Site and the procedures to be followed if they are found. Documentation shall be retained by the Qualified Paleontologist demonstrating that the appropriate construction personnel attended the training.
- 3. The Qualified Paleontologist shall develop a Paleontological Resources Monitoring Plan (PRMP) that shall detail the monitoring program necessary for the Project, based off of specific construction methodologies and locations. Construction activities have varying impacts on paleontological resources and may require different monitoring procedures. The PRMP shall take the specific construction plans for the Project to tailor a monitoring plan to the types of construction activities and the geologic units each may encounter. In general, ground disturbance across the Project Site that occurs in undisturbed sediments and exceeds 5-10 feet in depth may impact high potential sediments and therefore should be monitored. This includes; excavation and site preparation at the Well Site, drilling for the Production Well, cut and cover and entrance and exit pits for jack and bore along the proposed transmission main and at all access points for the rehabilitation of the transmission main. Paleontological resources monitoring shall be performed by a qualified paleontological monitor (meeting the standards of the SVP, 2010) under the direction of the Qualified Paleontologist. Depending on the conditions encountered, full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist shall spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils or potential fossils. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Oualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries.

4. Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries. If there are significant discoveries, fossil locality information and final disposition will be included with the final report which will be submitted to the appropriate repository and the City.

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Appendix A Personnel





EDUCATION

Ph.D., Vertebrate Paleontology; University of Southern California

M.S., Environmental Microbiology; University of Tennessee

B.A. with honors, Ecology and Systematics; William Jewell College & Homerton College, Cambridge University

10 YEARS EXPERIENCE

Alyssa Bell, PhD

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Paleontologist

Dr. Alyssa Bell has supervised and peformed field work, authored project reports, and provided scientific and compliance direction and quality control for paleontological projects throughout Southern California. Dr. Bell has accumulated a wealth of field experience, working with crews from a variety of institutions on field sites in California, Arizona, New Mexico, South Dakota, and Utah, and has led her own expeditions in Montana. She has performed all manner of investigations from surveys and assessments to monitoring and fossil idenfitication over the last 15 years as a part of her academic pursuits and professional consultation, with the last three years being exclusively professional endeavors.

In addition to consulting, Dr. Bell serves as a postdoctoral fellow at the Dinosaur Institute of the Natural History Museum of Los Angeles County (LACM). There she is involved in pursuing her own research into fossil birds as well as working with the Institute's field projects and museum-wide education and outreach initiatives. She has also published peer-reviewed articles and book chapters and given numerous presentations at scientific conferences on both her paleontological and microbiological research.

Relevant Experience

ICHA Area 10 (PA 10-2 & 10-4) Archaeological and Paleontological Monitoring, Irvine, CA. *Principal Investigator & Project Paleontologist*. Dr. Bell managed the curatorial process for fossils collected during monitoring of pre-construction activities at the University of California, Irvine, and authored the final report.

Suncrest Reactive Power Support Project, San Diego County, CA. *Principal Investigator.* Dr. Bell authored the paleontological assessment for the Proponent's Environmental Assessment (PEA) in support for a dynamic reactive power support facility and associated 230-kilovolt (kV) transmission line near Alpine, California. The application for Certificate of Public Convenience and Necessary was filed in summer 2015 and the PEA was deemed complete in December 2015.

Washington National Archaeological and Paleontological Monitoring (Access Culver City), Culver City, CA. *Principal Investigator & Project Paleontologist.* Dr. Bell managed the curatorial process for fossils collected during monitoring of preconstruction activities at the Washington national site in Culver City, CA and authored the final report.

OTO Hotels Santa Monica Archaeological and Paleontological Service, Santa Monica, CA. *Principal Investigator*. Dr. Bell supervised paleontological monitoring and mitigation services during construction excavations and grading. Services included implementation of a paleontological mitigation monitoring program and reporting.

Sacred Heart Specific Plan Environmental Impact Report (EIR), La Canada Flintridge, CA. *Principal Investigator*. Dr. Bell prepared paleontological studies and

developed monitoring & mitigation recommendations for the Sacred Heart development project.

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Sixth & Bixel Paleontological Monitoring Services Project, Los Angeles, CA. *Principal Investigator & Project Paleontologist*. Dr. Bell supervised paleontological monitoring of preconstruction activities in support of a development project encompassing two parcels in downtown Los Angeles. During these activities, monitors identified and recovered numerous significant vertebrate fossils. Dr. Bell supervised the excavation of fossilized whale remains discovered on-site, and oversaw the collection and curation of all fossil specimens.

Natural and Cultural Support for the Gordon Mull Subdivision EIR, Glendora, CA. *Principal Investigator*. Dr. Bell collected the necessary data to prepare the technical sections and mitigation recommendations to support an EIR prepared by another firm to address the Gordon Mull Subdivision in the city of Glendora. The project is proposes to redevelop a 71-acre, 19-lot located in the San Gabriel Foothills.

Lake Elsinore Lakeshore Town Center Permitting, Riverside County, CA. *Principal Investigator*. Dr. Bell provided paleontological studies and developed monitoring and mitigation recommendations for the Lake Elsinore Town Center project in Riverside County.

San Pedro Plaza Park - Phase III Archaeological Monitor, Los Angeles, CA. *Principal Investigator.* Dr. Bell identified fossils during the mitigation measurementrequired archaeological monitoring of earthmoving activities in San Pedro Park Plaza. She is also responsible for curation of the fossil material and authorship of the paleontological section of the final report.

City of Hope Specific Plan and EIR, Duarte, CA. *Principal Investigator.* Dr. Bell provided paleontological resource studies for the City of Hope Specific Plan Project.

Blythe Solar Power Project, Units 1 & 2, Riverside County, CA. *Project Paleontologist.* Dr. Bell supervised paleontological monitoring of preconstruction activities for a solar photo-voltaic cell power-generating facility outside the city of Blythe. As a part of her role, she provided oversight and management of paleontological monitors and development of the final monitoring report.

Industrial Project Environmental Impact Report, Colton, CA. *Principal Investigator*. Dr. Bell provided a paleontological resources study for a six-acre industrial project site at the southwest corner of Agua Mansa Road and Rancho Avenue in the city of Colton.

Mojave Solar Project Paleontological Reporting, San Bernardino County, CA. *Principal Investigator.* Dr. Bell managed curation of fossil materials and authored the final report of paleontological monitoring services provided for construction activities in support of a solar field development project in San Bernardino County.

El Camino Real Bridge Replacement Environmental Services, Atascadero, CA. *Principal Investigator.* Dr. Bell provided environmental services, including preparation of all California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) documentation, technical studies, and permitting, for the replacement of the El Camino Real Bridge over Santa Margarita Creek in Atascadero. Alyssa Bell, PhD Page 3



Recycled Water Transmission Water Main Paleo Monitoring, Fresno, CA. *Principal Investigator.* Dr. Bell developed a monitoring and mitigation plan for the city of Fresno recycled water main construction project.

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Shafter Wasco Irrigation District Natural and Cultural Resource Evaluations and Air Quality, Kern County CA. *Principal Investigator*. Dr. Bell provided paleontological studies and developed recommendations for the monitoring and mitigation of paleontological resources for the project.

Valentine EIR, Kern County, CA. *Principal Investigator.* Dr. Bell provided paleontological resources support for a 2,000-acre solar PV project in the Mojave Desert. Deliverables included comprehensive technical reports, GIS impact analysis, strategic and permitting support, and a paleontological field survey in the preparation of an EIR and other permitting requirements.

Valentine Solar EIR 115MW Supplemental Reports, Kern County, CA. *Principal Investigator.* Dr. Bell provided paleontological studies in support of changes to the previously established Valentine Solar project.

Valentine Solar Biological and Paleontological Study Updates, Rosamond, Kern County, CA. *Principal Investigator & Project Paleontologist*. Dr. Bell provided paleontological studies, carried out a paleontological survey, and developed monitoring and mitigation guidelines for the Valentine Solar project.

Field Research

2006-Present. The Dinosaur Institute, LACM. Coordinator and Team Leader on expeditions in Montana (Niobrara and Pierre Shale Formations) and Arizona (Chinle Formation). Field assistant on expeditions to Montana (Hell Creek Formation), Utah (Morrison Formation), Arizona (Chinle Formation), New Mexico (Kirtland Formation), and California (Aztec Sandstone). During this period approximately four-six weeks are spent in the field in various locations every year.

2015. Principal Investigator, Field Manager. SWCA Environmental Consultants. Supervision of all paleontological field work, including excavation of a partial whale fossil from a downtown Los Angeles construction site and numerous monitoring projects.

2014. University of Southern California. Field Assistant on an expedition to South Africa (Pre-Cambrian).

2005. Cambridge University. Field Assistant on an expedition in Badlands National Park, South Dakota (White River Group).

2002-2004. Montana State University Northern. Field Assistant on excavations in Montana (Judith River Formation).

Publications

Bell, A. and L. Chiappe, 2015. Identification of a new Hesperornithiform from the Cretaceous Niobrara Chalk and implications for ecologic diversity among early diving birds. PLOS One 10: e0141690.

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Bell, A. and M.J. Everhart, 2011. Remains of small avians from a Late Cretaceous (Cenomanian) microsite in north central Kansas. Transactions of the Kansas Academy of Science 114: 115-123

O'Connor, J., L. Chiappe, and A. Bell, 2011. Pre-modern birds: avian divergences in the Mesozoic in Kaiser, G. and G. Dyke, Living Dinosaurs. Oxford: Wiley-Blackwell Publishing. pp. 39-114.

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Bell, A., L. McKay, A. Layton, and D. Williams, 2009. Factors influencing the persistence of fecal Bacteroides in stream water. Journal of Environmental Quality 38: 1224-1232.

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Everhart, M.J. and A. Bell, 2009. A hesperornithiform limb bone from the basal Greenhorn Formation (Late Cretaceous; Middle Cenomanian) of north central Kansas. Journal of Vertebrate Paleontology 29: 952-956.

Conference Presentations

Bell, A., Y.-H.Wu, L. M. Chiappe, 2016. Use of morphometric data in taxonomy and functional morphology: a case study of modern and Cretaceous diving birds. 35th International Geological Congress. Cape Town, South Africa.

Bell, A., 2011. Inferring the ecology of extinct European birds from the Mesozoic and Tertiary. European Association of Vertebrate Paleontology. Heraklion, Crete.

Bell, A. and L.M. Chiappe, 2010. Identifying trends in avian ecomorphology. International Ornithological Congress. Sao Paulo, Brazil.

Bell, A., L.M. Chiappe, and J. O'Connor, 2009. Ecological diversity of Mesozoic birds: morphometric analysis with a phylogenetic perspective. Society of Vertebrate Paleontology. Bristol, United Kingdom.

Bell, A., Z.J. Tseng, and L. Chiappe, 2008. Diving mechanics of the extinct Hesperornithiformes: comparison to modern diving birds. Society of Vertebrate Paleontology. Cleveland, Ohio. Alyssa Bell, PhD Page 5



Bell, A., L. Chiappe, S. Susuki, and M. Watanabe, 2008. Phylogenetic and morphometric analysis of a new ornithuromorph from the Barun Goyot Formation, Southern Mongolia. Society of Avian Paleontology and Evolution. Sydney, Australia.

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Bell, A., 2008. Diving mechanics of the extinct Hesperornithiformes: comparison to modern diving birds. CalPaleo. Sacramento, California.

Bell, A., L. McKay, A. Layton, D. Williams, 2007. Persistence of Bacteroides in surface water. American Society for Microbiology. Chicago, Illinois.

Bell, A., L. McKay, and A. Layton, 2006. Survival and transport of Bacteroides in streams. Geological Society of America, Southeastern Section. Knoxville, Tennessee.

Bell, A., L. McKay, and A. Layton, 2006. Survival and transport of Bacteroides in streams. American Water Resources Association, Tennessee Division. Nashville, Tennessee.

Bell, A., 2004. Avian phylogenetics: a combined molecular and morphological analysis. David Nelson Duke Colloquium. Kansas City, Missouri.

Appendix D Noise and Vibration Information

Project: Beverly Hills Pipeline

Construction Noise Impact on Sensitive Receptors

Parameters	
Construction Hours:	8 Daytime hours (7 am to 7 pm)
	0 Evening hours (7 pm to 10 pm)
	0 Nighttime hours (10 pm to 7 am)
Leq to L10 factor	3

					R1 (Well	Site)			Pipeline	Work	
<i>Construction Phase</i> Equipment Type	No. of Equip.	Reference Noise Level at 50ft, Lmax	Acoustical Usage Factor	Distance (ft)	Lmax	Leq	L10	Distance (ft)	Lmax	Leq	L10
Well Site Demolition and Pump-to-Waste					93	88			93	88	
Jaw Crusher	2	84	10%	25	93	83	86	25	93	83	86
Dozer	1	82	40%	25	88	84	87	25	88	84	87
Excavator	1	81	40%	50	81	77	80	40	83	79	82
Forklift	1	75	10%	50	75	65	68	40	77	67	70
Tractor/Loader/Backhoe	1	80	25%	75	76	70	73	55	79	73	76
Other Equipment	1	85	50%	75	81	78	81	55	84	81	84
Well Construction Monitoring					88	88			89	89	
Air Compressor	1	78	40%	25	84	80	83	25	84	80	83
Bore/Drill Rig Truck	2	79	20%	25	88	81	84	25	88	81	84
Cranes	1	81	40%	50	81	77	80	40	83	79	82
Generator Sets	1	81	50%	50	81	78	81	40	83	80	83
Dump/Haul Trucks	1	76	40%	75	72	68	71	65	74	70	73
Other Equipment	4	85	50%	75	87	84	87	65	89	86	89
Pumps	1	81	50%	100	75	72	75	90	76	73	76
Tractor/Loader/Backhoe	1	80	25%	100	74	68	71	90	75	69	72
Well Equipping					87	83			87	83	
Cranes	1	81	40%	25	87	83	86	25	87	83	86
Forklift	1	75	10%	50	75	65	68	50	75	65	68
Rehabilitation/Transmission Main Installation					88	87			88	87	
Dozer	1	82	40%	25	88	84	87	25	88	84	87
Excavator	1	81	40%	25	87	83	86	25	87	83	86
Tractor/Loader/Backhoe	2	80	25%	75	79	73	76	75	79	73	76
Other Equipment	1	85	50%	150	75	72	75	150	75	72	75
Maximum Noise Level (Overlapping Phases)						91				87	

7-8

(1)Well Site Demo/Pump-to-Waste + Rehab/Transmission Main Installation

90 91

88

(2) Rehab/Transmission Main Installation + Well Construction Monitoring

(3) Rehab/Transmission Main Installation + Well Equipping

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

Noise Measurement Data

Project:	BH Pipelin	ie			Location: R1	
	06/30/49	07/01/10	07/02/10	07/03/10	Start Date and Time	
12.00.00 414			01/02/15	01103113		01
12:00:00 AN		44.1			7/1/2019 [8:00:00 AM]	
1:00:00 Aivi		44.0			7/2/2019 9:00:00 AM	6/30/19 8:00 Alvi
2:00:00 AM		43.4			11:00:00 AM	End
3:00:00 AM		48.5			12:00:00 PM	7/1/19 8:00 AM
4:00:00 AM		50.5			1:00:00 PM	
5:00:00 AM		50.8				58.0
6:00:00 AM		52.3			L _{dn}	57.7
7:00:00 AM		55.4			24-hr Max.	63.4
8:00:00 AM	55.0				24-hr Min.	43.4
9:00:00 AM	63.4				24-hr Nighttime Average ^a	49.6
10:00:00 AM	55.4				24-hr Nighttime Max	53.0
11:00:00 AM	55.4				24-hr Nighttime Min	43.4
12:00:00 PM	53.1				24-hr Daytime Average ^a	55.9
1:00:00 PM	54.7				24-hr Daytime Max	63.4
2:00:00 PM	55.4				24-hr Daytime Min	50.8
3:00:00 PM	54.9				Total Period Average	54.4
4:00:00 PM	53.6				Total Period Max	63.4
5:00:00 PM	53.9				Total Period Min	43.4
6:00:00 PM	53.2				Total Period Daytime Average	55.9
7:00:00 PM	52.5				Total Period Daytime Max	63.4
8:00:00 PM	52.1				Total Period Daytime Min	53.1
9:00:00 PM	50.8				Total Period Nighttime Average	49.6
10:00:00 PM	47.9				Total Period Nighttime Max	53.0
11:00:00 PM	53.0				Total Period Nighttime Min	43.4

^a Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m.

Measured Ambient Noise Levels

Project:	BH Pipeline
Location:	R1
Sources:	Ambient

Date: June 30 - July 1, 2019





Summary		
File Name on Meter	R2	
File Name on PC	SLM 0005055 LxT Data 031.01.ldbin	
Serial Number	0005055	
Model	SoundTrack LxT [®]	
Firmware Version	2.302	
User		
Location		
lob Description		
Note		
Measurement		
Description		
Start	2019-07-01 10:12:36	
Stop	2019-07-01 10:27:36	
Duration	00.15.00 0	
Bun Time	00:15:00.0	
Rain Time Bauco	00:00:00 0	
Pause	00.00.00.0	
Pre Calibration	2019-07-01 09:33:36	
Post Calibration	2013 07 01 05.55.50 None	
Calibration Deviation	None	
Overall Settings		
RMS Weight	A Weighting	
Peak Weight	A Weighting	
Detector	Slow	
Preamn		
ricamp	TRIVIENTI	
Microphone Correction	Off	
Microphone Correction	Off	
Microphone Correction Integration Method Overload	Off Exponential 144.5 dB	
Microphone Correction Integration Method Overload	Off Exponential 144.5 dB	
Microphone Correction Integration Method Overload	Off Exponential 144.5 dB A	C Z
Microphone Correction Integration Method Overload Under Range Peak	Off Exponential 144.5 dB A 100.8	C Z 97.8 102.8 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit	Off Exponential 144.5 dB A 100.8 49.8	C Z 97.8 102.8 dB 47.8 55.8 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor	Off Exponential 144.5 dB A 100.8 49.8 36.6	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor	Off Exponential 144.5 dB A 100.8 49.8 36.6	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results	Off Exponential 144.5 dB A 100.8 49.8 36.6	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results LASeq	Off Exponential 144.5 dB A 100.8 49.8 36.6 78.3 dB	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results LASeq LASE	Off Exponential 144.5 dB A 100.8 49.8 36.6 78.3 dB 107.9 dB	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results LASeq LASE EAS	Off Exponential 144.5 dB A 100.8 49.8 36.6 78.3 dB 107.9 dB 6.833 mPa ² h	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results LASeq LASE EAS EAS EAS8	Off Exponential 144.5 dB A 100.8 49.8 36.6 78.3 dB 107.9 dB 6.833 mPa ² h 218.655 mPa ² h	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results LASeq LASE EAS EAS8 EAS8 EAS40	Off Exponential 144.5 dB A 100.8 49.8 36.6 78.3 dB 107.9 dB 6.833 mPa ² h 218.655 mPa ² h 1.093 Pa ² h	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results LASeq LASE EAS EAS EAS8 EAS40 LASpeak (max)	Off Exponential 144.5 dB A 100.8 49.8 36.6 78.3 dB 107.9 dB 6.833 mPa ² h 218.655 mPa ² h 1.093 Pa ² h 2019-07-01 10:17:00	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results LASeq LASE EAS EAS8 EAS8 EAS40 LASpeak (max) LASmax	Off Exponential 144.5 dB A 100.8 49.8 36.6 78.3 dB 107.9 dB 6.833 mPa ² h 218.655 mPa ² h 1.093 Pa ² h 2019-07-01 10:17:00 2019-07-01 10:17:00	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB
Microphone Correction Integration Method Overload Under Range Peak Under Range Limit Noise Floor Results LASeq LASE EAS EAS EAS8 EAS40 LASpeak (max) LASmax LASmax	Off Exponential 144.5 dB A 100.8 49.8 36.6 78.3 dB 107.9 dB 6.833 mPa ² h 218.655 mPa ² h 1.093 Pa ² h 2019-07-01 10:17:00 2019-07-01 10:17:00 2019-07-01 10:17:31	C Z 97.8 102.8 dB 47.8 55.8 dB 37.3 44.9 dB

Summary			
File Name on Meter	R2 Nighttime		
File Name on PC	SLM_0005055_LxT_Data_039.0	0.ldbin	
Serial Number	0005055		
Model	SoundTrack LxT [®]		
Firmware Version	2.302		
User			
Location			
lob Description			
Note			
Measurement			
Description			
Start	2019-07-02 00:27:55		
Stop	2019-07-02 00:42:55		
Duration	00.15.00.0		
Bun Time	00:15:00.0		
Rain Time Bauco	00:00:00 0		
rause	00.00.00.0		
Dra Calibration	2010 07 01 00:22:26		
Pre Calibration	2019-07-01 09.55.56		
Post Calibration	None		
Calibration Deviation			
Quarall Sattings			
BMS Weight	A Woighting		
Rock Weight	7 Weighting		
Detector	SIOW		
Preamp	PRIVILATI		
Microphone Correction	Uff		
Integration Method	Exponential		
Overload	144.5 dB		
	Α	C Z	
Under Range Peak	100.8	97.8 102.8 dB	
Under Range Limit	49.8	47.8 55.8 dB	
Noise Floor	36.6	37.3 44.9 dB	
Desults			
	72 9 dp		
LASEd	75.0 UB		
	105.5 UB		
EAS	2.388 mPd ⁻ n		
EAS8	76.429 mPa-n		
EAS40	382.144 mPa ² h		
LZSpeak (max)	2019-07-02 00:39:10	107.9 dB	
LASmax	2019-07-02 00:39:10	85.7 dB	
LASmin	2019-07-02 00:27:57	51.8 dB	
SEA	-99.9 dB		
		1.0 -	
LAS > 85.0 dB (Exceedance Counts / Duration)	1	1.8 5	
LAS > 115.0 dB (Exceedance Counts / Duration)	0	U.U s	
LZSpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZSpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZSpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	

Summary		
File Name on Meter	R3	
File Name on PC	SLM_0005055_LxT_Data_032.01.ldbin	
Serial Number	0005055	
Model	SoundTrack LxT [®]	
Firmware Version	2.302	
User		
Location		
Job Description		
Note		
Measurement		
Description		
Start	2019-07-01 10:32:56	
Stop	2019-07-01 10:47:56	
Duration	00:15:00.0	
Run Time	00:15:00.0	
Pause	00:00:00.0	
Pre Calibration	2019-07-01 09:33:36	
Post Calibration	None	
Calibration Deviation		
Overall Settings		
RMS Weight	A Weighting	
Peak Weight	A Weighting	
Detector	Slow	
Preamp	PRMLxT1	
Microphone Correction	Off	
Integration Method	Exponential	
Overload	144.5 dB	
	Α	C Z
Under Range Peak	100.8	97.8 102.8 dB
Under Range Limit	49.8	47.8 55.8 dB
Noise Floor	36.6	37.3 44.9 dB
Recults		
LASeq	74.4 dB	
LASE	103.9 dB	
FAS	2 733 mPa ² h	
FAS8	87 461 mPa ² h	
FASA	437 306 mPa ² h	
LASpeak (max)	2019-07-01 10:39:07	100 6 dB
LASmax	2019-07-01 10:42:27	82 3 dB
LASmin	2019-07-01 10:47:14	54.1 dB
SEA	-99.9 dB	
-		

Summary			
File Name on Meter	R3 Nighttime		
File Name on PC	SLM_0005055_LxT_Data_038.00.ldb	bin	
Serial Number	0005055		
Model	SoundTrack LxT [®]		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement			
Description			
Start	2019-07-02 00:10:09		
Stop	2019-07-02 00:25:09		
Duration	00:15:00.0		
Run Time	00:15:00.0		
Pause	00:00:00.0		
Pre Calibration	2019-07-01 09:33:36		
Post Calibration	None		
Calibration Deviation			
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	Z Weighting		
Detector	Slow		
Preamp	PRMLxT1		
Microphone Correction	Off		
Integration Method	Exponential		
Overload	144.5 dB		
	А	C Z	
Under Range Peak	100.8	97.8 102.8 dB	
Under Range Limit	49.8	47.8 55.8 dB	
Noise Floor	36.6	37.3 44.9 dB	
Results			
LASeq	74.7 dB		
LASE	104.2 dB		
EAS	2.920 mPa ² h		
EAS8	93.444 mPa ² h		
EAS40	467.221 mPa ² h		
LZSpeak (max)	2019-07-02 00:17:57	104.0 dB	
LASmax	2019-07-02 00:11:13	82.3 dB	
LASmin	2019-07-02 00:22:55	53.0 dB	
SEA	-99.9 dB		
	_		
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LAS > 115.0 dB (Exceedance Counts / Duration)	0	U.U s	
LZSpeak > 135.0 dB (Exceedance Counts / Duration)	0	U.U S	
LZSpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZSpeaK > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	

Summary			
File Name on Meter	R4		
File Name on PC	SLM_0005055_LxT_Data_033.01.ldbin		
Serial Number	0005055		
Model	SoundTrack LxT®		
Firmware Version	2.302		
llser			
Location			
lob Description			
Note			
Note			
Measurement			
Description			
Start	2019-07-01 10:55:41		
Ston	2019-07-01 11:10:41		
Duration	00.15.00.0		
Bun Time	00:15:00.0		
Pauso	00:00:00 0		
rause	00.00.00.0		
Pre Calibration	2019-07-01 09:33:36		
Post Calibration	None		
Calibration Deviation			
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamp	PRMLxT1		
Microphone Correction	Off		
Integration Method	Exponential		
Overload	144.5 dB		
	Δ	C Z	
Under Range Peak	100.8	97.8 102.8 dB	
Under Range Limit	49.8	47.8 55.8 dB	
Noise Floor	36.6	37 3 44 9 dB	
	0010		
Results			
LASeq	75.0 dB		
LASE	104.6 dB		
EAS	3.169 mPa ² h		
EAS8	101.417 mPa ² h		
EAS40	507.083 mPa ² h		
LASpeak (max)	2019-07-01 10:58:10	109.7 dB	
LASmax	2019-07-01 10:58:10	93.0 dB	
LASmin	2019-07-01 11:02:10	59.0 dB	
SEA	-99.9 dB		
Summary			
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File Name on Meter	R4 Nighttime		
File Name on PC	SLM_0005055_LxT_Data_0)37.01.ldbin	
Serial Number	0005055		
Model	SoundTrack LxT [®]		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement			
Description			
Start	2019-07-01 23:48:45		
Stop	2019-07-02 00:03:45		
Duration	00:15:00.0		
Run Time	00:15:00.0		
Pause	00:00:00.0		
	0010010010		
Pre Calibration	2019-07-01 09:33:36		
Post Calibration	None		
Calibration Deviation			
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	Z Weighting		
Detector	Slow		
Preamp	PRMLxT1		
Microphone Correction	Off		
Integration Method	Exponential		
Overload	144.5 dB		
	Δ	C Z	
Linder Range Peak	100.8	97.8 102.8 dB	
Under Range Limit	49.8	47.8 55.8 dB	
Noise Floor	45.6	47.8 55.8 dB	
	50.0	37.3 44.9 UB	
Results			
LASeq	74.0 dB		
LASE	103.6 dB		
EAS	2.526 mPa	²h	
EAS8	80.819 mPa	²h	
EAS40	404.097 mPa	²h	
I 7Sneak (max)	2019-07-01 23:53:58	110.4 dB	
LASmax	2019-07-01 23:51:44	84 9 dB	
LASmin	2019-07-01 23:53:73	49.6 dB	
SEA	-99.9 dB	13.0 45	
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZSpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZSpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZSpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	
· · · · ·			

Summary		
File Name on Meter	R5	
File Name on PC	SLM_0005055_LxT_Data_034.01.ldbin	
Serial Number	0005055	
Model	SoundTrack LxT [®]	
Firmware Version	2.302	
User		
Location		
Job Description		
Note		
Measurement		
Description		
Start	2019-07-01 11:21:46	
Stop	2019-07-01 11:36:46	
Duration	00:15:00.0	
Run Time	00:15:00.0	
Pause	00:00:00.0	
Pre Calibration	2019-07-01 09:33:36	
Post Calibration	None	
Calibration Deviation		
Overall Settings		
RMS Weight	A Weighting	
Peak Weight	A Weighting	
Detector	Slow	
Preamp	PRMLxT1	
Microphone Correction	Off	
Integration Method	Exponential	
Overload	144.5 dB	
	Α	C Z
Under Range Peak	100.8	97.8 102.8 dB
Under Range Limit	49.8	47.8 55.8 dB
Noise Floor	36.6	37.3 44.9 dB
Results		
LASeq	70.7 dB	
LASE	100.2 dB	
EAS	1.174 mPa²h	
EAS8	37.574 mPa ² h	
EAS40	187.868 mPa²h	
LASpeak (max)	2019-07-01 11:33:22	98.7 dB
LASmax	2019-07-01 11:33:44	84.7 dB
LASmin	2019-07-01 11:36:22	57.6 dB
SEA	-99.9 dB	

Summary						
File Name on Meter	R5 Nighttime					
File Name on PC	SLM_0005055_LxT_Da	ta_036.01.ldbin				
Serial Number	0005055					
Model	SoundTrack LxT®					
Firmware Version	2 302					
liser	2.502					
Location						
Nete						
Note						
Measurement						
Description						
Start	2019-07-01 23:26:21					
Stop	2019-07-01 23:41:21					
Duration	00:15:00.0					
Bun Time	00.15.00 0					
Pause						
	00.00.00.0					
Pre Calibration	2019-07-01 00.22.26					
Pre Calibration	2013-07-01 09.33.30					
Post Calibration	None					
Calibration Deviation						
Overall Settings						
RMS Weight	A Weighting					
Peak Weight	Z Weighting					
Detector	Slow					
Preamp	PRMI xT1					
Microphone Correction	Off					
Integration Method	Exponential					
Overlead		AD				
Overload	144.3 (JD	~	-		
Huden Denes Deele	A 100.0			2 103 0 dD		
Under Kange Peak	100.8	9	8.76	102.8 dB		
Under Range Limit	49.8	4	47.8	55.8 dB		
Noise Floor	36.6	3	37.3	44.9 dB		
Results					 	
LASeq	74.7 (dB				
LASE	104.3	dB				
EAS	2.979	mPa²h				
EAS8	95.327	mPa²h				
FAS40	476 634	mPa²h				
I ZSneak (max)	2019-07-01 22.28.10		12 8 0	1B		
	2010 07 01 23.30.10	11	20 2 4	1B		
	2010 07 01 22.36.10		10.6	10		
SEA	2013-07-01 23.20.48	dB	+9.0 0	סג		
	55.5					
LAS > 85.0 dB (Exceedance Counts / Duration)	2		5.8 s	5		
LAS > 115.0 dB (Exceedance Counts / Duration)	0		0.0 s	5		
LZSpeak > 135.0 dB (Exceedance Counts / Duration)	0		0.0 s	5		
LZSpeak > 137.0 dB (Exceedance Counts / Duration)	0		0.0 s	5		
LZSpeak > 140.0 dB (Exceedance Counts / Duration)	0		0.0 s	5		

Summary		
File Name on Meter	R6	
File Name on PC	SLM 0004285 LxT Data 119.00.ldbin	
Serial Number	0004285	
Model	SoundTrack LxT®	
Firmware Version	2 302	
	2.302	
Location		
lob Description		
Note		
Note		
Measurement		
Description		
Start	2010-07-01 11:23:07	
Stan	2010-07-01 11:35:07	
Stop	2019-07-01 11.48.07	
	00.15.00.0	
Run Time	00:15:00.0	
Pause	00:00:00.0	
Due Caliburation	2010 07 01 10:10:11	
Pre Calibration	2019-07-01 10.19.11	
Post Calibration	None	
Calibration Deviation		
Overall Settings		
RMS Weight	A Weighting	
Roak Weight	A Weighting	
Detector	Slow	
Broomn		
Misrophone Correction	PRIVILATZD	
Integration Method	Exponential	
Overlead		
Overload	144.7 UB	6 J
	A 101.0	
Under Range Peak	101.0	98.0 103.0 dB
Under Range Limit	50.0	48.0 56.0 dB
Noise Floor	36.8	37.5 45.1 dB
Poculto		
	63 3 dB	
	32.5 ub	
	210.028 µrd-N	
	0.913 MPa ⁻ N	
	34.565 mPa ⁻ h	101.0 10
LASpeak (max)	2019-07-01 11:37:48	101.0 dB
LASmax	2019-07-01 11:46:11	81.9 dB
LASmin	2019-07-01 11:35:33	45.0 dB
SEA	-99.9 dB	

Summary			
File Name on Meter	R7		
File Name on PC	SLM_0004285_LxT_Data_118.00.I	dbin	
Serial Number	0004285		
Model	SoundTrack LxT [®]		
Firmware Version	2.302		
User			
Location			
lob Description			
Note			
Measurement			
Description			
Start	2019-07-01 11:06:23		
Stop	2019-07-01 11:21:23		
Duration	00:15:00.0		
Run Time	00:15:00.0		
Pause	00:00:00.0		
Pre Calibration	2019-07-01 10:19:11		
Post Calibration	None		
Calibration Deviation			
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamp	PRMLxT2B		
Microphone Correction	Off		
Integration Method	Exponential		
Overload	144.7 dB		
	А	C Z	
Under Range Peak	101.0	98.0 103.0 dB	
Under Range Limit	50.0	48.0 56.0 dB	
Noise Floor	36.8	37.5 45.1 dB	
Results			
LASeq	61.8 dB		
LASE	91.3 dB		
EAS	150.936 μPa²h		
EAS8	4.830 mPa²h		
EAS40	24.150 mPa²h		
LASpeak (max)	2019-07-01 11:07:52	93.6 dB	
LASmax	2019-07-01 11:07:52	79.7 dB	
LASmin	2019-07-01 11:16:29	47.8 dB	
SEA	-99.9 dB		
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LASpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LASpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LAspeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	

7-8

Summary			
File Name on Meter	R8		
File Name on PC	SLM 0004285 LxT Data 117	7.00.ldbin	
Serial Number	0004285		
Model	SoundTrack LxT®		
Firmware Version	2 302		
liser	2.002		
Location			
In Description			
Note			
Measurement			
Description			
Start	2019-07-01 10:41:52		
Stop	2019-07-01 10:56:52		
Duration	00:15:00.0		
Bun Time	00:15:00.0		
Pause	00.00.00 0		
	00.00.00.0		
Pre Calibration	2019-07-01 10:19:11		
Post Calibration	None		
Calibration Deviation			
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamp	PRMLxT2B		
Microphone Correction	Off		
Integration Method	Exponential		
Overload	144.7 dB		
	А	C Z	
Under Range Peak	101.0	98.0 103.0 dB	
Under Range Limit	50.0	48.0 56.0 dB	
Noise Floor	36.8	37.5 45.1 dB	
Results	54.2 JD		
LASEq	54.2 QB		
	83.8 UB		
EAS	26.584 µPa-h		
EAS8	850.703 µPa²h		
EAS40	4.254 mPa-n		
LASpeak (max)	2019-07-01 10:46:27	95.4 dB	
LASmax	2019-07-01 10:46:45	68.6 dB	
LASmin	2019-07-01 10:49:45	43.5 dB	
SEA	-99.9 GB		
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LASpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LASpeak > 137.0 dB (Exceedance Counts / Duration)	ů N	0.0 s	
LASpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	
	-		
LCSeq	63.8 dB		
LASeq	54.2 dB		
LCSeq - LASeq	9.6 dB		
LAleq	59.0 dB		
LAeq	54.2 dB		
LAIeg - LAeg	4.8 dB		

Summary			
File Name on Meter	R9		
File Name on PC	SLM_0004285_LxT_Data_1	.16.00.ldbin	
Serial Number	0004285		
Model	SoundTrack LxT [®]		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement			
Description			
Start	2019-07-01 10:21:52		
Stop	2019-07-01 10:36:52		
Duration	00:15:00.0		
Run Time	00:15:00.0		
Pause	00:00:00.0		
Pre Calibration	2019-07-01 10:19:12		
Post Calibration	None		
Calibration Deviation			
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamp	PRMLxT2B		
Microphone Correction	Off		
Integration Method	Exponential		
Overload	144.7 dB		
	А	C Z	
Under Range Peak	101.0	98.0 103.0 dB	
Under Range Limit	50.0	48.0 56.0 dB	
Noise Floor	36.8	37.5 45.1 dB	
Results			
LASeq	57.9 dB		
LASE	87.4 dB		
EAS	61.383 μPa	ĥ	
EAS8	1.964 mPa	²h	
EAS40	9.821 mPa	²h	
LASpeak (max)	2019-07-01 10:31:33	91.2 dB	
LASmax	2019-07-01 10:29:23	74.5 dB	
LASmin	2019-07-01 10:34:30	45.4 dB	
SEA	-99.9 dB		
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LASpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LASpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LASpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	

Final

CITY OF BEVERLY HILLS LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT Initial Study/Mitigated Negative Declaration

State Clearinghouse No. 2019099076

Prepared for City of Beverly Hills November 2019



Final

CITY OF BEVERLY HILLS LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT Initial Study/Mitigated Negative Declaration

State Clearinghouse No. 2019099076

Prepared for City of Beverly Hills November 2019

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TABLE OF CONTENTS

City of Beverly Hills, La Brea Subarea Well and Transmission Main Project Final IS/MND

	<u>Page</u>
Chapter 1. Introduction to Response to Comments	1-1
1.1 CEQA Requirements	1-1
1.2 CEQA Process	1-2
1.3 Evaluation and Response to Comments	1-2
1.4 Final IS/MND Certification and Approval	1-2
1.5 Notice of Determination	1-2
Chapter 2. Comment Letters	2-1
Chapter 3. Responses to Comments	3-1
Letter 1: State Clearinghouse, Office of Planning and Research	3-1
Letter 2: California Department of Transportation (CalTrans), District 7	3-1
Letter 3: Los Angeles County Metropolitan Transportation Authority (Metro).	3-3
Letter 4: South Coast Air Quality Management District (SCAQMD)	3-7
Letter 5: Call Log	3-8
Chapter 4. Corrections and Additions to the Draft IS/MND	4-1
Chapter 5. Mitigation Monitoring and Reporting Program	5-1
CEQA Requirements	5-1

List of Tables

2-1	Comment Letters Received	2-1
5-1	Mitigation Monitoring and Reporting Program for the La Brea Subarea Well and	
	Transmission Main Project	5-2

i

CHAPTER 1 Introduction to Response to Comments

This Final Initial Study/Mitigated Negative Declaration (Final IS/MND) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and *CEQA Guidelines* (California Code of Regulations Section 15000 et seq.). The Final IS/MND incorporates, by reference, the Draft IS/MND (State Clearinghouse No. 2019099076) prepared by the City of Beverly Hills (City) for the La Brea Subarea Well and Transmission Main Project (proposed project), as it was originally published and the following chapters, which include revisions made to the Draft IS/MND.

7-8

1.1 CEQA Requirements

Before the City may approve the project, it must certify that the Final IS/MND: a) has been completed in compliance with CEQA; b) was presented to the City Council who reviewed and considered it prior to approving the project; and c) reflects the City's independent judgment and analysis.

A Final IS/MND shall consist of the following:

- The Draft IS/MND or a revision of that draft;
- Comments and recommendations received on the Draft IS/MND;
- A list of persons, organizations, and public agencies commenting on the Draft IS/MND;
- The response of the Lead Agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the Lead Agency.

This Final IS/MND for the proposed project presents Chapter 1 through Chapter 4:

- Chapter 1: Introduction and CEQA process
- Chapter 2: A list of persons, organizations, and public agencies commenting on the Draft IS/MND, and the written comments received on the Draft IS/MND
- Chapter 3: Written responses to each comment identified in Chapter 2
- Chapter 4: Mitigation Monitoring and Reporting Program

1.2 CEQA Process

Public Participation Process

Notice of Intent

The Notice of Intent (NOI) to adopt an IS/MND was posted on September 23, 2019 with the County Clerk in Los Angeles. The Draft IS/MND was circulated for a 30-day public review until October 23, 2019. The Draft IS/MND was circulated to federal, State, and local agencies and interested parties requesting a copy of the Draft IS/MND. Copies of the Draft IS/MND were made available to the public at the following locations:

7-8

- City of Beverly Hills Web Site: http://www.beverlyhills.org/lcwell
- Beverly Hills Public Library, 444 N. Rexford Drive, Beverly Hills, CA 90210;
- Beverly Hills Public Works Building, 345 Foothill Road, Beverly Hills, CA 90210
- Palms-Ranch Park Branch Library, 2920 Overland Avenue, Los Angeles, CA, 90064
- Fairfax Branch Library, 161 S. Gardner Street, Los Angeles, CA, 90036; and
- Robertson Branch Library, 1719 S. Robertson Boulevard, Los Angeles, CA, 90035.

1.3 Evaluation and Response to Comments

The City, as the Lead Agency, will evaluate comments on environmental issues received from parties that have reviewed the Draft IS/MND and, although not required to do so, intends to prepare written responses.

1.4 Final IS/MND Certification and Approval

Prior to considering the project for approval, the City, as the Lead Agency, will review and consider the information presented in the Final IS/MND and will certify that the Final IS/MND:

- (a) Has been completed in compliance with CEQA;
- (b) Has been presented to the City Council as the decision-making body for the Lead Agency, which reviewed and considered it prior to approving the project; and
- (c) Reflects the City's independent judgment and analysis.

1.5 Notice of Determination

Pursuant to Section 15094 of the *CEQA Guidelines*, the City will file a Notice of Determination (NOD) with the Office of Planning and Research and Los Angeles County Clerk within five working days of project approval.

CHAPTER 2 Comment Letters

The Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) for the La Brea Subarea Well and Transmission Main Project (proposed project) was circulated for public review for 30 days (September 23, 2019 through October 23, 2019) in accordance with the requirements of *CEQA*. The City received four comment letters and six verbal comments (over the phone) during the public review period, which are listed in **Table 2-1** and included within this chapter. The letters have been marked with brackets that delineate comments pertaining to environmental issues and the information and analysis contained in the Draft IS/MND. Responses to such comments are provided in Chapter 3.

7-8

Comment No.	Commenting Agency	Date of Comment
1	State Clearinghouse, Office of Planning and Research	October 23, 2019
2	California Department of Transportation (CalTrans), District 7	October 22, 2019
3	Los Angeles County Metropolitan Transportation Authority (Metro)	October 22, 2019
4	South Coast Air Quality Management District (SCAQMD) October 22, 2019	
5	Call Log	
	 Kimberly Terry Sheryl Lori Laboy Norman Zafman Sylvia Ashly Fatima Choudury (Caltrans) 	Various September 24, 2019 through October 22, 2019

TABLE 2-1 COMMENT LETTERS RECEIVED



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

7-8



Gavin Newsom Governor

October 23, 2019

Tristan Malabanan Beverly Hills, City of 345 Foothill Road Beverly Hills, CA 90210

Subject: La Brea Subarea Well and Transmission Main Project SCH#: 2019099076

Dear Tristan Malabanan:

The State Clearinghouse submitted the above named MND to selected state agencies for review. The review period closed on 10/22/2019, and the comments from the responding agency (ies) is (are) available on the CEQA database for your retrieval and use. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

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

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

Check the CEQA database for submitted comments for use in preparing your final environmental document: https://ceqanet.opr.ca.gov/2019099076/2. Should you need more information or clarification of the comments, we recommend that you contact the commenting agency directly.

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

Sincerely,

Scott Morgan Director, State Clearinghouse

cc: Resources Agency

520

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

DEPARTMENT OF TRANSPORTATION

DISTRICT 7 – Office of Regional Planning 100 S. MAIN STREET, MS 16 LOS ANGELES, CA 90012 PHONE (213) 897-0475 FAX (213) 897-1337 TTY 711 www.dot.ca.gov

October 22, 2019

Tristan Malabanan City of Beverly Hills 345 Foothill Road Beverly Hills, CA 90210



Making Conservation a California Way of Life.

Governor's Office of Planning & Research

OCT 22 2019

STATE CLEARINGHOUSE

RE: La Brea Subarea Well and Transmission Main Project – Mitigated Negative Declaration (MND) SCH # 2019099076 GTS # 07-LA-2019-02840 Vic. LA-10/PM: R8.831 LA-187/PM: 8.648

Dear Tristan Malabanan:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced MND. The proposed project would include the construction of a groundwater production well in the La Brea Subarea (that would provide approximately 1,700 AFY of new water supply), the rehabilitation of an existing (inactive) 18 and 24-inch pipelines, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main with a diameter of 16-inches (collectively, referred to herein as "proposed transmission main"). The proposed transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply. The pipelines would be sized to accommodate 3,000 gallons per minute (gpm), which would be from the currently proposed well and potentially other wells in the area. The City of Beverly Hills is the Lead Agency under the California Environmental Quality Act (CEQA).

The nearest State facilities to the proposed project are Interstate 10 (I-10) and State Route 187 (SR-187). Specifically, the project is located approximately 2,000 feet from the I-10 & SR-187 interchange near S La Cienega Boulevard.

From reviewing the MND, Caltrans does not expect project approval to result in a direct adverse impact to the existing State transportation facilities.

The following information is for your consideration.

Caltrans appreciates the efforts of this project to minimize construction traffic, such as by conducting nighttime construction of the transmission main. If construction traffic is expected to cause delays on any State facilities, please submit the Traffic Control Plan detailing these delays, as well as information on a Truck Haul Route Program, for Caltrans' review. In addition, strategies should be identified in the Traffic Control Plan to ensure that truck deliveries during project design and construction are conducted in an efficient manner that does not cause transportation conflicts with other vehicles, pedestrians, or bicyclists.

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

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

> > 521

2-A

2-B

2-C

Tristan Malabanan October 22, 2019 Page 2 of 2

ensure maximum safety conditions for pedestrians, cyclists, and motorists.

Also, Senate Bill 743 (2013) mandates that VMT be used as the primary metric in identifying transportation impacts of all future development projects under CEQA, starting July 1, 2020. For information on determining transportation impacts in terms of VMT on the State Highway System, see the Technical Advisory on Evaluating Transportation Impacts in CEQA by the California Governor's Office of Planning and Research, dated December 2018: <u>http://opr.ca.gov/docs/20190122-743</u> Technical Advisory.pdf.

7-8

Finally, storm-water runoff is a sensitive issue for Los Angeles County and needs to be considered during project design.

If you have any questions about these comments, please contact Emily Gibson, the project coordinator, at Emily.Gibson@dot.ca.gov, and refer to GTS # 07-LA-2019-02840.

Sincerely

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

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



Los Angeles County Metropolitan Transportation Authority

7-8

One Gateway Plaza Los Angeles, CA 90012-2952 213.922.2000 Tel metro.net

October 22, 2019

Tristan Malabanan, P.E., Project Manager Department of Public Works, Engineering Division City of Beverly Hills 345 Foothill Road Beverly Hills, CA 90210 Sent by Email: askpw@beverlyhills.org

RE: La Brea Subarea Well and Transmission Main Project: Mitigated Negative Declaration (MND)

Dear Mr. Malabanan:

Thank you for coordinating with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the proposed La Brea Subarea Well and Transmission Main Project (Project) in the City of Beverly Hills (City). Metro is committed to working with local municipalities, developers, and other stakeholders across Los Angeles County on transit-supportive developments to grow ridership, reduce driving, and promote walkable neighborhoods.

The purpose of this letter is to outline recommendations from Metro concerning issues that are germane to our agency's statutory responsibility in relation to the Metro Purple Line Extension Section One and Two and Metro bus facilities and services, which may be affected by the proposed Project. In addition to the specific comments outlined below, Metro would like to provide the City with two resources: 1) the Metro Adjacent Development Handbook (attached), which provides an overview of common concerns for development adjacent to Metro-owned right-of-way (ROW) and 2) the Adjacent Construction Manual with technical information (also attached). These documents and additional resources are available at www.metro.net/projects/devreview/.

Project Description

The Project is adjacent to Metro bus service and the Purple Line Extension under construction, and includes construction of a groundwater production well in the La Brea Subarea, the rehabilitation of existing (inactive) 18- and 24- inch pipelines, and the connection of the rehabilitated pipelines to a newly constructed raw water transmission main with a diameter of 16 inches.

The proposed Well Site would be implemented on a Beverly Hills-owned property located at 1956 Chariton Street. The proposed transmission main in its entirety would be approximately four miles long. The proposed rehabilitation area of the transmission main would proceed north within La Cienega Boulevard to Olympic Boulevard, then west through the Frank Fenton Field at La Cienega Park. The alignment in Beverly Hills will continue north on Le Doux Road, then west on Clifton Way to connect to the proposed 16-inch new pipeline. The length of the proposed new 16-inch transmission main would then continue westward until turning north on North Swall Drive, then west on Dayton

3-A

3-B

Page 1 of 3

La Brea Subarea Well and Transmission Main Project MND – Metro Comments October 23, 2019

Way, until turning north on North Palm Drive, then continue westward on 3rd street, and finally through the City yard to connect to the utilities inlet side of the Foothill Water Treatment Plant (WTP).

7-8

Comments

Bus Stop Adjacency

- 1. <u>Service</u>: Metro Bus Line 105 operates on La Cienega Boulevard, adjacent to the Project. One Metro Bus stop is in proximity to the Project at La Cienega and Guthrie Avenue. Other transit operators may provide service in this area and should be consulted.
- 2. <u>Impact Analysis</u>: The MND should analyze potential effects on Metro Bus service and identify mitigation measures or project design features as appropriate. Potential impacts may include construction traffic, operation of and shipment/deliveries to the completed Project, and temporary or permanent bus service rerouting.
- Bus Operations Contacts: Please contact Metro Bus Operations Control Special Events Coordinator at 213-922-4632 and Metro's Stops and Zones Department at 213-922-5190 with any questions and at least 30 days in advance of initiating construction activities. Other municipal bus services may also be impacted and should be included in construction outreach efforts.

Subway Adjacency

- 1. <u>Operations</u>: The Metro Westside Purple Line Extension Section One and Two are currently under construction in the vicinity of the Project. Once in operation, peak service as often as ten minutes in both directions. Trains may operate in and out of revenue service, 24 hours a day, seven days a week in the tunnels adjacent to the Project.
- 2. <u>Impact Analysis</u>: Due to the Project's proximity to the Purple Line tunnel intersecting at Wilshire Boulevard and North Le Doux Road, the City is encouraged to contact Metro staff early in the design process to plan for potential impacts. The MND should analyze potential effects on subway construction and identify mitigation measures or project design features as appropriate. Metro recommends that the following provisions be used to develop a mitigation measure and/or project design feature that addresses these potential impacts:
 - a. <u>Haul Route</u>: The construction of the Project may impact haul routes on La Cienega Boulevard for the Purple Line Extension Two (i.e. lane closures) that have been approved by both the City of Beverly Hills and the City of Los Angeles. Metro would appreciate assistance in coordinating any modifications to the haul route necessitated by the Project.
 - b. <u>Technical Review</u>: The City shall require its construction contractor to shall submit site plans, engineering drawings and calculations, as well as construction work plans and methods, including any crane placement and radius, to evaluate any impacts to the Metro Purple Line infrastructure in relationship to the Project. The City shall ensure that its construction contractor will obtain Metro's approval of final construction drawings before commencement of any construction activities for the Project.

3-D

3-C

La Brea Subarea Well and Transmission Main Project MND – Metro Comments October 23, 2019

> c. <u>Construction Safety</u>: The construction and operation of the Project shall not disrupt the construction activities of the Metro Purple Line or the structural and systems integrity of Metro's tunnels. Not less than two months before commencement of construction activities, the City's construction contractor shall initiate with Metro Purple Line construction staff. During Project construction the City's construction contractor shall work in close coordination with Metro to ensure that structural integrity is not compromised by construction activities or permanent build conditions. The City's construction contractor shall permit Metro staff to monitor construction activities to ascertain any impact to the Purple Line.

If you have any questions regarding this response, please contact me by phone at 213-922-2671, by email at <u>LingS@metro.net</u>, or by mail at the following address:

Metro Development Review One Gateway Plaza MS 99-22-1 Los Angeles, CA 90012-2952

Sincerely,

Shine Ling, AICP Manager, Transit Oriented Communities

Attachments and links:

- Adjacent Construction Design Manual
- Adjacent Development Handbook: <u>https://www.metro.net/projects/devreview/</u>

525

3-D

3-E

October 22, 2019

SENT VIA E-MAIL AND USPS: askpw@beverlyhills.org Tristan Malabanan, P.E., Project Manager City of Beverly Hills, Department of Public Works Engineering Division 345 Foothill Road Beverly Hills, California 90210

Mitigated Negative Declaration (MND) for the Proposed La Brea Subarea Well and Transmission Project

7-8

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final MND.

South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposes to demolish an existing structure and rehabilitate an existing 10,250 linear feet of water pipelines ranging in diameter from 18 inches to 24 inches (Proposed Project). The Proposed Project will also include construction of a four-mile water pipeline 16 inches in diameter and a 700-gallon-per-minute water well. The Proposed Project is located along Burton Way, Le Doux Road, and La Cienega Boulevard from the northeast corner of Chariton Street and Guthrie Avenue in the City of Los Angeles to the northeast corner of La Cienega Boulevard and Cadillac Avenue in the City of Beverly Hills. Construction of the Proposed Project is anticipated to take up to 13 months, becoming operational in Winter of 2020¹. The well equipping (grading²) and the rehabilitation/transmissions main installation (building construction activities from both phases will occur adjacent to existing sensitive receptors⁵.

South Coast AQMD Staff's Summary of the Air Quality Analysis

In the Air Quality Analysis Section, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared those emissions to South Coast AQMD's recommended regional and localized air quality CEQA significance thresholds. Based on the analysis, the Lead Agency found that the Proposed Project's regional construction and operational impacts would be less than significant⁶. Based on the localized air quality analysis, the Lead Agency found that the Proposed Project would result in localized air quality analysis, the Lead Agency found that the Proposed Project would result in localized PM2.5 emissions at 2.9 pounds per day (lbs/day)⁷, which did not exceed South Coast AQMD's localized air quality CEQA significance threshold for PM2.5 at 3 lbs/day. As such, no air quality mitigation was included⁸.

4-A

4-B

¹ MND. Section 2.0 Project Description. Page 12.

² MND. Appendix A: Air Quality, Greenhouse Gas, and Energy Information. CalEEMod Summer Run. PDF page 42.

³ Ibid.

⁴ MND. Section 2.0 Project Description. Page 12.

⁵ MND. Section 4.3 Air Quality. Pages 33 through 36.

⁶ *Ibid.* Pages 28 through 37.

 $^{^{7}}$ Ibid.

⁸ Ibid.

Recommended Mitigation Measure for Localized Air Quality Impacts from Construction

While the Proposed Project's localized PM2.5 construction emissions (i.e., approximately 2.9 lbs/day) did not exceed South Coast AQMD's localized air quality CEQA significance threshold for PM2.5 at 3 lbs/day for one acre with sensitive receptors at 25 meters in Source Receptor Area 2 (Northwest Coastal LA County), they were slightly below the applicable significance threshold. Therefore, to further reduce PM2.5 emissions during construction and to ensure that nearby sensitive receptors are not adversely affected by the emissions from the use of off-road diesel-powered construction equipment that will occur adjacent to sensitive receptors, South Coast AQMD staff recommends that the Lead Agency incorporate the following mitigation measure into the Final MND.

7-8

Tier 4 Construction Equipment or Level 3 Diesel-Particulate Filters

To further reduce PM2.5 emissions during construction and minimize their impacts on nearby residents, South Coast AQMD staff recommends that the Lead Agency require the use of off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (USEPA) Tier 4 Final off-road emissions standards for equipment rated at 50 horsepower or greater during construction of the Proposed Project. Such equipment will be outfitted with Best Available Control Technology (BACT) devices including a CARB certified Level 3 Diesel Particulate Filter (DPFs). Level 3 DPFs are capable of achieving at least 85 percent reduction in particulate matter emissions⁹. A list of CARB verified DPFs are available on the CARB website¹⁰.

To ensure that Tier 4 Final construction equipment or better would be used during the Proposed Project's construction, South Coast AQMD staff recommends that the Lead Agency include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractor(s) must demonstrate the ability to supply the compliant construction equipment for use prior to any ground disturbing and construction activities. A copy of each unit's certified tier specification or model year specification and CARB or South Coast AOMD operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment. Additionally, the Lead Agency should require periodic reporting and provision of written construction documents by construction contractor(s) to ensure compliance, and conduct regular inspections to the maximum extent feasible to ensure compliance.

In the event that construction equipment cannot meet the Tier 4 Final engine certification, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by the Lead Agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim or Tier 3 emission standards, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the Proposed Project, and/or limiting construction phases occurring simultaneously.

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful,

¹⁰ \overline{Ibid} . Page 18.

4-C

4-D

⁹ CARB. November 16-17, 2004. Diesel Off-Road Equipment Measure – Workshop. Page 17. Accessed at: https://www.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf.

informative, or useful to decision makers and the public who are interested in the Proposed Project. Further, when the Lead Agency makes the finding that the additional recommended mitigation measure is not feasible, the Lead Agency should describe the specific reasons for rejecting them in the Final EIR (CEQA Guidelines Section 15091).

7-8

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Alina Mullins, Assistant Air Quality Specialist, at <u>amullins@aqmd.gov</u> or (909) 396-2402, should you have any questions.

4-D

4-E

Sincerely,

Lijin Sun

Lijin Sun, J.D. Program Supervisor, CEQA IGR Planning, Rule Development & Area Sources

LS:AM LAC190924-04 Control Number -

Date	Name	Questions/Comments	
9/24/2019	Kimberly Terry	 Why not put the line on Robertson? Where is all the traffic going to go? Is Beverly Hills allowed to take water from LA? Is LA okay with that? 	
9/24/2019	Sheryl	Where is the existing pipe on La Cienega?What's the timing of construction?	
9/26/2019	Lori Laboy	 Why are you replacing an 18 to 24" line with a 16" line? How long will the construction take and when will it start? 	
10/2/2019	Norman Zafman	 Expressed concerns about pipeline on Le Doux between Gregory & Charleville. 	
10/22/2019	Sylvia Ashly	 Concerned about chemicals & chemical treatment. Against of chemical treatment and potential pollutants at that site. 	
10/22/2019	Fatima Choudury (Caltrans)	 Concerned because the map shows a blue dot near the onramp of the freeway. 	

CHAPTER 3 Responses to Comments

A summary of the comments contained within the comment letters received during the public review period for the Draft Initial Study/Mitigated Negative Declaration (IS/MND) is included in this section (see Chapter 2). The City provides individual responses to the bracketed comments in each letter. Where the responses indicate additions or deletions to the text of the Draft IS/MND, additions are indicated in <u>underline</u> and deletions in strikeout.

7-8

Letter 1: State Clearinghouse, Office of Planning and Research

Comment 1-A

The comment acknowledges the State Clearinghouse distributed the IS/MND as required under CEQA to pertinent agencies. The Caltrans comment letter is attached.

Response 1-A

The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents in the Draft IS/MND. The Caltrans letter is responded to as Letter 2 below.

Letter 2: California Department of Transportation (Caltrans), District 7

Comment 2-A

The comment acknowledges receipt of the Draft IS/MND and reiterates the project description.

Response 2-A

No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 2-B

The comment explains which State facilities are closest to the project area and that Caltrans does not expect project approval to result in direct impacts to those facilities.

Response 2-B

The comment is noted and saved in the project file. No response is required because there are no specific comments on the contents in the Draft IS/MND.

7-8

Comment 2-C

The comment requests that if construction traffic is expected to cause delays on State facilities, a Traffic Control Plan be submitted to Caltrans. The comment then explains that any construction that requires the transportation of heavy equipment on State highways would require a permit. The comment recommends that large size truck trips be limited to off-peak commute periods to minimize congestion and ensure maximum safety conditions for pedestrians, cyclists, and motorists. Further, the comment reiterates Senate Bill 743 and how to identify traffic impacts starting July 1, 2020. Lastly, the comment states that storm-water runoff is a sensitive issue for LA County and needs to be considered during project design. The comment closes with providing Caltrans contact information.

Response 2-C

Section 4.17, Transportation, of the Draft IS/MND describes potential impacts including delays within the project area. No project delays are anticipated on any Caltrans facilities. If for some reason, the transportation of heavy construction equipment requires the use of oversized-transport vehicles on State highways, the City will ensure that the appropriate Caltrans transportation permit is acquired. The commenter notes that strategies should be identified in the Traffic Control Plan to ensure deliveries during design and construction do not cause traffic conflicts. Pages 105-107 of the Draft IS/MND describe how the City will control such construction traffic and indicate the City will cooperate with other agencies in formulating a Traffic Control Plan. Mitigation Measure TR-1 explains how the City will coordinate with the appropriate agencies before and during construction to ensure that congestion is minimized for pedestrians, cyclists and motorists. In response to the comment, Mitigation Measure TR-1 has been revised to include Caltrans as an agency that will be consulted, as appropriate, in the formation of the Traffic Control Plan, on Page 107 of the Draft IS/MND:

TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas.

The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills, Los Angeles County, Metro, and Caltrans, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that

public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.

7-8

Section 4.17(b) of the Draft IS/MND discusses transportation impacts in terms of vehicle miles travelled and indicates that the project would not result in any perceivable increase in vehicle miles traveled that would exceed a threshold of significance either during construction or during implementation. Last, the commenter does not raise any impacts associated with storm water runoff, but suggests that such issues be considered. The potential impacts regarding storm-water runoff are considered and are discussed in detail in Sections 4.7 and 4.10 of the Draft IS/MND. The project will be subject to a Construction General Permit (CGP) under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. As required under the CGP, the City or its contractor will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The objectives of a SWPPP is to identify pollutant sources (such as sediment) that may affect the quality of storm water discharge and to implement best management practices (BMPs) to reduce pollutants in storm water. Section 4.19, Utilities and Service Systems, discusses why the project does not require expanded storm water drainage systems. Thus, the Draft IS/MND adequately addresses storm water runoff issues. The City appreciates the contact information for Caltrans and will coordinate in the future, if necessary.

Letter 3: Los Angeles County Metropolitan Transportation Authority (Metro)

Comment 3-A

The comment acknowledges receipt of the Draft IS/MND and summarizes the purpose of the letter – to outline recommendations from Metro. The comment also provides two Metro resources.

Response 3-A

The City appreciates the guidance documents provided by Metro. The documents are saved in the project record. No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 3-B

The comment reiterates the project description and mentions that the project is adjacent to the Purple Line Extension that is currently under construction.

Response 3-B

No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 3-C

The comment explains that the proposed transmission main is located adjacent to bus stops and that transit operators in the immediate area should be consulted. The comment explains that the MND should analyze potential effects on Metro Bus service, including construction traffic, operation of and shipment/deliveries to the completed project, and temporary or permanent bus service rerouting. The comment then provides Metro Bus contacts and states that construction outreach efforts should be initiated 30 days prior to construction starts.

7-8

Response 3-C

As described on Page 105 of the Draft IS/MND within the Transportation Section, the City is aware of Metro's bus services at La Cienega/Guthrie and along the length of La Cienega Boulevard. The Draft IS/MND analyses potential traffic impacts, which would include such Metro services. In order to minimize potential impacts to bus services, nighttime construction will be implemented along La Cienega as much as possible. Furthermore, as described in Section 2, Project Description, the required construction equipment for various stages of construction would be staged in areas adjacent to public rights-of-ways or within the Well Site boundary, and would be temporary in nature. Construction equipment would not be traveling to and from the project sites day-to-day. Bus services could experience increased travel times if buses were traveling behind a heavy truck due to slower movement and turning radii compared to passenger vehicles; these delays would be intermittent throughout the day and would cease once construction activities are completed. No full lane closures are anticipated to occur under the proposed project; therefore, no alternative bus routes would be required during the duration of construction activities for the project. Implementation of Mitigation Measure TR-1 would prepare the Traffic Control Plan one for the proposed transmission main. The Traffic Control Plan will assist motorists, including public transit through construction areas. As described on Page 106 of the Draft IS/MND, the Traffic Control Plan for the proposed project would be coordinated with Los Angeles County and Metro when construction activities affect roadways and public transit under its jurisdiction. Specifically, the City will ensure that the project's contractor will coordinate with Metro Bus Operations staff with any questions and to ensure they receive ample notice of delays at least 30 days in advance of construction activities. Metro coordination efforts will be included in construction contractor specifications. Thus, the Draft IS/MND identifies mitigation measures for any potential impacts on Metro buses. Further, as described on Page 107 of the Draft IS/MND, once the project is operational there will not be an expected increase in vehicle trips to the project location. There would be no impacts, or less than significant traffic impacts, associated with the operation of and shipment/deliveries to the completed project location.

Additionally, in response to the comment, Mitigation Measure TR-1 has been revised to include Metro as an agency that will be consulted, as appropriate, in the formation of the Traffic Control Plan, on page 107 of the Draft IS/MND;

TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction

management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas.

7-8

The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills, Los Angeles County, Metro, and Caltrans, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.

Comment 3-D

The comment states that the project is located adjacent to the Metro Westside Purple Line extension. The comment highly encourages City staff to contact Metro staff early in the design process to ensure potential impacts to the Purple Line tunnel intersection at Wilshire Boulevard and North Le Doux Road are minimized. The comment then recommends mitigation measures/project design features to address potential impacts such as: coordinating with Metro along haul routes; construction contractor should submit site plans, engineering drawings and other documentation to Metro for approval before construction; and that the City's construction contractor shall permit Metro staff to monitor construction activities to ascertain impacts to the Purple Line.

Response 3-D

The City appreciates the information provided regarding the Metro Purple Line work that is currently underway. To address concerns with Metro's Purple Line (subway) work, specifically, Page 105 in Section 4.17 of the Draft IS/MND has been revised as follows:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant with Mitigation Incorporated. The project proposed would install a well, pump-to-waste stormdrain line within Chariton Street adjacent to the Well Site, and a transmission main. The Well Site would be located at 1956 Chariton Street. The proposed transmission main would be approximately four miles long. The proposed rehabilitation portion of the transmission main (existing inactive 18 and 24-inch pipelines) are shown on Figure 2. Construction equipment, vehicles, personnel, and materials staging areas would be located onsite at the Well Site, within adjacent City-owned property, or immediately adjacent to the transmission main construction areas along streets/roadways, where such areas can be accommodated.

There are no bicycle facilities within the project area along the local roadways such as Chariton Street and La Cienega. Transit services in the cities of Los Angeles and Beverly Hills are provided by the Los Angeles County Metropolitan Transportation Authority (Metro) (Metro 2019). There are many transit locations and opportunities for bus <u>and</u> <u>subway</u> services within the project area. The closest bus stop is located at the intersection of La Cienega and Guthrie, which runs along Route 105 in the northern/southward direction. <u>While, Metro's Purple Line (subway) is located within the project area near the</u> <u>proposed transmission main. It should be noted that Metro is currently working on the</u> <u>Purple Line within the City of Los Angeles.</u>

The proposed transmission main rehabilitation and new construction areas were specifically designed to avoid impacts to the Metro Purple Line construction work and future operations. The areas in which the proposed transmission main would be implemented along North Le Doux Road, specifically, would utilize slip-lining techniques which would minimize disturbance to areas near Metro facilities. Slip-lining construction involves installing a new pipe within an existing host pipe using trenchless construction methods to cross Wilshire Boulevard. Slip-lining eliminates the need for active construction areas which would require partial lane/road closures, which could impact traffic.

Further, the City of Beverly Hills and their contractor will coordinate with Metro during the construction design and planning, including the development of a Traffic Control Plan (see Mitigation Measure TR-1, below). This will ensure that Metro's Purple Line work is not adversely impacted and that Metro's work will not interfere with the proposed transmission main, once implemented. As such, the project would not significantly impact Purple Line construction haul routes or construction activities.

Construction of the proposed project is anticipated to occur over approximately 13 months, at night and throughout the day. All daytime construction would occur during typical construction hours ranging between 7:00 a.m. to 79:00 p.m., Monday through Friday except on federal holidays.

As the comment recommends, the City's contractor will coordinate with Metro no less than two months prior to construction activities and can accommodate Metro staff to monitor construction activities that may take place near the Metro Purple Line. Metro coordination efforts will be included in construction contractor specifications.

Comment 3-E

The comment provides a final contact if there are any questions regarding Metro's comment letter.

Response 3-E

The contact information is saved to the project record. The City will contact the number provided if any questions arise.

Letter 4: South Coast Air Quality Management District (SCAQMD)

7-8

Comment 4-A

The comment acknowledges receipt of the Draft IS/MND and reiterates the project description.

Response 4-A

No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 4-B

The comment summarizes the significance determinations of the proposed project in regards to the air quality analysis.

Response 4-B

No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 4-C

Although the emissions were below the applicable significance threshold, the commenter nonetheless recommends the adoption of an additional mitigation measure for the Final MND. The commenter recommends that all off-road diesel-powered construction equipment meet or exceed Tier 4 off-road emissions standards for equipment rated 50 horsepower or greater during construction. The commenter recommends the Lead Agency require that each unit's certified tier specification or model year specification and CARB or SCAQMD operating permit (if applicable) be available upon request and require periodic reporting. Additionally, the commenter recommends that the Lead Agency require written documentation by contractors to ensure compliance and conduct regular inspections to ensure compliance.

Response 4-C

This comment is noted and saved in the project record. Section 4.3 of the Draft IS/MND addresses air quality. The air quality analysis for the proposed project assumes Tier 3-compliant equipment would be used. As shown on Page 33 in Table 3 of the Draft IS/MND, maximum daily construction emissions would not exceed SCAQMD daily significance thresholds with utilization of Tier 3-compliant equipment. No mitigation measures are required to reduce emissions to less-than-significant levels. Pursuant to CEQA Guidelines Section 15126.4(a)(3), mitigation measures are not required for effects which are not found to be significant. Thus, there is no requirement to incorporate the commenter's proposed mitigation measure requiring the use of Tier 4 construction equipment.

Nonetheless, the City will recommend that Tier 4 compliant equipment be utilized where such equipment is reasonably available at reasonable economic terms, to ensure maximum reduction in emissions. Further, in the event that Tier 4 equipment is not used, the City will recommend the following best practices: construction equipment with Tier 4 Interim or Tier 3 emission standards be used; reduction in the number and/or horsepower rating of construction equipment; limiting the number of daily construction haul truck trips to and from the proposed project; and/or limiting construction phases occurring simultaneously. This information will be included in construction contractor specifications.

7-8

Comment 4-D

The comment requests that written responses to their comments are received during the public review process, pursuant to CEQA Guidelines Section 15074.

Response 4-D

The comment is noted and saved in the project record. The City will provide SCAQMD with a response to their comments.

Comment 4-E

The comment provides a SCAQMD contact for any questions.

Response 4-E

The comment is noted and saved in the project record. The City will coordinate with the SCAQMD, as necessary.

Letter 5: Call Log

Comment 5-A

The comment was via phone call by Kimberly Terry. She asked why the transmission line would not be placed on Robertson Boulevard and inquired about where the traffic would go. She then asked if the City of Beverly Hills is allowed to take water from the City of Los Angeles, and whether the City of Los Angeles would allow this.

Response 5-A

The proposed transmission line was specifically designed to avoid and/or minimize potential impacts to existing utilities underground within the project area and local vicinity. An alignment analysis was conducted under a separate study in 2015 that evaluated La Cienega Boulevard, Robertson Boulevard, and a westerly route through neighborhood streets. The alignment in La Cienega Boulevard was determined to have the least construction impacts due to the slip-lining construction method proposed which reduces excavation. The option in Robertson Boulevard would require "open-cut" construction methods and would have a greater impact to the community. Thus, because it had lower construction impacts, the La Cienega route was selected over the Robertson Boulevard route. As a result of the project construction, there is the potential

for some traffic delays. As described in Section 4.17 of the Draft IS/MND, Transportation, the project would be required to implement Mitigation Measure TR-1, which includes specific Traffic Control Plans for project components. These plans would re-route some traffic and would ensure that traffic would be minimized as much as possible and provide motorists with detours and safety design measures. The Traffic Control Plans will be reviewed by multiple applicable jurisdictions including the City of Los Angeles, the City of Beverly Hills, Caltrans and Metro.

7-8

Furthermore, as described in Section 2.1 of the Draft IS/MND Project Description, the La Brea Subarea within the Central Basin is not adjudicated. That is, there are no various stipulations on utilization of groundwater in this area. Further, the City of Beverly Hills has a history of implementing groundwater wells within the La Brea Subarea. The City of Los Angeles is a Responsible Agency under CEQA for the project's IS/MND, and the City of Beverly Hills has been and intends to continue to coordinate with the City of Los Angeles, as necessary. Groundwater modeling and extensive research has been conducted within the La Brea Subarea to ensure the safe yield of the Subbasin (see Section 4.10, Hydrology and Water Quality for more details).

Comment 5-B

The comment was via phone call by Sheryl. She asked where the existing pipe on La Cienega is located and asked about the timing of construction.

Response 5-B

As described in Section 2.3 of the Draft IS/MND's Project Description, the existing 18- and 24inch transmission main areas that will be rehabilitated are located within La Cienega Boulevard to Olympic Boulevard and within Le Doux Road from Gregory Way to Clifton Way. Please refer to Figure 2 of the Draft IS/MND. The existing transmission main is illustrated with a dashed purple line, as denoted in the figure legend.

Section 2.5.1 of the Draft IS/MND provides information regarding the project's construction schedule. Project construction would take place for approximately 13 months, from Winter 2020 through Summer 2021, with several activities potentially occurring in parallel. Construction activities would occur during nighttime and on weekends for the 24-hour drilling of the production well, requiring approximately 120 days of drilling and testing. Nighttime construction would also be required for the rehabilitation and construction of the transmission main along La Cienega Boulevard because it is within a commercial area. This nighttime construction would minimize impacts to traffic and construction delays within roadways. The remainder of the proposed well and transmission main would involve construction typically occurring between 7:00 a.m. and 7:00 p.m., Monday through Friday, and 8:00 a.m., and 6:00 p.m., Saturdays. No work is allowed on Sundays and federal holidays.

To document these changes to schedule and construction timing, Page 12 of the Draft IS/MND has been revised as follows:

Project construction would take place for approximately 13 months, from Fall 2019 through Winter 2020, through Summer 2021, with several activities potentially occurring in parallel. Construction activities would occur during nighttime and weekends for the 24-hour drilling of the production requiring approximately 120 days of drilling and testing. Nighttime construction would also be required for the rehabilitation and construction of the transmission main along La Cienega Boulevard because it is within a commercial area. This nighttime construction would minimize impacts to traffic and construction delays within roadways.

7-8

The remainder of the proposed well and transmission main would involve construction typically occurring between 7:00 a.m. and 79:00 p.m., Monday through Friday except on federal holidays.

Comment 5-C

The comment was via phone call by Lori Laboy. She asked why 18- and 24-inch lines are being replaced with 16-inch lines, and inquired about how long construction will take and when it will start.

Response 5-C

The transmission main rehabilitation and construction are discussed on pages 14 and 15 of the Draft IS/MND. The proposed transmission main was designed to accommodate proposed groundwater well flows to the Foothill Water Treatment Plant. A larger diameter pipeline is not required. The 18-inch and 24-inch pipelines are not in service. They are acting as host pipes for the slip-lining construction method. The slip-lining method maximizes the internal diameter of the pipe, which maximizes the benefit of utilizing the existing inactive 18 and 24-inch inch transmission main. The difference in pipeline sizes is being accounted for in the design of the new facilities.

Please refer to Response 5-B, above for information about construction.

Comment 5-D

The comment was via phone call from Norman Zafman. He expressed concerns about the pipeline being located on Le Doux between Gregory and Charleville.

Response 5-D

This area of proposed transmission main construction would include a slip-lining technique, which includes minimal disturbance to the roadway above and surrounding areas. Locating the pipeline in Le Doux Road was chosen because of the availability of utilizing inactive pipelines to act as host pipes for the slip-lining technique, which reduces construction impacts compared to constructing using "open-cut" trenching methods which would be required on a parallel street.

Comment 5-E

The comment was via phone call from Sylvia Ashly. She expressed concern about chemical treatments and is against chemical treatment and potential pollutants onsite.

Response 5-E

The Draft IS/MND addresses water treatment and impacts by pollutants. As noted throughout the Draft IS/MND, all groundwater extracted at the proposed Well Site would be sent to the City's existing Foothill Water Treatment Plant where it will be treated to State drinking water standards. Further, the Draft IS/MND addresses potential pollutants onsite. Section 4.9, Hazards and Hazardous Materials, addresses how hazardous materials will be handles on site. And Section 4.10, Hydrology and Water Quality, indicates that the project would be subject to a Construction General Permit (CGP) under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act, which requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The objectives of a SWPPP is to identify pollutant sources that may affect the quality of storm water discharge and to implement best management practices (BMPs) to reduce pollutants in storm water.

7-8

Comment 5-F

The comment was via phone call from Fatima Choudary with Caltrans. She was concerned the project figures showed existing utilities near the onramp to the freeway.

Response 5-F

Figure 2 of the Draft IS/MND illustrates a zoomed-out area of the project vicinity and proposed components. Existing and proposed project facilities would not be located on or near Caltrans facilities and would not interfere with day-to-day Caltrans operations. The project does not include an access point immediately adjacent to the freeway. The access point would likely be located adjacent to the proposed Well Site, near the intersection of Guthrie Avenue and Chariton Street.
CHAPTER 4 Corrections and Additions to the Draft IS/MND

7-8

Section 4.1 Introduction

This chapter contains a compilation of revisions made to the text of the Draft IS/MND by the City as the Lead Agency, in response to the comments received during the 30-day public review period as well as minor edits. All revisions are previously introduced in Chapter 3 of this Final IS/MND but are summarized here for convenience of the reader. Where the responses indicate additions or deletions to the text of the Draft IS/MND, additions are indicated in <u>underline</u> and deletions in strikeout.

Page 12

Project construction would take place for approximately 13 months, from Fall 2019 through Winter 2020, through Summer 2021, with several activities potentially occurring in parallel. Construction activities would occur during nighttime and weekends for the 24-hour drilling of the production requiring approximately 120 days of drilling and testing. Nighttime construction would also be required for the rehabilitation and construction of the transmission main along La Cienega Boulevard because it is within a commercial area. This nighttime construction would minimize impacts to traffic and construction delays within roadways.

The remainder of the proposed well and transmission main would involve construction typically occurring between 7:00 a.m. and 79:00 p.m., Monday through Friday except on federal holidays.

Page 105

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant with Mitigation Incorporated. The project proposed would install a well, pump-to-waste stormdrain line within Chariton Street adjacent to the Well Site, and a transmission main. The Well Site would be located at 1956 Chariton Street. The proposed transmission main would be approximately four miles long. The proposed rehabilitation portion of the transmission main (existing inactive 18 and 24-inch pipelines) are shown on Figure 2. Construction equipment, vehicles, personnel, and materials staging areas would be located onsite at the Well Site, within adjacent City-owned property, or immediately adjacent to the transmission main construction areas along streets/roadways, where such areas can be accommodated.

There are no bicycle facilities within the project area along the local roadways such as Chariton Street and La Cienega. Transit services in the cities of Los Angeles and Beverly Hills are provided by the Los Angeles County Metropolitan Transportation Authority (Metro) (Metro 2019). There are many transit locations and opportunities for bus <u>and subway</u> services within the project area. The closest bus stop is located at the intersection of La Cienega and Guthrie, which runs along Route 105 in the northern/southward direction. <u>While, Metro's Purple Line (subway)</u> is located within the project area near the proposed transmission main. It should be noted that <u>Metro is currently working on the Purple Line within the City of Los Angeles.</u>

7-8

The proposed transmission main rehabilitation and new construction areas were specifically designed to avoid impacts to the Metro Purple Line construction work and future operations. The areas in which the proposed transmission main would be implemented along North Le Doux Road, specifically, would utilize slip-lining techniques which would minimize disturbance to areas near Metro facilities. Slip-lining construction involves installing a new pipe within an existing host pipe using trenchless construction methods to cross Wilshire Boulevard. Slip-lining eliminates the need for active construction areas which would require partial lane/road closures, which could impact traffic.

Further, the City of Beverly Hills and their contractor will coordinate with Metro during the construction design and planning, including the development of a Traffic Control Plan (see Mitigation Measure TR-1, below). This will ensure that Metro's Purple Line work is not adversely impacted and that Metro's work will not interfere with the proposed transmission main, once implemented. As such, the project would not significantly impact Purple Line construction haul routes or construction activities.

Construction of the proposed project is anticipated to occur over approximately 13 months, at night and throughout the day. All daytime construction would occur during typical construction hours ranging between 7:00 a.m. to 79:00 p.m., Monday through Friday except on federal holidays. Nighttime construction would be required for 24-hour drilling and testing of the proposed well. Nighttime construction would also take place along various areas of La Cienega for the transmission main rehabilitation, connection and new pipeline construction. Nighttime construction of the transmission main is proposed in order to avoid traffic congestion/interferences as much as possible. Nighttime construction would only occur in various areas along La Cienega where nighttime construction is permitted due to being located within a commercial area. Nighttime construction would require approval from the City of Los Angeles. Construction activities, scheduling, and number of workers could overlap between the construction of the well, associated storm drain (pump-to-waste).) and the transmission main. Construction truck and vehicle trips would be generated primarily by construction workers commuting to and from the work sites, and by trucks hauling materials and equipment to and from the well and transmission main sites. Construction trucks and vehicles would use the regional circulation system, as well as the main roadways within the cities of Los Angeles and Beverly Hills. Based on the designated construction truck routes established in the cities' General Plans, construction trucks would primarily use La Cienega Boulevard, Sawtelle Boulevard, Venice Boulevard, Sepulveda Boulevard, Manchester, Adams, Olympic Boulevard, 3rd Street,

and Santa Monica Boulevard to bring construction materials and construction workers to the project area (City of Los Angeles 2016; City of Beverly Hills 2010).

7-8

Page 107

TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas.

The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills, Los Angeles County, Metro, and Caltrans, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.

CHAPTER 5 Mitigation Monitoring and Reporting Program

7-8

5.1 CEQA Requirements

Section 15091(d) and Section 15097 of the CEQA Guidelines require a public agency to adopt a program for monitoring or reporting on the changes it has required in the project or conditions of approval to substantially lessen significant environmental effects. This Mitigation, Monitoring and Reporting Program (MMRP) summarizes the mitigation commitments identified in the La Brea Subarea Well and Transmission Main Project (proposed project) (State Clearinghouse No. 2019099076). Mitigation measures are presented in the same order as they occur in the Final IS/MND.

The columns in the MMRP table provide the following information:

- Mitigation Measure(s): The action(s) that will be taken to reduce the impact to a less-thansignificant level.
- Implementation, Monitoring, and Reporting Action: The appropriate steps to implement and document compliance with the mitigation measures.
- **Responsibility:** The agency or private entity responsible for ensuring implementation of the mitigation measure. However, until the mitigation measures are completed, the City, as the CEQA Lead Agency, remains responsible for ensuring that implementation of the mitigation measures occur in accordance with the MMRP (CEQA Guidelines, Section 15097(a)).
- **Monitoring Schedule:** The general schedule for conducting each task, either prior to construction, during construction and/or after construction.

 Table 5-1

 MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
Biological Resources			
 BIO-1: The City shall be responsible for the implementation of mitigation to reduce impacts to migratory and/or nesting bird species to below a level of significance through one of the following two ways: 1. Vegetation removal and demolition of structures shall be scheduled outside the avian nesting season which runs from February 15 to August 31 to avoid potential impacts to nesting birds; or 2. If avoidance of the avian nesting season (February 15 through August 31) is not feasible then the following shall occur: a) A qualified biologist (i.e. biologist(s) familiar with local nesting bird species and their behavior) shall conduct a preconstruction nesting bird survey no more than 3 days prior to any vegetation removal or demolition of structures. The survey shall be conducted to ensure that impacts to birds, including raptors, protected by the MBTA and/or the California Fish and Game Code and bat maternity colonies are avoided. Survey areas shall include suitable avian nesting habitat. b) If active nests of protected birds are identified during pre-construction surveys, an avoidance buffer area shall be determined at the discretion of the qualified biologist and demarcated for avoidance using flagging, staking, fencing, or another appropriate barrier to delineate construction avoidance until the nest is determined to no longer be active by a qualified biologist (i.e., young have fledged or no longer alive within the nest). An active nest is defined as a structure or site under construction are not part of the nest. Construction personnel shall be informed of the active nest and avoidance requirements. A biological monitor shall review the Project Site, at a minimum of one-week intervals, during all construction activities occurring near active nests to ensure that no inadvertent impacts to active nests cocrur. Pre-construction nesting bird surveys and monitoring results shall be submitted to the City of Beverly Hills Planning Division via email or memorandum upon c	 Include mitigation measure in construction contractor specifications. Retain copies of the survey(s) in the project file. Prepare reports to document any nesting bird species prior to construction activities. Perform additional survey(s) if there is a lapse of construction activities for seven days or more. Prepare reports to document any nesting bird species prior to resuming construction activities. Retain surveys and reports in the project file. 	The City; Construction Contractor	Before and During Construction

7-8

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
Cultural Resources	•		
CUL-1: Retention of Qualified Archaeologist . Prior to the start of any ground disturbing activities, a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior 2008) shall be retained by the City of Beverly Hills to carry out all mitigation measures related to cultural resources. In addition, the City of Beverly Hills will retain a Native American monitor to work in tandem with the archaeologist in the areas and during activities with potential to encounter prehistoric archaeological resources.	 Include mitigation measure in construction contractor specifications. Retain documentation of retaining a qualified archaeologist in the project file. 	The City; Construction Contractor	Before and During Construction
CUL-2: Cultural Resources Sensitivity Training. Prior to start of any ground-disturbing activities, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel associated with the proposed project. Construction personnel shall be informed of the types of cultural resources that may be encountered during construction, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City of Beverly Hills shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.	 Include mitigation measure in construction contractor specifications. Retain documentation demonstrating attendance of construction personnel to cultural resources sensitivity training. 	The City; Construction Contractor	Before and During Construction
CUL-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the qualified archaeologist) shall observe all excavation activities associated with the installation of the Well Site. For the portion of the alignment requiring installation of the new transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring of all excavations including trenching and bore pits. For the portion of the alignment which involves the rehabilitation of existing transmission mains, an archaeological monitor and Native American monitoring on all access points along the rehabilitation alignment. Should the soils prove to be too disturbed to contain archaeological resources these spot checks can be reduced or discontinued. Conversely, if the sediments are found to contain archaeological resources, the qualified archaeologist may recommend full time monitoring for such areas along the route. The qualified archaeologist, in coordination with the City of Beverly Hills, may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitor(s) shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed in Mitigation Measure CUL-4). The archaeological monitor shall keep daily logs detailing the types of archaeologist shall be submitted to the City of Beverly Hills. The qualified archaeologist shall submit a copy of the final report to the SCCIC.	 Include mitigation measure in construction contractor specifications. Perform site inspections to ensure compliance with cultural sensitivity requirements. Retain all archeological and tribal inspection forms in the project file. Retain copy of final archaeological report in the project file. 	The City; Construction Contractor	Before and During Construction

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
CUL-4: Unanticipated Discoveries. In the event of an unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City of Beverly Hills, and the appropriate Native American representatives for prehistoric resources, on the significance of the resource.	 Include mitigation measure in construction contractor specifications. Perform site inspections to ensure compliance with cultural sensitivity requirements. Retain inspection forms in the project file. Retain correspondence between archeologist and Native American representative. Retain a copy of Archeological Resources Treatment Plan (if one is required) in the project file. 	The City; Construction Contractor	Before and During Construction
CUL-5: Unanticipated Discovery of Human Remains and Associated Funerary Objects. In the event human remains and/or associated funerary objects are encountered during construction of the proposed project, all activity in the vicinity of the find shall cease (within 100 feet). Human remains discoveries shall be treated in accordance with and California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, requiring assessment of the discovery by the County Coroner, assignment of a Most Likely Descendant by the NAHC, and consultation between the Most Likely Descendant and the landowner regarding treatment of the discovery. Until the landowner has conferred with the Most Likely Descendant, the City of Beverly Hills shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity and that further activities take into account the possibility of multiple burials.	 Include mitigation measure in construction contractor specifications. Retain inspection forms in the project file. Retain NAHC correspondence in project files, if necessary. 	The City; Construction Contractor	Before and During Construction
GEO-1: A qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist) shall be retained prior to the approval of demolition or grading permits. The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall attend the project kick-off meeting and Project progress meetings on a regular basis, and shall report to the project site in the event potential paleontological resources are encountered.	 Include mitigation measure in construction contractor specifications. Retain documentation of retaining a qualified paleontologist in the project file. 	The City; Construction Contractor	Before and During Construction
GEO-2: The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training at the project kick-off meeting prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). In the event construction crews are phased, additional training shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the project site and the procedures to be followed if they are found. Documentation shall be retained by the Qualified Paleontologist demonstrating that the appropriate construction personnel attended the training.	 Include mitigation measure in construction contractor specifications. Retain documentation demonstrating attendance of construction personnel to paleontological resources training. 	The City; Construction Contractor	Before and During Construction

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
GEO-3: The Qualified Paleontologist shall develop a Paleontological Resources Monitoring Plan (PRMP) that shall detail the monitoring program necessary for the project, based off of specific construction methodologies and locations. Construction activities have varying impacts on paleontological resources and may require different monitoring procedures. The PRMP shall take the specific construction plans for the project to tailor a monitoring plan to the types of construction activities and the geologic units each may encounter. In general, ground disturbance across the project site that occurs in undisturbed sediments and exceeds 5-10 feet in depth may impact high potential sediments and therefore should be monitored. This includes; excavation and site preparation at the Well Site, drilling for the production well, cut and cover and entrance and exit pits for jack and bore along the proposed transmission main and at all access points for the rehabilitation of the transmission main. Paleontological resources monitoring shall be performed by a qualified paleontological monitor (meeting the standards of the SVP 2010) under the direction of the Qualified Paleontologist. Depending on the conditions encountered, full-time monitoring can be reduced to part- time inspections or ceased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist shall spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils or potential fossils. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation r	 Include mitigation measure in construction contractor specifications. Retain copies of all paleontological research, survey and PRMP in the project file. Perform site monitoring to ensure compliance with paleontological requirements. Retain inspection forms in the project file. 	The City; Construction Contractor	Before and During Construction
GEO-4 : Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries. If there are significant discoveries, fossil locality information and final disposition will be included with the final report which will be submitted to the appropriate repository and the City.	 Include mitigation measure in construction contractor specifications. Paleontological monitoring reports and logs will be retained in project file. Retain fossil recovery logs in the project file. 	The City; Construction Contractor	Before and During Construction
Hazards and Hazardous Materials			
HAZ-1: Prior to the initiation of any construction requiring ground-disturbing activities, the City shall complete an environmental assessment of the proposed site to locate the potential for soil and groundwater contamination in the project area. The recommendations set forth in the site assessment shall be implemented to the satisfaction of applicable agencies before and during construction.	 Include mitigation measure in construction contractor specifications. Retain copies of all environmental site assessments in the project file. 	The City; Construction Contractor	Before Construction

7-8

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
HAZ-2: If the site assessments determine that the site has contaminated soil and/or groundwater, a Soil and Groundwater Management Plan shall be prepared that specifies the method for handling and disposing of contaminated soil and groundwater prior to demolition, excavation, and construction activities. The City shall be responsible for ensuring implementation of the Plan in compliance with applicable regulations.	 Include mitigation measure in construction contractor specifications. Retain copies of Soil and Groundwater Management Plan in the project file. Perform site inspections to verify contractor compliance with hazardous materials. Retain inspection forms in the project file. 	The City; Construction Contractor	Before and During Construction
HAZ-3: In conjunction with Mitigation Measure TR-1 , prior to initiating construction of the transmission main within roadway rights-of-way, the City shall prepare and implement a Traffic Control Plan that contains comprehensive strategies for maintaining emergency access. Strategies shall include, but are not limited to, maintaining steel trench plates at the construction sites to restore access across open trenches and identification of alternate routing around construction zones. In addition, police, fire, and other emergency service providers shall be notified of the timing, location, and duration of the construction activities and the location of detours and lane closures. The City shall ensure that the Traffic Control Plan and other construction activities are consistent with the Los Angeles County Operational Area Emergency Response Plan.	 Include mitigation measure in construction contractor specifications. Retain a qualified consultant to prepare a Traffic Control Plan that is consistent with the Los Angeles County Operational Area Emergency Response Plan. Retain copies of written notifications in the project file. Retain copies of the Traffic Control Plan in the project file. 	The City; Construction Contractor	Before Construction
Noise			
 NOISE-1: Prior to construction, the City of Beverly Hills shall ensure that the contractor specifications stipulate that: All construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers and other state-required noise attenuation devices capable of up to a 5 dBA reduction. When feasible, construction haul routes shall avoid noise-sensitive uses (e.g., residences, convalescent homes). During construction, stationary construction equipment shall be placed such that emitted noise is directed away from the nearest noise-sensitive receptors. The project shall provide noise blanket/temporary noise barriers rated for up to a 10 dBA reduction between the active areas and surrounding sensitive uses. 	 Include mitigation measure in construction contractor specifications. Retain a qualified construction monitor to conduct routine inspections of noise reduction measures during project construction. Maintain written inspection records in the project file to verify compliance. 	The City; Construction Contractor	Before Construction
 NOISE-2: Throughout project construction and operation, the City of Beverly Hills shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints as soon as possible. The City shall establish and disseminate a 24/7 hotline telephone number for use by the public to report any undesirable project noise conditions. If the telephone number is not staffed 24 hours per day, the City shall include an automatic answering feature with date and time stamp recording to answer calls when the phone is unattended. The City shall designate a Noise Disturbance Coordinator during construction and permanently once the facility is operational. The Noise Disturbance Coordinator shall assist in resolving noise complaints to minimize impacts while maintaining the objectives of the construction and operation of the facility. The Noise Disturbance Coordinator shall report all noise complaints to the City program manager. 	 Include mitigation measure in construction contractor specifications. Retain a qualified Noise Disturbance Coordinator to implement the mitigation measure. Maintain written documentation of all noise complaints and the resolution of complaints in the project file. 	The City; Construction Contractor	During and After Construction

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
 For construction noise complaints received outside of the construction hours and days allowed (Monday through Friday, between the hours of 7:00 a.m. and 8:00 p.m.), the Noise Disturbance Coordinator shall take immediate steps to determine whether project construction is causing the noise and, if so, to reduce the noise level of that activity or take other appropriate action to remedy the complaint as quickly as possible. For construction activities near local residences, the Noise Disturbance Coordinator shall have the authority to require the installation of a temporary noise barrier to reduce noise impacts to the closest sensitive receptors. The noise barriers shall be tall enough to effectively block sight-lines of the construction to the closest residences. The contractor shall install noise barriers as directed by the Noise Disturbance Coordinator to minimize construction noise and resolve noise complaints. 			
NOISE-3 : Residents of properties shall be offered noise mitigation measures (e.g., hearing protection, sound-proofing, white noise machines, etc.) acceptable to the residents or temporary relocation for the duration of nearby construction that would generate construction noise levels at their property in excess of 45 dBA, Leq during nightlime hours, for the duration of time that 24-hour activity occurs. Based on the analyses presented in this IS/MND, this measure shall apply to residences located within approximately 200 feet of the well installation location and pipeline rehabilitation and main transmission activity (i.e. residences along or near Chariton Street and La Cienega Boulevard).	 Include mitigation measure in construction contractor specifications. Maintain written documentation of offered noise mitigation measures in the project file. 	The City; Construction Contractor	During Construction
NOISE-4 : The contractor shall coordinate with any affected schools, institutions of learning, hospitals, or churches regarding construction schedule and the expected level of disturbance. The contractor shall ensure there are no special events or gatherings that would be affected by construction activity before continuing and will notify any affected institution of the anticipated schedule and completion date. In the event of a conflict, the contractor shall limit the use of equipment in an effort to lower noise levels or cease construction completely until the event or gathering has ended.	 Include mitigation measure in construction contractor specifications. Maintain written documentation of all construction coordination in the project file. 	The City; Construction Contractor	Before and During Construction
NOISE-5: The operation of construction equipment that generates high levels of vibration, such as large bulldozers and loaded trucks, shall be prohibited within 45 feet of existing residential structures. Instead, small construction equipment such as small rubber tired bulldozers, small rubber tired excavator, etc., not exceeding 150 horsepower shall be used within this area during demolition, grading, and excavation operations.	 Include mitigation measure in construction contractor specifications. Retain a qualified construction monitor to conduct routine inspections of vibration reduction measures during project construction. Retain documentation required by the mitigation measure. Maintain written inspection records in the project file to verify compliance 	The City; Construction Contractor	During Construction

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
Transportation			-
TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas. The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills, Los Angeles County, Metro, and Caltrans, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.	 Include mitigation measure in construction contractor specifications. Retain copies of all correspondence with the City of Los Angeles and the City of Beverly Hills in the project file. Retain copies of the Traffic Control/Traffic Management Plan in the project file. Retain a qualified construction monitor to conduct routine inspections of traffic control measures during project construction. Maintain a record of collected information and written notifications in the project file. Maintain written inspection records in the project file to verify compliance. 	The City; Construction Contractor	Before and During Construction

10/12/2021 Board Meeting

RESOLUTION NO. 19-R-13261

7-8

RESOLUTION OF THE COUNCIL OF THE CITY OF BEVERLY HILLS ADOPTING А MITIGATED NEGATIVE DECLARATION PURSUANT TO THE **CALIFORNIA** ENVIRONMENTAL QUALITY ACT FOR THE IMPLEMENTATION OF THE LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT

WHEREAS, to expand local water supply, the City of Beverly Hills ("City") proposes to implement the La Brea Subarea Well and Transmission Main Project ("proposed Project"); and

WHEREAS, the Project would include the construction of a groundwater production well in the La Brea Subarea on City-owned property located at 1956 Chariton Street in the City of Los Angeles, the rehabilitation of existing inactive 18 and 24-inch pipelines along La Cienega Boulevard in the cities of Beverly Hills and Los Angeles, and the connection of the rehabilitated pipeline to a newly 16-inch constructed raw water transmission main. The proposed 16-inch transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant for treatment and supply; and

WHEREAS, the City, acting as the lead agency, has prepared environmental documentation for the whole of a contemplated Project consisting of the above referenced component parts, and as further described in the Final Initial Study/Mitigated Negative Declaration ("Final IS/MND"), attached hereto as Exhibit A and incorporated herein by reference; and

WHEREAS, an Initial Study and Mitigated Negative Declaration were prepared for the Project by the City, pursuant to the requirements of the California Environmental Quality Act (CEQA, Public Resources Code sections 21000-21177), CEQA Guidelines (14 California Code of Regulations sections 15000-15387), and other applicable requirements; and

WHEREAS, on September 19, 2019, the City, after undertaking an Initial Study to provide the public with information about the potential effects on the local and regional environment associated with the proposed Project, found that there will not be a significant effect on the environment (the City) in this case because revisions in the Project have been made by or agreed to by the Project proponent and because of the incorporation and implementation of proposed Project mitigation measures, and determined that a Mitigated Negative Declaration would be prepared; and WHEREAS, the Notice of Intent to Adopt a Mitigated Negative Declaration and the Initial Study completed for the Project was duly noticed and circulated for a 30-day public review period from September 23, 2019 through October 23, 2019; and

7-8

WHEREAS, during the public review and comment period, the City received four comment letters from public agencies, and six verbal comments from comments members of the general public and public agency staff; and

WHEREAS, although not required to do so, the City has prepared responses to each of the comments received during the public comment period on the Notice of Intent to Adopt a Mitigated Negative Declaration and Initial Study, and prepared a Final IS/MND, that includes the draft Mitigated Negative Declaration documentation, the comments received in response to the Notice of Intent to Adopt a Mitigated Negative Declaration during the public comment period, responses to those comments, and a Mitigation Monitoring and Reporting Program; and

WHEREAS, the documents, staff reports, technical studies, appendices, plans, specifications, and other materials that constitute the record of proceedings upon which this resolution and any action on the Project and the Final IS/MND is based are on file for public examination during normal business hours at the City of Beverly Hills Department of Public Works, Engineering Division, 345 Foothill Road, Beverly Hills, CA 90210.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF BEVERLY HILLS DOES HEREBY RESOLVE, DECLARE, DETERMINE AND ORDER AS FOLLOWS:

Section 1. The City Council incorporates the recitals set forth above as if restated herein in their entirety.

Section 2. The City Council of the City, as the lead agency for the Project, has considered the Final IS/MND, dated November 2019 (State Clearing House No. 2019099076), along with all comments received during the public review period, and the responses to the comments that are contained in the Final IS/MND.

Section 3. The City Council finds, in its independent judgment after considering all relevant evidence in the record of proceedings for the Project, including without limitation the information set forth in the Final IS/MND, that there is not substantial evidence supporting a fair argument that the Project may actually produce any significant environmental impacts that cannot be mitigated to a less than significant level through implementation of those mitigation

measures identified in the Final IS/MND. Therefore, the Council finds that the Project will not have a significant environmental effect.

7-8

Section 4. The City Council finds that the Final IS/MND reflects the City Council's independent judgment and analysis.

Section 5. For the foregoing reasons and based on the information and findings included in the record before the City Council, including the Staff Report, the Initial Study, the studies that have been conducted to evaluate whether the Project would cause significant environmental impacts, the proposed Mitigated Negative Declaration, and the Mitigation Monitoring and Reporting Program, all of which are incorporated herein by this reference, the City Council of the City of Beverly Hills hereby certifies that the Final IS/MND has been prepared in compliance with CEQA, adopts the Final IS/MND and adopts the attached Mitigation Monitoring and Reporting Program, as set forth in Chapter 5 of the Final IS/MND, which is attached hereto as Exhibit A, making all mitigation measures fully applicable to the Project.

Section 6. The City Council hereby directs staff to prepare a Notice of Determination and file that Notice with the County Clerk in accordance with Section 15075(d) of the California Environmental Quality Act Guidelines.

Section 7. This Resolution shall be effective upon adoption. The City Clerk shall testify to the passage and adoption of this Resolution and enter it into the Book of Resolutions of the City.

ADOPTED: November 19, 2019

MIRISČH JOHN Mayor of the City of Beverly Hills, California

ATTEST: (SEAL) HUMA AHMED City Clerk

APPROVED AS TO FORM:

LAURENCE S. WIENER City Attorney

APPROVED AS CONTENT:

GEORGE CHAVEZ City Manager

7-8

Exhibit A

7-8

Final Initial Study/Mitigated Negative Declaration

Final

CITY OF BEVERLY HILLS LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT Initial Study/Mitigated Negative Declaration

State Clearinghouse No. 2019099076

Prepared for City of Beverly Hills November 2019



Final

CITY OF BEVERLY HILLS LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT Initial Study/Mitigated Negative Declaration

State Clearinghouse No. 2019099076

Prepared for City of Beverly Hills November 2019

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TABLE OF CONTENTS

City of Beverly Hills, La Brea Subarea Well and Transmission Main Project Final IS/MND

	<u>Page</u>
Chapter 1. Introduction to Response to Comments	1-1
1.1 CEQA Requirements	1-1
1.2 CEQA Process	1-2
1.3 Evaluation and Response to Comments	1-2
1.4 Final IS/MND Certification and Approval	1-2
1.5 Notice of Determination	1-2
Chapter 2. Comment Letters	2-1
Chapter 3. Responses to Comments	3-1
Letter 1: State Clearinghouse, Office of Planning and Research	3-1
Letter 2: California Department of Transportation (CalTrans), District 7	3-1
Letter 3: Los Angeles County Metropolitan Transportation Authority (Metro))3-3
Letter 4: South Coast Air Quality Management District (SCAQMD)	3-7
Letter 5: Call Log	3-8
Chapter 4. Corrections and Additions to the Draft IS/MND	4-1
Chapter 5. Mitigation Monitoring and Reporting Program	5-1
CEQA Requirements	5-1

List of Tables

2-1	Comment Letters Received	2-1
5-1	Mitigation Monitoring and Reporting Program for the La Brea Subarea Well and	
	Transmission Main Project	5-2

i

CHAPTER 1 Introduction to Response to Comments

This Final Initial Study/Mitigated Negative Declaration (Final IS/MND) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and *CEQA Guidelines* (California Code of Regulations Section 15000 et seq.). The Final IS/MND incorporates, by reference, the Draft IS/MND (State Clearinghouse No. 2019099076) prepared by the City of Beverly Hills (City) for the La Brea Subarea Well and Transmission Main Project (proposed project), as it was originally published and the following chapters, which include revisions made to the Draft IS/MND.

7-8

1.1 CEQA Requirements

Before the City may approve the project, it must certify that the Final IS/MND: a) has been completed in compliance with CEQA; b) was presented to the City Council who reviewed and considered it prior to approving the project; and c) reflects the City's independent judgment and analysis.

A Final IS/MND shall consist of the following:

- The Draft IS/MND or a revision of that draft;
- Comments and recommendations received on the Draft IS/MND;
- A list of persons, organizations, and public agencies commenting on the Draft IS/MND;
- The response of the Lead Agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the Lead Agency.

This Final IS/MND for the proposed project presents Chapter 1 through Chapter 4:

- Chapter 1: Introduction and CEQA process
- Chapter 2: A list of persons, organizations, and public agencies commenting on the Draft IS/MND, and the written comments received on the Draft IS/MND
- Chapter 3: Written responses to each comment identified in Chapter 2
- Chapter 4: Mitigation Monitoring and Reporting Program

1.2 CEQA Process

Public Participation Process

Notice of Intent

The Notice of Intent (NOI) to adopt an IS/MND was posted on September 23, 2019 with the County Clerk in Los Angeles. The Draft IS/MND was circulated for a 30-day public review until October 23, 2019. The Draft IS/MND was circulated to federal, State, and local agencies and interested parties requesting a copy of the Draft IS/MND. Copies of the Draft IS/MND were made available to the public at the following locations:

7-8

- City of Beverly Hills Web Site: http://www.beverlyhills.org/lcwell
- Beverly Hills Public Library, 444 N. Rexford Drive, Beverly Hills, CA 90210;
- Beverly Hills Public Works Building, 345 Foothill Road, Beverly Hills, CA 90210
- Palms-Ranch Park Branch Library, 2920 Overland Avenue, Los Angeles, CA, 90064
- Fairfax Branch Library, 161 S. Gardner Street, Los Angeles, CA, 90036; and
- Robertson Branch Library, 1719 S. Robertson Boulevard, Los Angeles, CA, 90035.

1.3 Evaluation and Response to Comments

The City, as the Lead Agency, will evaluate comments on environmental issues received from parties that have reviewed the Draft IS/MND and, although not required to do so, intends to prepare written responses.

1.4 Final IS/MND Certification and Approval

Prior to considering the project for approval, the City, as the Lead Agency, will review and consider the information presented in the Final IS/MND and will certify that the Final IS/MND:

- (a) Has been completed in compliance with CEQA;
- (b) Has been presented to the City Council as the decision-making body for the Lead Agency, which reviewed and considered it prior to approving the project; and
- (c) Reflects the City's independent judgment and analysis.

1.5 Notice of Determination

Pursuant to Section 15094 of the *CEQA Guidelines*, the City will file a Notice of Determination (NOD) with the Office of Planning and Research and Los Angeles County Clerk within five working days of project approval.

CHAPTER 2 Comment Letters

The Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) for the La Brea Subarea Well and Transmission Main Project (proposed project) was circulated for public review for 30 days (September 23, 2019 through October 23, 2019) in accordance with the requirements of *CEQA*. The City received four comment letters and six verbal comments (over the phone) during the public review period, which are listed in **Table 2-1** and included within this chapter. The letters have been marked with brackets that delineate comments pertaining to environmental issues and the information and analysis contained in the Draft IS/MND. Responses to such comments are provided in Chapter 3.

7-8

Comment No.	Commenting Agency	Date of Comment
1	State Clearinghouse, Office of Planning and Research	October 23, 2019
2	California Department of Transportation (CalTrans), District 7	October 22, 2019
3	Los Angeles County Metropolitan Transportation Authority (Metro)	October 22, 2019
4	South Coast Air Quality Management District (SCAQMD)	October 22, 2019
5	Call Log	
	 Kimberly Terry Sheryl Lori Laboy Norman Zafman Sylvia Ashly Fatima Choudury (Caltrans) 	Various September 24, 2019 through October 22, 2019

TABLE 2-1 COMMENT LETTERS RECEIVED



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

7-8



Kate Gordon Director

1-A

Gavin Newsom Governor

October 23, 2019

Tristan Malabanan Beverly Hills, City of 345 Foothill Road Beverly Hills, CA 90210

Subject: La Brea Subarea Well and Transmission Main Project SCH#: 2019099076

Dear Tristan Malabanan:

The State Clearinghouse submitted the above named MND to selected state agencies for review. The review period closed on 10/22/2019, and the comments from the responding agency (ies) is (are) available on the CEQA database for your retrieval and use. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

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

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

Check the CEQA database for submitted comments for use in preparing your final environmental document: https://ceqanet.opr.ca.gov/2019099076/2. Should you need more information or clarification of the comments, we recommend that you contact the commenting agency directly.

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

Sincerely,

Scott Morgan Director, State Clearinghouse

cc: Resources Agency

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

DEPARTMENT OF TRANSPORTATION

DISTRICT 7 – Office of Regional Planning 100 S. MAIN STREET, MS 16 LOS ANGELES, CA 90012 PHONE (213) 897-0475 FAX (213) 897-1337 TTY 711 www.dot.ca.gov

October 22, 2019

Tristan Malabanan City of Beverly Hills 345 Foothill Road Beverly Hills, CA 90210 Gavin Newsom, Governor

Making Conservation

a California Way of Life.

2-A

2-B

2-C

Governor's Office of Planning & Research

OCT 22 2019

STATE CLEARINGHOUSE

RE: La Brea Subarea Well and Transmission Main Project – Mitigated Negative Declaration (MND) SCH # 2019099076 GTS # 07-LA-2019-02840 Vic. LA-10/PM: R8.831 LA-187/PM: 8.648

Dear Tristan Malabanan:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced MND. The proposed project would include the construction of a groundwater production well in the La Brea Subarea (that would provide approximately 1,700 AFY of new water supply), the rehabilitation of an existing (inactive) 18 and 24-inch pipelines, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main with a diameter of 16-inches (collectively, referred to herein as "proposed transmission main"). The proposed transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply. The pipelines would be sized to accommodate 3,000 gallons per minute (gpm), which would be from the currently proposed well and potentially other wells in the area. The City of Beverly Hills is the Lead Agency under the California Environmental Quality Act (CEQA).

The nearest State facilities to the proposed project are Interstate 10 (I-10) and State Route 187 (SR-187). Specifically, the project is located approximately 2,000 feet from the I-10 & SR-187 interchange near S La Cienega Boulevard.

From reviewing the MND, Caltrans does not expect project approval to result in a direct adverse impact to the existing State transportation facilities.

The following information is for your consideration.

Caltrans appreciates the efforts of this project to minimize construction traffic, such as by conducting nighttime construction of the transmission main. If construction traffic is expected to cause delays on any State facilities, please submit the Traffic Control Plan detailing these delays, as well as information on a Truck Haul Route Program, for Caltrans' review. In addition, strategies should be identified in the Traffic Control Plan to ensure that truck deliveries during project design and construction are conducted in an efficient manner that does not cause transportation conflicts with other vehicles, pedestrians, or bicyclists.

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

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

Tristan Malabanan October 22, 2019 Page 2 of 2

ensure maximum safety conditions for pedestrians, cyclists, and motorists.

Also, Senate Bill 743 (2013) mandates that VMT be used as the primary metric in identifying transportation impacts of all future development projects under CEQA, starting July 1, 2020. For information on determining transportation impacts in terms of VMT on the State Highway System, see the Technical Advisory on Evaluating Transportation Impacts in CEQA by the California Governor's Office of Planning and Research, dated December 2018: <u>http://opr.ca.gov/docs/20190122-743</u> Technical Advisory.pdf.

7-8

Finally, storm-water runoff is a sensitive issue for Los Angeles County and needs to be considered during project design.

If you have any questions about these comments, please contact Emily Gibson, the project coordinator, at Emily.Gibson@dot.ca.gov, and refer to GTS # 07-LA-2019-02840.

Sincerely,

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

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability" 2-C



Los Angeles County Metropolitan Transportation Authority One Gateway Plaza Los Angeles, CA 90012-2952 213.922.2000 Tel metro.net

October 22, 2019

Tristan Malabanan, P.E., Project Manager Department of Public Works, Engineering Division City of Beverly Hills 345 Foothill Road Beverly Hills, CA 90210 Sent by Email: askpw@beverlyhills.org

RE: La Brea Subarea Well and Transmission Main Project: Mitigated Negative Declaration (MND)

Dear Mr. Malabanan:

Thank you for coordinating with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the proposed La Brea Subarea Well and Transmission Main Project (Project) in the City of Beverly Hills (City). Metro is committed to working with local municipalities, developers, and other stakeholders across Los Angeles County on transit-supportive developments to grow ridership, reduce driving, and promote walkable neighborhoods.

The purpose of this letter is to outline recommendations from Metro concerning issues that are germane to our agency's statutory responsibility in relation to the Metro Purple Line Extension Section One and Two and Metro bus facilities and services, which may be affected by the proposed Project. In addition to the specific comments outlined below, Metro would like to provide the City with two resources: 1) the Metro Adjacent Development Handbook (attached), which provides an overview of common concerns for development adjacent to Metro-owned right-of-way (ROW) and 2) the Adjacent Construction Manual with technical information (also attached). These documents and additional resources are available at www.metro.net/projects/devreview/.

Project Description

The Project is adjacent to Metro bus service and the Purple Line Extension under construction, and includes construction of a groundwater production well in the La Brea Subarea, the rehabilitation of existing (inactive) 18- and 24- inch pipelines, and the connection of the rehabilitated pipelines to a newly constructed raw water transmission main with a diameter of 16 inches.

The proposed Well Site would be implemented on a Beverly Hills-owned property located at 1956 Chariton Street. The proposed transmission main in its entirety would be approximately four miles long. The proposed rehabilitation area of the transmission main would proceed north within La Cienega Boulevard to Olympic Boulevard, then west through the Frank Fenton Field at La Cienega Park. The alignment in Beverly Hills will continue north on Le Doux Road, then west on Clifton Way to connect to the proposed 16-inch new pipeline. The length of the proposed new 16-inch transmission main would then continue westward until turning north on North Swall Drive, then west on Dayton

3-A

3-B

Page 1 of 3

La Brea Subarea Well and Transmission Main Project MND – Metro Comments October 23, 2019

Way, until turning north on North Palm Drive, then continue westward on 3rd street, and finally through the City yard to connect to the utilities inlet side of the Foothill Water Treatment Plant (WTP).

7-8

Comments

Bus Stop Adjacency

- 1. <u>Service</u>: Metro Bus Line 105 operates on La Cienega Boulevard, adjacent to the Project. One Metro Bus stop is in proximity to the Project at La Cienega and Guthrie Avenue. Other transit operators may provide service in this area and should be consulted.
- 2. <u>Impact Analysis</u>: The MND should analyze potential effects on Metro Bus service and identify mitigation measures or project design features as appropriate. Potential impacts may include construction traffic, operation of and shipment/deliveries to the completed Project, and temporary or permanent bus service rerouting.
- 3. <u>Bus Operations Contacts</u>: Please contact Metro Bus Operations Control Special Events Coordinator at 213-922-4632 and Metro's Stops and Zones Department at 213-922-5190 with any questions and at least 30 days in advance of initiating construction activities. Other municipal bus services may also be impacted and should be included in construction outreach efforts.

Subway Adjacency

- 1. <u>Operations</u>: The Metro Westside Purple Line Extension Section One and Two are currently under construction in the vicinity of the Project. Once in operation, peak service as often as ten minutes in both directions. Trains may operate in and out of revenue service, 24 hours a day, seven days a week in the tunnels adjacent to the Project.
- 2. <u>Impact Analysis</u>: Due to the Project's proximity to the Purple Line tunnel intersecting at Wilshire Boulevard and North Le Doux Road, the City is encouraged to contact Metro staff early in the design process to plan for potential impacts. The MND should analyze potential effects on subway construction and identify mitigation measures or project design features as appropriate. Metro recommends that the following provisions be used to develop a mitigation measure and/or project design feature that addresses these potential impacts:
 - a. <u>Haul Route</u>: The construction of the Project may impact haul routes on La Cienega Boulevard for the Purple Line Extension Two (i.e. lane closures) that have been approved by both the City of Beverly Hills and the City of Los Angeles. Metro would appreciate assistance in coordinating any modifications to the haul route necessitated by the Project.
 - b. <u>Technical Review</u>: The City shall require its construction contractor to shall submit site plans, engineering drawings and calculations, as well as construction work plans and methods, including any crane placement and radius, to evaluate any impacts to the Metro Purple Line infrastructure in relationship to the Project. The City shall ensure that its construction contractor will obtain Metro's approval of final construction drawings before commencement of any construction activities for the Project.

3-D

3-C

La Brea Subarea Well and Transmission Main Project MND – Metro Comments October 23, 2019

> c. <u>Construction Safety</u>: The construction and operation of the Project shall not disrupt the construction activities of the Metro Purple Line or the structural and systems integrity of Metro's tunnels. Not less than two months before commencement of construction activities, the City's construction contractor shall initiate with Metro Purple Line construction staff. During Project construction the City's construction contractor shall work in close coordination with Metro to ensure that structural integrity is not compromised by construction activities or permanent build conditions. The City's construction contractor shall permit Metro staff to monitor construction activities to ascertain any impact to the Purple Line.

If you have any questions regarding this response, please contact me by phone at 213-922-2671, by email at <u>LingS@metro.net</u>, or by mail at the following address:

7-8

Metro Development Review One Gateway Plaza MS 99-22-1 Los Angeles, CA 90012-2952

Sincerely,

Shine Ling, AICP Manager, Transit Oriented Communities

Attachments and links:

- Adjacent Construction Design Manual
- Adjacent Development Handbook: <u>https://www.metro.net/projects/devreview/</u>

3-E



SENT VIA E-MAIL AND USPS:

October 22, 2019

askpw@beverlyhills.org Tristan Malabanan, P.E., Project Manager City of Beverly Hills, Department of Public Works Engineering Division 345 Foothill Road Beverly Hills, California 90210

Mitigated Negative Declaration (MND) for the Proposed La Brea Subarea Well and Transmission Project

7-8

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final MND.

South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposes to demolish an existing structure and rehabilitate an existing 10,250 linear feet of water pipelines ranging in diameter from 18 inches to 24 inches (Proposed Project). The Proposed Project will also include construction of a four-mile water pipeline 16 inches in diameter and a 700-gallon-per-minute water well. The Proposed Project is located along Burton Way, Le Doux Road, and La Cienega Boulevard from the northeast corner of Chariton Street and Guthrie Avenue in the City of Los Angeles to the northeast corner of La Cienega Boulevard and Cadillac Avenue in the City of Beverly Hills. Construction of the Proposed Project is anticipated to take up to 13 months, becoming operational in Winter of 2020¹. The well equipping (grading²) and the rehabilitation/transmissions main installation (building construction activities from both phases will occur adjacent to existing sensitive receptors⁵.

South Coast AQMD Staff's Summary of the Air Quality Analysis

In the Air Quality Analysis Section, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared those emissions to South Coast AQMD's recommended regional and localized air quality CEQA significance thresholds. Based on the analysis, the Lead Agency found that the Proposed Project's regional construction and operational impacts would be less than significant⁶. Based on the localized air quality analysis, the Lead Agency found that the Proposed Project would result in localized air quality analysis, the Lead Agency found that the Proposed Project would result in localized PM2.5 emissions at 2.9 pounds per day (lbs/day)⁷, which did not exceed South Coast AQMD's localized air quality CEQA significance threshold for PM2.5 at 3 lbs/day. As such, no air quality mitigation was included⁸.

4-A

4-B

¹ MND. Section 2.0 Project Description. Page 12.

² MND. Appendix A: Air Quality, Greenhouse Gas, and Energy Information. CalEEMod Summer Run. PDF page 42.

³ Ibid.

⁴ MND. Section 2.0 Project Description. Page 12.

⁵ MND. Section 4.3 Air Quality. Pages 33 through 36.

⁶ *Ibid.* Pages 28 through 37.

⁷ *Ibid*.

⁸ Ibid.

Tristan Malabanan

Recommended Mitigation Measure for Localized Air Quality Impacts from Construction

While the Proposed Project's localized PM2.5 construction emissions (i.e., approximately 2.9 lbs/day) did not exceed South Coast AQMD's localized air quality CEQA significance threshold for PM2.5 at 3 lbs/day for one acre with sensitive receptors at 25 meters in Source Receptor Area 2 (Northwest Coastal LA County), they were slightly below the applicable significance threshold. Therefore, to further reduce PM2.5 emissions during construction and to ensure that nearby sensitive receptors are not adversely affected by the emissions from the use of off-road diesel-powered construction equipment that will occur adjacent to sensitive receptors, South Coast AQMD staff recommends that the Lead Agency incorporate the following mitigation measure into the Final MND.

Tier 4 Construction Equipment or Level 3 Diesel-Particulate Filters

To further reduce PM2.5 emissions during construction and minimize their impacts on nearby residents, South Coast AQMD staff recommends that the Lead Agency require the use of off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (USEPA) Tier 4 Final off-road emissions standards for equipment rated at 50 horsepower or greater during construction of the Proposed Project. Such equipment will be outfitted with Best Available Control Technology (BACT) devices including a CARB certified Level 3 Diesel Particulate Filter (DPFs). Level 3 DPFs are capable of achieving at least 85 percent reduction in particulate matter emissions⁹. A list of CARB verified DPFs are available on the CARB website¹⁰.

To ensure that Tier 4 Final construction equipment or better would be used during the Proposed Project's construction, South Coast AQMD staff recommends that the Lead Agency include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractor(s) must demonstrate the ability to supply the compliant construction equipment for use prior to any ground disturbing and construction activities. A copy of each unit's certified tier specification or model year specification and CARB or South Coast AQMD operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment. Additionally, the Lead Agency should require periodic reporting and provision of written construction documents by construction contractor(s) to ensure compliance, and conduct regular inspections to the maximum extent feasible to ensure compliance.

In the event that construction equipment cannot meet the Tier 4 Final engine certification, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by the Lead Agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim or Tier 3 emission standards, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the Proposed Project, and/or limiting construction phases occurring simultaneously.

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful,

4-C

⁹ CARB. November 16-17, 2004. *Diesel Off-Road Equipment Measure – Workshop*. Page 17. Accessed at: <u>https://www.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf</u>.

¹⁰ \overline{Ibid} . Page 18.

10/12/2021 Board Meeting

Tristan Malabanan

informative, or useful to decision makers and the public who are interested in the Proposed Project. Further, when the Lead Agency makes the finding that the additional recommended mitigation measure is not feasible, the Lead Agency should describe the specific reasons for rejecting them in the Final EIR (CEQA Guidelines Section 15091).

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Alina Mullins, Assistant Air Quality Specialist, at amullins@aqmd.gov or (909) 396-2402, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D. Program Supervisor, CEQA IGR Planning, Rule Development & Area Sources

LS:AM LAC190924-04 Control Number

7-8

4-D

4-E

Date	Name	Questions/Comments	Т
9/24/2019	Kimberly Terry	 Why not put the line on Robertson? Where is all the traffic going to go? Is Beverly Hills allowed to take water from LA? Is LA okay with that? 	5
9/24/2019	Sheryl	Where is the existing pipe on La Cienega?What's the timing of construction?	Į
9/26/2019	Lori Laboy	 Why are you replacing an 18 to 24" line with a 16" line? How long will the construction take and when will it start? 	
10/2/2019	Norman Zafman	 Expressed concerns about pipeline on Le Doux between Gregory & Charleville. 	Ţ
10/22/2019	Sylvia Ashly	 Concerned about chemicals & chemical treatment. Against of chemical treatment and potential pollutants at that site. 	Ī
10/22/2019	Fatima Choudury (Caltrans)	 Concerned because the map shows a blue dot near the onramp of the freeway. 	Ī

CHAPTER 3 Responses to Comments

A summary of the comments contained within the comment letters received during the public review period for the Draft Initial Study/Mitigated Negative Declaration (IS/MND) is included in this section (see Chapter 2). The City provides individual responses to the bracketed comments in each letter. Where the responses indicate additions or deletions to the text of the Draft IS/MND, additions are indicated in <u>underline</u> and deletions in strikeout.

7-8

Letter 1: State Clearinghouse, Office of Planning and Research

Comment 1-A

The comment acknowledges the State Clearinghouse distributed the IS/MND as required under CEQA to pertinent agencies. The Caltrans comment letter is attached.

Response 1-A

The comment is noted and saved in the project record. No response is required because there are no specific comments on the contents in the Draft IS/MND. The Caltrans letter is responded to as Letter 2 below.

Letter 2: California Department of Transportation (Caltrans), District 7

Comment 2-A

The comment acknowledges receipt of the Draft IS/MND and reiterates the project description.

Response 2-A

No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 2-B

The comment explains which State facilities are closest to the project area and that Caltrans does not expect project approval to result in direct impacts to those facilities.

Response 2-B

The comment is noted and saved in the project file. No response is required because there are no specific comments on the contents in the Draft IS/MND.

7-8

Comment 2-C

The comment requests that if construction traffic is expected to cause delays on State facilities, a Traffic Control Plan be submitted to Caltrans. The comment then explains that any construction that requires the transportation of heavy equipment on State highways would require a permit. The comment recommends that large size truck trips be limited to off-peak commute periods to minimize congestion and ensure maximum safety conditions for pedestrians, cyclists, and motorists. Further, the comment reiterates Senate Bill 743 and how to identify traffic impacts starting July 1, 2020. Lastly, the comment states that storm-water runoff is a sensitive issue for LA County and needs to be considered during project design. The comment closes with providing Caltrans contact information.

Response 2-C

Section 4.17, Transportation, of the Draft IS/MND describes potential impacts including delays within the project area. No project delays are anticipated on any Caltrans facilities. If for some reason, the transportation of heavy construction equipment requires the use of oversized-transport vehicles on State highways, the City will ensure that the appropriate Caltrans transportation permit is acquired. The commenter notes that strategies should be identified in the Traffic Control Plan to ensure deliveries during design and construction do not cause traffic conflicts. Pages 105-107 of the Draft IS/MND describe how the City will control such construction traffic and indicate the City will cooperate with other agencies in formulating a Traffic Control Plan. Mitigation Measure TR-1 explains how the City will coordinate with the appropriate agencies before and during construction to ensure that congestion is minimized for pedestrians, cyclists and motorists. In response to the comment, Mitigation Measure TR-1 has been revised to include Caltrans as an agency that will be consulted, as appropriate, in the formation of the Traffic Control Plan, on Page 107 of the Draft IS/MND:

TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas.

The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills, Los Angeles County, Metro, and Caltrans, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that
public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.

7-8

Section 4.17(b) of the Draft IS/MND discusses transportation impacts in terms of vehicle miles travelled and indicates that the project would not result in any perceivable increase in vehicle miles traveled that would exceed a threshold of significance either during construction or during implementation. Last, the commenter does not raise any impacts associated with storm water runoff, but suggests that such issues be considered. The potential impacts regarding storm-water runoff are considered and are discussed in detail in Sections 4.7 and 4.10 of the Draft IS/MND. The project will be subject to a Construction General Permit (CGP) under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. As required under the CGP, the City or its contractor will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The objectives of a SWPPP is to identify pollutant sources (such as sediment) that may affect the quality of storm water discharge and to implement best management practices (BMPs) to reduce pollutants in storm water. Section 4.19, Utilities and Service Systems, discusses why the project does not require expanded storm water drainage systems. Thus, the Draft IS/MND adequately addresses storm water runoff issues. The City appreciates the contact information for Caltrans and will coordinate in the future, if necessary.

Letter 3: Los Angeles County Metropolitan Transportation Authority (Metro)

Comment 3-A

The comment acknowledges receipt of the Draft IS/MND and summarizes the purpose of the letter – to outline recommendations from Metro. The comment also provides two Metro resources.

Response 3-A

The City appreciates the guidance documents provided by Metro. The documents are saved in the project record. No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 3-B

The comment reiterates the project description and mentions that the project is adjacent to the Purple Line Extension that is currently under construction.

Response 3-B

No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 3-C

The comment explains that the proposed transmission main is located adjacent to bus stops and that transit operators in the immediate area should be consulted. The comment explains that the MND should analyze potential effects on Metro Bus service, including construction traffic, operation of and shipment/deliveries to the completed project, and temporary or permanent bus service rerouting. The comment then provides Metro Bus contacts and states that construction outreach efforts should be initiated 30 days prior to construction starts.

7-8

Response 3-C

As described on Page 105 of the Draft IS/MND within the Transportation Section, the City is aware of Metro's bus services at La Cienega/Guthrie and along the length of La Cienega Boulevard. The Draft IS/MND analyses potential traffic impacts, which would include such Metro services. In order to minimize potential impacts to bus services, nighttime construction will be implemented along La Cienega as much as possible. Furthermore, as described in Section 2, Project Description, the required construction equipment for various stages of construction would be staged in areas adjacent to public rights-of-ways or within the Well Site boundary, and would be temporary in nature. Construction equipment would not be traveling to and from the project sites day-to-day. Bus services could experience increased travel times if buses were traveling behind a heavy truck due to slower movement and turning radii compared to passenger vehicles; these delays would be intermittent throughout the day and would cease once construction activities are completed. No full lane closures are anticipated to occur under the proposed project; therefore, no alternative bus routes would be required during the duration of construction activities for the project. Implementation of Mitigation Measure TR-1 would prepare the Traffic Control Plan one for the proposed transmission main. The Traffic Control Plan will assist motorists, including public transit through construction areas. As described on Page 106 of the Draft IS/MND, the Traffic Control Plan for the proposed project would be coordinated with Los Angeles County and Metro when construction activities affect roadways and public transit under its jurisdiction. Specifically, the City will ensure that the project's contractor will coordinate with Metro Bus Operations staff with any questions and to ensure they receive ample notice of delays at least 30 days in advance of construction activities. Metro coordination efforts will be included in construction contractor specifications. Thus, the Draft IS/MND identifies mitigation measures for any potential impacts on Metro buses. Further, as described on Page 107 of the Draft IS/MND, once the project is operational there will not be an expected increase in vehicle trips to the project location. There would be no impacts, or less than significant traffic impacts, associated with the operation of and shipment/deliveries to the completed project location.

Additionally, in response to the comment, Mitigation Measure TR-1 has been revised to include Metro as an agency that will be consulted, as appropriate, in the formation of the Traffic Control Plan, on page 107 of the Draft IS/MND;

TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction

management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas.

7-8

The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills, Los Angeles County, Metro, and Caltrans, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.

Comment 3-D

The comment states that the project is located adjacent to the Metro Westside Purple Line extension. The comment highly encourages City staff to contact Metro staff early in the design process to ensure potential impacts to the Purple Line tunnel intersection at Wilshire Boulevard and North Le Doux Road are minimized. The comment then recommends mitigation measures/project design features to address potential impacts such as: coordinating with Metro along haul routes; construction contractor should submit site plans, engineering drawings and other documentation to Metro for approval before construction; and that the City's construction contractor shall permit Metro staff to monitor construction activities to ascertain impacts to the Purple Line.

Response 3-D

The City appreciates the information provided regarding the Metro Purple Line work that is currently underway. To address concerns with Metro's Purple Line (subway) work, specifically, Page 105 in Section 4.17 of the Draft IS/MND has been revised as follows:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant with Mitigation Incorporated. The project proposed would install a well, pump-to-waste stormdrain line within Chariton Street adjacent to the Well Site, and a transmission main. The Well Site would be located at 1956 Chariton Street. The proposed transmission main would be approximately four miles long. The proposed rehabilitation portion of the transmission main (existing inactive 18 and 24-inch pipelines) are shown on Figure 2. Construction equipment, vehicles, personnel, and materials staging areas would be located onsite at the Well Site, within adjacent City-owned property, or immediately adjacent to the transmission main construction areas along streets/roadways, where such areas can be accommodated.

There are no bicycle facilities within the project area along the local roadways such as Chariton Street and La Cienega. Transit services in the cities of Los Angeles and Beverly Hills are provided by the Los Angeles County Metropolitan Transportation Authority (Metro) (Metro 2019). There are many transit locations and opportunities for bus <u>and</u> <u>subway</u> services within the project area. The closest bus stop is located at the intersection of La Cienega and Guthrie, which runs along Route 105 in the northern/southward direction. <u>While, Metro's Purple Line (subway) is located within the project area near the</u> <u>proposed transmission main. It should be noted that Metro is currently working on the</u> <u>Purple Line within the City of Los Angeles.</u>

The proposed transmission main rehabilitation and new construction areas were specifically designed to avoid impacts to the Metro Purple Line construction work and future operations. The areas in which the proposed transmission main would be implemented along North Le Doux Road, specifically, would utilize slip-lining techniques which would minimize disturbance to areas near Metro facilities. Slip-lining construction involves installing a new pipe within an existing host pipe using trenchless construction methods to cross Wilshire Boulevard. Slip-lining eliminates the need for active construction areas which would require partial lane/road closures, which could impact traffic.

Further, the City of Beverly Hills and their contractor will coordinate with Metro during the construction design and planning, including the development of a Traffic Control Plan (see Mitigation Measure TR-1, below). This will ensure that Metro's Purple Line work is not adversely impacted and that Metro's work will not interfere with the proposed transmission main, once implemented. As such, the project would not significantly impact Purple Line construction haul routes or construction activities.

Construction of the proposed project is anticipated to occur over approximately 13 months, at night and throughout the day. All daytime construction would occur during typical construction hours ranging between 7:00 a.m. to 79:00 p.m., Monday through Friday except on federal holidays.

As the comment recommends, the City's contractor will coordinate with Metro no less than two months prior to construction activities and can accommodate Metro staff to monitor construction activities that may take place near the Metro Purple Line. Metro coordination efforts will be included in construction contractor specifications.

Comment 3-E

The comment provides a final contact if there are any questions regarding Metro's comment letter.

Response 3-E

The contact information is saved to the project record. The City will contact the number provided if any questions arise.

Letter 4: South Coast Air Quality Management District (SCAQMD)

7-8

Comment 4-A

The comment acknowledges receipt of the Draft IS/MND and reiterates the project description.

Response 4-A

No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 4-B

The comment summarizes the significance determinations of the proposed project in regards to the air quality analysis.

Response 4-B

No response is required because there are no specific comments on the contents in the Draft IS/MND.

Comment 4-C

Although the emissions were below the applicable significance threshold, the commenter nonetheless recommends the adoption of an additional mitigation measure for the Final MND. The commenter recommends that all off-road diesel-powered construction equipment meet or exceed Tier 4 off-road emissions standards for equipment rated 50 horsepower or greater during construction. The commenter recommends the Lead Agency require that each unit's certified tier specification or model year specification and CARB or SCAQMD operating permit (if applicable) be available upon request and require periodic reporting. Additionally, the commenter recommends that the Lead Agency require written documentation by contractors to ensure compliance and conduct regular inspections to ensure compliance.

Response 4-C

This comment is noted and saved in the project record. Section 4.3 of the Draft IS/MND addresses air quality. The air quality analysis for the proposed project assumes Tier 3-compliant equipment would be used. As shown on Page 33 in Table 3 of the Draft IS/MND, maximum daily construction emissions would not exceed SCAQMD daily significance thresholds with utilization of Tier 3-compliant equipment. No mitigation measures are required to reduce emissions to less-than-significant levels. Pursuant to CEQA Guidelines Section 15126.4(a)(3), mitigation measures are not required for effects which are not found to be significant. Thus, there is no requirement to incorporate the commenter's proposed mitigation measure requiring the use of Tier 4 construction equipment.

Nonetheless, the City will recommend that Tier 4 compliant equipment be utilized where such equipment is reasonably available at reasonable economic terms, to ensure maximum reduction in emissions. Further, in the event that Tier 4 equipment is not used, the City will recommend the following best practices: construction equipment with Tier 4 Interim or Tier 3 emission standards be used; reduction in the number and/or horsepower rating of construction equipment; limiting the number of daily construction haul truck trips to and from the proposed project; and/or limiting construction phases occurring simultaneously. This information will be included in construction contractor specifications.

7-8

Comment 4-D

The comment requests that written responses to their comments are received during the public review process, pursuant to CEQA Guidelines Section 15074.

Response 4-D

The comment is noted and saved in the project record. The City will provide SCAQMD with a response to their comments.

Comment 4-E

The comment provides a SCAQMD contact for any questions.

Response 4-E

The comment is noted and saved in the project record. The City will coordinate with the SCAQMD, as necessary.

Letter 5: Call Log

Comment 5-A

The comment was via phone call by Kimberly Terry. She asked why the transmission line would not be placed on Robertson Boulevard and inquired about where the traffic would go. She then asked if the City of Beverly Hills is allowed to take water from the City of Los Angeles, and whether the City of Los Angeles would allow this.

Response 5-A

The proposed transmission line was specifically designed to avoid and/or minimize potential impacts to existing utilities underground within the project area and local vicinity. An alignment analysis was conducted under a separate study in 2015 that evaluated La Cienega Boulevard, Robertson Boulevard, and a westerly route through neighborhood streets. The alignment in La Cienega Boulevard was determined to have the least construction impacts due to the slip-lining construction method proposed which reduces excavation. The option in Robertson Boulevard would require "open-cut" construction methods and would have a greater impact to the community. Thus, because it had lower construction impacts, the La Cienega route was selected over the Robertson Boulevard route. As a result of the project construction, there is the potential

for some traffic delays. As described in Section 4.17 of the Draft IS/MND, Transportation, the project would be required to implement Mitigation Measure TR-1, which includes specific Traffic Control Plans for project components. These plans would re-route some traffic and would ensure that traffic would be minimized as much as possible and provide motorists with detours and safety design measures. The Traffic Control Plans will be reviewed by multiple applicable jurisdictions including the City of Los Angeles, the City of Beverly Hills, Caltrans and Metro.

7-8

Furthermore, as described in Section 2.1 of the Draft IS/MND Project Description, the La Brea Subarea within the Central Basin is not adjudicated. That is, there are no various stipulations on utilization of groundwater in this area. Further, the City of Beverly Hills has a history of implementing groundwater wells within the La Brea Subarea. The City of Los Angeles is a Responsible Agency under CEQA for the project's IS/MND, and the City of Beverly Hills has been and intends to continue to coordinate with the City of Los Angeles, as necessary. Groundwater modeling and extensive research has been conducted within the La Brea Subarea to ensure the safe yield of the Subbasin (see Section 4.10, Hydrology and Water Quality for more details).

Comment 5-B

The comment was via phone call by Sheryl. She asked where the existing pipe on La Cienega is located and asked about the timing of construction.

Response 5-B

As described in Section 2.3 of the Draft IS/MND's Project Description, the existing 18- and 24inch transmission main areas that will be rehabilitated are located within La Cienega Boulevard to Olympic Boulevard and within Le Doux Road from Gregory Way to Clifton Way. Please refer to Figure 2 of the Draft IS/MND. The existing transmission main is illustrated with a dashed purple line, as denoted in the figure legend.

Section 2.5.1 of the Draft IS/MND provides information regarding the project's construction schedule. Project construction would take place for approximately 13 months, from Winter 2020 through Summer 2021, with several activities potentially occurring in parallel. Construction activities would occur during nighttime and on weekends for the 24-hour drilling of the production well, requiring approximately 120 days of drilling and testing. Nighttime construction would also be required for the rehabilitation and construction of the transmission main along La Cienega Boulevard because it is within a commercial area. This nighttime construction would minimize impacts to traffic and construction delays within roadways. The remainder of the proposed well and transmission main would involve construction typically occurring between 7:00 a.m. and 7:00 p.m., Monday through Friday, and 8:00 a.m., and 6:00 p.m., Saturdays. No work is allowed on Sundays and federal holidays.

To document these changes to schedule and construction timing, Page 12 of the Draft IS/MND has been revised as follows:

Project construction would take place for approximately 13 months, from Fall 2019 through Winter 2020, through Summer 2021, with several activities potentially occurring in parallel. Construction activities would occur during nighttime and weekends for the 24-hour drilling of the production requiring approximately 120 days of drilling and testing. Nighttime construction would also be required for the rehabilitation and construction of the transmission main along La Cienega Boulevard because it is within a commercial area. This nighttime construction would minimize impacts to traffic and construction delays within roadways.

7-8

The remainder of the proposed well and transmission main would involve construction typically occurring between 7:00 a.m. and 79:00 p.m., Monday through Friday except on federal holidays.

Comment 5-C

The comment was via phone call by Lori Laboy. She asked why 18- and 24-inch lines are being replaced with 16-inch lines, and inquired about how long construction will take and when it will start.

Response 5-C

The transmission main rehabilitation and construction are discussed on pages 14 and 15 of the Draft IS/MND. The proposed transmission main was designed to accommodate proposed groundwater well flows to the Foothill Water Treatment Plant. A larger diameter pipeline is not required. The 18-inch and 24-inch pipelines are not in service. They are acting as host pipes for the slip-lining construction method. The slip-lining method maximizes the internal diameter of the pipe, which maximizes the benefit of utilizing the existing inactive 18 and 24-inch inch transmission main. The difference in pipeline sizes is being accounted for in the design of the new facilities.

Please refer to Response 5-B, above for information about construction.

Comment 5-D

The comment was via phone call from Norman Zafman. He expressed concerns about the pipeline being located on Le Doux between Gregory and Charleville.

Response 5-D

This area of proposed transmission main construction would include a slip-lining technique, which includes minimal disturbance to the roadway above and surrounding areas. Locating the pipeline in Le Doux Road was chosen because of the availability of utilizing inactive pipelines to act as host pipes for the slip-lining technique, which reduces construction impacts compared to constructing using "open-cut" trenching methods which would be required on a parallel street.

Comment 5-E

The comment was via phone call from Sylvia Ashly. She expressed concern about chemical treatments and is against chemical treatment and potential pollutants onsite.

Response 5-E

The Draft IS/MND addresses water treatment and impacts by pollutants. As noted throughout the Draft IS/MND, all groundwater extracted at the proposed Well Site would be sent to the City's existing Foothill Water Treatment Plant where it will be treated to State drinking water standards. Further, the Draft IS/MND addresses potential pollutants onsite. Section 4.9, Hazards and Hazardous Materials, addresses how hazardous materials will be handles on site. And Section 4.10, Hydrology and Water Quality, indicates that the project would be subject to a Construction General Permit (CGP) under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act, which requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The objectives of a SWPPP is to identify pollutant sources that may affect the quality of storm water discharge and to implement best management practices (BMPs) to reduce pollutants in storm water.

7-8

Comment 5-F

The comment was via phone call from Fatima Choudary with Caltrans. She was concerned the project figures showed existing utilities near the onramp to the freeway.

Response 5-F

Figure 2 of the Draft IS/MND illustrates a zoomed-out area of the project vicinity and proposed components. Existing and proposed project facilities would not be located on or near Caltrans facilities and would not interfere with day-to-day Caltrans operations. The project does not include an access point immediately adjacent to the freeway. The access point would likely be located adjacent to the proposed Well Site, near the intersection of Guthrie Avenue and Chariton Street.

CHAPTER 4 Corrections and Additions to the Draft IS/MND

7-8

Section 4.1 Introduction

This chapter contains a compilation of revisions made to the text of the Draft IS/MND by the City as the Lead Agency, in response to the comments received during the 30-day public review period as well as minor edits. All revisions are previously introduced in Chapter 3 of this Final IS/MND but are summarized here for convenience of the reader. Where the responses indicate additions or deletions to the text of the Draft IS/MND, additions are indicated in <u>underline</u> and deletions in strikeout.

Page 12

Project construction would take place for approximately 13 months, from Fall 2019 through Winter 2020, through Summer 2021, with several activities potentially occurring in parallel. Construction activities would occur during nighttime and weekends for the 24-hour drilling of the production requiring approximately 120 days of drilling and testing. Nighttime construction would also be required for the rehabilitation and construction of the transmission main along La Cienega Boulevard because it is within a commercial area. This nighttime construction would minimize impacts to traffic and construction delays within roadways.

The remainder of the proposed well and transmission main would involve construction typically occurring between 7:00 a.m. and 79:00 p.m., Monday through Friday except on federal holidays.

Page 105

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant with Mitigation Incorporated. The project proposed would install a well, pump-to-waste stormdrain line within Chariton Street adjacent to the Well Site, and a transmission main. The Well Site would be located at 1956 Chariton Street. The proposed transmission main would be approximately four miles long. The proposed rehabilitation portion of the transmission main (existing inactive 18 and 24-inch pipelines) are shown on Figure 2. Construction equipment, vehicles, personnel, and materials staging areas would be located onsite at the Well Site, within adjacent City-owned property, or immediately adjacent to the transmission main construction areas along streets/roadways, where such areas can be accommodated.

There are no bicycle facilities within the project area along the local roadways such as Chariton Street and La Cienega. Transit services in the cities of Los Angeles and Beverly Hills are provided by the Los Angeles County Metropolitan Transportation Authority (Metro) (Metro 2019). There are many transit locations and opportunities for bus <u>and subway</u> services within the project area. The closest bus stop is located at the intersection of La Cienega and Guthrie, which runs along Route 105 in the northern/southward direction. <u>While, Metro's Purple Line (subway)</u> is located within the project area near the proposed transmission main. It should be noted that <u>Metro is currently working on the Purple Line within the City of Los Angeles.</u>

7-8

The proposed transmission main rehabilitation and new construction areas were specifically designed to avoid impacts to the Metro Purple Line construction work and future operations. The areas in which the proposed transmission main would be implemented along North Le Doux Road, specifically, would utilize slip-lining techniques which would minimize disturbance to areas near Metro facilities. Slip-lining construction involves installing a new pipe within an existing host pipe using trenchless construction methods to cross Wilshire Boulevard. Slip-lining eliminates the need for active construction areas which would require partial lane/road closures, which could impact traffic.

Further, the City of Beverly Hills and their contractor will coordinate with Metro during the construction design and planning, including the development of a Traffic Control Plan (see Mitigation Measure TR-1, below). This will ensure that Metro's Purple Line work is not adversely impacted and that Metro's work will not interfere with the proposed transmission main, once implemented. As such, the project would not significantly impact Purple Line construction haul routes or construction activities.

Construction of the proposed project is anticipated to occur over approximately 13 months, at night and throughout the day. All daytime construction would occur during typical construction hours ranging between 7:00 a.m. to 79:00 p.m., Monday through Friday except on federal holidays. Nighttime construction would be required for 24-hour drilling and testing of the proposed well. Nighttime construction would also take place along various areas of La Cienega for the transmission main rehabilitation, connection and new pipeline construction. Nighttime construction of the transmission main is proposed in order to avoid traffic congestion/interferences as much as possible. Nighttime construction would only occur in various areas along La Cienega where nighttime construction is permitted due to being located within a commercial area. Nighttime construction would require approval from the City of Los Angeles. Construction activities, scheduling, and number of workers could overlap between the construction of the well, associated storm drain (pump-to-waste).) and the transmission main. Construction truck and vehicle trips would be generated primarily by construction workers commuting to and from the work sites, and by trucks hauling materials and equipment to and from the well and transmission main sites. Construction trucks and vehicles would use the regional circulation system, as well as the main roadways within the cities of Los Angeles and Beverly Hills. Based on the designated construction truck routes established in the cities' General Plans, construction trucks would primarily use La Cienega Boulevard, Sawtelle Boulevard, Venice Boulevard, Sepulveda Boulevard, Manchester, Adams, Olympic Boulevard, 3rd Street,

and Santa Monica Boulevard to bring construction materials and construction workers to the project area (City of Los Angeles 2016; City of Beverly Hills 2010).

7-8

Page 107

TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas.

The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills, Los Angeles County, Metro, and Caltrans, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.

CHAPTER 5 Mitigation Monitoring and Reporting Program

7-8

5.1 CEQA Requirements

Section 15091(d) and Section 15097 of the CEQA Guidelines require a public agency to adopt a program for monitoring or reporting on the changes it has required in the project or conditions of approval to substantially lessen significant environmental effects. This Mitigation, Monitoring and Reporting Program (MMRP) summarizes the mitigation commitments identified in the La Brea Subarea Well and Transmission Main Project (proposed project) (State Clearinghouse No. 2019099076). Mitigation measures are presented in the same order as they occur in the Final IS/MND.

The columns in the MMRP table provide the following information:

- Mitigation Measure(s): The action(s) that will be taken to reduce the impact to a less-thansignificant level.
- **Implementation, Monitoring, and Reporting Action:** The appropriate steps to implement and document compliance with the mitigation measures.
- **Responsibility:** The agency or private entity responsible for ensuring implementation of the mitigation measure. However, until the mitigation measures are completed, the City, as the CEQA Lead Agency, remains responsible for ensuring that implementation of the mitigation measures occur in accordance with the MMRP (CEQA Guidelines, Section 15097(a)).
- **Monitoring Schedule:** The general schedule for conducting each task, either prior to construction, during construction and/or after construction.

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	Monitoring Schedu		Before and During Construction					
	Responsibility		The City; Construction Contractor					
OK THE LA DREA JUDAREA WELL AND TRANSMISSION I	Implementation, Monitoring, and Reporting Action		 Include mitigation measure in construction contractor specifications. Retain copies of the survey(s) in the project file. Prepare reports to document any nesting bird species prior to construction activities. 	 Perform additional survey(s) if there is a lapse of construction activities for seven days or more. Prepare reports to document any nesting bird species 	prior to resuming construction activities.Retain surveys and reports in the project file.			
	Mitigation Measures	Biological Resources	 BIO-1: The City shall be responsible for the implementation of mitigation to reduce impacts to migratory and/or nesting bird species to below a level of significance through one of the following two ways: Vegetation removal and demolition of structures shall be scheduled outside the avian nesting season which runs from February 15 to August 31 to avoid potential impacts to nesting birds. 	 If avoidance of the avian nesting season (February 15 through August 31) is not feasible then the following shall occur: a) A qualified biolocist (i.e. biolocist(s) familiar with local nesting bird species and 	their behavior) shall conduct a preconstruction mesting bird survey no more than 3 days prior to any vegetation removal or demolition of structures. The survey shall be conducted to ensure that impacts to birds, including raptors, protected by the MBTA and/or the California Fish and Game Code and bat maternity colonies are avoided. Survey areas shall include suitable avian nesting habitat.	b) If active nests of protected birds are identified during pre-construction surveys, an avoidance buffer area shall be determined at the discretion of the qualified biologist and demarcated for avoidance using flagging, staking, fencing, or another appropriate barrier to delineate construction avoidance until the nest is determined to no longer be active by a qualified biologist (i.e., young have fledged or no longer alive within the nest). An active nest is defined as a	structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. Construction personnel shall be informed of the active nest and avoidance requirements. A biological monitor shall review the Project Site, at a minimum of one-week intervals, during all rostruction activities occurring near active nests to ensure that no inadvertent impacts to active nests occur. Pre-construction nesting bird surveys and monitoring results shall be submitted to the City of Beverly Hills	Planning Division via email or memorandum upon completion of the pre- construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
Cultural Resources			
CUL-1: Retention of Qualified Archaeologist. Prior to the start of any ground disturbing activities, a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior 2008) shall be retained by the City of Beverly Hills to carry out all mitigation measures related to cultural resources. In addition, the City of Beverly Hills will retain a Native American monitor to work in tandem with the archaeologist in the areas and during activities with potential to encounter prehistoric archaeologist in the areas and during activities with potential to encounter prehistoric archaeologist in the areas and	 Include mitigation measure in construction contractor specifications. Retain documentation of retaining a qualified archaeologist in the project file. 	The City; Construction Contractor	Before and During Construction
CUL-2: Cultural Resources Sensitivity Training. Prior to start of any ground-disturbing activities, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel associated with the proposed project. Construction personnel shall be informed of the types of cultural resources that may be encountered during construction, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City of Beverly Hills shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.	 Include mitigation measure in construction contractor specifications. Retain documentation demonstrating attendance of construction personnel to cultural resources sensitivity training. 	The City; Construction Contractor	Before and During Construction
CUL-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the qualified archaeologist) shall observe all excavation activities associated with the installation of the Well Site. For the portion of the alignment requiring installation of the new transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring of all excavations including trenching and bore pits. For the portion of the alignment which involves the rehabilitation of existing transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring of all excavations including trenching end bore pits. For the portion of the alignment which involves the rehabilitation of existing transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring on all access points along the rehabilitation alignment. Should the solis prove to be too disturbed to contain archaeological monitor will conduct tull time monitoring for such areas along the route. The qualified archaeologist may recommend full time monitoring for such areas along the route. The qualified archaeologist, in coordination with the City of Beverly Hills, may reduce or discontinue monitoring fit is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted be encountered within the types of archaeological monitority of a discovery until the qualified archaeological monitoring shall be conducted the encountered within the types of archaeological monitority of a discovery until the qualified archaeological monitoring shall be conducte to halt or redirect ground-disturbing activities away from the vicinity of a discoveries. After monitoring he types of activities and soils observed, and any discoveries. After monitoring he types of activities and soils observed and prove the detalis the results of monitoring	 Include mitigation measure in construction contractor specifications. Perform site inspections to ensure compliance with cultural sensitivity requirements. Retain all archeological and tribal inspection forms in the project file. Retain copy of final archaeological report in the project file. 	The City; Construction Contractor	Before and During Construction

5. Mitigation Monitoring and Reporting Program

Attachment 2, Page 576 of 722

5-3

ESA / 190167 November 2019

Mitigation Measures	Imple	lementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
CUL-4: Unanticipated Discoveries. In the event of an unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City of Beverly Hills, and the appropriate Native American representatives for prehistoric resources, on the significance of the resource.	• • • • •	Include mitigation measure in construction contractor specifications. Perform site inspections to ensure compliance with cultural sensitivity requirements. Retain inspection forms in the project file. Retain correspondence between archeologist and Native American representative. Retain a copy of Archeological Resources Treatment Plan (if one is required) in the project file.	The City; Construction Contractor	Before and During Construction
CUL-5: Unanticipated Discovery of Human Remains and Associated Funerary Objects. In the event human remains and/or associated funerary objects are encountered during construction of the proposed project, all activity in the vicinity of the find shall cease (within 100 feet). Human remains discoveries shall be treated in accordance with and California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, requiring assessment of the discovery by the County Coroner, assignment of a Most Likely Descendant by the NAHC, and consultation between the Most Likely Descendant and the landowner regarding treatment of the discovery. Until the landowner has conferred with the Most Likely Descendant, the City of Beverly Hills shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity and that further activities take into account the possibility of multiple burials.	• • •	Include mitigation measure in construction contractor specifications. Retain inspection forms in the project file. Retain NAHC correspondence in project files, if necessary.	The City; Construction Contractor	Before and During Construction
GEO-1 : A qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist) shall be retained prior to the approval of demolition or grading permits. The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall attend the project kick-off meeting and Project progress meetings on a regular basis, and shall report to the project site in the event potential paleontological resources are encountered.	• •	Include mitigation measure in construction contractor specifications. Retain documentation of retaining a qualified paleontologist in the project file.	The City; Construction Contractor	Before and During Construction
GEO-2: The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training at the project kick-off meeting prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). In the event construction crews are phased, additional training shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the project site and the procedures to be followed if they are found. Documentation shall be retained by the Qualified Paleontologist demonstrating that the appropriate construction personnel	• •	Include mitigation measure in construction contractor specifications. Retain documentation demonstrating attendance of construction personnel to paleontological resources training.	The City; Construction Contractor	Before and During Construction

Attachment 2, Page 577 of 722

10/12/2021 Board Meeting

5. Mitigation Monitoring and Reporting Program

Mitigation Measures	Implementation, Monitoring, and Re	porting Action	Responsibility	Monitoring Schedule
GEO-3: The Qualified Paleontologist shall develop a Paleontological Resources Monitoring Plan (PRMP) that shall detail the monitoring program necessary for the project, based off of specific construction methodologies and locations. Construction activities have varying impacts on paleontological resources and may require different monitoring procedures. The PRMP shall take the specific construction plans for the project to tailor a monitoring plan to the types of construction activities and the geologic units each may encounter. In general, ground disturbance across the project site that occurs in undisturbed sediments and exceeds 5-10 feet in depth may impact high potential sediments and threefore should be monitored. This includes; excavation and site preparation at the Well Site, drilling for the production well, cut and cover and entrance and exit pits for jack and bore along the proposed transmission main and at access points for the rehabilitation of the transmission main. Paleontological resources monitoring shall be performed by a qualified paleontological monitor (meeting the standards of the SVP 2010) under the direction of the Qualified Paleontologist. Depending on the conditions encountered, full-time monitoring can be reduced to part- time inspections or cased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist shall spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils or observed, and any discoveries. Any significant fossils collected during project-related excavations shall be prepare daily logs detailing the types of activities and solis observed, and any discoveries. Any significant fossils collected during project-related excavations with retrievable storage. The Qualified Paleonologist shall prepare a final monitoring and mitigation report for submittal to	 Include mitigation measure in con specifications. Retain copies of all paleontologics and PRMP in the project file. Perform site monitoring to ensure paleontological requirements. Retain inspection forms in the projection forms in the	istruction contractor al research, survey compliance with ject file.	The City; Construction Contractor	Before and During Construction
GEO-4: Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries. If there are significant discoveries, fossil locality information and final disposition will be included with the final report which will be submitted to the City.	 Include mitigation measure in con specifications. Paleontological monitoring reports retained in project file. Retain fossil recovery logs in the p 	istruction contractor s and logs will be project file.	The City; Construction Contractor	Before and During Construction
Hazards and Hazardous Materials				
HAZ-1: Prior to the initiation of any construction requiring ground-disturbing activities, the City shall complete an environmental assessment of the proposed site to locate the potential for soil and groundwater contamination in the project area. The recommendations set forth in the site assessment shall be implemented to the satisfaction of applicable agencies before and during construction.	 Include mitigation measure in con specifications. Retain copies of all environmental the project file. 	istruction contractor	The City; Construction Contractor	Before Construction

7-8

10/12/2021 Board Meeting

ESA / 190167 November 2019

5-5

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
HAZ-2 : If the site assessments determine that the site has contaminated soil and/or groundwater, a Soil and Groundwater Management Plan shall be prepared that specifies the method for handling and disposing of contaminated soil and groundwater prior to demolition, excavation, and construction activities. The City shall be responsible for ensuring implementation of the Plan in compliance with applicable regulations.	 Include mitigation measure in construction contractor specifications. Retain copies of Soil and Groundwater Management Plan in the project file. Perform site inspections to verify contractor compliance with hazardous materials. Retain inspection forms in the project file. 	The City; Construction Contractor	Before and During Construction
HAZ-3: In conjunction with Mitigation Measure TR-1 , prior to initiating construction of the transmission main within roadway rights-of-way, the City shall prepare and implement a Traffic Control Plan that contains comprehensive strategies for maintaining emergency access. Strategies shall include, but are not limited to, maintaining steel trench plates at the construction sites to restore access across open trenches and identification of alternate routing around construction zones. In addition, police, fire, and other emergency service providers shall be notified of the timing, location, and duration of the construction activities and the location of detours and lane closures. The City shall ensure that the Traffic Control Plan and other construction activities are consistent with the Los Angeles County Operational Area Emergency Response Plan.	 Include mitigation measure in construction contractor specifications. Retain a qualified consultant to prepare a Traffic Control Plan that is consistent with the Los Angeles County Operational Area Emergency Response Plan. Retain copies of written notifications in the project file. Retain copies of the Traffic Control Plan in the project file. 	The City; Construction Contractor	Before Construction
Noise			
NOISE-1: Prior to construction, the City of Beverly Hills shall ensure that the contractor specifications stipulate that:	 Include mitigation measure in construction contractor specifications. 	The City; Construction	Before Construction
 All construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers and other state-required noise attenuation devices capable of up to a 5 dBA reduction. When feasible, construction haul routes shall avoid noise-sensitive uses (e.g., residences. convalescent homes). 	 Retain a qualified construction monitor to conduct routine inspections of noise reduction measures during project construction. Maintain written inspection records in the project file to verify compliance. 	Contractor	
 During construction, stationary construction equipment shall be placed such that emitted noise is directed away from the nearest noise-sensitive receptors. The project shall provide noise blanket/temporary noise barriers rated for up to a 10 dBA reduction between the active areas and surrounding sensitive uses. 			
NOISE-2: Throughout project construction and operation, the City of Beverly Hills shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints as soon as possible.	 Include mitigation measure in construction contractor specifications. Retain a cualified Noise Disturbance Coordinator to 	The City; Construction Contractor	During and After Construction
 The City shall establish and disseminate a 24/7 hotline telephone number for use by the public to report any undesirable project noise conditions. If the telephone number is not staffed 24 hours per day, the City shall include an automatic answering feature with date and time stamp recording to answer calls when the phone is unattended. 	 Mainternet dramation of complexity of all noise complaints Maintain written documentation of all noise complaints and the resolution of complaints in the project file. 		
 The City shall designate a Noise Disturbance Coordinator during construction and permanently once the facility is operational. The Noise Disturbance Coordinator shall assist in resolving noise complaints to minimize impacts while maintaining the objectives of the construction and operation of the facility. The Noise Disturbance Coordinator shall report all noise complaints to the City program manager. 			

5. Mitigation Monitoring and Reporting Program

5-6

ESA / 190167 November 2019

10/1	2/2021 Board I	Meeting		Meeting 7-8
Monitoring So		During Const	Before and I Construct	During Const
Responsibility		The City; Construction Contractor	The City; Construction Contractor	The City; Construction Contractor
mplementation, Monitoring, and Reporting Action		Include mitigation measure in construction contractor specifications. Maintain written documentation of offered noise mitigation measures in the project file.	Include mitigation measure in construction contractor specifications. Maintain written documentation of all construction coordination in the project file.	 Include mitigation measure in construction contractor specifications. Retain a qualified construction monitor to conduct routine inspections of vibration reduction measures during project construction. Retain documentation required by the mitigation measure. Maintain written inspection records in the project file to verify compliance.
Mitigation Measures	 For construction noise complaints received outside of the construction hours and days allowed (Monday through Friday, between the hours of 7:00 a.m. and 8:00 p.m.), the Noise Disturbance Coordinator shall take immediate steps to determine whether project construction is causing the noise and, if so, to reduce the noise level of that activity or take other appropriate action to remedy the complaint as quickly as possible. For construction activities near local residences, the Noise Disturbance Coordinator shall have the authority to require the installation of a temporary noise barrier to reduce nimpacts to the closest sensitive receptors. The noise barriers shall be tall enough to effectively block sight-lines of the construction to the closest residences. The contractor shall install noise barriers as directed by the Noise Disturbance Coordinator to minimize construction noise and resolve noise complaints. 	NOISE-3 : Residents of properties shall be offered noise mitigation measures (e.g., hearing protection, sound-proofing, white noise machines, etc.) acceptable to the residents or temporary relocation for the duration of nearby construction that would generate construction noise levels at their property in excess of 45 dBA. Leq during nighttime hours, for the duration of time that 24-hour activity occurs. Based on the analyses presented in this IS/MND, this measure shall apply to residences located within approximately 200 feet of the well installation location and pipeline rehabilitation and main transmission activity (i.e. residences along or near Chariton Street and La Cienega Boulevard).	NOISE-4 : The contractor shall coordinate with any affected schools, institutions of learning, hospitals, or churches regarding construction schedule and the expected level of disturbance. The contractor shall ensure there are no special events or gatherings that would be affected by construction activity before continuing and will notify any affected institution of the anticipated schedule and completion date. In the event of a conflict, the contractor shall limit the use of equipment in an effort to lower noise levels or cease construction completely until the event or gathering has ended.	NOISE-5: The operation of construction equipment that generates high levels of vibration, such as large bulldozers and loaded trucks, shall be prohibited within 45 feet of existing residential structures. Instead, small construction equipment such as small rubber tired bulldozers, small rubber tired excavator, etc., not exceeding 150 horsepower shall be used within this area during demolition, grading, and excavation operations.

595

5-7

ESA / 190167 November 2019

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
Transportation			
TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction management within the Well Site and surrounding local roadways; and second, for construction management within the Well Site and surrounding local roadways; and second, for construction management within the Well Site and surrounding local roadways; and second, for construction management of proposed new transmission main areas. The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles. City of Beverly Hills, Los Angeles County, Metro, and Caltrans, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will be maintained to individual properties, that emergency access will be that written notices are provided to affected property owners and that detours or attention and that during control Plan will ensure that written notices are provided to rubicit transit, bicyclists using on-street bicycle lanes, and predestrians using adjacent sidewalks.	 Include mitigation measure in construction contractor specifications. Retain copies of all correspondence with the City of Los Angeles and the City of Beverly Hills in the project file. Retain copies of the Traffic Control/Traffic Management Plan in the project file. Retain a qualified construction monitor to conduct routine inspections of traffic control measures during project construction. Maintain a record of collected information and written notifications in the project file. Maintain written inspection records in the project file to verify compliance. 	The City; Construction Contractor	Before and During Construction

5. Mitigation Monitoring and Reporting Program

DRAFT IS/MND

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(Attached)

Public Draft

CITY OF BEVERLY HILLS LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT

Initial Study/Mitigated Negative Declaration

Prepared for City of Beverly Hills September 2019



Public Draft

CITY OF BEVERLY HILLS LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT

Initial Study/Mitigated Negative Declaration

Prepared for City of Beverly Hills September 2019

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TABLE OF CONTENTSCity of Beverly HillsLa Brea Subarea Well and Transr

La Brea Subarea Well and Transmission Main Project

Sectio	on 1, 1.1 1.2	Introduction Statutory Authority and Requirements Purpose	1 1
Sectio	on 2, 2.1 2.2 2.3 2.4 2.5 2.6	Project Description Project Background Project Objectives Project Location and Setting Description of Project Elements Project Implementation 1 Required Approvals	3 4 4 5 2 6
Sectio	on 3,	Initial Study Checklist1	7
3	3.1	Background	7
	3.2	Environmental Factors Potentially Affected	8
Sectio	on 4,	Environmental Analysis1	9
2	4.1	Aesthetics	:1
2	4.2	Agricultural and Forest Resources	5
2	4.3	Air Quality	8
2	4.4	Biological Resources	9
2	4.5	Cultural Resources	.3
2	4.6	Energy	.9
2	4.7	Geology, Soils, and Seismicity5	2
2	4.8	Greenhouse Gas Emissions	4
2	4.9	Hazards and Hazardous Materials	0
2	4.10	Hydrology and Water Quality	7
2	4.11	Land Use and Land Use Planning	3
2	4.12	Mineral Resources	5
2	4.13	Noise	1
2	4.14	Population and Housing	9
2	4.15	Public Services	1
2	4.16	Recreation	4
2	4.17	10 Transportation	5
2	4.18	I ribal Cultural Resources	0
2	4.19	Utilities and Service Systems	3
2	4.20	Wildlife	0
2	4.Z1	ivianuatory Findings of Significance	Ø

i

List of Figures

1	Regional Location	6
2	Project Location	7
3	Proposed Well Site	8
4	Project Land Use	9
5	Well Rendering	11
6	School and Recreational Facilities in the Project Area	73
7	Noise Measurement Locations	

List of Tables

1	Construction Phase Duration	12
2	Construction Equipment Mix and No. of Workers	13
3	Maximum Daily Construction Emissions	33
4	Localized Significant Summary Construction	35
5	Annual Project Greenhouse Gas Emissions	67
6	Ambient Noise Levels	90
7	Construction Equipment and Maximum Noise Levels	92
8	Unmitigated Maximum Construction Noise Levels at Sensitive Receptors	93
9	Vibration Source Levels for Construction Equipment	96

List of Appendices

Appendix A: Air Quality, Greenhouse Gas and Energy Information

Appendix B: Biological Resources Data

Appendix C: Cultural Resources and Paleontological Resources Technical Reports,

ii

and AB 52 Consultation Materials

Appendix D: Noise and Vibration Information

List of Acronyms

AFY	acre feet per year
AQMP	Air Quality Management Plan
AR4	Fourth Assessment Report
ATCM	airborne toxic control measures
AWWA	American Water Works Association
BACT	Best Available Control Technology
BC3	Business Council on Climate Change
BHFD	Beverly Hills Fire Department
BHPD	Beverly Hills Police Department
BHUSD	Beverly Hills Unified School District
BMPs	best management practices
CAAQS	California Ambient Air Quality Standards
CalOSHA	California Division of Occupational Safety and Health
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CGS	California Geologic Survey
CH4	methane
CNDDB	California Natural Diversity Database
CO2	carbon dioxide
DDW	Division of Drinking Water
DTSC	California Department of Toxic Substance Control
EDD	Employment Development Department
ERP	Emergency Response Plan
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GHG	Greenhouse Gas
GWPs	global warning potential
НСР	Habitat Conservation Plan
HFCs	hydrofluorocarbons
I-10	Interstate 10
IPCC	United Nations Intergovernmental Panel on Climate Change
IS	Initial Study
LACM	Natural History Museum of Los Angeles County
LADWP	Los Angeles Department of Water and Power

iii

7-8

LAFD	Los Angeles Fire Department
LAMC	Los Angeles Municipal Code
LAPD	Los Angeles Police Department
LAUSD	Los Angeles Unified School District
LOS	Level of Service
LST	localized significant threshold
MBTA	Federal Migratory Bird Treaty Act
MG	million gallons
MMT	million metric tons
MND	Mitigated Negative Declaration
MRDS	Mineral Resource Data System
MT	metric ton
MWD	Metropolitan Water District of Southern California
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plan
NOX	primary oxides of nitrogen
NPDES	National Pollutant Detection and Elimination System
OEHHA	Environmental Health Hazard Assessment
PFCs	perfluorocarbons
PM10	particulate matter 10 microns in diameter or less
PPV	peak particle velocity
RCP	Regional Comprehensive Plan
RMS	root mean square
RO	Reverse Osmosis
ROW	right-of-way
RPS	California Renewables Portfolio Standard
RTP	Regional Transportation Plan
SCAB	South Coast Air Basin
SCAG	Southern California Associate of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SF6	sulfur hexafluoride
SMARA	Surface Mining and Reclamation Act
SOON	Surplus Off-Road Option for NO _X
SR	State Route
SRA	source receptor area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
TACs	toxic air contaminants
USDA	United States Department of Agriculture

iv

- USEPA United State Environmental Protection Agency
- USGS United States Geologic Survey
- WEP Water Enterprise Plan
- WTP Water Treatment Plant

v

SECTION 1 Introduction

To expand local water supply, the City of Beverly Hills (City) proposes to develop the La Brea Subarea Well and Transmission Main Project (proposed project or project) by providing an additional net 1,700 acre-feet per year (AFY) of groundwater supply in the La Brea Subarea within the Central Groundwater Basin. The project would include the construction and operation of new pipelines, rehabilitation of an existing abandoned pipeline, and construction of a new groundwater extraction well, as described below. While there may be a need to develop additional wells in the area to accomplish the water production goal, the location and timing of any such wells is unknown at this time.

7 - 8

1.1 Statutory Authority and Requirements

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000–21177) and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Section 15000 et seq.), the City of Beverly Hills, acting in the capacity of Lead Agency, is required to prepare an Initial Study (IS) to determine if the proposed project may have a significant effect on the environment (CEQA Guidelines Section 15063). If a Lead Agency finds that there is no substantial evidence that a project, either as proposed or as modified to include the mitigation measures identified in the IS, may cause a significant effect on the environment, the Lead Agency must prepare a Negative Declaration or Mitigated Negative Declaration (MND) for that project (Public Resources Code Section 21080(c), CEQA Guidelines Section 15070(b)).

This document is prepared in accordance with CEQA and is intended to provide an environmental analysis to support subsequent discretionary actions upon the project (CEQA Guidelines Section 15074). This analysis is not a policy document and its approval by the City neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required. This environmental documentation and supporting analysis is subject to a public review period (CEQA Guidelines Sections 15073, 15105). During this review period, comments on the document should be addressed to the City. The City will consider any comments received as part of the proposed project's environmental review and include them with the CEQA documentation for consideration by the City.

1.2 Purpose

Acting as the CEQA Lead Agency, the City has prepared this IS/MND to provide the public and responsible agencies with information about the potential environmental impacts associated with implementation of the proposed project. This IS/MND was prepared in compliance with Sections

15063 and 15070 through 15075 of the CEQA Guidelines. In accordance with Section 15070 of the CEQA Guidelines, an MND shall be prepared if the IS identifies potentially significant effects, but revisions in the project plans would avoid or mitigate the effects to a point where clearly no significant effects would occur, and there is no substantial evidence that the revised project may have a significant effect on the environment.

SECTION 2 Project Description

The proposed project would include the construction of a groundwater production well in the La Brea Subarea (that would provide approximately 1,700 AFY of new water supply), the rehabilitation of an existing (inactive) 18 and 24-inch pipelines, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main with a diameter of 16inches (collectively, referred to herein as "proposed transmission main"). The proposed transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply. The pipelines would be sized to accommodate 3,000 gallons per minute (gpm), which would be from the currently proposed well and, potentially, other wells in the area although the need for and locations of any such future wells is unknown at this time.

7-8

2.1 Project Background

The City's water service area is approximately 6.35 square miles and includes approximately 10,600 service connections. The system includes over 170 miles of pipeline, 16 pressure zones and 10 reservoirs. The service area has a resident population of approximately 43,000 people and a daytime population of up to 250,000 people. The City's service area supplies water from imported sources from the Metropolitan Water District of Southern California (MWD).

Historically, the City relied heavily on groundwater to meet service demands with the first wells developed in the 1880's. The City became a charter member of MWD in 1941 at which point it started to import water from MWD, thereby increasing its reliance on imported water sources. This reliance slowed in the early 1990's when imported water became more expensive and less reliable, at which point the City began reconsidering the use of its local groundwater resources.

Today, the City's water supply is solely dependent on imported water. To add reliability to their water supply portfolio, the City previously constructed four production wells in the Hollywood Basin and a new Reverse Osmosis (RO) treatment plant that was first put into operation in 2003. The groundwater from the four wells is conveyed to the RO treatment plant where it is treated and discharged into the City's distribution system under normal operation, blending with the imported water from MWD. From 2011 to 2015, the approximate average annual flows were 740 acre-feet per year (AFY) produced through local groundwater, while 10,800 AFY was imported from MWD. Therefore, local groundwater production accounted for an average of six percent of the City's average annual water supply (City of Beverly Hills 2016). The 10 reservoirs supporting the system store a combined 43 million gallons (MG).

There are three local groundwater basins near the City: the Hollywood Basin (in which the City is located); the Santa Monica Basin to the west; and the Central Basin, which includes the La Brea Subarea. Due to the adjudication status of the basins and historical groundwater development, various areas within the City's vicinity have been investigated for the expansion of groundwater resources. The City recently completed a 2015 Water Enterprise Plan (WEP) which specifically identified the need to re-establish the well field in the La Brea Subarea to increase the local water contribution to the City (City of Beverly Hills 2015).

2.2 Project Objectives

Project objectives include the following:

- Develop approximately 1,700 AFY of new potable water supply in the La Brea Subarea of the Central Basin;
- Optimally locate a new well to provide the highest feasible level of sustainable groundwater production, and sites that can be purchased and developed in the most efficient manner and permitted by Division of Drinking Water (DDW);
- Use the existing WTP;
- Rehabilitate existing inactive 18 and 24-inch pipelines where possible to minimize construction impacts; and
- Increase operational flexibility through the development of a new water supply.

2.3 Project Location and Setting

The proposed project would be located within two jurisdictions; the City of Beverly Hills and the City of Los Angeles, as depicted on **Figure 1, Regional Location** and **Figure 2, Project Location**. The City of Beverly Hill's Foothill WTP is located on Foothill Road between Alden Drive and Third Street. The Foothill WTP is a developed water treatment plant which contains reverse osmosis (RO) facilities that would treat the raw water received from the proposed groundwater production well (Figure 2).

The proposed Well Site would be implemented on a City-owned property located at 1956 Chariton Street in the City of Los Angeles, as depicted on **Figure 3**, **Proposed Well Site**. The proposed Well Site has a land use designation of Low Medium II Residential and is zoned as Restricted Density Multiple Dwelling Zone (RD2-1). The site is currently developed with a residential structure; however, there are no current residents living in the structure. The site is surrounded by other residences to the north, west and south. To the east is an area designated as Neighborhood Commercial, which consists of City-owned property, and other commercial properties along La Cienega Boulevard. Implementation of the Well Site would require the installation of 15-inch storm drain pipe, which would be located within the paved right-of-way (ROW) along Chariton Street. The storm drain would dispose of water being flushed through the well during well testing and during normal operations.

While there may be a need of additional wells in the area to meet the production goal, the need for and locations of any such future wells have not been determined at this time. The La Brea Subarea is located in the northern unadjudicated portion of the Central Basin.

7-8

The proposed transmission main, in its entirety would be approximately four miles long. The proposed rehabilitation area of the transmission main (existing 18 and 24-inch inactive pipelines) would proceed north within La Cienega Boulevard to Olympic Boulevard and within Le Doux Road from Gregory Way to Clifton Way (see Figure 2) and to connect to the proposed 16-inch new pipeline The length of the proposed new 16-inch transmission main would then continue westward until turning north on North Swall Drive, then west on Dayton Way. The transmission main would continue westerly along Dayton Way until turning north on North Palm Drive, then Westward on 3rd street then through the City yard to connect to the utilities inlet side of the Foothill WTP (Figure 2).

Land uses in the project area vary in both the City of Los Angeles and Beverly Hills (**Figure 4**, **Project Land Use**). In the City of Los Angeles, the existing surrounding land uses include community commercial, general commercial, and neighborhood office commercial, where the transmission main alignment would be located along La Cienega Boulevard leading to the Well Site. Other existing land uses in the overall project area located in the City of Los Angeles include: public facilities, low density residential, medium density residential, open space, and industrial. The portion of the transmission main in the City of Beverly Hills is surrounded by single residential, multi-family residential, commercial, and public schools (Figure 4) (City of Beverly Hills 2019; City of Los Angeles 2019).

Zoning in the City of Los Angeles where the proposed transmission main would be located are as follows: Single Family Residential, Multiple Family Residential, Commercial, Manufacturing, Open Space, and Public Facilities. As the proposed transmission main travels through the City of Beverly Hills, it passes through various zones including C-5 (Commercial Zone), P-S (Public Service Zone), R-4 (Multiple Residence Zone), Parks, Reservoirs, Government (Unzoned), R-1.5X (One-Family Residential Zone), C-3 (Commercial Zone), C-3T-3 (Commercial Transition Zone), and R-1 (One-Family Residential Zone).

2.4 Description of Project Elements

The proposed project includes: the demolition of existing structures at the proposed Well Site; the construction of one well within the La Brea Subarea; the rehabilitation of existing inactive 18 and 24-inch transmission main pipelines along La Cienega Boulevard; and the construction of a new 16-inch transmission main that would convey flows from the proposed Well Site to the City's WTP for treatment. Demolition, rehabilitation, and the construction of new facilities associated with the proposed project are described further below.



7-8

SOURCE: ESRI

ESA

La Brea Subarea Well and Transmission Main Project

Figure 1 Regional Location



7-8

SOURCE: ESRI; City of Beverly Hills

ESA

La Brea Subarea Well and Transmission Main Project

Figure 2 Project Location


La Brea Subarea Well and Transmission Main Project

Attachment 2, Page 598 of 722



7-8



7-8

SOURCE: ESRI; City of Beverly Hills; City of Los Angeles

La Brea Subarea Well and Transmission Main Project

Figure 4 Project Land Use

2.4.1 Production Well

The proposed Well Site would be located on 1956 Chariton Street in the City of Los Angeles (Figure 2). The area is essentially flat and the existing residential structure would be demolished before the construction of the Well. After demolition, a 15-inch storm drain (pump-to-waste pipeline) would be constructed within Chariton Street, to connect to an existing storm drain system within the local streets. When a well is turned on, typical procedure is to "pump-to-waste" for a short duration to flush the well system. This flushing procedure will discharge through the 15-inch storm drain.

The proposed well would include an approximately 150 horsepower (hp) electric pump that would be housed within a new pump building. The pump building would be approximately 700 square feet (sf) with a 3-foot by 3-foot concrete pad underneath. The well-housing would not exceed the height of adjacent structures. Total well depth would be approximately 500 feet. The predicted flow rate for the well is between 500 and 700 gpm. The well-housing would be designed to blend in with the surrounding environment. **Figure 5, Well Rendering** illustrates what the proposed well may look like.

The Well Site has two existing driveways along La Cienega Boulevard as well as access to the Well Site along Chariton Street (see Figure 2). La Cienega Boulevard is a high traffic street given that it provides access to I-10 and is also a truck route.

2.4.2 Rehabilitation and Proposed Transmission Main

The installation of new groundwater production well in the La Brea Subarea would include the rehabilitation of existing inactive 18 and 24-inch transmission pipelines and the construction of a new 16-inch transmission main alignment to convey water to the City distribution system from the proposed Well Site.

The existing, inactive 18-inch transmission main pipeline is located just north of Interstate 10 (I-10) at La Cienega Boulevard and continues north for approximately 8,000 linear feet (lf) to Olympic Boulevard at a depth of approximately 3 feet below the ground surface (bgs). The City has an easement to allow for the rehabilitation and use of this pipeline. The alignment horizontally and vertically varies at intersections; however, the majority of the pipe is located beneath the existing sidewalk on the west side of La Cienega Boulevard. The existing inactive 24inch transmission main is located within Le Doux Road from Gregory Way north approximately 2,250 liner feat (lf) to Clifton Way, and includes the crossing of Wilshire Blvd. The alignment is located approximately 6-feet east of street centerline at a cover depth that varies between 3.5-feet and 6-feet. The existing 18 and 24-inch pipelines would be rehabilitated as part of the overall transmission main of the project, then connect to the newly constructed 16-inch transmission main pipeline The rehabilitated and new portions of the proposed transmission main would be connected and sized appropriately for anticipated flows.



SOURCE: Hazen & Sawyer, 2019

Figure 5 Well Rendering

La Brea Subarea Well and Transmission Main Project

The projected operational flow rate for the proposed production well is in the range of 500 to 700 gpm. An 8-inch diameter pipe would be used for the individual discharge pipeline from the production well. The transmission main would be sized to handle the flow rate of the optimal flow of approximately (2,100 gpm), to allow for use in conjunction with potential future wells in the area. Many of the streets along the transmission main alignment are single lane roads, with existing utilities such as water, sewer, gas, electric, and storm drain.

2.5 Project Implementation

Implementation of the proposed project would consist of a combination of construction activities as well as the operation and maintenance of facilities once construction and rehabilitation is complete. This section describes the characteristics associated with the construction (including rehabilitation and demolition) and operation and maintenance phases of the proposed project.

2.5.1 Construction Phase Characteristics

Construction Schedule

Project construction would take place for approximately 13 months, from Fall 2019 through Winter 2020, with several activities potentially occurring in parallel. Construction activities would occur during nighttime and weekends for the 24-hour drilling of the production requiring approximately 120 days of drilling and testing. Nighttime construction would also be required for the rehabilitation and construction of the transmission main along La Cienega Boulevard because it is within a commercial area. This nighttime construction would minimize impacts to traffic and construction delays within roadways.

The remainder of the proposed well and transmission main would involve construction typically occurring between 7:00 a.m. and 7:00 p.m., Monday through Friday except on federal holidays. **Table 1** summarizes the proposed construction activities and their estimated durations.

	-
Type of Construction	Estimated Duration
Wells Site Demolition and Pump-to-Waste	2 months
Well Construction Monitoring	4 months
Well Equipping	7 months
Rehabilitation/Transmission Main Installation	8 months
Total Construction Phase Duration	13 months
Note: Construction phasing/type may not occur concurrently. SOURCE: Hazen 2019	

TABLE 1 CONSTRUCTION PHASE DURATION

Construction Activities and Construction Vehicle Trips

All construction activities associated with the proposed project would occur within the Well Site boundaries and within existing public ROWs and sidewalks. Construction equipment, vehicles, personnel, and materials staging areas would be located onsite or immediately adjacent to the site, where such areas can be accommodated. Construction traffic would utilize local streets, primarily La Cienega Boulevard. The following subsections provide descriptions of the various aspects of the proposed project's construction phase. **Table 2** summarizes equipment that are anticipated to be used during construction of the proposed project. Table 2 shows the equipment that could be used during any of the construction phases and is not indicative of the total amount that would be operated onsite at any given time.

7-8

Estimated Construction Workers	Number and Types of Construction Equipment
10	hydraulic excavators, pulverizes, hammers, forklift, front loader, trench boxes, dump truck
4	1 drill rig, 1 pipe trailer, 3 baker-type tanks, 1 frontend loader 1 generator, 1 compressor, 1 gravel pump, 4 sound walls, 1 small crane, 1 water truck, 4 auxiliary materials delivery trucks; 1 pump installation rig; 3 cement trucks; 1 cement pump truck
4	forklift, crane
10	backhoe, excavator, front end loader, trench boxes, dump truck
-	Estimated Construction Workers 10 4 4 10

TABLE 2 CONSTRUCTION EQUIPMENT MIX AND NO. OF WORKERS

Up to 20 workers per day would be required during the peak construction phase of the proposed project. Construction-related transportation activities associated with the proposed project will include haul truck trips, construction material truck trips and employee trips. Table 2, above, summarizes the estimated number of workers necessary for each phase.

Demolition/Site Preparation

The proposed project would demolish existing structures at the Well Site, totaling approximately 6,767 cubic yards of construction material. Generally, ground disturbance during demolition would not extend deeper than 25 feet; concrete below this depth would be left in place. Demolition and site grading activities would require approximately 5 dumpster haul trucks per day and 20 dumpster haul trucks total. Imported soil may be required to level the site after demolition. Construction waste would be disposed of at 365 Disposal & Recycling Landfill located at 11153 Tuxford Street, Sun Valley, CA 91352.

Due to the age of the existing structures at the Well Site, hazardous materials may be encountered during removal. Hazardous materials, including asbestos-containing materials, lead-based paint, and universal wastes¹ were documented in facilities designated for demolition. Removal of these materials would be performed in accordance with federal and state regulations.

New Facilities/Rehabilitation

Production Well

The proposed project would construct a new above-grade well-house and new below-grade production well, as described previously. Construction equipment pertaining to the Well Site would be staged onsite or immediately adjacent to the site, where such areas can be accommodated. Best management practices (BMPs) would be implemented to control erosion. The proposed production well would require continuous 24-hour drilling and testing, and therefore would require temporary overnight lighting. All temporary constructing lighting would be shielded downward and away from the adjacent properties, cars driving along Chariton Street and other roadways, and the surrounding residential neighborhoods.

Well drilling would require the removal of approximately 11 cubic yards of excavated soil for the Well Site. The removal of excavated soil would require four haul truck trips per day at the Well Site. No imported soil would be required. Well installation would require 10 vendor/supply trucks and other vehicles. The total amount of trucks and vehicles required for Well Site would be approximately 84 vehicles.

Transmission Main Rehabilitation and Construction

Pipeline construction equipment will be temporarily staged in areas immediately adjacent to roadways and/or stored off site. The transmission main alignment would be installed primarily within existing roadways and ROW to the extent feasible.

Construction of the proposed transmission main would involve trenching using conventional cut and cover and jack and bore techniques for pipeline portions within the City of Beverly Hills. The transmission main would run along Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street. The trenching technique would include saw cutting of the pavement where applicable, trench excavation, pipe installation, backfill operations, and resurfacing. Open trenches would be between approximately 4 feet wide and 5 feet deep with vertical cuts and trench shoring. Excavation depths would vary depending on location of existing utilities. On average, about 100-200 linear feet of pipeline would be installed per day.

No full road closures are anticipated for the proposed project. Partial road closures may be required. The City would obtain the appropriate encroachment permitting and coordinate with the City of Los Angeles in applicable areas, as needed. Partial road closures would include signage, traffic guidance, and other safety measures. Please see Section 4.17, *Transportation*, below for further details on traffic control measures. Boring methods would be used as needed to avoid full road closures. Implementation of the new 16-inch transmission main would require the

¹ Universal waste is a category of waste materials designated as "hazardous waste", but containing materials that are very common. It is defined in 40 C.F.R. 273.9, by the United States Environmental Protection Agency but states may also have corollary regulations regarding these materials.

excavation of approximately 11,018 cubic yards of soil. All excavated soil would be hauled away and trenches would be backfilled with 2-sack slurry.

Rehabilitation of the existing inactive 18 and 24-inch transmission main pipelines would be executed through the sliplining technique². The rehabilitated portion of the 18 and 24-inch existing pipelines will be sliplined with a 13.5-inch carrier pipe (it gets inserted within the 18 and 24-inch pipes). Typical practice in pipeline design is to use pipe fittings called reducers to connect pipes of different sizes. The rehabilitated 18 and 24-inch pipes will connect to the newly constructed 16-inch portion of the transmission main by using a standard ductile iron mechanical joint (18-inch by 16-inch ductile iron reducer) fittings. The design flow rate for the pipeline is 2100 gpm, but the transmission main in its entirety is sized to accommodate up to 3000 gpm. Rehabilitation would require the excavation of approximately 185 cubic yards of soil.

All impacted areas would be returned to pre-project conditions. Approximately 1,000 sf of various portions of the west sidewalk along La Cienega Boulevard would need to be reinstalled. When a new pipeline is installed, it requires the excavation of a trench through the street/roadway. After a pipeline is installed, the trench should be backfilled and the pavement surface needs to be replaced with new pavement. This is typical construction technique for all segments of a pipeline being installed within an open-trench construction area. Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street would need to be repaved once the new 16-inch transmission main is installed. The total square feet to repaved area is approximately 10,000 sf.

2.5.2 Operation and Maintenance

Full operation of all components of the proposed project is estimated to commence in late 2020, and operate as needed 24 hours per day, 7 days a week. Operation of proposed facilities would only require periodic maintenance with daily staffing similar to the City's existing conditions at similar City facilities. The proposed well and transmission main would not require an increase in the number of City employees; therefore, routine operations, maintenance, and/or repair would be performed by the City's current existing staff. Since the City already owns and operates similar assets, maintenance activities would be performed in the same manner. The proposed well pump would require varying amounts of energy depending on pumping schedules. The proposed well would use a maximum of 112kW of energy when operating. Therefore, the proposed project would not significantly increase the need for energy within the project vicinity.

² The pipeline rehabilitation method sliplining uses High Density Polyethylene (HDPE) with the rolldown method, or traditional sliplining with fusible polyvinyl chloride (PVC). The sliplining method maximizes the internal diameter of the pipe, which maximizes the benefit of utilizing the existing inactive 18 and 24-inch inch transmission main.

2.6 Required Approvals

The proposed project may require approvals from the following agencies:

• City of Los Angeles, demolition permit, grading permit, construction permit within public right-of-way, utility permit;

7-8

- City of Beverly Hills, permit application, encroachment permit for work within public street or right-of-way;
- Los Angeles Regional Water Quality Control Board Region 4, Storm Water Pollution Prevention Plans (SWPPP) and General Construction Permit;
- Division of Drinking Water, Domestic Water Supply Permit; and
- South Coast Air Quality Management District, Permit to construct.

SECTION 3 Initial Study Checklist

3.1 Background

1.	Project Title:	La Brea Subarea Well and Transmission Main Project
2.	Lead Agency Name and Address:	City of Beverly Hills 345 Foothill Road Beverly Hills, CA 90210
3.	Contact Person and Phone Number:	Tristan Malabanan, P.E. City of Beverly Hills, Project Manager (310) 285-2512
4.	Project Location:	City of Beverly Hills and the City of Los Angeles (see Section 2.3, above)
5.	Project Sponsor's Name and Address:	City of Beverly Hills Department of Public Works, Civil Engineering Division 345 Foothill Road Beverly Hills, CA 90210
6.	General Plan Designation(s):	Various (see Section 2.3, above)
7.	Zoning:	Various (see Section 2.3, above)
8.	Description of Project:	

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The project would include the construction of a groundwater production well in the La Brea Subarea, the rehabilitation of existing 18 and 24-inch pipelines, and the connection of the rehabilitated pipeline to a newly 16-inch constructed raw water transmission main. The proposed 16-inch transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply.

9. Surrounding Land Uses and Setting:

Residential and Commercial Uses (See Section 2.3, above for more information)

10. Other public agencies whose approval is required:

See Section 2.6, above.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

See Section 4.18, below.

3.2 Environmental Factors Potentially Affected

The environmental factors checked below include impacts that are "Less Than Significant with Mitigation Incorporated." There are no environmental factors that have an impact that is identified as a "Potentially Significant Impact" because all potential significant impacts can be reduced to less than significant with the incorporation of mitigation measures.

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	Aesthetics		Agriculture and Forestry Resources		Air Quality
\boxtimes	Biological Resources	\boxtimes	Cultural Resources		Energy
\boxtimes	Geology/Soils/Seismicity		Greenhouse Gas Emissions	\times	Hazards & Hazardous Materials
	Hydrology/Water Quality		Land Use/Planning		Mineral Resources
\boxtimes	Noise		Population/Housing		Public Services
	Recreation	\boxtimes	Transportation	\times	Tribal Cultural Resources
	Utilities/Service Systems	\boxtimes	Wildfire		
\times	Mandatory Findings of Significance				

DETERMINATION:

On the basis of this IS:

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

JD Mlabonan

Signature

<u>Tristan Malabanan, P.E., Project Manager</u> Printed Name • •• • ••

Date

<u>City of Beverly Hills</u> For

SECTION 4 Environmental Analysis

Sections 4.1 through 4.21 analyze the potential environmental impacts associated with the Project. The environmental issue areas that are evaluated are:

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- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning

- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Services Systems
- Wildfire
- Mandatory Findings of Significance

The environmental analysis in the following sections is patterned after the CEQA Guidelines Appendix G, Environmental Checklist (hereafter referred to as the Initial Study Checklist or IS Checklist),), which was revised by the Office of Planning and Research on December 28, 2018, and used by the City in its environmental review process. The IS Checklist will identify and briefly explain the environmental effects of the project. For any effects that are determined to be potentially significant, the IS Checklist will identify and evaluate feasible measures that may be incorporated into the project to avoid or mitigate any adverse impacts.

For the evaluation of potential impacts, the questions in the IS Checklist are stated and an answer is provided according to the analysis undertaken as part of the IS. The analysis considers the long-term, direct, and indirect impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.
- Less than Significant Impact. The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- Less than Significant with Mitigation Incorporated. The development will have the potential to generate impacts, which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

• **Potentially Significant Impact.** The development could have impacts, which may be considered significant, and therefore additional analysis is required to identify mitigation measures that could reduce potentially significant impacts to less than significant levels.

The following is a discussion of potential project impacts as identified in the IS/Environmental Checklist. Explanations are provided for each item.

4.1 Aesthetics

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1.	AESTHETICS — Except as provided in Public Resources Code Section 21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?			\boxtimes	

7-8

Environmental Evaluation

Would the Project:

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

Less Than Significant Impact. The City of Los Angeles General Plan identifies several scenic resources within the city, including but not limited to the San Gabriel and Santa Susana Mountains to the north, the Santa Monica Mountains that extend across the middle of the city, the Palos Verdes Hills and Pacific Ocean to the south and west, and views of the Los Angeles River throughout the city (City of Los Angeles 2001). Similarly, the City of Beverly Hills identifies landscaping and various urban settings as scenic vistas with the city (City of Beverly Hills 2010). The nearest scenic vistas to the project area would be the Pacific Ocean and the Santa Monica Mountains located approximately eight miles to the west and two miles northwest of the proposed project, respectively. Furthermore, a portion of Santa Monica Boulevard (old Route 66) within the City of Beverly Hills is located immediately north of the WTP, where the water will be treated.

The project area is not officially designated as a scenic vista or scenic corridor. Short-term construction impacts would include: equipment staging; well drilling and installation; and transmission main rehabilitation and new pipeline. installation. These construction activities would occur for approximately 13 months. The presence of construction equipment within the project area could temporarily disrupt views of the distant mountains from motorists traveling along local roadways. However, the project area is heavily built-up and urban in nature. Many views of local scenic resources are already obstructed by commercial and residential buildings within the project area. Further, construction is temporary, and would not permanently effect

views of local scenic vistas. Therefore, construction impacts on aesthetics would be less than significant.

Once constructed, the transmission main would be underground and would not affect any existing views of local scenic vistas. The Well Site facilities would be located above-ground on property owned by the City of Beverly Hills. Although, implementation of proposed project would introduce built structures into the project area, the existing Well Site is currently developed. Therefore, implementation of well facilities would not appear substantially different than current land uses. Additionally, the well-housing and ancillary facilities would be designed to conform with surrounding development. Further, the proposed well facilities would not have the scale or massing to significant obstruct views of the surrounding scenic vistas such as the Santa Monica Mountains. Therefore, the proposed project would not result in a substantial adverse effect on a scenic vista and impacts would be considered less than significant.

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

No Impact. Based on a review of the California Department of Transportation (Caltrans) List of Scenic Highways, the project area is not located along an officially Designated State Scenic Highway (Caltrans 2019). The nearest eligible state scenic highway is State Route (SR) 1 which is located approximately 8 miles southwest of the project area. Therefore, the proposed project would not substantially damage scenic resources such as trees, rock outcroppings, or historic buildings within a state scenic highway. No impacts would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. The proposed project would be located in an urbanized area. Construction activities associated with the proposed well and transmission main would result in short-term impacts to the visual character and quality of the project area. Construction activities would require the use of construction equipment and storage of materials within the project sites. Excavated areas, stockpiled soils, and other materials generated during construction could impact the visual character of the surrounding environment. These impacts would be temporary, would occur over the 13-month construction period, and would not permanently affect the existing visual character of the surrounding area.

Once constructed, the transmission main would be underground and would not substantially degrade the visual character or the quality of public view of the site or its surroundings. The proposed well, once constructed, would place permanent above-ground structures within the project area. However, as described previously, the area in which the well would be implemented is highly developed and surrounded by commercial and residential development. The well facilities would be designed to blend in with existing and surrounding development, and will be have the appearance of a single family residence consistent with the neighboring development

(refer to Figure 5).). Specifically, the well height would not exceed the height of surrounding buildings and structures. Therefore, the visual character and quality of the Well Site would not be degraded. Nor would the project conflict with applicable zoning or other regulations governing scenic quality. Thus, no impacts would occur.

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

Less than Significant Impact. Existing light and glare sources within the project area include exterior lighting, glass and building materials of surrounding residential and commercial development. Additionally, the transmission main area is largely adjacent to La Cienega Boulevard, Olympic Boulevard, Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, and West 3rd Street in both Beverly Hills and Los Angeles. All local roadways contain cars and streetlights that emit light and glare during the day and night.

The presence of construction equipment would not introduce new permanent lighting or glare to the project area. Nighttime lighting would be required for proposed well drilling, which would require 24-hour drilling, and portions of the proposed transmission line within commercial areas, where construction would occur at night. Nighttime construction would be temporary and limited to the area immediately surrounding the active construction areas. All lighting would be shielded and pointed toward the construction activity and away from surrounding sensitive land uses. Therefore, light and glare impacts due to project construction would be considered less than significant.

Once constructed, the proposed transmission main would be located underground and would not result in any impacts to light or glare. The aboveground portions of the proposed well facilities would not have highly reflective surfaces, and would not include large areas of glass on structures/buildings; therefore, the proposed project would have less than significant impacts regarding glare.

The proposed well facilities would be located within existing City property boundaries that currently contain lighting within the interior and exterior of existing structures. The Well Site would be located within an urban area, developed with residential, commercial, and industrial uses. Implementation of the proposed project could result in new exterior nighttime lighting for operational and security purposes within the Well Site. However, the outdoor facility lighting would be confined to the immediate area and would not be directed into adjacent areas or create light beams into the night sky. Onsite security lighting would be directed away from the adjacent residential uses. As a result, the proposed project would not introduce substantial sources of lighting to the project area and impacts regarding lighting would be less than significant.

References

- Caltrans, 2019. California Scenic Highway Mapping System: Los Angeles County. Available online at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed April 2019.
- City of Beverly Hills, 2010. City of Beverly Hills General Plan, Open Space Element. Available online at: http://www.beverlyhills.org/cbhfiles/storage/files/filebank/10282-5 OpenSpace%2001122010.pdf, accessed April 2019.
- City of Los Angeles, 2001. Conservation Element of the City of Los Angeles General Plan. Available online at: https://planning.lacity.org/cwd/gnlpln/consvelt.pdf . Accessed April 2019.
- City of Los Angeles, 2016. Mobility Plan 2035, an Element of the General Plan. Available online at: https://planning.lacity.org/documents/policy/mobilityplnmemo.pdf, accessed June 2019.

4.2 Agricultural and Forest Resources

	Potentially Significant	Less Than Significant with Mitigation	Less-Than- Significant	
Issues (and Supporting Information Sources):	Impact	Incorporated	Impact	No Impact

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2. AGRICULTURAL AND FOREST RESOURCES -

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

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Environmental Evaluation

Would the Project:

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

No Impact. The project area is currently developed and void of any agricultural uses. The California Department of Conservation (CDC) Important Farmland Map for Los Angeles County has not been mapped. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within or adjacent to the project area (CDC 2019). Therefore, no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur.

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

No Impact. A Williamson Act Contract requires private landowners to voluntarily restrict their land to agricultural land and compatible open-space uses. The project area is not located on land zoned for agricultural use (City of Beverly Hills 2008; City of Los Angeles 2019). Additionally, the project area is void of agricultural uses and does not include land enrolled in a Williamson Act Contract (CDC 2016). Therefore, implementation of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

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

No Impact. The proposed project would not conflict with existing zoning of forest land or cause rezoning of forest land, timberland, or timberland zoned for Timberland Production. The proposed project does not involve any changes to current General Plan land use or zoning. Additionally, the City of Beverly Hills and City of Los Angeles zoning maps do not include zoning categories related to forest land, timberland, or timberland zoned as Timberland Production (City of Los Angeles 2001; City of Beverly Hills 2010). Therefore, the proposed project would not conflict with existing zoning for these uses, and would not result in the conversion of forest land. No impact would occur.

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

No Impact. The project area and surrounding areas contain no forest land. Thus, implementation of the proposed project would result in no impacts related to the loss or conversion of forest land to non-forest use.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. Refer to responses above. The project area consists of public right-of-ways, residential and commercial development. No other changes to the existing environment would occur from implementation of the proposed project that could result in conversion of farmland to nonagricultural use or forest land to non-forest use. Thus, no impact would occur.

References

- California Department of Conservation (CDC), 2019. California Important Farmland Finder. DOC). 2017a. Farmland Mapping and Monitoring Program- Los Angeles County Important Farmland 2016. Available online at: https://maps.conservation.ca.gov/DLRP/CIFF/, https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx, , accessed on April 12, 2019.
- CDC, 2016. DOC. 2017b. Los Angeles County Williamson Act FY 2015/2016. Available online at: ftp://ftp.consrv.ca.gov/pub/dlrp/wa/, Division of Land Resource Protection- State of California Williamson Act Contract Land. Available online at: ftp://ftp.consrv.ca.gov/pub/dlrp/wa/2016%20Statewide%20Map/WA_2016_8.5X11.pdf, , accessed on April 12, 2019.
- City of Beverly Hills, 2008. City of Beverly Hills Zoning Map. Available online at: http://www.beverlyhills.org/cbhfiles/storage/files/64529851516564397/FinalZoningMap.p dfhttp://www.beverlyhills.org/cbhfiles/storage/files/64529851516564397/FinalZoningMap. pdf., accessed on April 12, 2019.
- City of Los Angeles, 2019. ZIMAS. Available online at: http://zimas.lacity.org/, accessed June 2019.

4.3 Air Quality

Issi	ies (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
3.	AIR QUALITY — Where available, the significance criteria established by control district may be relied upon to make the following	y the applicable g determinatior	e air quality manag ıs.	ement district o	r air pollution
	Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			\boxtimes	
c)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			\boxtimes	

Environmental Evaluation

Would the Project:

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

Less than Significant Impact. The project area is located within the 6,745-square-mile South Coast Air Basin (SCAB). Air quality planning for the SCAB is under the jurisdiction of the South Coast Air Quality Management District (SCAOMD). The SCAOMD has adopted a series of Air Quality Management Plans (AQMP) to meet the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. The SCAQMD is required, pursuant to the Clean Air Act, to reduce emissions of criteria pollutants for which the Air Basin is in non-attainment of the NAAQS (e.g., ozone $[O_3]$, and particulate matter 2.5 microns in diameter or less [PM2.5]). The SCAQMD, California Air Resources Board (CARB), and United States Environmental Protection Agency (USEPA) have adopted the 2012 AQMP which incorporates scientific and technological information and planning assumptions, regarding air quality, including the Southern California Association of Governments (SCAG) 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and emission inventory methodologies for various source categories (SCAQMD 2013). The AQMP builds upon other agencies' plans to achieve federal standards for air quality in the Air Basin and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, and on-road and off-road mobile sources. In addition, it highlights the significant amount of emission reductions needed and the urgent need to identify additional strategies, especially for mobile sources, to meet all federal criteria pollutant standards in accordance with the Clean Air Act.

The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the NAAQS. These strategies are developed, in part, based on regional

growth projections prepared by the SCAG. As part of its air quality planning, SCAG has prepared the Regional Comprehensive Plan (RCP) and Guide and the RTP/SCS, which provide the basis for the land use and transportation components of the AQMP and are used in the preparation of the air quality forecasts and the consistency analysis included in the AQMP. Both the RCP and AQMP are based, in part, on projections originating with county and city general plans.

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The 2012 AQMP was prepared to accommodate growth, reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are consistent with the assumptions used in the AQMP do not interfere with attainment because the growth is included in the projections utilized in the formulation of the AQMP. Thus, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if it would individually exceed the SCAQMD's numeric indicators.

Control strategies in the 2012 AQMP with potential applicability to reducing short-term emissions from construction activities associated with the Project include strategies denoted in the AQMP as ONRD-04 and OFFRD-01, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment. Descriptions of measures ONRD-04 and OFFRD-01 are provided below:

- **ONRD-04 Accelerated Retirement of Older On-Road Heavy-Duty Vehicles:** This measure seeks to replace up to 1,000 heavy-duty vehicles per year with newer or new vehicles that at a minimum, meet the 2010 on-road heavy-duty NO_X exhaust emissions standard of 0.2 grams per brake horsepower-hour (g/bhp-hr).
- **OFFRD-01** Extension of the Soon Provision for Construction/Industrial Equipment: This measure continues the Surplus Off-Road Option for NO_X (SOON) provision of the statewide In-Use Off-Road Fleet Vehicle Regulation beyond 2014 through the 2023 timeframe.

The SCAQMD Governing Board adopted the 2016 AQMP on March 3, 2017 (SCAQMD 2016). CARB approved the 2016 AQMP on March 23, 2017. USEPA approval is pending, but is a necessary requirement before the 2016 AQMP can be incorporated into the State Implementation Plan. Key elements of the 2016 AQMP include implementing fair-share emissions reductions strategies at the federal, state, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit from co-benefits for greenhouse gas (GHG), energy, transportation and other planning efforts. The strategies included in the 2016 AQMP are intended to demonstrate attainment of the NAAQS for the federal O₃ and PM2.5 standards. The 2016 AQMP also incorporates growth projections from the SCAG 2016 RTP/SCS. Until such time as the 2016 AQMP is approved by the USEPA, the 2012 AQMP remains the applicable AQMP for federal air quality planning purposes. However, the 2016 AQMP is used in the analyses in this section, since it has been adopted by both SCAQMD and CARB. The 2016 AQMP incorporates the above-listed 2012 AQMP control strategies, which are designated as MOB-08 and MOB-10.

Construction Emissions

Construction activities associated with the proposed project have the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators and trenchers, and through vehicle trips generated from worker trips and haul trucks traveling to and from the proposed project area. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily oxides of nitrogen (NO_X), would result from the use of construction equipment such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Under this criterion, the SCAOMD recommends that lead agencies demonstrate that a project would not directly obstruct implementation of an applicable air quality plan and that a project be consistent with the assumptions (typically land-use related, such as resultant employment or residential units) upon which the air quality plan are based. The project would result in an increase in short-term employment compared to existing conditions. Being relatively small in number and temporary in nature, construction jobs under the project would not conflict with the long-term employment projections upon which the AQMP is based. As discussed above, emission control strategies in the AQMP with potential applicability to short-term emissions from construction activities include strategies denoted in the 2012 AQMP as ONRD-04 and OFFRD-01 and denoted in the 2016 AOMP as MOB-8 and MOB-10 in the 2016 AOMP, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment by accelerating replacement of older, emissions-prone engines with newer engines meeting more stringent emission standards. Construction contractors utilized for the project would be required to comply with State regulations that require the phase-in of less polluting construction equipment and trucks (Title 13 California Code of Regulations [CCR], Sections 2449 and 2025) and as such, the project would not conflict with implementation of these AQMP emissions reduction strategies. Additionally, the project would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment. The project would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403, which includes watering to suppress dust, covering or stabilizing haul trucks, and other fugitive dust control measures.

Compliance with these requirements is consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Because the project would not conflict with the control strategies intended to reduce emissions from construction equipment, the project would not conflict with or obstruct implementation of the AQMP, and impacts would be less than significant.

Operation

The 2016 AQMP was prepared to accommodate growth, reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP. The proposed project represents an infrastructure project that would have no effect on

long-term population and employment growth. As the project would not conflict with the growth projections in the AQMP, impacts would be less than significant.

7-8

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The SCAB is currently in extreme nonattainment for ozone (federal and State standards), non-attainment for respirable particulate matter 10 microns in diameter or less (PM10) (State standards) and PM2.5 (federal and State standards). The SCAQMD's approach for assessing cumulative impacts related to operations is based on attainment of ambient air quality standards in accordance with the requirements of the federal and State Clean Air Acts. As discussed above, the SCAQMD has developed a comprehensive plan, the 2016 AQMP, which addresses the region's cumulative air quality condition.

A significant impact may occur if a project were to add a cumulatively considerable contribution of a federal or State non-attainment pollutant. Because the SCAB is currently in nonattainment for ozone, PM10 and PM2.5, related projects could cause ambient concentrations to exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. In particular, CEQA Guidelines Sections 15064(h)(3) provides guidance in determining the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

"A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency..."

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the project's incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted 2016 AQMP. The 2016 AQMP includes demographic growth forecasts for various socioeconomic categories (e.g. population, housing, employment), developed by SCAG for their 2016 Regional Transportation Plan (RTP). As discussed under (a), above, the project would not conflict with the 2016 AQMP.

The project would contribute to local and regional air pollutant emissions during construction (short-term or temporary) and project occupancy (long-term). However, based on the following analysis, construction and operation of the project would result in less than significant impacts relative to the daily significance thresholds for criteria air pollutant emissions established by the SCAQMD for construction and operational phases (SCAQMD 2015).

Daily regional and annual construction and operational source project criteria pollutant emissions (NO_X, volatile organic compounds [VOC], PM10, PM2.5, sulfur oxides [SO_X], and carbon monoxide [CO]) are estimated using the CalEEMod (Version 2016.3.2) software, an emissions inventory software program recommended by the SCAQMD. The model also calculates emissions from direct and indirect sources and quantifies applicable emissions reductions achieved from emissions control strategies and mitigation measures. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles and statewide and regional emissions inventories from all motor vehicles, including passenger cars to heavy-duty trucks, operating on highways, freeways, and local roads in California. The input values used in the CalEEMod modeling analysis were adjusted based on project specific information. Assumptions and modeling output are included in **Appendix A**.

Construction Emissions

Construction activities associated with the project would result in emissions of CO, VOCs, NO_x, SO_X, PM10, and PM2.5. Construction related emissions are expected from the trenching, paving, pump house construction, and construction worker commutes. Construction is expected to commence in October 2019 and would last through December 2020, as described previously in Section 2.5.1 Construction Phase Characteristics. The construction schedule utilized in the Air Quality Impact Analysis represents a "worst-case" scenario. It is assumed that construction for the well would occur concurrently with work for the transmission main line. If project construction commences later than the anticipated start date, air quality impacts would be less than those analyzed herein, because a more energy-efficient and cleaner burning construction equipment fleet mix would be expected in the future, pursuant to State regulations that require construction equipment fleet operators to phase-in less polluting heavy-duty equipment. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Site specific construction fleet may vary due to specific project needs at the time of construction. The analysis utilized construction fleet information and a construction schedule provided by Hazen. A detailed summary of construction equipment assumptions by phase is provided in Table 2 above in Section 2.5.1 Construction Phase Characteristics.

The estimated maximum daily construction emissions are summarized in **Table 3** below. Transmission main installation and well construction may occur simultaneously so the maximum daily emissions is the sum of the overlapping phases. Emissions from the project construction would not exceed any criteria pollutant thresholds established by the SCAQMD. Therefore, impacts would be considered less than significant.

	Emissions (pounds per day)					
Year	voc	NO _x	со	SOx	PM10	PM2.5
Overlapping Phases						
Well Site Demolition and Pump-to-Waste - 2019 and Rehabilitation/Transmission Main Installation - 2019	4	33	30	< 1	3	2
Well Construction Monitoring - 2019 and Rehabilitation/Transmission Main Installation - 2019	6	63	50	< 1	4	3
Well Construction Monitoring - 2020 and Rehabilitation/Transmission Main Installation - 2020	6	58	49	< 1	3	3
Well Equipping - 2020 and Rehabilitation/Transmission Main Installation - 2020	2	20	15	<1	1	1
Maximum Daily Regional Emissions	6	63	50	< 1	4	3
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
SOURCE: ESA 2019.						

TABLE 3 MAXIMUM DAILY CONSTRUCTION EMISSIONS

7-8

Operational Emissions

During operation of the project, there would only be periodic maintenance for the Well and proposed transmission main. The proposed facilities would not require an increase in the number of employees compared to the existing facilities; therefore, routine operations, maintenance, and/or repair would be performed by the City's current existing staff. Additional fuel and emissions for servicing the proposed facilities would be minimal. Therefore, impacts would be considered less than significant.

By applying SCAQMD's cumulative air quality impact methodology, implementation of the project would not result in an addition of criteria pollutants such that cumulative impacts would occur, in conjunction with related projects in the region. In addition, construction of the project is not expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SCAQMD is in non-attainment (ozone, PM10, PM2.5). Therefore, impacts would be considered less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The localized effects from the on-site portion of the emissions are evaluated at nearby sensitive receptor locations potentially impacted by the Proposed Action according to the SCAQMD's Localized Significance Threshold Methodology (June 2003, revised July 2008), which relies on on-site mass emission rate screening tables and project-specific dispersion modeling typically for sites greater than five acres, as appropriate (SCAQMD 2008). The localized significance thresholds are applicable to NO_X, CO, PM10, and PM2.5. For NO_X

and CO, the thresholds are based on the ambient air quality standards. For PM10 and PM2.5, the thresholds are based on requirements in SCAQMD Rule 403 (Fugitive Dust) for construction and Rule 1303 (New Source Review Requirements) for operations. The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The screening criteria depend on: (1) the area in which the project is located, (2) the size of the project area, and (3) the distance between the project area and the nearest sensitive receptor (e.g., residences, schools, hospitals). The screening criteria were utilized in this assessment. For the project, the appropriate Source Receptor Area (SRA) for the localized significant threshold (LST) is the Northwest Los Angeles County Coastal monitoring station (SRA 2). Since the total acreage disturbed is less than five acres per day, SCAQMD's screening look-up tables were used to determine localized significance thresholds. The nearest sensitive receptors to the Well are the residential uses located adjacent to the well. Sensitive receptors would also be located adjacent to the pipeline alignment along La Cienega Boulevard, Le Doux Road, Clifton Way, South Clark Drive, North Swall Drive, Dayton Way, North Elm Street, and Palm Drive as described in Section 2.3 Project Location and Setting, and Figure 2. Receptors adjacent to the pipeline alignment may be exposed to localized emissions on short-term and temporary basis. On average, about 100-200 linear feet of pipeline would be installed per day; therefore, any one specific sensitive receptor adjacent to the pipeline alignment would only be exposed to localized emissions for a few days.

SCAQMD's Methodology clearly states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the LST analysis only emissions included in the CalEEMod "on-site" emissions outputs were considered. The significance thresholds determined conservatively assume that the site is 1 acre and 25 meters away from the nearest sensitive receptor.

Localized Construction Emissions

Table 4 identifies the localized impacts at the nearest receptor location in the vicinity of the project area. The localized emissions during construction activity would not exceed any of the SCAQMD's localized significance thresholds. Therefore, impacts would be considered less than significant.

	Emissions (pounds per day)			
On-Site Grading Emissions	NO _x	со	PM10	PM2.5
Overlapping Phases				
Well Site Demolition and Pump to Waste - 2019 and Rehabilitation/Transmission Main Installation - 2019	30	29	2.0	1.9
Well Construction Monitoring - 2019 and Rehabilitation/Transmission Main Installation - 2019	60	48	3.1	2.9
Well Construction Monitoring - 2020 and Rehabilitation/Transmission Main Installation - 2020	54	48	2.7	2.5
Well Equipping - 2020 and Rehabilitation/Transmission Main Installation - 2020	17	14	1.0	0.9
Maximum Daily Localized Emissions	60	48	3.1	2.9
SCAQMD Localized Threshold	103	562	4	3
Threshold Exceeded?	No	No	No	No
SOURCE: ESA 2019.				

TABLE 4
LOCALIZED SIGNIFICANT SUMMARY CONSTRUCTION

Operational Emissions

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may queue and idle at the site (e.g., warehouse or transfer facilities). The proposed transmission main and well are not expected to be a source of air emissions. Therefore, due to the lack of stationary source emissions, no long-term localized significance threshold analysis is needed.

CO "Hot Spot" Analysis

According to SCAQMD ambient air quality monitoring data, existing CO concentrations within the project area (Source Receptor Area 2, Northwest Coastal Los Angeles County) for 2016, 2017, and 2018 were approximately 2.2, 2.0, 1.6 parts per million (ppm), respectively, for the maximum 1-hour average and 1.1, 1.2, 1.3 ppm, respectively, for the maximum 8-hour average (SCAQMD 2016b, 2017, 2018). These measured values are substantially below the most stringent ambient air quality standard of 20 ppm for the 1-hour average and 9.0 ppm for the 8-hour average.

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. Projects may worsen air quality if they increase the percentage of vehicles in cold start modes by two percent or more; significantly increase traffic volumes (by five percent or more) over existing volumes; or worsen traffic flow, defined for signalized intersections as increasing average delay at intersections operating at Level of Service (LOS) E or F or causing an intersection that would operate at LOS D or better without the proposed project, to operate at LOS E or F. While construction-related traffic on the local roadways would occur during construction, the net increase of construction worker vehicle trips to the existing daily traffic volumes on the local roadways would be relatively small (no more

than 20 construction workers at a time) and would not result in CO hotspots. Additionally, the construction-related vehicle trips would only occur in the short-term and intermittently along the approximately 4-mile transmission main alignment and Well Site.

Construction of the project may include lane closures to accommodate the placement of the transmission pipeline within the public street right-of-way. Lane closures for the project would not increase the actual traffic volume on the public street right-of-way but may result in traffic congestion over a greater time duration due to the unavailability of one or more travel lanes and vehicles requiring additional time to travel through the congested area. Lane closures for the project would result in a reduction of physical space available to vehicles. Thus, while a lane closure could result in traffic congestion over a greater duration, there would be a fewer number of vehicles physically occupying a specific area (i.e., within a congested intersection or on a roadway segment) due to the unavailability of one or more travel lanes. The net result with respect to CO hotspots would be that while traffic congestion over a greater time duration may cause CO concentration levels to be incrementally increased over a similarly greater time duration, the reduced number of vehicles physically occupying a specific area (i.e., within a congested intersection or a roadway segment) would act to counterbalance potential increases in CO hotspots concentrations by reducing the number of vehicles emitting CO within an area. With typical atmospheric dispersion of CO emissions, and given that existing CO concentrations are substantially below the ambient air quality standards, lane closures associated with construction of the project would not cause a substantial increase in CO concentrations such that the project would cause CO hotspots in excess of the 1-hour or 8-hour ambient air quality standard.

During operation, only minimal emissions would be generated from vehicle trips by worker staff for periodic inspection and maintenance purposes. The project would not produce the volume of traffic required to generate a CO hotspot. Therefore, impacts would be considered less than significant.

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs) are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

Construction

Intermittent construction activities associated with the proposed project would result in short-term emissions of diesel particulate matter, which the State has identified as a TAC. During construction, the exhaust of off-road heavy-duty diesel equipment would emit diesel particulate matter during general construction activities, such as demolition, site preparation, and well/transmission main construction.

Diesel particulate matter poses a carcinogenic health risk that is generally measured using an exposure period of 30 years for sensitive residential receptors, according to the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment

(OEHHA) Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA Guidance), which was updated in 2015 with new exposure parameters including age sensitivity factors (OEHHA 2015). Sensitive receptors would be located adjacent to the well and along the pipeline alignment; however, localized diesel particulate matter emissions (strongly correlated with PM2.5 emissions) would be minimal and would be below localized thresholds as presented in Table 4. Although the localized analysis does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts. The low level of PM2.5 emissions coupled with the short-term duration of construction activity and the relatively small-scale of the proposed project would result in overall low level of diesel particulate matter concentrations in the project area. Furthermore, compliance with the CARB airborne toxic control measures (ATCM) anti-idling measure, which limits idling to no more than five minutes at any location for diesel-fueled commercial vehicles, would further minimize diesel particulate matter emissions in the project area. The proposed project would utilize a construction contractor(s) that complies with required and applicable BACT and the In-Use Off-Road Diesel Vehicle Regulation. Thus, it is expected that sensitive receptors would be exposed to emissions below thresholds and construction TAC impacts would be less than significant.

Operations

The proposed project would introduce new on-site stationary equipment, such as pumps and generators, and the Well Site. However, the equipment would not generate TAC emissions into the outdoor environment. Therefore, the proposed project would not expose surrounding sensitive receptors to TAC emissions. Impacts would be considered less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. As shown in Table 3, the project would not exceed any criteria pollutant thresholds for which the SCAQMD is in attainment (CO, SOX). Therefore, impacts would be considered less than significant.

Odors

Potential sources that may emit odors during construction activities include construction equipment exhaust, the application of asphalt, and the use of architectural coatings and solvents. According to the SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. SCAQMD Rule 1113 limits the amount of VOCs from architectural coatings and solvents. Further, construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of construction. Through adherence with mandatory compliance with SCAQMD Rules, no construction activities or materials are proposed which would create objectionable odors. Given that the well is located in a single-family residential neighborhood, it is assumed that this would be the worst case scenario as the residence (sensitive receptor) is adjacent to the project.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass

molding facilities. While the project would connect to the existing Foothill Water Treatment Plant, the transmission main and well are not anticipated to generate fugitive or evaporative odor emissions. Therefore, the proposed project would not generate odors affecting a substantial number of people and impacts would be considered less than significant.

References

- Office of Health Hazard Assessment (OEHHA), 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Available at: http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidancemanual-preparation-health-risk-0. Accessed July 2019.
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- SCAQMD, 2013. Final 2012 Air Quality Management Plan. Available at: https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2012air-quality-management-plan. Accessed July 2019.
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- SCAQMD, 2016b, 2017, 2018. Historical Data by Year (2016, 2017, and 2018). Available: http://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year. Accessed September 2019.

4.4 Biological Resources

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4.	BIOLOGICAL RESOURCES — Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				\boxtimes
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				\boxtimes
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			\boxtimes	
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				\boxtimes

7-8

Environmental Evaluation

Would the Project:

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

No Impact. The project area is located in a highly urbanized area of the cities of Los Angeles and Beverly Hills, and is currently developed with commercial and residential buildings and associated parking lots. The proposed transmission main would run along major roads and residential streets. The project area with a 500-foot buffer does not include suitable habitat for candidate, sensitive, or special-status species. Due to high levels of human activity and the density of development in the project area, there is no potential for sufficient natural habitat to support candidate, sensitive, or special status species within the project area. As such, the proposed project would not have a substantial adverse effect on candidate, sensitive, or special status species and no impact would occur in this regard.

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

No Impact. As discussed under in Question 4.4(a), the project area is currently developed with urban uses. No riparian habitat or designated sensitive natural communities exist on the project sites or in the surrounding area. The proposed Well Site supports ornamental landscaping, including mature trees along streets, hedges, and low shrubs around residential and commercial buildings. The Well Site and areas along the proposed transmission main do not include any vegetation that constitutes a plant community. As such, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community, and no impact would occur in this regard.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. As discussed under Question 4.4(a), the project area is currently developed and located within an urbanized area. The project area is not known to contain any federally protected wetlands as defined by Section 404 of the Clean Water Act or state wetlands as defined by the State Water Resources Control Board, and no proposed project facilities would occur within or state of federal wetlands. As such, the project would not have a substantial adverse effect on state or federally protected wetlands, and no impact would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact with Mitigation Incorporated. The project area is currently developed and located in a highly urbanized area of the cities of Beverly Hills and Los Angeles. No wildlife corridors or native wildlife nursery sites are known to occur on the Well Site, transmission main alignment, or in the surrounding areas. Further, due to the urbanized nature of the project area, the potential for native resident or migratory wildlife species movement through the project area is negligible.

Nonetheless, the proposed Well Site does include ornamental trees and manmade structures that could support raptor and/or songbird nests. As discussed under Question 4.4(b), mature trees are located along La Cienega Boulevard and the other adjacent residential streets. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). Implementation of the proposed project has the potential to interfere with nesting birds during construction activities. Mitigation provided below would reduce this impact to a less than significant level.

Mitigation Measure

BIO-1: The City shall be responsible for the implementation of mitigation to reduce impacts to migratory and/or nesting bird species to below a level of significance through one of the following two ways:

7-8

- 1. Vegetation removal and demolition of structures shall be scheduled outside the avian nesting season which runs from February 15 to August 31 to avoid potential impacts to nesting birds; or
- 2. If avoidance of the avian nesting season (February 15 through August 31) is not feasible then the following shall occur:
 - a) A qualified biologist (i.e. biologist(s) familiar with local nesting bird species and their behavior) shall conduct a preconstruction nesting bird survey no more than 3 days prior to any vegetation removal or demolition of structures. The survey shall be conducted to ensure that impacts to birds, including raptors, protected by the MBTA and/or the California Fish and Game Code and bat maternity colonies are avoided. Survey areas shall include suitable avian nesting habitat.
 - b) If active nests of protected birds are identified during pre-construction surveys, an avoidance buffer area shall be determined at the discretion of the qualified biologist and demarcated for avoidance using flagging, staking, fencing, or another appropriate barrier to delineate construction avoidance until the nest is determined to no longer be active by a qualified biologist (i.e., young have fledged or no longer alive within the nest). An active nest is defined as a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. Construction personnel shall be informed of the active nest and avoidance requirements. A biological monitor shall review the Project Site, at a minimum of one-week intervals, during all construction activities occurring near active nests to ensure that no inadvertent impacts to active nests occur. Pre-construction nesting bird surveys and monitoring results shall be submitted to the City of Beverly Hills Planning Division via email or memorandum upon completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

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

Less than Significant Impact. The proposed Well Site contains mature street trees located on private property within the project area. Therefore, the project would be subject to the provisions of the City of Los Angeles Municipal Code pertaining to the removal and replacement of street trees and trees on privately owned property. It is a violation of the City of Los Angeles Municipal Code (Sec. 5-4.1001) for people who are not official representatives or authorized agents of the City of Los Angeles to prune, remove, make attachment to, or otherwise damage a city street or park tree. However, the Well Site is owned by the City of Beverly Hills and the project is exempt from the City of Los Angeles' municipal and zoning codes and ordinances (see Section 4.11, *Land Use and Planning* of this Draft IS/MND for more information). Therefore, no conflict with

local policies or ordinances protecting biological resources would occur with implementation of the proposed Well Site and mitigation. Impacts would be less than significant.

Vegetation within the transmission main corridor is comprised of mature trees located along local streets, and the removal or modification of city trees is considered a potentially significant impact if this activity conflicts with local policies or ordinances. However, implementation of the proposed project would not remove or prune trees as part of the project, therefore, no impacts would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. There is no adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan in place for the Well Site, the City of Los Angeles, or the City of Beverly Hills. Therefore, the project would have no impact with respect to these plans.

References

California Department of Fish and Wildlife (CDFW), 2019. California Natural Diversity Database (CNDDB) Rarefind 5. Electronic database, Sacramento, California. Available online at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data, accessed on May 29, 2019.

4.5 Cultural Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
5.	CULTURAL RESOURCES — Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?			\boxtimes	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		\boxtimes		
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?		\boxtimes		

7-8

Discussion

A Phase I Cultural Resources Assessment was prepared in support of the IS/MND (Appendix C). The study included archival research for archaeological, and historic resources within the study area. A records search for the proposed project was conducted on April 11, 2019 at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The records search included a review of all recorded archaeological resources and previous studies within the proposed project area and a 0.5-mile radius, and historic architectural resources within a 0.25-mile radius of the proposed project. For the purposes of this assessment, a study area beyond the project alignment was established by considering all known project components and the optimal zone of the La Brea Subarea and provided additional information on the broader context of the La Brea Subarea.

The records search results indicate that 23 cultural resources have been identified within the proposed project records search area. Three archaeological resources have been previously recorded within a 0.5-mile radius of the proposed project area and four have been previously recorded within the La Brea Subarea. Additionally, a cluster of ten prehistoric village archaeological resources, recorded in the 1950's, is located less than one-mile south and adjacent to the La Brea Subarea. Ten historic architectural resources and one California Historic Landmark (CHL) have been recorded within 0.25 miles of the proposed project and five have been previously recorded within the La Brea Subarea. The three archaeological resources previously recorded within 0.5 miles of the proposed project as well as the four previously recorded within the La Brea Subarea are prehistoric camp or village sites. Of the 11 architectural resources previously recorded within 0.25 miles of the proposed project, four are located within 100 feet of the proposed project (P-19-187281, -187282, -187283, and -189803). Three of the four resources (P-19-187281, -187282, -187283) were demolished in the early 2000s and are no longer extant. Resource P-19-189803 is a wooden utility pole constructed sometime prior to 1966. P-19-189803, is located within 30 feet of the proposed project and has been previously determined ineligible for listing National Register of Historical Resources (NRHP), but has not been previously evaluated for inclusion in the California Register of Historical Resources (CRHR). In addition, ESA conducted extensive historic map research of the project site and vicinity.
As part of this investigation, ESA contacted the Native American Heritage Commission (NAHC) requesting that a Sacred Lands File check be conducted for the proposed project and that contact information be provided for Native American groups or individuals that may have concerns about cultural resources in the study area. The response received on April 25, 2019 which indicated that Naïve American cultural resources are not known to be located within the proposed project area. A cultural resources field survey of the study area was conducted and focused on areas that would be potentially impacted by the proposed project and included survey and documentation of the built environment,

Environmental Evaluation

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant Impact. Two historic architectural resources have been identified within or immediately adjacent to the proposed project and include a wooden utility pole constructed prior to 1966 (P-19-189803) and the residence located at 1956 Chariton Street. The following paragraphs present the significance findings for both resources.

P-19-189803

Resource P-19-189803 has been determined ineligible for listing in the NRHP (Status Code 6Y), but has not been previously evaluated for inclusion in the CRHR. The NRHP evaluation for the resource did not identify that the resource was associated with a significant event (Criteria A/1), nor does it appear to be associated with a significant person or persons (Criterion B/2) (Loftus 2011). The resource is a typical example of a mid-20th century wooden utility pole does not possess qualities of design or distinctive characteristics of design and the work of a master (Criterion C/3) (Loftus 2011). Based on this evaluation, it is recommended that resource P-19-189803 is not eligible for listing in the CRHR and does not qualify as a historical resource. In addition, the resource is not listed for local significance. This resource will not be directly or indirectly impacted by the project and no additional evaluation or recommendations are warranted.

1956 Chariton Street

1956 Chariton Street is a single-family residence, and this building type was evaluated under the historical and architectural themes that follow: the Spanish Colonial Revival Architectural Style (1912-1942), Community and Operative Builders (1888-1940), and Early Single-Family Residential Development (1880-1930). This resource is recommended ineligible for listing in the CRHR, is not listed locally, and does not qualify as historical resources pursuant to CEQA. As such the proposed project would not result in significant impacts to known historical resources.

Therefore, the proposed project would result in less than significant impacts to historical resources and no mitigation measures are required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to \$15064.5?

7-8

Less Than Significant with Mitigation Incorporated. Review of previous investigations in the vicinity of the project, as well as review of the prehistoric context for the area provides an understanding of the potential for encountering prehistoric archaeological resources in the project site. When completing analysis of buried archaeological site sensitivity, important factors to consider include elevation, soil conditions, proximity to water, proximity to raw materials, and ethnographic and historic information. It is also necessary to evaluate the subsequent land use in determining the possibility for the preservation of prehistoric archaeological materials.

Archaeological Sensitivity

No archaeological resources were identified within or immediately adjacent to the known proposed project area. The proposed project includes the installation of a new transmission main, the rehabilitation of an existing transmission main, and the installation of Well Site. The installation and rehabilitation of the transmission mains would involve cut and cover excavations extending to depths of 5 feet within existing city streets. The installation of the Well Site would require the demolition of the residence at 1956 Chariton Street and excavations associated with the demolition would extend to depths of up to 25 feet. These ground disturbing activities have the potential to encounter unknown, sub-surface historic-period and/or prehistoric archaeological resources that could qualify as historical resource or unique archaeological resources pursuant to CEQA. Given that the rehabilitation of the transmission mains will occur within city streets with existing utilities, the likelihood of encountering intact archaeological deposits is moderate to low. However, the installation of new transmission mains may include trenching in undisturbed or moderately disturbed sediments and so the sensitivity is considered moderate to high. As described above the majority of the project alignment is within historic roads which were built in the 1940's. Historically, road construction did not require substantial excavation and historic and prehistoric sites or resources may be capped and preserved under the roads. A large number of prehistoric sites and villages are known to have been located less than a mile from the southern terminus of the known project alignment and redeposited archaeological material could be encountered during excavation, and intact materials could be encountered in trench sidewalls or if the rehabilitation requires additional excavation. During consultation for AB 52, the Gabrieleño Band of Mission Indians – Kizh Nation expressed concern about the high sensitivity of the project alignment. The demolition work at 1956 Chariton Street also has a high likelihood of encountering historic-period subsurface archaeological deposits associated with the residence such as privies or refuse deposits.

Mitigation Measures

Given the potential to encounter subsurface archaeological deposits during proposed project implementation, ESA provides the following recommended mitigation measures to reduce potential impacts to archaeological deposits that may qualify as historical resources or unique archaeological resources to less than significant.

CUL-1: Retention of Qualified Archaeologist. Prior to the start of any ground disturbing activities, a qualified archaeologist, defined as an archaeologist meeting the

Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior 2008) shall be retained by the City of Beverly Hills to carry out all mitigation measures related to cultural resources. In addition, the City of Beverly Hills will retain a Native American monitor to work in tandem with the archaeologist in the areas and during activities with potential to encounter prehistoric archaeological resources.

CUL-2: Cultural Resources Sensitivity Training. Prior to start of any grounddisturbing activities, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel associated with the proposed project. Construction personnel shall be informed of the types of cultural resources that may be encountered during construction, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City of Beverly Hills shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

CUL-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the qualified archaeologist) shall observe all excavation activities associated with the installation of the Well Site. For the portion of the alignment requiring installation of the new transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring of all excavations including trenching and bore pits. For the portion of the alignment which involves the rehabilitation of existing transmission mains, an archaeological monitor and Native American monitor will conduct full time monitoring on all access points along the rehabilitation alignment. Should the soils prove to be too disturbed to contain archaeological resources these spot checks can be reduced or discontinued. Conversely, if the sediments are found to contain archaeological resources, the qualified archaeologist may recommend full time monitoring for such areas along the route. The qualified archaeologist, in coordination with the City of Beverly Hills, may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the proposed project. The archaeological monitor(s) shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed in Mitigation Measure CUL-4). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to the City of Beverly Hills. The qualified archaeologist shall submit a copy of the final report to the SCCIC.

CUL-4: Unanticipated Discoveries. In the event of an unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City of Beverly Hills, and the appropriate Native American representatives for prehistoric resources, on the significance of the resource.

If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to,

avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City of Beverly Hills that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource and makes recommendations for curation or donation to appropriate curation facilities. The qualified archaeologist and the City of Beverly Hills shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.

7-8

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

Less than Significant Impact with Mitigation Incorporated. The NAHC was contacted on April 10, 2019 to request a search of the Sacred Lands File (SLF). The NAHC responded to the request in a letter dated April 25, 2019. The results of the SLF search conducted by the NAHC indicate that Native American cultural resources are not known to be located within the proposed project area.

Mitigation Measure

CUL-5: Unanticipated Discovery of Human Remains and Associated Funerary Objects. In the event human remains and/or associated funerary objects are encountered during construction of the proposed project, all activity in the vicinity of the find shall cease (within 100 feet). Human remains discoveries shall be treated in accordance with and California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, requiring assessment of the discovery by the County Coroner, assignment of a Most Likely Descendant by the NAHC, and consultation between the Most Likely Descendant and the landowner regarding treatment of the discovery. Until the landowner has conferred with the Most Likely Descendant, the City of Beverly Hills shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity and that further activities take into account the possibility of multiple burials.

References

- Loftus, Shannon. 2011. Primary Record for P-19-189803. On file at the South Central Coastal Information Center, California State University Fullerton.
- South Central Coastal Information Center (SCCIC). 2019a. Single Property Printout for P-19-187281. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2019b. Single Property Printout for P-19-187282. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2019c. Single Property Printout for P-19-187283. On file at the South Central Coastal Information Center, California State University, Fullerton.

4.6 Energy

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-Than- Significant Impact	No Impact
6.	ENERGY — Would the project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			\boxtimes	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			\boxtimes	

7-8

Environmental Evaluation

Would the Project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. The project would result in consumption of energy resources during project construction and operation. During construction, the project would use heavy construction equipment and require worker, vendor, and hauling trips to install the proposed Well and transmission main. These construction activities would use approximately 59,665 gallons of diesel and 1,827 gallons of gasoline (Appendix A). The project would require construction contractors and truck operators to comply with applicable state regulations governing heavy duty diesel on- and off-road equipment to minimize transportation fuel consumption. As discussed in Section 4.3, *Air Quality*, the CARB anti-idling measure, which limits idling to no more than five minutes at any location for diesel-fueled commercial vehicles, would minimize diesel fuel consumption from on-road trucks in the project area.

During operation, it is assumed that there would not be a substantial increase in mobile trips as the project would not require an increase in the number of employees compared to the existing facilities; therefore, routine operations, maintenance, and/or repair would be performed by the City's current existing staff. The Well Site is located in the City of Los Angeles and the proposed Well would have a 150 hp pump, which would consume a total of 725,089 kWh per year (Appendix A), conservatively assuming a 24-hour per day, 365 days per year operation. Under actual operating conditions, the proposed pump would require varying amounts of energy depending on pumping schedules. The proposed pump would have a maximum rating of 112 kW of electricity (instantaneous power) but would normally require less electricity under normal operating condition or approximately 83 kW assuming a load factor of 0.74, which is equivalent to powering approximately 25 homes.³ This electricity demand is within the capability of LADWP to provide without the need for substantial new energy infrastructure, and as such the

La Brea Subarea Well and Transmission Main Project Draft Initial Study/Mitigated Negative Declaration

³ A load factor of 0.74 is based on the default load factor for pumps in the CalEEMod emissions model. The estimated 83 kW equivalent to power 25 homes is based on conversion of 16.4 megawatt system providing power for nearly 5,000 homes as reported from the Office of the Mayor (see https://www.lamayor.org/mayor-garcetti-announces-completion-world%E2%80%99s-most-powerful-rooftop-solar-project).

project would not significantly increase the need for energy within the project vicinity. Furthermore, compared to the Los Angeles Department of Water and Power (LADWP) Energy and Demand Forecast for 2020, the Project would represent 0.003 percent of the total demand (LADWP 2017; Appendix A).

Therefore, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and would not increase the need for new energy infrastructure and impacts would be considered less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. The State of California, City of Los Angeles, and City of Beverly Hills have implemented energy policies relevant to this project. The California Renewables Portfolio Standard (RPS) was established in 2002 and required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2013. California Senate Bill 350 (Chapter 547, Statues of 2015) is the most recent update to the state's RPS requirements. The RPS requires publicly owned utilities and retail sellers of electricity in California to procure 33 percent of their electricity sales from eligible renewable sources by 2020 and 50 percent by the end of 2030. The project would generate an increase in electricity demand for operation of the well pumps from LADWP; however, the demand would be extremely minimal with respect to LADWP supplies and no additional power generation facilities would be required. The project would not conflict with LADWP or the State's ability to achieve the RPS goals.

The City of Los Angeles' Plan, published in April 2019, sets a goal to supply 55 percent renewable energy by 2025; 80 percent by 2036; and 100 percent by 2045. For energy efficiency, the Plan would reduce building energy use per sq. ft. for all types of buildings 22 percent by 2025; 34 percent by 2035; and 44 percent by 2050 (City of Los Angeles 2019). The City of Beverly Hills' Sustainable City Plan establishes policies to maximize energy efficiency in both City operations and Citywide; maximize use of renewable energy generating systems and other energy efficiency technologies; minimize the use of nonrenewable, polluting transportation fuels; and strive for energy independence as a City (City of Beverly Hills 2009). As the project would install a well and transmission main, it would not conflict with or obstruct either city's plan for renewable energy or energy efficiency. The project would reduce the energy demand for water conveyance as it develops a local supply. Therefore, the project would have a less than significant impact to conflicting with or obstructing a state or local plan for renewable energy or energy efficiency.

References

- California Air Resources Board, 2004. Proposed Regulation Order: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, Appendix A, 2004. Available at https://www.arb.ca.gov/regact/idling/isorappf.pdf. Accessed September 2019.
- City of Beverly Hills, 2009. Sustainable City Plan. Available: http://www.beverlyhills.org/cbhfiles/storage/files/24347783778629768/SustainableCityPla n.pdf. Accessed July 2019.
- City of Los Angeles, 2019. L.A.'s Green New Deal: Sustainable City Plan (Plan). Available: http://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf. Accessed July 2019.
- Los Angeles Department of Water and Power (LADWP). 2017 Retail Electric Sales and Demand Forecast. September 15, 2017. Available: http://rates.ladwp.com/Admin/Uploads/Load%20Forecast/2017/10/2017%20Retails%20Sal es%20Forecast_Final.pdf Accessed: July 2019.

4.7 Geology, Soils, and Seismicity

Issu	es (a	nd Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
7.	 GEOLOGY and Soils — Would the project: 					
a)	 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 					
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)				
	ii)	Strong seismic ground shaking?			\boxtimes	
	iii)	Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv)	Landslides?				\boxtimes
b)	Res	sult in substantial soil erosion or the loss of topsoil?			\boxtimes	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?					
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				\boxtimes	
e)	Hav of s sys disp	ve soils incapable of adequately supporting the use septic tanks or alternative waste water disposal tems where sewers are not available for the posal of waste water?				\boxtimes
f)	Dire rese	ectly or indirectly destroy a unique paleontological ource or site or unique geologic feature?		\boxtimes		

Discussion

The following evaluation is based on geologic and seismic information derived from various sources listed below and compiled in this section to develop a comprehensive understanding of the potential constraints and hazards associated with geotechnical exploration activities. Information sources include geologic and soils maps and information prepared by the Department of Conservation, California Geologic Survey (CGS), the county of Los Angeles, and the cities of Los Angeles and Beverly Hills, all of which reflect the most up-to-date understanding of the regional geology and seismicity. Additionally, a paleontological resources fossil locality search was conducted by the Natural History Museum of Los Angeles County (LACM) on April 19, 2019.

American Water Works Association Standards for Proposed Pipelines

Pipelines are constructed to various industry standards. The American Water Works Association (AWWA) is a worldwide nonprofit scientific and educational association that, among its many activities, establishes recommended standards for the construction and operation of public water supply systems, including standards for pipe and water treatment facility materials and sizing, installation, and facility operations. While the AWWA's recommended standards are not enforceable code requirements, they nevertheless can dictate how pipelines for water conveyance are designed and constructed. As part of the proposed project, the construction contractors would incorporate AWWA Standards into the design and construction of the proposed transmission main.

7-8

Seismic Considerations

In California, an earthquake can cause injury or property damage by: (1) rupturing the ground surface, (2) violently shaking the ground, (3) causing the underlying ground to fail due to liquefaction, or (4) causing enough ground motion to initiate slope failures or landslides, any of which could damage or destroy structures. The checklist items in Appendix G of the CEQA Guidelines, which provide the basis for most of the significance criteria above, reflect the potential for large earthquakes to occur in California and recommend analysis of the susceptibility of the project sites to seismic hazards and the potential for the proposed program to exacerbate the effects of earthquake-induced ground motion at the project sites and surrounding areas. Impacts associated with seismic hazards would be considered significant if the potential effects of an earthquake on a particular site could not be mitigated by an engineered solution. The significance criteria do not require elimination of the potential for structural damage from seismic hazards. Rather, the criteria require an evaluation of whether significant seismic hazards could be minimized through engineering design solutions that would reduce the associated risk of loss, injury, or death.

State and local code requirements ensure buildings and other structures are designed and constructed to withstand major earthquakes, thereby reducing the risk of collapse and the associated risks to human health and safety and private property. The code requirements have been developed through years of study of earthquake response and the observed performance of structures during significant local earthquakes and others around the world. The proposed project would be required to comply with the California Building Code (CBC) and the *CGS Guidelines for Evaluating and Mitigating Seismic Hazards* (Special Publication 117A) (CGS 2008) which provides guidance for evaluating and mitigating seismic hazards as required by the Public Resources Code Section 2695(a).

Environmental Evaluation

Would the Project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist

for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)

Less than Significant Impact. The Alquist-Priolo Earthquake Fault Zoning Act, signed into law in December of 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development and prohibit construction on or near active fault traces to reduce hazards associated with fault rupture. The Alquist-Priolo Earthquake Fault Zones (AP Zones) are the regulatory zones delineated on maps that include surface traces of active faults. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones, which include all land divisions and most structures for human occupancy.

Active or potentially active faults within Los Angeles County within one mile of the project area are the Newport-Inglewood, Santa Monica and Hollywood Faults (CGS 2018). The existing Foothill WTP, the proposed Well Site, and various other areas project areas where the proposed well may be implemented within an AP Zones (CGS 2018). Thus, the impacts associated with ground fault rupture resulting from a seismic event could be potentially significant.

However, the proposed well and transmission main would undergo appropriate project sitespecific, design-level geotechnical evaluations prior to final design and construction as required to comply with the CBC. The geotechnical engineer, as a registered professional with the State of California, is required to comply with the CBC and local codes while applying standard engineering practice and the appropriate standard of care required for projects in the Los Angeles County area. The California Professional Engineers Act (Building and Professions Code Sections 6700-6799), and the Codes of Professional Conduct, as administered by the California Board of Professional Engineers and Land Surveyors, provides the basis for regulating and enforcing engineering practice in California. Adherence to the CBC standards would ensure the strongest structure feasible at the proposed locations, with no increased risk to human life. Impacts related to the risk of loss, injury, or death involving fault rupture would be reduced to less than significant.

ii) Strong seismic ground shaking?

Less than Significant Impact. The project area lies within a region that is seismically active. In the event of an earthquake in Southern California, some seismic ground shaking would likely be experienced in the project area sometime during the operational life of the project. As discussed, the Newport-Inglewood, Santa Monica, and Hollywood Faults are known active faults within the project area and are capable of producing earthquakes. Ground shaking could result in structural damage to the proposed well and transmission main, which in turn could affect operation of related systems. The proposed facilities are non-habitable; however, existing City employees may need to access the various facilities for maintenance or manual control purposes. Therefore, structural and mechanical failure of facilities onset by seismic ground shaking would continue to potentially threaten the safety of onsite workers. As discussed above, the City would design the proposed well and transmission main in conformance with applicable standards established by the CBC. These design standards consider proximity to potential seismic sources and the maximum

anticipated groundshaking possible. Compliance with these building safety design standards would reduce the potential to threaten the safety of existing onsite workers, and therefore, reduce the potential impacts associated with groundshaking to less than significant.

7-8

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. According to the City of Los Angeles and City of Beverly Hills General Plans, and the CGS, various portions of the project area are located within liquefaction hazard zones (City of Los Angeles 1996; City of Beverly Hills 2010; CGS 2018). Thus, in the event of a large earthquake with a high acceleration of seismic shaking, the potential for liquefaction exists.

As discussed above, the proposed well and transmission main locations would undergo a geotechnical investigation and be designed to resist damage from seismic shaking. As part of the proposed project, all geotechnical recommendations provided by the project geotechnical engineer and the City would be incorporated into project designs in areas where liquefiable soils are identified. Solutions to rectify liquefaction are modern engineering approaches used throughout California and are considered standard industry practice. Methods to correct liquefiable soils include removal and replacement of problematic soils, the use of pile foundations, and drainage columns to reduce saturated conditions. The geotechnical investigation and corrective actions for potential liquefiable soils, where needed, would be based on the CGS Special Publication 117A (see the discussion above). The project structures would be subject to the CBC which controls the design and location of buildings and structures in order to safeguard the public and reduce potential impacts related to liquefaction to less than significant.

iv) Landslides?

No Impact. The implementation of the proposed project would not result in an increased exposure to landslides. Landslides are deep-seated ground failures (several tens to hundreds of feet deep) in which a large section of a slope detaches and slides downhill. The project area is located in a relatively flat area that has previously been graded and developed. There is no known history of landslides in the general area of the project. Further, the project area is not within a State-Designated Seismic Hazard Zone for Earthquake-Induced Landslides (CGS 2018). Therefore, landslides are not considered a potential hazard within the project area, and no impacts would occur.

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

Less than Significant Impact. Soil exposed by construction activities for the proposed project could be subject to erosion if exposed to heavy rain, winds, or other storm events. Further, as construction could disturb one or more acres of soil, the City would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. In compliance with this permit, a Storm Water Pollution Prevention Program (SWPPP) would be prepared and implemented, which would require erosion control, sediment control, non-stormwater and waste and material management BMPs to minimize the loss of topsoil or substantial erosion.

Furthermore, implementation of the proposed project would need to comply with SCAQMD Rule 403 for dust control that would ensure the prevention and/or management of the loss of topsoils and erosion during construction. Therefore, potential loss of topsoil and substantial soil erosion during construction and operation of the proposed project would be less than significant.

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

Less than Significant Impact. Non-seismically-induced geologic hazards such as landslides, lateral spreading, settlement, and slope failure can be caused by unstable soils. Subsidence of the ground surface occurs under static conditions (i.e., due to consolidation settlement from overlying load or long-term water or mineral extraction), but can also be accelerated and accentuated by earthquakes. The extraction of fluid resources from subsurface sedimentary layers (i.e., water or oil) can result in subsidence from the removal of supporting layers in the geologic formation. Settlement of loose, unconsolidated soils generally occurs slowly, but can cause significant structural damage if structures are not properly designed. According to the Los Angeles and City of Beverly Hills General Plan Safety Elements, the cities have experienced limited subsidence over the years; however, it is still a potential hazard (City of Los Angeles 1996; City of Beverly Hills 2010). Therefore, impacts related to subsidence are potentially significant.

Refer to responses above for discussions of potential impacts related to liquefaction and landslides. The proposed project is located in an area defined as having the potential for liquefaction or collapse. The proposed project would involve grading activities and would construct subterranean facilities that could induce unstable soil activity. Therefore, the project could be located on unstable soils resulting in potentially significant impacts. However, the proposed project would be subject to the CBC which controls the design and location of facilities in order to safeguard the public and reduce potential unstable soils impacts. The proposed project would incorporate engineering design features to remediate potential significant impacts associated with subsidence, liquefaction, collapsible soils, and lateral spreading. Therefore, the implementation of the proposed project would result in less than significant impacts associated with unstable soils.

Furthermore, the City and its contractors would be required to adhere to all California Division of Occupational Safety and Health (CalOSHA) requirements for working within active construction sites, including specific provisions for working within trenches that would ensure the safety of all construction workers onsite. Therefore, relative to existing conditions, the proposed Project would not expose people or structures to new potential substantial adverse effects related to unstable soils. Impacts would be less than significant.

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

Less than Significant Impact. Expansive soils are predominantly comprised of clays, which expand in volume when water is absorbed and shrink when the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. Soils with a

moderate to high shrink-swell potential can cause damage to roads, buildings, and infrastructure (USDA 2019). Primary soil types in the project area contain Urban-land complexes comprised of sands and sandy loams. These soils are not typically expansive. However, the two unknown proposed well locations may be located within areas that contain expansive soils. The presence of expansive soils could decrease the structural stability of the proposed project facilities, which could result in structural or operational failure of proposed facilities and or threaten the health and safety of onsite workers. Such impacts are considered potentially significant.

However, as described above, all geotechnical recommendations provided by the project geotechnical engineer would be incorporated into the project's designs. The geotechnical investigation would provide corrective actions for potential expansive soils. The project structures would be subject to the CBC which controls the design and location of facilities in order to safeguard the public and reduce potential impacts related to expansive soils to less than significant levels.

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

No Impact. The proposed project does not include the installation of septic tanks or alternative wastewater disposal systems. During project implementation, the City or the contractor may have portable toilet facilities available onsite temporarily for use by construction workers. Once the proposed well and transmission main are constructed, such portable facilities would be removed and the wastewater properly handled and disposed in accordance with all applicable laws and regulations. There would be no impact associated with wastewater disposal.

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

Less Than Significant Impact with Mitigation Incorporated. On April 19, 2019, ESA requested a database search from the LACM for records of fossil localities in and around the project area. The purpose of the museum records search was to: (1) determine whether any previously recorded fossil localities occur in the Project Site, (2) assess the potential for disturbance of these localities during construction, and (3) evaluate the paleontological sensitivity within the Project Site and vicinity.

The records search identified three fossil localities from within 0.1 miles of the project area and an additional six localities within one mile. While exact coordinate data is not provided by the LACM, it appears that at least one of these sites may fall within the project area. These localities preserve a wide variety of terrestrial vertebrates, such as mammoth, mastodon, bison, horse, birds, and rodents, as well as plants and invertebrate fossils (McLeod 2019). While the depths of several of these localities are unstated, recorded depths range from 13 to 30 ft below ground surface (bgs) (McLeod 2019). These results are consistent with the Pleistocene terrestrial fossil record of the Los Angeles Basin.

57

7-8

Geologic mapping by Dibblee and Ehrenspeck (1991) indicates that the surface of the project area is covered with Holocene-aged younger alluvium, likely overlying older alluvium and marine sediments, which in turn may overlie the Monterey Formation at undetermined depths. These geologic units are discussed below.

Younger Alluvium (Qa). These sediments consist of unconsolidated silt, sand, and gravel and date from modern times to the Holocene (Dibblee and Ehrenspeck 1991). Younger alluvium is mapped as occurring across the entirety of the project area at the surface. Due to the young age of these deposits, they have low paleontological potential at the surface; however, these sediments increase in age with depth, and therefore fossil resources may be encountered in the deeper levels of this unit. While the exact depth at which the transition to older, high potential sediments [>5,000 years old, following the SVP's definition (SVP 2010)] is not known, fossils have been discovered across the Los Angeles Basin as shallowly as 5-10 feet below ground surface (Jefferson 1991a; 1991b). These fossils are similar to those described below from older alluvial fan deposits.

Older Alluvial Fan Deposits (Qae). Older alluvial fan deposits occur just to the east of the project area, as close as 0.1 - 0.2 miles from the project area, indicating these sediments may be present in the subsurface of the project area at relatively shallow depths. These sediments date to the Pleistocene and consist of tan to light reddish brown sand with minor gravel detritus from the highlands to the north (Diblee and Ehrenspeck 1991). These Pleistocene sediments have a rich fossil history in the Los Angeles Basin (Hudson and Brattstrom 1977; Jefferson 1991a and b; McDonald and Jefferson 2008; Miller 1941 and 1971; Roth 1984; Scott 2010, Scott and Cox 2008; Springer et al., 2009). The most common Pleistocene terrestrial mammal fossils include the bones of mammoth, bison, deer, and small mammals, but other taxa, including horse, lion, cheetah, wolf, camel, antelope, peccary, mastodon, capybara, and giant ground sloth, have been reported (Graham and Lundelius 1994), as well as reptiles such as frogs, salamanders, and snakes (Hudson and Brattstrom 1977). In addition to illuminating the striking differences between Southern California in the Pleistocene and today, this abundant fossil record has been vital in studies of extinction (e.g. Sandom et al. 2014; Barnosky et al. 2004), ecology (e.g. Connin et al. 1998), and climate change (e.g. Roy et al. 1996).

Shallow Marine Deposits (Qom). Shallow marine deposits occur to the west of the project area, as close as 0.4 miles. indicating they may be present in the shallow subsurface of the project area. These sediments consist of light gray to light brown sand, pebbly sand gravel, and silt deposited when the area was last submerged by the ocean during the Pleistocene (Diblee and Ehrenspeck 1991). Similar sediments have a rich fossil history in the Los Angeles Basin. In the Cheviot Hills, roughly 1.5 miles west of the southern portion of the project area, over one hundred species of marine invertebrates, primarily mollusks, were identified from Pleistocene marine sediments (Rodda 1957). Across the Los Angeles Basin shallow marine deposits assigned to the San Pedro Sand have a strong record of preserving Pleistocene marine and terrestrial fossils. The San Pedro Sand has yielded a diverse fauna of nearshore marine invertebrates such as crabs, snails, bivalves, gastropods, and echinoids (Kennedy 1975; Valentine 1989; Woodring 1957) and vertebrates such as sharks, bony fish, amphibians, reptiles, birds, whales, antelopes, mammoth, dire wolves, rodents, and bison (Barnes and McLeod 1984; Fitch 1967; Kennedy 1975; Woodring 1957).

Fernando Formation. While the Fernando Formation does not crop out in the vicinity of the project area due to truncation by the Hollywood-Santa Monica Fault Zone to the north of the project area, subsurficial cross sections developed by Diblee and Ehrenspeck (1991) indicate it is likely present in the subsurface underlying alluvial sediments within the range of the depth for the well (500 ft below ground surface [bgs]). The Fernando Formation dates to the Pliocene and consists of marine siltstone, sandstone, pebbly sandstone, and conglomerate (Morton and Miller 2006). The lower part of the Fernando Formation consists of a pebble-cobble conglomerate in a sandstone matrix that fines upwards into a coarse sandstone and then a silty sandstone (Schoellhamer et al. 1981). The upper Fernando Formation consists of coarse grained sandstone with conglomerate lenses (Schoellhamer et al. 1981). The Fernando Formation has an extensive record of preserving scientifically significant fossils, including invertebrates such as mollusks, echinoids, and bryozoans (Groves 1992; Morris 1976; Woodring 1938), fish (Huddleston and Takeuchi 2006), squid (Clarke et al. 1980), and a number of unidentified megafossils (Schoellhamer et al. 1981).

7-8

As a result of this study, the surficial sediments of the project site identified as **Younger Alluvium (Qa)** Surficial sediments; **low-to-high potential, increasing with depth**. A wide variety of Ice Age fossils have been found in older alluvial sediments across southern California, as reviewed above, including multiple specimens known from the very near vicinity of the project area (McLeod, 2019). The exact depth at which the transition from low to high potential occurs is unknown in the Project Site, depths of 5-10 feet are common in the region (Jefferson 1991a, 1991b). **Older Alluvial Fan Deposits (Qae)** – Subsurficial sediments; **high potential**. A wide variety of Ice Age fossils have been found in these sediments across the Los Angeles Basin, as reviewed above, including multiple localities known from within one mile of the project area (McLeod 2019). **Shallow Marine Deposits (Qom)** - Subsurficial sediments; **high potential**. Similar sediments have produced extensive marine fossils of both vertebrate and invertebrate animals, some as close as 1.5 miles from the project area (Rodda 1957). **Fernando Formation** – Subsurface; **high potential**. The Fernando Formation is well-known in Southern California for preserving a wide array of marine fossils such as sharks, bony fishes, and marine invertebrates.

As a result of this study, sediments present across the project area identified as younger alluvium are assigned low-to-high paleontological potential, increasing with depth. The underlying older alluvial fan and shallow marine deposits, as well as the Fernando Formation, have high paleontological potential. This classification indicates a high potential for fossils to be present in the subsurface. The following recommendations would serve to protect potentially unique paleontological resources or unique geological features, should they be encountered:

Mitigation Measures

The following mitigation measures are required to reduce impacts to unique paleontological resources or unique geological feature to a less than significant level:

GEO-1: A qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist) shall be retained prior to the approval of demolition or grading permits. The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources,

shall attend the project kick-off meeting and Project progress meetings on a regular basis, and shall report to the project site in the event potential paleontological resources are encountered.

GEO-2: The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training at the project kick-off meeting prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). In the event construction crews are phased, additional training shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the project site and the procedures to be followed if they are found. Documentation shall be retained by the Qualified Paleontologist demonstrating that the appropriate construction personnel attended the training.

GEO-3: The Qualified Paleontologist shall develop a Paleontological Resources Monitoring Plan (PRMP) that shall detail the monitoring program necessary for the project, based off of specific construction methodologies and locations. Construction activities have varying impacts on paleontological resources and may require different monitoring procedures. The PRMP shall take the specific construction plans for the project to tailor a monitoring plan to the types of construction activities and the geologic units each may encounter. In general, ground disturbance across the project site that occurs in undisturbed sediments and exceeds 5-10 feet in depth may impact high potential sediments and therefore should be monitored. This includes; excavation and site preparation at the Well Site, drilling for the production well, cut and cover and entrance and exit pits for jack and bore along the proposed transmission main and at all access points for the rehabilitation of the transmission main. Paleontological resources monitoring shall be performed by a qualified paleontological monitor (meeting the standards of the SVP 2010) under the direction of the Qualified Paleontologist. Depending on the conditions encountered, full-time monitoring can be reduced to parttime inspections or ceased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist shall spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Monitors shall have the authority to temporarily halt or divert work away from exposed fossils or potential fossils. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries.

GEO-4: Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries. If there are significant discoveries, fossil locality information and final disposition will be included with the final report which will be submitted to the appropriate repository and the City.

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4.8 Greenhouse Gas Emissions

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
8.	GREENHOUSE GAS EMISSIONS — Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	

Environmental Evaluation

Would the Project:

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

Less than Significant Impact. Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long term global temperature increases.

The State defines GHGs as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different global warming potentials (GWPs) and CO₂ is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e). For example, CH₄ has a GWP of 25 (over a 100-year period); therefore, one metric ton (MT) of CH₄ is equivalent to 25 MT of CO₂ equivalents (MTCO₂e). The GWP ratios are available from the United Nations Intergovernmental Panel on Climate Change (IPCC) and are published in the *Fourth Assessment Report* (AR4). By applying the GWP ratios, project-related CO₂e emissions can be tabulated in metric tons (MT) per year. Large emission sources are reported in million metric tons (MMT) of CO₂e.⁴

Some of the potential effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years (CARB 2008). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and

⁴ A metric ton is 1,000 kilograms; it is equal to approximately 1.1 U.S. tons and approximately 2,204.6 pounds.

climate are likely to vary regionally, but are expected to include the following direct effects (IPCC 2001):

7-8

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

California produced 429.4 MMTCO₂e in 2016. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2016, accounting for approximately 41 percent of total GHG emissions in the state. This sector was followed by the industrial sector (23 percent) and the electric power sector (including both in-state and out-of-state sources) (16 percent) (CARB 2018).

Impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and toxic air contaminants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it is clear that the quantity is enormous, and no single project would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

Neither the city of Los Angeles nor city of Beverly Hills has not adopted a threshold of significance for GHG emissions that would be applicable to this project. In December 2008, the SCAQMD adopted a 10,000 MTCO₂e per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. Although SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a proposed project for which SCAQMD is not the lead agency, or a uniform methodology for analyzing impacts related to GHG emissions on global climate change, in the absence of any industry-wide accepted standards, the SCAQMD's significance threshold of 10,000 MTCO₂e per year for projects is the most relevant air district-adopted GHG significance threshold and is used as a benchmark for the proposed project. It should be noted that the SCAQMD's significance threshold of 10,000 MTCO₂e per year for industrial projects is intended for long-term operational GHG emissions. The SCAQMD has developed guidance for the determination of the significance of GHG construction emissions that recommends that total emissions from construction be amortized over an assumed project lifetime of 30 years and added to operational emissions and then compared to the threshold (SCAQMD 2008).

The justification for the threshold is provided in SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. As stated by the SCAQMD:

"...the...screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects...the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90 percent of all new or modified stationary source projects. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 [MMTCO₂e per year]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology (BACT)] for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility."

The SCAQMD has applied its 10,000 MTCO₂e/year significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold.⁵ However, for purposes of analysis in this MND, the GHG emissions from all of the project's GHG emissions sources are included in the GHG emissions and are measured against the 10,000 MTCO₂e/year significance threshold. Thus, as explained above, based on guidance from the SCAQMD, if an industrial project would emit GHGs less than 10,000 MTCO₂e per year, the project would not be considered a substantial GHG emitter and GHG emission impact would be less than significant, requiring no additional analysis and no mitigation.

CEQA Guidelines 15064.4 (b)(1) states that a lead agency may use a model or methodology to quantify GHGs associated with a project. In October 2017, the SCAQMD in conjunction with CAPCOA released the latest version of the CalEEMod (Version 2016.3.2). The purpose of this model is to estimate construction-source and operational-source emissions from direct and

⁵ For example, the SJVAPCD "determined that GHG emissions increases that are covered under CARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA ..." (SJVAPCD 2014). Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft EIR that demonstrate the SCAQMD has applied its 10,000 MTCO₂e/year significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold (SCAQMD 2014a, 2014b, 2014c, 2015).

indirect sources. Accordingly, the latest version of CalEEMod has been used for this project to estimate the project's emission impacts (see Appendix A).

Construction Emissions

Construction activities associated with the project would result in emissions of CO₂ and to a lesser extent CH₄ and N₂O. Construction-period GHG emissions were quantified based on the same construction schedule, activities, and equipment list as described in Table 1 and Table 2 above in *Section 2.5.1 Construction Phase Characteristics*. To amortize the emissions over the life of the project, the SCAQMD recommends calculating the total GHG emissions attributable to construction activities, dividing it by the 30-year project life, and then adding that number to a project's annual operational-phase GHG emissions. As such, construction emissions were amortized over a 30-year period (see Appendix A).

Operational Emissions

As described in *Section 4.3 Air Quality*, during operation of the project, there would only be periodic maintenance for the Well and proposed transmission main. The proposed facilities would not require an increase in the number of employees compared to the existing facilities; therefore, routine operations, maintenance, and/or repair would be performed by the City's current existing staff. Additional fuel and emissions for servicing the proposed facilities would be minimal. Furthermore, implementation of the project would increase reliance on local ground water supplies that would reduce the amount of imported water. Importing of water generates higher levels of GHG emissions associated with conveyance as compared to local water supplies that would be generated from this project (at least a 58 percent reduction in water supply electricity, based on CalEEMod default factors⁶). Therefore, impacts to GHG emissions during operation would be considered less than significant.

Emissions Summary

The annual GHG emissions for the project were estimated to be approximately MTCO₂e per year as summarized in **Table 5**. Direct and indirect emissions associated with the project are compared with the SCAQMD proposed screening level for industrial/stationary source projects, which is 10,000 MTCO₂e. As shown in Table 5, the project would result in a less than significant impact with respect to GHG emissions.

Emission Source	Total MTCO₂e/year
Amortized construction emissions	21
Energy (Electricity)	513
Annual CO ₂ e (All Sources)	534
Significance Threshold	10,000
Threshold Exceeded?	No
SOURCE: Appendix B. ESA 2019.	

 TABLE 5

 ANNUAL PROJECT GREENHOUSE GAS EMISSIONS

⁶ See: CalEEMod User's Guide, Appendix D, Table 9.2, 2017.

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

Less than Significant Impact. A significant impact would occur if the project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment by conflicting with applicable regulatory plans and policies to reduce GHG emissions as discussed within CARB's Climate Change Scoping Plan, City of Los Angeles' pLAn, and City of Beverly Hills Sustainable City Plan.

The CARB Scoping Plan Update focused on establishing a greenhouse gas reduction target of 40 percent below 1990 levels by 2030. The Project would provide increased access to local water supplies, which would in turn reduce the need for imported water and resulting energy and emissions that come from water conveyance (at least a 58 percent reduction in electricity, based on CalEEMod default factors⁷). Because the CARB Scoping Plan requires a suite of strategies across multiple sectors to achieve the GHG reduction targets, the proposed Project would be consistent by reducing the energy consumption needed for water pumping and treatment with the installation of a new, local Well and rehabilitated/expanded water pipeline infrastructure.

The City of Los Angeles' pLAn, published in April 2019, sets targets to increase renewable energy, source water locally, reduce building energy, reduce vehicle miles traveled and increase zero emission vehicles, build housing, create green jobs, and reduce GHG emissions. Los Angeles' ultimate goal is to reach carbon neutral by 2050. Specific to the Project, pLAn aims to source 70 percent of water locally by 2035 (City of Los Angeles 2019). This Project would help achieve that goal by installing a new, local Well and rehabilitating and expanding water pipeline infrastructure within the City of Los Angeles.

The City of Beverly Hills Sustainable City Plan, published in 2009, provides a framework for prioritizing policies and programs to achieve sustainability. Contributing factors to sustainability include community participation & civic duty, climate protection & air quality, energy, water, land use, transportation & open space, materials & waste, environmental & public health, sustainable local economy, and social equity. The Project is consistent with the Sustainable City Plan's objective to "use water efficiently and effectively while managing storm and waste water in a beneficial manner" and policy to "maximize the availability and use of alternative water sources." As of 2009, Beverly Hills sourced approximately 10 percent of its water from local ground water and 90 percent from Metropolitan Water District (MWD), which imports water from the California State Water Project and Colorado River (City of Beverly Hills 2009). This Project would be consistent with the City of Beverly Hills policies to provide an alternate water source locally and reduce energy use from water conveyance.

Overall, as the project would be consistent with CARB's Climate Change Scoping Plan, City of Los Angeles' pLAn, and City of Beverly Hills Sustainable City Plan, the project would not conflict with an applicable plan, policy, or regulation to reduce GHG emissions. As such, impacts would be considered less than significant.

⁷ See: CalEEMod User's Guide, Appendix D, Table 9.2, 2017.

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4.9 Hazards and Hazardous Materials

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
9.	HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			\boxtimes	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		\boxtimes		
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		\boxtimes		
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				\boxtimes

Environmental Evaluation

Would the Project:

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

Less than Significant Impact. The California Office of Emergency Services oversees state agencies and programs that regulate hazardous materials (Health and Safety Code, Article 1, Chapter 6.95). A hazardous material is any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. The proposed project would require the use of construction vehicles and equipment and thus involve the routine transport, use, storage, and disposal of hazardous materials such as diesel fuel, gasoline, oils, grease, equipment fluids, cleaning solutions and solvents, lubricant oils, and adhesives. If such hazardous materials were not handled properly, in accordance with federal, state and local regulations, a potentially significant hazards to the public or environmental could occur.

Existing federal and state law regulates the handling, storage and transport of hazardous materials and hazardous wastes. Pursuant to the federal Hazardous Materials Transportation Act, 49 U.S.C. § 5101 et seq., the United States Department of Transportation promulgated strict regulations applicable to all trucks transporting hazardous materials. Occupational safety standards have been established in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace, including construction sites. The CalOSHA has primary responsibility for developing and enforcing standards for safe workplaces and work practices in California in accordance with regulations specified in California Code of Regulations (CCR) Title 8. For example, under Title 8 CCR 5194 (Hazard Communication Standard), construction workers must be informed about hazardous substances that may be encountered, and under Title 8 CCR 3203 (Injury Illness Prevention Program) workers must be properly trained to recognize workplace hazards and to take appropriate steps to reduce potential risks due to such hazards. Thus, during construction and operation, contractors and/or City staff handling, storing or transporting hazardous materials or wastes must comply with regulations that would reduce the risk of accidental release and provide protocols and notification requirements should an accidental release occur. Therefore, by complying with relevant federal, state, and local laws, the proposed project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials during implementation of the proposed project.

7-8

During operation, the proposed project would not require the routine use of large quantities of hazardous materials at the Well Site. Impacts would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. As discussed above in the response to Question 4.9(a), the proposed project would involve the routine use of hazardous materials during construction and activities; the transport, use, storage and disposal of such hazardous materials would be required to comply with existing applicable federal, state and local regulations. Accidental spills of small amounts of these materials could occur during routine transport, use, storage or disposal, and could potentially injure construction workers, contaminate soil, and/or affect the groundwater below the reservoir. Impacts associated with the accidental release, although localized to the project site, could potentially create a significant hazard to the environment.

In the event of an accidental release during implementation of the proposed project, containment and clean up would be in accordance with existing applicable regulatory requirements. Title 8 CCR 5194 requires preparation of a hazards communication program identifying hazardous materials onsite and reducing the potential for a spill; and 29 CFR 1910.120 includes requirements for emergency response to releases or substantial threats of releases of hazardous substances. Contractors and/or the City would be required to prepare and implement a Hazardous Materials Business Plan, as required under the state Hazardous Materials Release Response Plans and Inventory Act, to manage any hazardous materials they use during construction and operation, respectively. A HMBP is a document containing detailed information on the inventory

of hazardous materials at a facility; Emergency Response Plans (ERP) and procedures in the event of a reportable release or threatened release of a hazardous material; a Site Safety Plan with provisions for training for all workers; a site map that contains north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, hazardous material handling and storage areas, and emergency response equipment. Further, all spent hazardous materials would be disposed of in accordance with California Department of Toxic Substances Control (DTSC) and County regulations. Construction and maintenance specifications prepared for the proposed project would identify best management practices (BMPs) to ensure the lawful transport, use, storage, and disposal of hazardous materials. Therefore, potential impacts to the public or the environment related to reasonably foreseeable accident conditions involving hazardous materials would be less than significant.

During operation, the proposed project would not require the routine use of hazardous materials at the Well Site or along the transmission main, and thus it is not reasonably foreseeable that accident conditions involving the release of hazardous materials into the environment would occur during operation. Conveyed production well water would be treated at the Foothill WTP under existing City of Beverly Hills permits. Impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Less than Significant Impact. The project area is located adjacent to and within one-quarter mile of various schools such as Crescent Heights Boulevard Elementary School (Figure 6, School and Recreational Facilities in the Project Area). Construction activities would use limited quantities of hazardous materials as described above, which would occur within one-quarter mile of the school facilities. However, the City is required to comply with all relevant and applicable federal, state and local laws and regulations that pertain to the release of hazardous materials during construction activities as described in response to Questions 4.9(a) and 4.9(b). Compliance with all applicable federal, state and local regulations would reduce potential impacts to the public or the environment regarding hazardous waste emissions within one-quarter mile of a school. During operation, there would not be routine use of hazardous materials at the proposed well sites. Impacts would be less than significant.



7-8

SOURCE: ESRI; City of Beverly Hills; City of Los Angeles

La Brea Subarea Well and Transmission Main Project

Figure 6 School and Recreational Facilities in the Project Area

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

Less than Significant with Mitigation Incorporated. A review of the Department of Toxic Substances Control's (DTSC) Hazardous Waste and Substances List – Site Cleanup (Cortese List) indicates that there are no identified hazardous material sites located within the proposed Well Site, the Foothill WTP, or within Chariton Street, La Cienega Boulevard, Olympic Boulevard, Le Doux Road, Clifton Way, North Swall Drive, Dayton Way, North Palm Drive, or 3rd Street where the proposed transmission main would travel (DTSC 2019a). A database search of hazardous materials sites using the online DTSC EnviroStor and State Water Resources Control Board (SWRCB) GeoTracker databases identified zero hazardous clean-up sites within these same project areas (DTSC 2019b; SWRCB 2019). Construction activities associated with the proposed well could encounter contaminated soil and/or groundwater during excavation, thereby posing a health threat to construction workers, the public, and the environment.

As standard procedure for siting groundwater wells, an environmental assessment of the proposed location would be conducted to ensure soil and groundwater contamination is avoided. **Mitigation Measures HAZ-1** and **HAZ-2** would require that these site-specific studies be conducted prior to selecting suitable sites in order to identify local contamination. These studies would identify recommendations and cleanup measures to reduce risk to the public and the environment from existing hazardous waste sites. Therefore, impacts to the public or the environment related to hazardous materials sites would be less than significant.

Mitigation Measures

HAZ-1: Prior to the initiation of any construction requiring ground-disturbing activities, the City shall complete an environmental assessment of the proposed site to locate the potential for soil and groundwater contamination in the project area. The recommendations set forth in the site assessment shall be implemented to the satisfaction of applicable agencies before and during construction.

HAZ-2: If the site assessments determine that the site has contaminated soil and/or groundwater, a Soil and Groundwater Management Plan shall be prepared that specifies the method for handling and disposing of contaminated soil and groundwater prior to demolition, excavation, and construction activities. The City shall be responsible for ensuring implementation of the Plan in compliance with applicable regulations.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest airport to the project area is the Santa Monica Airport, located approximately 4.6 miles southwest of the project area. The proposed project is not located within an airport land use plan or within 2 miles of a public airport or public use airport. No impact would occur.

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

7-8

Less than Significant with Mitigation Incorporated. The proposed Well Site would not impair implementation of or physically interfere with adopted emergency response plans or emergency evacuation plans. There would be no installation of well facilities within public rights-of-way and no possibility of interfering with evacuation routes. During construction, truck haul trips would transport construction and debris materials to and from project sites; however, these trips would not impact the roadway in a way that would impede emergency evacuations. The truck trips would not require closure of any roadways and would only temporary slow traffic near the project sites. Project-related vehicles would not block existing street access to the sites. Therefore, no impacts related to an emergency response or evacuation plan would occur.

Operation of the proposed well facilities would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The facilities all consist of groundwater retrieval infrastructure which, during operation, would not interfere with traffic flows. However, aboveground well facilities would require periodic maintenance. Maintenance activities would be random and require minimal trips that would not significantly impact the surrounding roadways. Impacts related to an adopted emergency plan would be considered less than significant during operation.

The proposed transmission main would be rehabilitated and constructed within public rights-ofway. This construction activity could potentially block access to roadways and driveways for emergency vehicles. The construction-related impacts, although temporary, could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. However, the implementation of **Mitigation Measure HAZ-3** would require the preparation of a Traffic Control Plan with comprehensive strategies to reduce disruption to emergency access. Therefore, with implementation of mitigation measures, potential significant impacts to emergency access would be reduced to less than significant levels.

Following construction, operation of the pipelines would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as they would be located underground. Impacts related to an adopted emergency plan would be less than significant during operation.

Mitigation Measures

HAZ-3: In conjunction with **Mitigation Measure TR-1**, prior to initiating construction of the transmission main within roadway rights-of-way, the City shall prepare and implement a Traffic Control Plan that contains comprehensive strategies for maintaining emergency access. Strategies shall include, but are not limited to, maintaining steel trench plates at the construction sites to restore access across open trenches and identification of alternate routing around construction zones. In addition, police, fire, and other emergency service providers shall be notified of the timing, location, and duration of the construction activities and the location of detours and lane closures. The City shall ensure that the Traffic Control Plan and other construction activities are consistent with the Los Angeles County Operational Area Emergency Response Plan.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. The project area is located within a highly developed area containing little to no vegetation. The project area is located within a State/Federal Responsibility Area (SRA), Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) (CAL FIRE 2011). Therefore, implementation of the proposed project would not create hazardous fire conditions or expose construction workers to wildfire risks. No impacts would occur.

References

- California Department of Forestry and Fire Protection (CAL FIRE), 2011. Very High Fire Hazard Severity Zones in LRA, Los Angeles County. Available online at: http://frap.fire.ca.gov/webdata/maps/los_angeles/LosAngelesCounty.pdf, accessed June 2019.
- Department of Toxic Substance Control (DTSC), 2019a. Available online at: https://calepa.ca.gov/sitecleanup/corteselist/, accessed June 2019.
- DTSC, 2019b. EnviroStor Database. Available online at: https://www.envirostor.dtsc.ca.gov/public/, accessed June 2019.
- State Water Resources Control Board (SWRCB), 2019. GeoTracker. Available online at: https://geotracker.waterboards.ca.gov/, accessed June 2019.

4.10 Hydrology and Water Quality

Issu	es (and Su	upporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
10.	HYDROI Would t	LOGY AND WATER QUALITY — he project:				
a)	Violate a discharg degrade	ny water quality standards or waste e requirements or otherwise substantially surface or ground water quality?			\boxtimes	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				\boxtimes	
c)	Substant site or ar course o addition would:	tially alter the existing drainage pattern of the rea, including through the alteration of the f a stream or river or river or through the of imperious surfaces, in a manner which				
	i)	result in substantial erosion or siltation on- or off-site;			\boxtimes	
	ii)	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			\boxtimes	
	iii)	create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv)	impede or redirect flood flows?			\boxtimes	
d)	In flood h of polluta	nazard, tsunami, or seiche zones, risk release ants due to project inundation?			\boxtimes	
e)	Conflict v quality co manager	with or obstruct implementation of a water ontrol plan or sustainable groundwater ment plan?			\boxtimes	

7-8

Environmental Evaluation

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. Construction and demolition activities including grading, excavation, and backfilling would result in substantial soil disturbance and exposure onsite. Disturbed and exposed soils could be moved by wind and water and result in erosion and sedimentation of stormwater runoff. Construction of the proposed well, 15-inch Stormdrain, transmission main, and demolition equipment would use chemicals and solvents such as fuel and lubricating grease for motorized heavy equipment, which could also come into contact with stormwater by way of inadvertent spills or releases (For more discussion of this topic please refer to Section 4.9, *Hazards and Hazardous Materials*). Due to the age of the residential structure at Well Site, hazardous materials may be encountered during demolition that could also mix with

stormwater. Therefore, proposed project construction and demolition has the potential to affect water quality.

Since construction and demolition would disturb an area greater than an acre, the project would be subject to a Construction General Permit (CGP) under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. As required under the CGP, the City or its contractor would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The objectives of a SWPPP is to identify pollutant sources (such as sediment) that may affect the quality of storm water discharge and to implement best management practices (BMPs) to reduce pollutants in storm water.

In particular, erosion control BMPs would be used to prevent the degradation of water quality in the construction area. Other BMPs that could be used to enhance erosion control include scheduling to avoid wet weather events; preservation of existing vegetation where feasible; hydraulic mulching; hydroseeding; using soil binders; straw mulching; using geotextiles, plastic covers, and erosion control blankets/mats; and wood mulching. Examples of erosion control BMPs are installing a silt fence; creating a sediment/desilting basin; installing sediment traps; installing check dams; using fiber rolls; creating gravel bag berms; street sweeping and vacuuming; creating a sandbag barrier; creating a straw bale barrier; and storm drain inlet protection. BMPs would also include practices for proper handling of chemicals such as avoidance of fueling at the construction site and overtopping during fueling, and installation of containment pans. Further, implementation of the construction BMPs would be consistent with the Los Angeles County Stormwater Program and would begin with the commencement of demolition and construction and continue through the completion of the proposed well and transmission main (LA Public Works 2019). Implementation of the SWPPP and BMPs in compliance with the NPDES permitting requirements would avoid or reduce all erosion and sedimentation impacts to below a level of significance during construction.

The proposed 15-inch storm drain (pump-to-waste pipeline) would be constructed within Chariton Street, to connect to existing utilities within the local streets. Once the well is operational, typical procedure is to "pump-to-waste" for a short duration to flush the well system. Flushed well water and stormwater runoff at the Well Site would be captured to comply with Los Angeles County Stormwater Program and conveyed through the proposed pump-to-waste line to the storm drain. Development water from the proposed well would be discharged to the storm drain pursuant to California Regional Water Quality Control Board Los Angeles Region ORDER NO. R4-2003-0108 (CAG994005), covering Discharges of Groundwater from Potable Supply Wells to Surface Water. Therefore, no substantial adverse impacts to water quality would occur and operational impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact.

Construction

During construction, the project area would be watered during dry and windy conditions to prevent dust and debris from migrating off-site. The demand for construction watering would be minor and temporary during intermittent construction times. Further, historic groundwater levels in the project area suggest that no dewatering would be required during construction of the well facilities or transmission main (LADWP 2011). Therefore, the proposed project facilities would not directly interfere with groundwater supplies or interfere substantially with groundwater recharge during construction. Impacts would be less than significant.

Operation

The objective of the project is to extract available groundwater within the La Brea Subarea within safe and available limits and treat the water at the Foothill WTP for the City of Beverly Hill's use. The project is intended to provide additional water supply to the City as an objective of the City's 2015 Final Urban Water Management Plan (2016) to accommodate planned demand for the City and reduce reliability on imported water from MWD. The City has conducted substantial research to estimate the amount of groundwater currently available in the Subbasin and to quantify the amount that is available for extraction without impacting other groundwater recharge sources. The only known active water well in the La Brea Subarea is a privately-owned well used to supply irrigation water to a few tens of acres of lawns at a condominium complex in the southern portion of the Subarea (Michael Baker International 2017). Very little information is available for this well; however, the City's implementation of the Well Site would not substantially impact local groundwater availability or levels at this existing well due to the distance between the existing and proposed wells in the Subarea. Historically, the City extracted approximately 4,460 AFY of groundwater from 16 wells that operated in the Subarea at various times during the period between 1950 and 1974. In 1976, Beverly Hills decided to discontinue producing water from the La Brea Subarea in favor of purchasing all of their water supply from MWD (Michael Baker International 2017; LADWP 2011). However, the City retained its "rights" to extract groundwater from the Subarea for future use by submitting annual statements to the SWRCB. The safe yield⁸ for the La Brea Subarea was determined to be approximately 3,000 AFY (LADWP 2011; City of Beverly Hills 2016).

The groundwater supply (1,700 AFY) to be provided by the project is not only consistent with the City's projected water demand within their Urban Water Management Plan (City of Beverly Hills 2016). Given that the City is substantially built out/developed and therefore, would not introduce new development or population that would potentially increase the demand for water within the City. Further, 1,700 AFY is within the safe yield of the Subarea (LADWP 2011; City of Beverly

⁸ "Safe yield" refers to the amount of water that can be withdrawn from a groundwater basin aquifer without producing an undesired effect, such as substantially depleting groundwater levels or interfering with groundwater recharge.
Hills 2016). The safe yields of groundwater basins are calculated by water management agencies in order to protect groundwater resources and thus not depleting the groundwater supply. Therefore, implementation of the proposed production well would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the Central Basin (where the La Brea Subarea is located).

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or river or through the addition of imperious surfaces, in a manner which would:

i) result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. Construction and demolition activities would disturb and expose soil, which could be moved by wind and water, resulting in erosion and sedimentation of stormwater runoff. Since construction and demolition would exceed an acre, these activities must comply with the SWRCB Construction General Permit. As discussed in Question 4.7(a) and 4.10(a), above, the City would prepare a SWPPP that includes erosion and sediment control BMPs implemented during construction and demolition to protect water quality. Compliance with the SWPPP would ensure a less than significant impact during construction.

Once constructed, the proposed facilities would not alter drainage from any of the sites. The Well Site is currently developed with impermeable surfaces and drains to the storm drains within Chariton Street. Once constructed, the well facilities would have a smaller scale than the existing structure, but would not make the Well Site more impermeable than existing conditions. Similarly, once constructed, the transmission main would be underground and the disturbed areas would be repaved and return to previous site conditions. Therefore, implementation of the proposed project facilities would not result in substantial erosion or siltation on or offsite. Impacts would be less than significant.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less than Significant Impact. Demolition of existing structures and construction of new facilities at the Well Site would permanently alter the site's topography. The project would demolish existing structures onsite and provide new well facilities and paving. Stormwater runoff at the Well Site would be captured onsite and conveyed through proposed pump-to-waste drains or flow to existing stormdrains within the general area, consistent with the Los Angeles County Stormwater Program. The proposed well facilities would not have the scale or massing to alter flows in a way such that flooding may occur. Further, the proposed transmission main would be implemented within areas currently developed and paved, either within public ROWs or within sidewalks. After transmission main implementation, the pipelines would be underground and the project area would return to existing conditions and repaved. Therefore, implementation of the proposed well facilities and transmission main would not increase surface runoff or flow in a way such that flooding would occur. Therefore, impacts would be less than significant.

iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than Significant Impact. The project would require implementation of a SWPPP, including BMPs for erosion control and for proper handling of chemicals. As such, construction of the proposed project would not provide substantial additional sources of polluted runoff into stormdrain systems.

7-8

The Well Site and transmission main project areas are currently largely paved and already contribute stormwater runoff. Implementation of the well facilities and transmission main would not increase the amount of impermeable surfaces or natural drainage direction of stormwater flows. Once constructed, the project would not substantially increase runoff from any of the sites into local stormdrains or the Well Site proposed stormdrain (pump to waste). The proposed Well Site is designed to accommodate stormwater flows and well-flushing water through the proposed stormdrain (pump-to-waste) line. The stormdrain is sized appropriately to capture all flows. As such, the proposed project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. Any impacts would be less than significant.

iv) impede or redirect flood flows?

Less than Significant Impact. The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer for the project area (Panel No. 0637C1595G) shows that the project area is largely within an area of minimal flood hazard. The Well Site and the entirety of the proposed transmission main would not be located within a flood hazard zone (FEMA 2018). Further, none of the new well facilities would have the scale or massing to substantially alter flood flows within the already highly developed project area. Therefore, impacts would be considered less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. The proposed project is largely in an area with no flood risk. A SWPPP would be prepared and implemented during construction activities to ensure proper handling of chemicals and avoid release of pollutants to the project site. As such, impacts due to potential release of pollutants in a flood hazard area would be less than significant.

A seiche is a wave set up on a river, reservoir, pond, or lake when seismic waves from an earthquake pass through the area (USGS 2019a). The project area is not located near a body of water, therefore, there would be no potential impacts associated with the risk of release of pollutants due to project inundation from a seiche.

A tsunami is a sea wave of local or distant origin that results from large-scale seafloor displacements associated with earthquakes, major submarine slides or exploding volcanic islands (USGS 2019b). An event such as an earthquake creates a large displacement of water resulting in a rise or mounding at the ocean surface that moves away from this center as a sea wave. The project area is located approximately 7 miles east of the Pacific Ocean and is not located within the tsunami risk zone. Therefore, the proposed project would not be subject to tsunamis and would not risk release of pollutants due to project inundation from a tsunami. No impacts would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Los Angeles RWQCB Water Quality Control Plan (Basin Plan) sets water quality objectives that are qualitative and quantitative in order to protect the beneficial uses within the basin. The water quality constituents that have numerical limits for groundwater include: arsenic, bacteria, barium, boron, chloride, cyanide, total dissolved solids, fluoride, metals, Methylene Blue-Activated Substances, pH, radioactivity, sodium, and sulfate. As described in Section 4.3 and Question 4.7(b) above, construction activities would require water for dust control; however, all water would be sourced from treated water onsite and not from groundwater. As discussed in Question 4.10(b), the project would not interfere with groundwater management of the La Brea Subbasin. As a result, the project would not conflict with the implementation of a water quality control plan or groundwater management plan, and impacts would be less than significant.

References

- City of Beverly Hills, 2016. Urban Water Management Plan. Available online at http://www.beverlyhills.org/departments/publicworks/utilities/waterservices/urbanwaterma nagementplan/, accessed June 2019.
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- Los Angeles Department of Water and Power, 2011. *Feasibility Report for Development Resources in the Santa Monica and Hollywood Basins*. December 2011.
- Michael Baker International, 2017. La Brea Subarea, Wells, Water Treatment, and Transmission Main Project Preliminary Design Report. May 2017.
- USGS, 2019a. Seismic Seiches. Available at: https://earthquake.usgs.gov/learn/topics/seiche.php, accessed June 2019.
- USGS, 2019b. Earthquake Glossary, Tsunami. Available at: https://earthquake.usgs.gov/learn/glossary/?term=tsunami, accessed June 2019.

4.11 Land Use and Land Use Planning

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
11.	LAND USE AND LAND USE PLANNING — Would the project:				
a)	Physically divide an established community?				\boxtimes
b)	Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			\boxtimes	

7-8

Environmental Evaluation

Would the Project:

a) Physically divide an established community?

No Impact. The proposed project does not propose any action that could divide an established community. The physical division of an established community generally refers to the construction of a feature such as an interstate highway or railroad tracks, or removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area. Given the proposed project would construct the proposed well and a transmission main within a highly developed area, the proposed project would result in no impact to the physical division of an established community.

b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. The proposed transmission main would be installed within or adjacent to local rights-of-way and would not conflict with land use designations or be incompatible with neighboring land uses. In addition, once constructed, the proposed transmission main would not pose long-term incompatibility with land uses. As described above in Section 2.3, the proposed Well Site would be implemented within City-owned property in an area with a land use designation of Low Medium II Residential and zoned RD2-1 (City of Los Angeles 2019). Pursuant to Government Code Sections 53091(d) and (e), building and zoning ordinances of cities or counties do not apply to the location or construction of facilities for the projection, generation, storage, treatment, or transmission of water (California Legislative Information 2003). Therefore, any well facilities that may be inconsistent with the City of Los Angeles General Plan land use designations would not be subject to a conditional use permit or general plan amendment. However, the proposed well would be contained within a well-house designed to blend in with surrounding environment. Further, all operational sounds would be within allowable limits within a residential area (see Section 4.13, *Noise* for more information). The City would coordinate directly with the City of Los Angeles to ensure operations of the well facilities would be compatible with existing adjacent land uses, if necessary. Therefore, impacts would be less than significant.

83

References

- California Legislative Information, 2003. Government Code, Article f. Regulation of Local Agencies by Counties and Cities. Available online at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§io nNum=53091, accessed June 2019.
- City of Los Angeles, 2019. ZIMAS. Available online at: http://zimas.lacity.org/, accessed June 2019.

4.12 Mineral Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
12.	MINERAL RESOURCES — Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				\boxtimes

7-8

Environmental Evaluation

Would the Project:

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

No Impact. According to the USGS Mineral Resources Data System (USGS 2019), the project area is not identified as a known mineral resource area and does not have a history of mineral extraction uses. In addition, according to the State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, no oil or gas wells exists within the project area (CDC 2019). The Surface Mining and Reclamation (SMARA) Mineral Land Classification prepared by CGS indicates that the project area primarily consists of Mineral Resource Zone 1 (MRZ-1) and MRZ-3 areas (CGS 1994; City of Los Angeles 2001; City of Beverly Hills 2010). An MRZ-1 designation is assigned to CGS study areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence; an MRZ-3 designation is assigned to CGS study areas containing mineral deposits whose significance cannot be evaluated due to inadequate subsurface data (CGS 1994). Therefore, the proposed project would not result in the loss of availability of a known mineral resource, and no impacts would occur.

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

No Impact. The City of Los Angeles and City of Beverly Hills Conservation Elements (City of Los Angeles 2001; City of Beverly Hills 2010) do not identify the project area as a mineral resource recovery zone. Therefore, the implementation of the proposed project would not result in the loss of a locally important mineral resource recovery site. No impacts would occur.

85

La Brea Subarea Well and Transmission Main Project Draft Initial Study/Mitigated Negative Declaration

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4.13 Noise

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
13.	NOISE — Would the project result in:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project				\boxtimes

7-8

Discussion

to excessive noise levels?

expose people residing or working in the project area

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If a sound's physical intensity is doubled, the sound level increases by 3 dBA, regardless of the initial sound level; i.e., 60 dBA plus 60 dBA equals 63 dBA. However, where noise levels of different levels are combined, the change in noise level would be less than 3 dB; i.e., 70 dBA plus 60 dBA equals 70.4 dBA.

Noise that is experienced at any receptor can be attenuated by distance or the presence of noise barriers or intervening terrain. Sound from a single source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. For acoustically absorptive, or soft, sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction.

The proposed project would be located within two jurisdictions; the City of Beverly Hills and the City of Los Angeles. The proposed Well Site would be located in the City of Los Angeles, currently developed with a residential structure. The proposed transmission main would be

approximately four miles long located within roadways primarily within the City of Los Angeles, with a portion located in the City of Beverly Hills, as shown in Figure 2.

The Noise Element of the City of Beverly Hills General Plan contains noise goals and policies that address unnecessary, excessive, and annoying noise levels and sources, such as vehicles, construction, and stationary sources (e.g., heating and cooling systems, mechanical rooms, etc.). Potentially sensitive land uses in the City of Beverly Hills include residences (including residences for the elderly), schools, churches, and libraries. Commercial uses are not defined as noise sensitive receptors. The City of Beverly Hills noise ordinance (BHMC Section 5-1-201 and subsequent) includes noise standards and regulations:

Section 5-1-202 prohibits any person from operating machinery or mechanical devices in a manner which creates a noise increase of more than 5 dBA above the ambient noise level at any property outside the hours permitted by the City's noise ordinance for construction activity.

Section 5-1-205 of the BHMC prohibits construction activity between the hours of 6:00 PM and 8:00 AM any day, and on Sundays and public holidays. Further, construction work within 500 feet of a residential zone is prohibited on Saturdays.

Section 5-1-206 of the BHMC prohibits any person to create any noise on any street, sidewalk, or public place adjacent to any school, institution of learning, or church while the same is in use, or adjacent to any hospital; which noise substantially and unreasonably interferes with the workings of such institutions.

The Noise Element of the City of Los Angeles General Plan includes a number of goals, objectives, and policies for land use planning purposes to limit exposure of citizens to excessive noise levels. The City of Los Angeles Municipal Code (LAMC) noise ordinance includes noise standards and regulations.

Section 111.01 and Section 111.03 of the LAMC define the ambient noise as the actual measured ambient noise level or the City's presumed ambient noise level, whichever is greater. The actual ambient noise level is the measured noise level averaged over a period of at least 15 minutes Leq.

Section 111.02 of the LAMC provides procedures and criteria for the measurement of the sound level of "offending" noise sources. In accordance with the LAMC, a noise level increase of 5 dBA over the existing average ambient noise level at an adjacent property line is considered a noise violation. To account for people's increased tolerance for short-duration noise events, the Noise Regulation provides a 5 dBA allowance for noise occurring more than five but less than fifteen minutes in any one-hour period and an additional 5 dBA allowance (total of 10 dBA) for noise occurring five minutes or less in any one-hour period.

Section 112.02 limits increases in noise levels from air conditioning, refrigeration, heating, pumping and filtering equipment. Such equipment may not be operated in such

manner as to create any noise which would cause the noise level on the premises of any other occupied property, or, if a condominium, apartment house, duplex, or attached business, within any adjoining unit, to exceed the ambient noise level by more than 5 dBA.

7-8

Section 112.05 of the LAMC sets a maximum noise level for construction equipment of 75 dBA at a distance of 50 feet when operated within 500 feet of a residential zone. Compliance with this standard is required only where "technically feasible."

Section 41.40 of the LAMC prohibits construction between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, 6:00 P.M. and 8:00 A.M. on Saturday, and at any time on Sunday (i.e., construction is allowed Monday through Friday between 7:00 A.M. to 9:00 P.M.; and Saturdays and National Holidays between 8:00 A.M. to 6:00 P.M.). In general, the City's Department of Building and Safety enforces noise ordinance provisions relative to equipment and the Los Angeles Police Department enforces provisions relative to noise generated by people. However, the provisions of Section 41.40(a) shall not apply to any person who performs the construction, repair or excavation work involved pursuant to the express written permission of the Board of Police Commissioners through its Executive Director. The Executive Director on behalf of the Board, may grant this permission, upon application in writing, where the work purposed to be done is in the public interest, or where hardship or injustice, or unreasonable delay would result from its interruption during the hours mentioned above, or where the building or structure involved is devoted or intended to be to be developed to a use immediately related to public defense. The City allows project applicants to obtain permission to conduct construction outside of the hours specified above. In these cases, a project applicant must obtain the express written permission of the Board of Police Commissioners through its Executive Director. The Executive Director, on behalf of the Board, may grant this permission upon application in writing where the work purposed to be done is in the public interest, or where hardship or injustice, or unreasonable delay would result from its interruption during the hours mentioned above.

Environmental Evaluation

Would the Project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant with Mitigation Incorporated. As shown in Table 1 in Section 2, Project Description, construction of the Project would occur in four phases over a total of 13 months from October 2019 to December 2020. The construction of the well components would happen concurrently with the pipeline rehabilitation and transmission main installation. Maximum daily activities would involve up to 10 workers for well-site construction and 10 workers for the pipeline rehabilitation main installation.

The existing land uses surrounding the project area, include community commercial, general commercial, and neighborhood office commercial, where the transmission main alignment would be located along La Cienega Boulevard leading to the proposed location of the Well Site. Other existing land uses in the overall project area include: public facilities, low residential, medium residential, educational, open space, places of worship, and industrial. The portion of the transmission main in the City of Beverly Hills is surrounded by single-family residential, multifamily residential, commercial, and public schools (City of Beverly Hills 2019; City of Los Angeles 2019). The closest noise sensitive receptors to Well Site are the residential uses adjacent on either side of the well site, as close as approximately 25 feet. The closest noise sensitive receptors to the pipeline rehabilitation and transmission main installation are residential, motel, and places of worship along La Cienega Boulevard and mainly residential and open space uses on the other roadways the pipeline travels along. Noise sensitive receptors along the pipeline route are assumed to be as close as approximately 25 feet from the active construction site.

To characterize the ambient noise levels at noise sensitive receptors, ESA conducted eight shortterm (15-minute duration) and one long-term (24-hour duration) ambient noise measurements at the property line of noise sensitive receptors located along the proposed pipeline alignment and the well location, as shown on **Figure 7**, **Noise Measurement Locations**. **Table 6**, *Ambient Noise Levels*, provides the ambient noise levels measured and noise sources observed at each location.

Receptor Location	Approximate Distance to Project Site (feet)	Measured Daytime Ambient Noise Levels, (dBA L _{eq})	Measured Nighttime Ambient Noise Levels, ^a (dBA L _{eq})
R1. Well Location	25	55.9	49.6
R2. Park Cienega Motel	25	78.3	73.8
R3. La Cienega Motel	25	74.4	74.7
R4. Grand Motel	25	75.0	74.0
R5. Multi-family residential/Pressman Academy/Temple Beth Am	25	70.7	74.7
R6. Multi-family residential/La Cienega Park/The Academy Library	25	63.3	N/A ^b
R7. Single-family residential along N. Le Doux Road near Clifton Way/Pentecostal Mission of Beverly Hills	25	61.8	N/A ^b
R8. Single-family residential along Dayton Way near N Oakhurst Drive	25	54.2	N/A ^b
R9. Single-family residential along N Maple Drive near Burton Way	25	57.9	N/A ^b

TABLE 6 AMBIENT NOISE LEVELS

SOURCE: ESA, 2019

^a Nighttime noise measurements were taken at locations where nighttime work is expected to occur and is all assumed within Los Angeles and along La Cienega Boulevard.

^b N/A denotes that no nighttime measurements were taken because no nighttime work would occur at this receptor.



SOURCE: ESRI; City of Beverly Hills; City of Los Angeles

La Brea Subarea Well and Transmission Main Project

Figure 7 Noise Measurement Locations

Noise from on-site construction activities would be generated by the use of equipment involved during various stages of construction. The noise levels generated by construction equipment would vary depending on factors such as the type and number of equipment, the specific model (horsepower rating), the construction activities being performed, and the maintenance condition of the equipment. Individual pieces of construction equipment anticipated to be used during project construction could produce maximum noise levels of 75 to 85 dBA Lmax at a reference distance of 50 feet from the noise source, as shown in **Table 7**, *Construction Equipment and Maximum Noise Levels*. These maximum noise levels would occur when equipment is operating under full power conditions. The estimated usage factor for the equipment is also shown in Table 7. The usage factors are based on the Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide (FHWA 2006).

Source	Estimated Usage Factor (%)	Reference Noise Level at 50 feet (dBA Lmax)
Air Compressor	50%	78
Bore/Drill Rig Truck	20%	79
Crane	40%	81
Dozer	40%	82
Dump/Haul Truck	40%	76
Excavator	40%	81
Forklift	10%	75
Generator Set	50%	81
Jaw Crusher	10%	84
Other Equipment	50%	85
Pump	50%	81
Tractor/Loader/Backhoe	25%	80
SOURCE: FHWA 2006		

TABLE 7 CONSTRUCTION EQUIPMENT AND MAXIMUM NOISE LEVELS

To characterize construction-period noise levels, the hourly Leq noise level associated with each construction phase is estimated based on the quantity, type, and usage factors for each type of equipment used during each construction phase and are typically attributable to multiple pieces of equipment operating simultaneously. Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently.

The estimated noise levels at noise sensitive receptors were calculated using the FHWA's RCNM and were based on a maximum concurrent operation of construction equipment, which is considered a worst-case evaluation because the project would typically use less equipment simultaneously, and as such would generate lower noise levels. See **Appendix D** for the noise calculation worksheets. The nearest sensitive receptors to the construction areas would be residential, educational, motel, and religious land uses. **Table 8**, *Unmitigated Maximum*

Construction Noise Levels at Sensitive Receptors, shows the estimated maximum construction noise levels that would occur at the nearest off-site sensitive uses during a peak day of construction activity.

7-8

Source	Approximate Distance to Project Site (feet)	Maximum Construction Noise Level (dBA Leq)	Daytime Significance Threshold ^a	Significant Impact?	Nighttime Significance Threshold ^b	Significant Impact?
R1. Well Location	25	91	60.9	Yes	54.6	Yes
R2. Park Cienega Motel	25	87	83.3	Yes	78.8	Yes
R3. La Cienega Motel	25	87	79.4	Yes	79.7	Yes
R4. Grand Motel	25	87	80.0	Yes	79.0	Yes
R5. Multi-family residential/ Pressman Academy/Temple Beth Am	25	87	75.7	Yes	79.7	Yes
R6. Multi-family residential/La Cienega Park/The Academy Library	25	87	68.9	Yes	N/A	N/A
R7. Single-family residential along N. Le Doux Road near Clifton Way/Pentecostal Mission of Beverly Hills	25	87	66.8	Yes	N/A	N/A
R8. Single-family residential along Dayton Way near N Oakhurst Drive	25	87	N/A	N/A	N/A	N/A
R9. Single-family residential along N Maple Drive near Burton Way	25	87	N/A	N/A	N/A	N/A

 TABLE 8

 UNMITIGATED MAXIMUM CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS

SOURCE: FHWA 2006, ESA 2019.

^a Daytime thresholds included for City of LA receptors and City of Beverly Hills receptors that are considered sensitive under BHMC Section 5-1-206.

^b Nighttime thresholds included for areas where night work would occur.

Construction in the City of Los Angeles would occur Monday through Friday, within the hours of 7:00 A.M. and 6:00 P.M., but may include 24-hour construction along La Cienega Boulevard. The project construction contractor will obtain a noise variance from the City of Los Angeles for any work occurring outside the hours of 7:00 a.m. and 8:00 p.m., and for any holiday or weekend work, in compliance with local regulations. Construction noise is considered a significant impact if the activity increases the measured ambient noise levels by 5 dBA during any time of the day. Table 8, above, compares the estimated construction noise levels to the ambient noise levels plus 5 dBA as measured at locations R1 through R9.

In the City of Beverly Hills, construction noise is considered a significant impact if the Project construction occurs outside of the allowable construction hours of 8 A.M. to 6 P.M. Furthermore, if the construction activity happens near any institution of learning, hospital, or church at any

time of day, the construction activity may not exceed 5 dBA greater than the measured ambient noise levels.

Additionally, the daytime construction in the City of Beverly Hills would occur near a church and library (R6 and R7), and therefore, is subject to BHMC Section 5-1-206. Activity at other receptors in the City of Beverly Hills (R8 and R9) would comply with the allowable construction hours of 8 A.M. to 6 P.M. Project construction noise could impact noise sensitive receptors during construction. However, implementation of **Mitigation Measures NOISE-1** through **NOISE-4** would reduce construction noise and ensure that noise impacts at sensitive receptors would be minimized. Therefore, construction noise impacts would be less than significant.

On-road haul trucks would be used to transport materials to and from the Project construction areas. The trucks would travel past residences along La Cienega Boulevard, Olympic Boulevard, Le Doux Road, Clifton Way, Clark Drive, Dayton Way, Maple Drive, and 3rd Street. The number of passing trucks would be minimal at approximately 8 trucks per day (with 3 trucks during the A.M. or P.M. peak hour is assumed in the analysis). The temporary addition of these minimal number of trucks per day during project construction activities would not contribute to an audible increase in noise levels above the existing noise levels. As previously stated, a doubling of traffic volumes on a roadway is required to increase traffic noise levels by 3 dBA, which is a barely perceptible increase to a healthy human ear. Since the minimal number of trips would not cause a doubling of traffic volumes, the off-site construction traffic noise impacts would be less than significant.

The existing noise environment in the project area is dominated by traffic noise from vehicle traffic on nearby roadways, as well as from other existing noise sources including airport-related noise. As the project is an infrastructure project that involves pipeline replacement, operation of the project would not result in a net increase in operational noise levels along the pipeline route. Furthermore, the well site would be enclosed within a structure and not cause a perceptible change in ambient noise levels. The project would require periodic maintenance activities, which would involve a few trucks or vehicles per month travelling to the well site and different pipeline segments, but would not require any additional employees. However, given the minimal usage of maintenance vehicles at the project site, project operation would not result in a perceptible increase in noise levels. As such, operation of the project would result in a less than significant impact.

Mitigation Measures

NOISE-1: Prior to construction, the City of Beverly Hills shall ensure that the contractor specifications stipulate that:

- All construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers and other state-required noise attenuation devices capable of up to a 5 dBA reduction.
- When feasible, construction haul routes shall avoid noise-sensitive uses (e.g., residences, convalescent homes).
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from the nearest noise-sensitive receptors.

• The project shall provide noise blanket/temporary noise barriers rated for up to a 10 dBA reduction between the active areas and surrounding sensitive uses.

NOISE-2: Throughout project construction and operation, the City of Beverly Hills shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints as soon as possible.

- The City shall establish and disseminate a 24/7 hotline telephone number for use by the public to report any undesirable project noise conditions. If the telephone number is not staffed 24 hours per day, the City shall include an automatic answering feature with date and time stamp recording to answer calls when the phone is unattended.
- The City shall designate a Noise Disturbance Coordinator during construction and permanently once the facility is operational. The Noise Disturbance Coordinator shall assist in resolving noise complaints to minimize impacts while maintaining the objectives of the construction and operation of the facility. The Noise Disturbance Coordinator shall report all noise complaints to the City program manager.
- For construction noise complaints received outside of the construction hours and days allowed (Monday through Friday, between the hours of 7:00 a.m. and 8:00 p.m.), the Noise Disturbance Coordinator shall take immediate steps to determine whether project construction is causing the noise and, if so, to reduce the noise level of that activity or take other appropriate action to remedy the complaint as quickly as possible.
- For construction activities near local residences, the Noise Disturbance Coordinator shall have the authority to require the installation of a temporary noise barrier to reduce noise impacts to the closest sensitive receptors. The noise barriers shall be tall enough to effectively block sight-lines of the construction to the closest residences. The contractor shall install noise barriers as directed by the Noise Disturbance Coordinator to minimize construction noise and resolve noise complaints.

NOISE-3: Residents of properties shall be offered noise mitigation measures (e.g., hearing protection, sound-proofing, white noise machines, etc.) acceptable to the residents or temporary relocation for the duration of nearby construction that would generate construction noise levels at their property in excess of 45 dBA, L_{eq} during nightime hours, for the duration of time that 24-hour activity occurs. Based on the analyses presented in this IS/MND, this measure shall apply to residences located within approximately 200 feet of the well installation location and pipeline rehabilitation and main transmission activity (i.e. residences along or near Chariton Street and La Cienega Boulevard).

NOISE-4: The contractor shall coordinate with any affected schools, institutions of learning, hospitals, or churches regarding construction schedule and the expected level of disturbance. The contractor shall ensure there are no special events or gatherings that would be affected by construction activity before continuing and will notify any affected institution of the anticipated schedule and completion date. In the event of a conflict, the contractor shall limit the use of equipment in an effort to lower noise levels or cease construction completely until the event or gathering has ended.

95

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

Less than Significant Impact with Mitigation Incorporated. During project construction, the operation of typical heavy construction equipment for demolition, earth-moving, and excavation would generate localized vibration levels, which, depending upon distance, could potentially affect structures or annoy people. Non-typical heavy impact machinery that could result in excessive vibration conditions, such as pile drivers, would not be used.

Vibration analyses are conducted for potential structural damage to buildings, and annovance to humans in inhabited structures. The closest structures to the construction activities on the project site would be the adjacent residential, commercial, educational, and religious land uses adjacent to the well site and along the path of the pipeline. The closest and most sensitive off-site structures would be residential structures approximately 25 feet from the well site and pipeline alignment.

Construction vibration would have a significant impact if:

- Project construction activities cause groundborne vibration levels to exceed the building damage threshold of 0.2 in/sec PPV at Building Category III Non-engineered timber and masonry buildings (FTA 2018), and
- Project construction activities cause groundborne vibration levels to exceed the human annoyance threshold of 80 VdB at Land Use Category 2 – Residences (FTA 2018).

The vibration levels generated by the general construction equipment that generate the highest vibration levels during the construction of the proposed project are identified in **Table 9**, Vibration Source Levels for Construction Equipment, in terms of peak particle velocity (PPV), expressed in inches per second (in/sec), and root mean square (RMS) velocity, expressed in VdB. As shown, depending on the type of construction equipment used, vibration velocities could reach as high as approximately 0.089 in/sec PPV at 25 feet from the source (e.g., large bulldozer), which corresponds to a RMS velocity level of 87 VdB at 25 feet from the source.

VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT						
Equipment	Approximate PPV (in/sec) at 25 feet	Approximate RMS (VdB) at 25 feet				
Large Bulldozer	0.089	87				
Loaded Trucks	0.076	86				
Jackhammer	0.035	79				
Small Bulldozer	0.003	58				

TABLE 9

As shown in Table 9, operation of a large bulldozer would generate vibration levels that would not structurally impact structures, if operated at approximately 25 feet or greater.

The residences adjacent to the well site and along the pipeline alignment are conservatively considered as non-engineered timber and masonry buildings, and are located at a minimum of 25 feet from the construction activity. Operation of a large bulldozer at 25 feet would not exceed the 0.2 in/sec PPV structural damage threshold for these type of buildings. Therefore, the potential structural damage vibration impact to residential structures from project construction would be less than significant.

7-8

In addition to potential structural damage, construction vibration could potentially cause human annoyance at nearby buildings. The vibration impact threshold for human annoyance at a residential structure is 80 VdB. As shown in Table 9, the vibration generated by the operation of a large bulldozer or a loaded haul truck at 25 feet would exceed the human annoyance thresholds of 80 VdB. At 45 feet, the operation of this equipment would not exceed the human annoyance threshold. Therefore, the operation of this equipment at the well site and pipeline would potentially exceed the vibration threshold of human annoyance, resulting in a significant impact.

However, implementation of **Mitigation Measure NOISE-5** would lessen the human annoyance caused by construction vibration and ensure that impacts at sensitive receptors would be minimized. Therefore, construction vibration impacts would be less than significant.

Once construction activities have been completed, there would be no substantial operational sources of vibration activities from the Project site. The primary sources of transient vibration would include well pumps and employee vehicle circulation during maintenance, which also produce limited levels of vibration. These sources would generate substantially lower levels of vibration identified above for construction. Ground-borne vibration generated by each of the abovementioned activities would generate approximately up to 0.005 in/sec PPV adjacent to the project site (FTA 2018). Therefore, vibration impacts during Project operation would not result in substantial adverse environmental impacts.

Mitigation Measure

NOISE-5: The operation of construction equipment that generates high levels of vibration, such as large bulldozers and loaded trucks, shall be prohibited within 45 feet of existing residential structures. Instead, small construction equipment such as small rubber tired bulldozers, small rubber tired excavator, etc., not exceeding 150 horsepower shall be used within this area during demolition, grading, and excavation operations.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. The project site is located approximately 4 miles from the Santa Monica Airport, which has an airport land use commission plan that identifies its airport influence area including noise contours, and that the Project is not located within (Los Angeles County 2003). Therefore, the project would not have the potential to expose people to significant aircraft-generated noise. No impact would occur.

97

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98

4.14 Population and Housing

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
14.	POPULATION AND HOUSING — Would the project:				
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			\boxtimes	
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

7-8

Environmental Evaluation

Would the Project:

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

Less than Significant Impact. The proposed project does not include construction of new homes or businesses that would result in a direct increase in population or create a substantial number of jobs. Construction activities would require temporary employment. The maximum number of construction workers at the project site at once would be 28 workers and these opportunities are expected to be filled by workers within the local economy. In May 2019, there was an unemployment average of 4.5 percent, with a County-wide increase of 6.4 percent in construction specifically from 2018 to 2019 (EDD 2019). Given that there was an average of 144,700 persons within the County involved in construction activities, specifically, it is reasonable to assume that there are available workers for the construction activities associated with the proposed project over the 13-month period. Because the majority of the work force is located in the County which is highly populated, there would be an adequate number of local workers that could be available for construction jobs and could commute to the temporary construction jobs rather than relocate and induce growth in the area.

The proposed project is designed to allow the City to continue to provide water services in its service area and to meet forecasted demand and growth in the service area. The proposed project's expansion of water supply is consistent with development anticipated by the City's Urban Water Management Plan, the Southern California Association of Governments (SCAG), the City of Beverly Hills General Plan, and expected population growth. The City has prepared CEQA documentation evaluating potential impacts of growth that could result from implementation of their General Plan. By providing public services to meet population expectations, the City lessens impacts to public services that could result from implementation of land use policies. Localizing water supply in order to provide water supply reliability and public health would occur irrespective of growth rates in the service area.

The project area is substantially developed and would continue to provide water services in an area with similar facilities and services. The project would not be implemented within a

greenfield or undeveloped area where a project such as the proposed would introduce new water services, which could promote growth. Therefore, the implementation of the proposed project would result in less than significant impacts related to indirect inducement of population growth.

Further, operation of the proposed well and transmission main would not require any new City employees. Therefore, implementation of the proposed project would not directly induce substantial population growth in the City's service area. Therefore, the project would result in less than significant impacts to population growth.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. Although there is one existing residence on the Well Site that would be demolished, this structure is not currently being used to house people, nor has it been used as a residence recently. Therefore, the proposed project would not displace people or housing necessitating the construction of replacement housing elsewhere. There would be no impact.

References

Employment Development Department (EDD), 2019. Los Angeles- Long Beach- Glendale Metropolitan Division (LA County). Available online at: https://www.labormarketinfo.edd.ca.gov/file/lfmonth/la\$pds.pdf, accessed June 2019.

4.15 Public Services

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact	
15.	PUE	BLIC SERVICES — Would the project:				
a)	Res asso alte phy con env acco perf	sult in substantial adverse physical impacts ociated with the provision of new or physically red governmental facilities, need for new or sically altered government facilities, the struction of which could cause significant ironmental impacts, in order to maintain eptable service ratios, response times, or other formance objectives for any of the following public <i>v</i> ices:				
	i)	Fire protection?				\boxtimes
	ii)	Police protection?				\boxtimes
	iii)	Schools?				\boxtimes
	iv)	Parks?				\boxtimes
	v)	Other public facilities?				\boxtimes

Environmental Evaluation

Would the Project:

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

i) Fire protection?

No Impact. Fire services for the City of Los Angeles and the City of Beverly Hills are provided by the Los Angeles Fire Department (LAFD) and the Beverly Hills Fire Department (BHFD), respectively. The LAFD and the BHFD provide the primary response for fire suppression and emergency medical services to the project area (LAFD 2019a; City of Beverly Hills 2019a). The nearest station to the project area is LAFD Station 58, located at 1556 South Robertson Boulevard in Los Angeles (LAFD 2019b). The City's Fire department is located at 445 North Rexford Drive (City of Beverly Hills 2019a) The proposed project would not change existing demand for fire protection services because operation would not result in an increase of onsite employees or population. Further, the proposed well facilities and transmission main would not introduce structures or ancillary facilities that increase fire susceptibility as compared to existing structures within the project area. Therefore, the proposed project would not increase the need for new fire department staff or new facilities and no impacts would occur.

ii) Police protection?

No Impact. The City of Los Angeles and the City of Beverly Hills are provided with police protection services by the Los Angeles Police Department (LAPD) and the City of Beverly Hills Police Department (BHPD), respectively (LAFD 2019; City of Beverly Hills 2019b). The proposed project does not include new homes or businesses that would require any additional services or extended response times for police protection services beyond those required with the existing on-site uses. Therefore, the City would not be required to expand or construct new police stations to serve the proposed project. No impacts would occur with the proposed project because additional police protection facilities would not be needed.

iii) Schools?

No Impact. The project area lies within the Los Angeles Unified School District (LAUSD) and Beverly Hills Unified School District (BHUSD) service areas (LAUSD 2019; BHUSD, 2019). The student generation rates within LAUSD and other private schools within the project area would not be affected or altered by the implementation of the proposed project. The proposed project would not affect local school enrollment. No school facilities would be impacted by the proposed project or be required to be constructed.

iv) Parks?

No Impact. The proposed project would not interfere with or have adverse impacts on parks (refer to Figure 6). The proposed project would not involve new housing or employment opportunities that would prompt the need for new parks. A portion of the proposed transmission main would travel adjacent to La Cienega Park; however, construction and operation of the proposed project would not impact the use of nearby recreational uses.

v) Other public facilities?

No Impact. The proposed project would not introduce inhabitants to the project area that would require additional public facilities. No impacts would occur with the proposed project because public facilities would not be needed.

References

- City of Beverly Hills, 2019a. Fire Department. Available online at: http://www.beverlyhills.org/departments/firedepartment/, accessed June 2019.
- City of Beverly Hills, 2019b. Police Department. Available online at: http://www.beverlyhills.org/departments/policedepartment/, accessed June 2019.
- LAFD, 2019a. Los Angeles Fire department. Available online at: https://www.lafd.org/, accessed June 2019.
- LAFD, 2019b. Los Angeles Fire Department, Find Your Station. Available online at: https://www.lafd.org/fire-stations/station-results, accessed June 2019.

- LAPD, 2019. Official Site of the Los Angeles Police Department. Available online at: http://www.lapdonline.org/, accessed June 2019.
- LAUSD, 2019. Los Angeles Unified School District. Available online at: https://achieve.lausd.net/,accessed June 2019.

4.16 Recreation

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
16.	RECREATION:				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				\boxtimes
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

Environmental Evaluation

Would the Project:

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

No Impact. The City of Los Angeles and City of Beverly Hills maintain the local parks and provide recreational services for the project area. The nearest recreational facilities located adjacent to the project area are Beverly Gardens Park, La Cienega Park, Frank Fenton Field, Arnaz Park, Hamel Mini Park, and Rexford Mini Park (Figure 6). The proposed project would not directly introduce new residents within the project area. Therefore, the proposed project would not increase the use of these existing recreational facilities within the project area and would result in no impact to the physical deterioration of recreational facilities.

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

No Impact. The implementation of the proposed project would not require recreational facilities to serve the project. Therefore, the proposed project would not result in an adverse physical effect on the environment from the construction or expansion of additional recreational facilities because the proposed project would not require recreational facilities. (For additional discussion of temporary impacts to recreational facilities, refer to Section 4.15 Public Services, Question 4.15(a)(iv).)

4.17 Transportation

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
17.	TRANSPORTATION — Would the project:				
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		\boxtimes		
b)	Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?				\boxtimes
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d)	Result in inadequate emergency access?		\boxtimes		
_					

Environmental Evaluation

Would the Project:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant with Mitigation Incorporated. The project proposed would install a well, pump-to-waste Stormdrain line within Chariton Street adjacent to the Well Site, and a transmission main. The Well Site would be located at 1956 Chariton Street. The proposed transmission main would be approximately four miles long. The proposed rehabilitation portion of the transmission main (existing inactive 18 and 24-inch pipelines) are shown on Figure 2. Construction equipment, vehicles, personnel, and materials staging areas would be located onsite at the Well Site, within adjacent City-owned property, or immediately adjacent to the transmission main construction areas along streets/roadways, where such areas can be accommodated.

There are no bicycle facilities within the project area along the local roadways such as Chariton Street and La Cienega. Transit services in the cities of Los Angeles and Beverly Hills are provided by the Los Angeles County Metropolitan Transportation Authority (Metro) (Metro 2019). There are many transit locations and opportunities for bus services within the project area. The closest bus stop is located at the intersection of La Cienega and Guthrie, which runs along Route 105 in the northern/southward direction.

Construction of the proposed project is anticipated to occur over approximately 13 months, at night and throughout the day. All daytime construction would occur during typical construction hours ranging between 7:00 a.m. to 7:00 p.m., Monday through Friday except on federal holidays. Nighttime construction would be required for 24-hour drilling and testing of the proposed well. Nighttime construction would also take place along various areas of La Cienega for the transmission main rehabilitation, connection and new pipeline construction. Nighttime construction of the transmission main is proposed in order to avoid traffic congestion/interferences as much as possible. Nighttime construction would only occur in various

areas along La Cienega where nighttime construction is permitted due to being located within a commercial area. Nighttime construction would require approval from the City of Los Angeles. Construction activities, scheduling, and number of workers could overlap between the construction of the well, associated storm drain (pump-to-waste).) and the transmission main. Construction truck and vehicle trips would be generated primarily by construction workers commuting to and from the work sites, and by trucks hauling materials and equipment to and from the well and transmission main sites. Construction trucks and vehicles would use the regional circulation system, as well as the main roadways within the cities of Los Angeles and Beverly Hills. Based on the designated construction truck routes established in the cities' General Plans, construction trucks would primarily use La Cienega Boulevard, Sawtelle Boulevard, Venice Boulevard, Sepulveda Boulevard, Manchester, Adams, Olympic Boulevard, 3rd Street, and Santa Monica Boulevard to bring construction materials and construction workers to the project area (City of Los Angeles 2016; City of Beverly Hills 2010).

While construction of the proposed project would temporarily generate additional truck and vehicle trips within the cities and the regional circulation system of Los Angeles County, traffic levels would not substantially increase and would be temporary in nature, as traffic levels would return to pre-construction conditions once construction is complete. Additionally, while local drivers could experience increased travel times if they were traveling behind a heavy truck due to slower movement and turning radii compared to passenger vehicles, these delays would be intermittent throughout the day and would cease once construction activities are completed.

However, while construction of the proposed project would not significantly increase the amount of trucks and vehicles on the local and regional circulation systems, construction activities within roadways could require partial closure of traffic lanes, which could significantly impact the performance of applicable roadways and public transportation. In order to reduce impacts to roadway performance during construction of the proposed transmission main and storm drain pipelines, the City would be required to implement Mitigation Measure TR-1, which would require the preparation and implementation of a Traffic Control Plan. The Traffic Control Plan would include, but not be limited to, signage, striping, delineated detours, flagging operations, changeable message signs, delineators, arrow boards, and K-Rails that would be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles and City of Beverly Hills. The traffic control plan for the proposed project would be coordinated with Los Angeles County and Metro when construction activities affect roadways and public transit under its jurisdiction. Therefore, with implementation of Mitigation Measure TR-1, impacts to the City of Los Angeles, City Beverly Hills, and regional circulation systems during construction of the proposed project would be reduced to less than significant levels.

Once constructed, the proposed transmission main and storm drains (pump-to-waste for the Well Site) would be contained entirely underground and would require minimal maintenance. In addition, all associated aboveground well facilities would require minimal maintenance infrequently, which could generate a few vehicle trips annually. However, the amount of trips generated by operation and maintenance would result in a negligible increase to existing traffic volumes and would be sporadic. Furthermore, the proposed project would not alter the local

roadway configuration or permanently disrupt bus stops or bike lanes once operational, and therefore would be consistent with all applicable transportation and traffic plans. Thus, operation of the proposed project would not affect the performance of the local or regional circulation systems. Operational impacts would be less than significant.

Mitigation Measures

TR-1: Prior to the start of construction of the project, the City shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will be separated into two different sections: the first section being for construction management within the Well Site and surrounding local roadways; and second, for construction management in areas located along the proposed transmission main rehabilitation areas and proposed new transmission main areas.

The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of Los Angeles, City of Beverly Hills and Los Angeles County, as applicable. The Traffic Control Plan shall be prepared in accordance with the City of Los Angeles and the City of Beverly Hills' traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, that emergency access will not be restricted, and that public transit will not be significantly disrupted. The Traffic Control Plan will ensure that written notices are provided to affected property owners and that detours or alternative routes are provided for public transit, bicyclists using on-street bicycle lanes, and pedestrians using adjacent sidewalks.

b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

No Impact. "Vehicle miles traveled" refers to the amount and distance of automobile travel attributed to a project. An average of 20 construction personnel would be required at the well and transmission main sites within one day. Eight additional workers could potentially be required to haul materials to and from the project sites. This would mean that a maximum of 28 construction workers, in total, would be driving to and from project sites for various construction activities. However, it is very unlikely that 28 workers would be utilizing vehicles during one day. Further, construction workers would be taken from the existing labor pool and therefore, would be driving in from local areas within the County. These trips would be temporary over the approximate 13-month construction period, and would not result in any perceivable increase in vehicle miles traveled that would exceed a City or County threshold of significance.

Further, there are no new permanent vehicle trips associated with the implementation of the proposed project once operational. The well and transmission main may require periodic maintenance. However, maintenance activities would be similar in nature to other maintenance currently being performed at existing City facilities. City staff would be traveling from local existing facilities such as the Foothill WTP. Therefore, maintenance activities would not occur frequently enough as to contribute to a significant increase of vehicle miles traveled throughout

the project area. As a result, the proposed project would be consistent with CEQA Guidelines section 15064.3 subdivision (b), and no impacts would occur.

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

Less than Significant with Mitigation Incorporated. The proposed project includes construction of well facilities and a transmission main within the City of Los Angeles and City of Beverly Hills. The proposed project does not include the construction of a new roadway or intersection, which could be determined to be a hazardous design feature.

Construction of the proposed project would include the use of heavy trucks to bring construction materials to and from the project area. While local drivers could experience temporary congestion due to construction vehicles, delays would be intermittent throughout the day and would cease once construction activities are completed. Construction of the facilities included under the proposed project may require partial road closures, which could result in hazardous driving conditions. However, implementation of Mitigation Measure TR-1 would require the preparation and implementation of a Traffic Control Plan to minimize the effects on roadway safety. Therefore, construction of the proposed project would not result in a hazardous design feature within the project area. Impacts during construction would be less than significant with mitigation.

Operation of the proposed project would require periodic maintenance checks and activities within the cities. City staff would perform routine operations similar to what occurs along other pipelines and well facilities in the project vicinity. Further, operation of the proposed project would not require heavy equipment nor would it impact existing intersections or roadways and as such would not result in a hazardous design feature. Impacts during operation of the proposed project would be less than significant.

d) Result in inadequate emergency access?

Less than Significant with Mitigation Incorporated. Construction of the proposed project would not substantially increase traffic levels or travel times on the surrounding circulation systems. Construction trips would be generated by trucks bringing materials to and from the construction sites and daily construction worker vehicle trips. However, while construction of the proposed project would not significantly increase the amount of trucks and vehicles on the local and regional circulation systems, construction activities within roadways would require partial road closures, which could interfere with emergency access. In order to reduce impacts to emergency access during construction of the proposed project, the City would be required to implement Mitigation Measure TR-1, which would require the preparation and implementation of a Traffic Control Plan. The Traffic Control Plan would include, but not limited to, signage, striping, delineated detours, flagging operations, changeable message signs, delineators, arrow boards, and K-Rails that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate emergency access and circulation to the satisfaction of the City of Los Angeles County and Metro, as necessary, as well

as with emergency responders, which include fire departments, police departments, and ambulances that have jurisdiction within the project area. Therefore, with implementation of Mitigation Measure TR-1, in conjunction with Mitigation Measure HAZ-3, impacts to emergency access during construction of the proposed project would be reduced to less than significant.

7-8

Once constructed, the transmission main would be contained entirely underground and the well would be located within City property. These facilities would not interfere with emergency access. The proposed project facilities would require periodic maintenance, which could generate a few vehicle trips annually. The proposed well may need reconditioning which would take place every three to four years which will take approximately three to four days and include one to two vehicles for pump removal and well redevelopment. However, due to the relatively limited amount of vehicle trips associated with operation and maintenance of the proposed project facilities, these trips would not interfere with emergency access. Impacts to emergency access during operation would be less than significant.

References

City of Beverly Hills, 2010. Circulation. Available online at: http://www.beverlyhills.org/cbhfiles/storage/files/filebank/10281--6_Circulation%2001122010.pdf, accessed June 2019.

City of Los Angeles, 2016. Mobility Plan 2035, An Element of the General Plan. Available online at: https://planning.lacity.org/documents/policy/mobilityplnmemo.pdf, accessed June 2019.

Metro, 2019. About Metro. Available online at: https://www.metro.net/, accessed June 2019.

4.18 Tribal Cultural Resources

Issi	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
18.	Tribal Cultural Resources — Would the project cause a substantial adverse change in Resources Code section 21074 as either a site, feature, terms of the size and scope of the landscape, sacred pla American tribe, and that is:	the significand place, cultural ce, or object w	ce of a tribal cultura landscape that is g ith cultural value to	ll resource, defi eographically d a California Na	ned in Public efined in ative
a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		\boxtimes		
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Environmental Evaluation

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

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)

Less Than Significant with Mitigation Incorporated. Assembly Bill 52 (AB 52), signed into law on September 25, 2014, requires lead agencies to evaluate a project's potential to impact Tribal cultural resources and establishes a formal consultation process for California Native American Tribes as part of CEQA. Tribal cultural resource includes sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register or included in a local register of historical resources. AB 52 also gives lead agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a Tribal cultural resource. Consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects, and that is traditionally and culturally affiliated with the geographic area of a proposed project.

The analysis of impacts to Tribal cultural resources is based on the consultation between the City and the Tribes, information provided by the Tribes, and the *Cultural Resources Assessment Report* (Appendix C). The potential for the project area to contain Tribal cultural resources was assessed based on information provided by Tribes and supplemented by the findings of the cultural resource records search (i.e., presence and proximity of known resources), the SLF search, land use history research, subsurface geological conditions, and the proposed excavation parameters for the Project. The NAHC was contacted on April 10, 2019 to request a search of the SLF.

7-8

The City commenced tribal notification in accordance with AB 52 on June 21, 2019, via a mailing to all of the surrounding tribes on the City's AB 52 notification list. One tribe has commented on the request. The Gabrieleño Band of Mission Indians - Kizh Nation engaged in consultation, and in a consultation phone call with City on August 22, 2019 the Tribe expressed their concerns regarding the proposed project. While the Tribe did not provide locations of any known tribal cultural resources within the project site, they expressed concern for the sensitivity of the area and the possibility of unforeseen and inadvertent discovery of Tribal cultural resources. The tribe requested monitoring, and this monitoring is included in Section 4.5, Cultural Resources mitigation above. The Tribe concurred with this approach and consultation was closed on September 18, 2019. To ensure the proposed project would not result in a potentially significant impact, in the event that objects or artifacts that may be Tribal cultural resources are encountered during the course of any ground-disturbance activities, all such activities would temporarily cease on the specific project site until the potential Tribal cultural resource(s) is properly assessed following specific protocol required by the Los Angeles Department of City Planning. Therefore, impacts would be less than significant with implementation of cultural mitigation measures.

Mitigation Measures

Implement Mitigation Measures CUL-1 through CUL-5.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant with Mitigation Incorporated. Under AB 52, if a lead agency determines that a project may cause a substantial adverse change to a Tribal cultural resource, the lead agency must consider measures to mitigate that impact. PRC Section 21074 provides a definition of a Tribal cultural resource. In brief, in order to be considered a Tribal cultural resource, a resource must be either: 1) listed, or determined to be eligible for listing, on the national, State, or local register of historic resources, or 2) a resource that the lead agency chooses, in its discretion supported by substantial evidence, to treat as a Tribal cultural resource. In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the State register of historic resources or City Designated Cultural Resource. In applying those criteria, a lead agency shall consider the value of the resource to the tribe.

As discussed above, the City provided notice to tribes soliciting requests for consultation on June 21, 2019. So as to ensure any unforeseen and inadvertent discovery of Tribal cultural resources would not result in a potentially significant impact, in the event that objects or artifacts that may be Tribal cultural resources are encountered during the course of any ground-disturbance activities, all such activities would temporarily cease on the specific project site until the potential

Tribal cultural resource(s) is properly assessed following specific protocol required by the Los Angeles Department of City Planning. Therefore, impacts would be less than significant with implementation of cultural mitigation measures.

Mitigation Measures

Implement Mitigation Measures CUL-1 through CUL-5.

4.19 Utilities and Service Systems

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
19.	UTILITIES AND SERVICE SYSTEMS — Would the project:				
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications, the construction of which could cause significant environmental effects?				\boxtimes
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			\boxtimes	
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				\boxtimes
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			\boxtimes	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				\boxtimes

7-8

Environmental Evaluation

Would the Project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications, the construction of which could cause significant environmental effects?

No Impact. The proposed project may require a limited use of potable water during construction activities. Water required for potential dust suppression would be obtained from a support truck. New water facilities or expansion of existing facilities would not be required to support this use. Additionally, the proposed project would not require new electric power, natural gas, or telecommunications facilities.

The existing Foothill WTP is currently sized to accommodate increased flows from well implementation. Implementation of the proposed project would not require the WTP to update RO and other treatment facilities. Further, the proposed project would not substantially alter the local drainage pattern of the proposed Well Site. During operation of the proposed project, the project facilities themselves would not generate wastewater, and therefore would not exceed wastewater treatment requirements. In addition, surface water generated by storms or by construction activities would be collected by the onsite well drainage systems and directed to the storm drain. Compliance with the permit conditions would ensure that all RWQCB requirements would not be exceeded. Therefore, the implementation of the proposed project would not require new or expanded wastewater treatment facilities or stormwater drainage systems. No impacts would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. Water needs of the project during construction would be relatively minor and temporary. Water could be used for various construction related activities, such as dust suppression. After construction, the proposed project would not include uses that would increase the demand for water. Overall water use is not expected to change as a result of this project. The proposed project would have sufficient water supplies available from the City and less than significant impacts would occur.

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

No Impact. The proposed project would result in the generation of wastewater associated with temporary use of portable toilets. During project implementation, the City or the contractor may have portable toilet facilities available onsite temporarily for use by construction workers. Given the relatively small construction workforce of an average of 8 and up to a maximum of 28 workers onsite daily for the 13-month construction period, this amount of waste would be minimal. Once the construction phase is over, such portable facilities would be removed and the wastewater properly handled and disposed in accordance with all applicable laws and regulations.

As discussed above, operation of the proposed project would not generate any wastewater. The City would not be required to provide future capacity as a result of proposed project implementation. The proposed project has adequate capacity to serve current treatment demands. Therefore, the proposed project does not require a wastewater treatment provider to serve the project. No impacts would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. Construction and implementation of the proposed project is not anticipated to generate a significant amount of solid waste. The construction contractor would be required to dispose of excavated soil and solid wastes in accordance with local solid waste disposal requirements. Construction of the proposed project would result in the removal of approximately 200 cubic yards of material during demolition of the three existing structures. The generation of material from proposed project implementation is considered minimal compared to the remaining capacity at the nearest landfill which is the 365 Disposal & Recycling Landfill. The 365 Disposal & Recycling Landfill is located at 11153 Tuxford Street, Sun Valley, CA 91352. The landfill is permitted to accept up to 15 tons per day and processes and transfers solid waste for recycling or to other local landfills (CalRecycle 2019). Because the proposed project would only generate construction waste temporarily and no long-term waste would be generated, the

implementation of the proposed project would result in less than significant impacts on daily permitted capacity of the 365 Disposal & Recycling Landfill. Further, the project would not impair attainment of solid waste reduction goals.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The proposed project would comply with all federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and City of Los Angeles and City of Beverly Hills requirements for solid waste generated during the construction process. No impacts would occur.

References

CalRecycle, 2019. SWIS Facility Detail, 365 Disposal and Recycling Inc (19-AR-1264). Available online at: https://www2.calrecycle.ca.gov/swfacilities/Directory/19-AR-1264/, accessed June 2019.
4.20 Wildfire

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
20.	Wildfire—If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?		\boxtimes		
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				\boxtimes
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				\boxtimes
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				\boxtimes

Environmental Evaluation

Would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant with Mitigation Incorporated. As discussed in response to Question 4.9(f), *Hazards and Hazardous Materials*, implementation of the proposed project is not anticipated to substantially impair an adopted emergency response plan or evacuation plan with implementation of Mitigation Measures HAZ-3 and TR-1. Construction activities would not significantly interfere with emergency response access to the project vicinity. Impacts would be less than significant with mitigation.

Mitigation Measures

Implement Mitigation Measures HAZ-3 and TR-1.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. As discussed in response to Question 4.9(g), *Hazards and Hazardous Materials*, the project area is fully developed with pavement and facilities, and is not located within a fire safety hazard zone. Further, the project area is not located within a valley or somewhere susceptible to prevailing winds, and the project area is flat and does not contain slopes. Therefore, implementation of the proposed project would not construct or operate facilities within an area vulnerable to wildland fires, and would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. No impacts would occur.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

7-8

No Impact. The proposed project would not result in the installation of permanent roads, fuel breaks, emergency water sources or new power lines. Construction activities of new well facilities include various piping and electrical controls that may require maintenance. However, as described previously, the project facilities would be implemented within a developed area and not within a fire hazard safety zone. Therefore, implementation of utilities within the already developed properties, would not result in temporary or ongoing impacts to the environment.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. As discussed in Sections 4.7(a)(iv), 4.7(c), 4.10(c)(ii), and 4.10(c)(i), the project would not result in increased drainage or runoff that could contribute to landslide or flooding impacts. No impact would occur.

4.21 Mandatory Findings of Significance

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
21.	MANDATORY FINDINGS OF SIGNIFICANCE —				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		\boxtimes		

Environmental Evaluation

Would the Project:

a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. As discussed in Section 4.4 *Biological Resources*, the project activities have the potential to interfere with nesting birds in nearby mature trees within the project area. Although impacts would be temporary, interfering with nesting birds during the breeding season is considered a potentially significant impact. Implementation of Mitigation Measure BIO-1, would reduce potential impacts to a less than significant level.

Furthermore, as discussed in Section 4.5 *Cultural Resources*, while there are known cultural resources within the project area, construction of the proposed project would not result in direct or indirect impacts to those known resources. However, construction of the proposed project could potentially encounter unknown archaeological, paleontological resources or human remains. With implementation of Mitigation Measures CUL-1 through CUL-5 and GEO-1 through GEO-4, impacts would be reduced to a less than significant level. Once constructed, operation of the proposed project would have no long-term permanent impacts to biological or cultural resources.

Mitigation Measures

Implement Mitigation Measures BIO-1, CUL-1 through CUL-5, and GEO-1 through GEO-4.

7-8

b) Have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant with Mitigation Incorporated. A cumulative impact could occur if the proposed project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area. No direct significant impacts were identified for the proposed project that could not be mitigated to a less than significant level. However, when combined with other projects within the vicinity, the proposed project may result in a contribution to a potentially significant cumulative impact.

The proposed project does not include any agricultural or forestry resources, or mineral resources that could be impacted and the proposed project and would have no effect on land use and planning, population and housing, public services or recreation. In addition, impacts would be less than significant for aesthetics, air quality, energy, GHG emissions, hydrology and water quality, and utilities. As a result, cumulative impacts related to these resources would be less than significant.

Potential impacts to biological resources, cultural resources, and paleontological resources (geology, soils, and seismicity), hazards and hazardous materials, noise, transportation, tribal cultural resources, and wildfire would only occur during construction of the project. These potential construction impacts would be short term and occur over a 13-month period. The construction impacts for the proposed project are limited in nature and scope to the project area in and around the cities of Los Angeles and Beverly Hills. The project work itself will largely occur within the Well Site and along public roadways and will be contained such that off-site impacts do not occur. As a result, the impacts of the proposed project would not combine together with other related projects in the vicinity to produce a significant environmental impact. Furthermore, the operation of the proposed production well and transmission main would not contribute to long-term cumulative impacts and their contribution to impacts would be less than cumulatively considerable.

With implementation of mitigation measures, which aim to reduce project impacts to neighboring sensitive receptors and to sensitive natural resources, impacts related to biological resources, cultural resources, and paleontological resources (geology, soils, and seismicity), hazards and hazardous materials, noise, transportation, tribal cultural resources, and wildfire risks would be less than cumulatively considerable. Therefore, the proposed project would not result in any impacts that would be cumulatively considerable resulting from the proposed project. Cumulative impacts would be considered less than significant with implementation of mitigation.

Mitigation Measures

Implement all mitigation measures contained within this Draft IS/MND (Section 4).

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact with Mitigation Incorporated. The proposed project would not result in substantial adverse effects, either direct or indirect, on human beings. The project would provide the City of Beverly Hills with groundwater that would localize their water supply. As described in Section 4.3 *Air Quality*, air emissions associated with the proposed project would not result in adverse health effects to sensitive receptors. As described in Section 4.13 *Noise*, construction noise also would not result in adverse effects to sensitive receptors with implementation of Mitigation Measures NOISE-1 through NOISE-5. Impacts to human beings would be less than significant with mitigation.

Mitigation Measures

Implement Mitigation Measures NOISE-1 through NOISE-5.

7-8

Notice of Determination

Appendix D

TO:		FROM:		
Office of Planning and Rese	earch	Public Agency: City of Beverly Hills		
For U.S. Mail:	Street Address:	Public Works Department, Engineering Division		
P.O. Box 3044	1400 Tenth Street	Address: 345 Foothill Road		
Sacramento, CA 95812-3044	Sacramento, CA 95814	Beverly Hills, CA 90210		
		Contact: Tristan Malabanan		
🛛 County Clerk		Phone: 310-285-2467		
County of: Los Angeles		Lead Agency (if different from above):		
Address: 12400 Imperial Hwy		Same as Above		
Norwalk, CA 90650		Address:		
		Contact:		
		Phone:		

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2019099076

Project Title: City of Beverly Hills, La Brea Subarea Well and Transmission Main Project

Project Location (include county): Cities of Los Angeles and Beverly Hills, Los Angeles County

Project Description: The proposed project would include the construction of a groundwater production well in the La Brea Subarea (that would provide approximately 1,700 AFY of new water supply), the rehabilitation of an existing (inactive) 18 and 24-inchpipelines, and the connection of the rehabilitated pipeline to a newly constructed raw water transmission main with a diameter of 16-inches (collectively, referred to herein as "proposed transmission main"). The proposed transmission main would connect the proposed production well to the existing Foothill Water Treatment Plant (WTP) for treatment and supply. The pipelines would be sized to accommodate 3,000 gallons per minute (gpm), which would be from the currently proposed well and, potentially, other wells in the area although the need for and locations of any such future wells is unknown at this time

This is to advise that the	City of Beverly Hills	has approved the above described project on
	(Lead Agency or Responsible Agency)	

November 19, 2019 and has made the following determinations regarding the above described projects. (Date)

- 1. The project $[\square$ will \boxtimes will not have a significant effect on the environment.
- 2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
- 3. Mitigation measures [were interview were not] made a condition of the approval of the project.
- A mitigation reporting or monitoring plan [⊠ was □ was not] adopted for this project.
 A statement of Overriding Considerations [□ was ⊠ was not] adopted for this project.
- 6. Findings [were knot] were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the Negative Declaration, is available to the General Public at:

City of Beverly Hills Public Works Building, 2	345 Foothill Road, Beverly Hills, CA	90210
Signature (Public Agency)	Title:	Project Manager
Date: November 20, 2019	Date Received filing at OPR:	Governor's Office of Planning & Research
Authority cited Section 21083, Public Resources Code		NOV 25 2019
Reference: Section 21000-21174, Public Resources Code.		STATE CLEARINGHOUSE

ORIGINAL FILED

NOV 22 2019

Notice of Determination LOS ANGELES. COUNTY CLERK

Appendix D

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Sacramento, CA 95812-3044	Sacramento, CA 95814	Beverly Hills, CA 90210		
		Contact: Tristan Malabanan		
🛛 County Clerk		Phone: 310-285-2467		
County of: Los Angeles		Lead Agency (if different from above):		
Address: 12400 Imperial Hwy		Same as Above		
Norwalk, CA 90650		Address:		
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Date: November 20, 2019	Date Received filing at OPR	Governor's Office of Planning & Research

NOV 25 2019

Authority cited: Section 21083, Public Resources Code, Reference, Section 21000-21174, Public Resources Code.

STATE CLEARINGHOUSE

State of California—Natural Resources Agency CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE					
2019 ENVIRONMENTAL FILING FEE CASH RECEIPT					
		201011220480	013		
		STATE CLEAR		l (If annicable	3
		2019099076		(in applicable	/
		2010000010		DATC	
LEAD AGENCY				DATE	
				11/22/2019	
COUNTYSTATE AGENCY OF FILING				DOCUMENT	NUMBER
LOS ANGELES		an a		2019306193	
CITY OF BEVERLY HILLS, LA BREA SUBAREA WELL AND TRANSMISSION MAIN PE	ROJECT	nade daar daaraan aan aan ah			ARED
				FIONE NON	
PROJECT APPLICANT ADDRESS	CITY		STATE	ZIP CODE	
345 EQOTHUL POAD	BEVEDI V HII	10	CA	00210	
PROJECT APPLICANT (Check appropriate box):				90210	
Local Public Agency School District Other Special District	□ State	Agency	Private E	ntity	
CHECK APPLICABLE FEES:					
Environmental Impact Report (EIR)		:	\$3,271.00	\$	0.00
Negative Declaration (ND)(MND)		:	\$2,354.75	\$	2,354.75
Application Fee Water Diversion (State Water Resources Control Board Only)			\$850.00	¢	0.00
Projects Subject to Certified Regulatory Programs (CRP)			61.112.00	۰	0.00
			50.00	\$	0.00
			00.00	\$	75.00
Project that is exempt from fees					
Notice of Exemption					
CDFW No Effect Determination (Form Attached)					
□ Other				\$	0.00
PAYMENT METHOD:				•	0 400 75
🗋 Cash 🗹 Credit 🗹 Check 🔲 Other				\$\$	2,429.75

SIGNATURE	TITLE
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Governor's Office of Planning & Research

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STATE CLEARINGHOUSE

COPY - LEAD AGENCY

ORIGINAL FILED

NOV 22 2019

Notice of Determination

LOS ANGELES, COUNTY CLERK

Appendix D

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Sacramento, CA 95812-3044 Sacramento, CA 95814		Beverly Hills, CA 90210		
		Contact: Tristan Malabanan		
🖾 County Clerk		Phone: 310-285-2467		
County of: Los Angeles		Lead Agency (if different from above):		
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City of Beverly Hills Public Works Building, 345 Foothill Road, Beverly Hills, CA 90210

Signature (Public Agency)	Title	e: Project Manager
Date: November 20, 2019	Date Received filing at OPF	λ:

7-8

10/12/2021 Board Meeting State of California—Natural Resources Agency	7-8	Atta	chment 2, I	Page 717 of	722
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE					
2019 ENVIRONMENTAL FILING FEE CASH RECEIPT					
		RECEIPT #	0013		
			RING HOUSE	# /If annicable	
		2019099076			/
COUNTY/STATE AGENCY OF FILING				11/22/2019	
				DOCUMENT	NUMBER
PROJECT TITLE				2019306193	
		· T			
PROJECT APPLICANT NAME	UN MAIN PROJEC	· I		TPHONE NUM	ABER
PROJECT APPLICANT ADDRESS			ISTATE	ZIP CODE	
345 FOOTHILL ROAD	BEVEE		CA	90210	
PROJECT APPLICANT (Check appropriate box):				130210	<u> </u>
Local Public Agency School District Other Spectrum	cial District	State Agency	Private	Entity	
CHECK APPLICABLE FEES:					
Environmental Impact Report (EIR)			\$3,271.00	\$	0.00
Negative Declaration (ND)(MND)			\$2,354.75	\$	2,354.75
Application Fee Water Diversion (State Water Resources Control Boar	d Only)		\$850.00	¢	0.00
Projects Subject to Certified Regulatory Programs (CRP)			\$1,112.00	* <u> </u>	0.00
County Administrative Fee			\$50.00	* <u> </u>	75.00
Project that is exempt from fees				\$	73.00
Notice of Exemption					
CDFW No Effect Determination (Form Attached)					
Other				\$	0.00
PAYMENT METHOD:					
🗋 Cash 🗹 Credit 🗹 Check 🗔 Other _		-		\$	2,429.75

SIGNATURE	TITLE
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7-8

Attachment 2, Page 719 of 722 Dean C. Logan Los Angeles County Registrar / Recorder 12400 Imperial Highway, Norwalk, CA (800)201-8999

BUSINESS FILINGS REGISTRATION

NORWALK DEPARTMENT HEADQUARTER

Cashier: T. IBARRA



Friday, November 22, 2019 10:55 AM

<u>Item(s)</u>

Fee	Qty	Total
NoD - County Posting 2019306193	Fee 1	\$75.00
NoD ~ Negative Declar 2019306193	atio 1	\$2,354.75
Total	\$2,4	29.75
Total Documents:		1
Customer payment(s):		
Check Credit Card		\$2,354.75 \$75.00
Phone Lt. 1		

<u>Check List:</u> #129920679

197115

\$2,354.75

ADDENDUM TO THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE CITY OF BEVERLY HILLS, LA BREA SUBAREA WELL AND TRANSMISSION MAIN PROJECT

7-8

Prepared by: City of Beverly Hills 345 Foothill Road Beverly Hills, CA 90210

1. Introduction:

To expand local water supply, the City of Beverly Hills developed the La Brea Subarea Well and Transmission Main Project (project) to provide an additional net 1,700 acre-feet per year of groundwater supply in the La Brea Subarea within the unadjudicated portion of the Central Groundwater Basin. The project includes the construction of a groundwater production well in the La Brea Subarea, the rehabilitation and construction of a transmission pipeline, and the connection of the transmission pipeline to a newly constructed raw water transmission main. The transmission main connects the production well to the existing Foothill Water Treatment Plant for treatment and supply. The pipelines are sized to accommodate a maximum of approximately 3,000 gallons per minute, which would be from the production well and, potentially, other wells in the area although the locations of any such future wells is unknown.

The City of Beverly Hills published the Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration (IS/MND) for the project in September of 2019 for a 30-day public review period. After the 30-day public review period, a Final IS/MND was prepared and published. In November of 2019, the City of Beverly Hills certified the project and filed a Notice of Determination with the Los Angeles County Clerk and State Clearinghouse.

2. Project Modification Description:

The City of Beverly Hills is proposing to obtain financial assistance for the approved project through the Local Resources Program (LRP) that is administered by the Metropolitan Water District of Southern California (Metropolitan). The LRP provides financial incentives to public and private water agencies to encourage local development of water recycling, groundwater recovery and seawater desalination.

The City of Beverly Hills is requesting Metropolitan to reinstate the LRP agreement executed in 1998 and terminated in July 2020. Due to unforeseen water quality changes discovered in 2015, the City's water treatment plant had to be shut down for an extended period of time. As a result of increased levels of iron, manganese, iron sulfide, and sanding in the groundwater, the City of Beverly Hills embarked on a program to perform water quality testing, pilot testing, design, and construction of a pre-treatment system addition to the existing WTP. The pre-treatment system comprises of the addition of enhanced sand removal with sand separators and Oxidant Media Filtration prior to the existing reverse osmosis treatment system. Construction of the pretreatment system began in August 2020 and is scheduled to be completed in September 2021.

The City of Beverly Hills is requesting the LRP agreement to be extended and reinstated with an amendment to the original agreement adding an additional 5 years to the term of the agreement. The LRP incentive of \$250/AF would remain the same in the reinstated agreement as in the original agreement.

As the Lead Agency, the City of Beverly Hills has prepared this addendum to the previously certified IS/MND to clarify the City's intent to reinstate and extend LRP funding from Metropolitan in support of the project. Metropolitan will act as a Responsible Agency to this project for CEQA compliance.

3. Minor Technical Additions:

This addendum has been prepared to clarify the Lead Agency's intent to apply for LRP funding.

7-8

In April 2020, the City of Beverly Hills submitted the proposal on the City of Beverly Hills, La Brea Subarea Well and Transmission Main Project to Metropolitan. As a Responsible Agency, Metropolitan's Board of Directors will review and consider the proposal and environmental documentation prepared by the City of Beverly Hills including this addendum in determining whether or not to approve financial assistance for the project within the LRP administrative process.

The proposed project modification (i.e., a partnership with Metropolitan in the LRP for the City of Beverly Hills, La Brea Subarea Well and Transmission Main Project) would be consistent with Metropolitan's commitment to develop LRP activities that would increase water supply reliability and avoid or defer Metropolitan capital expenditures.

Therefore, this minor clarification results in no modifications to the environmental impact analysis or conclusions included in the adopted IS/MND. Instead, the proposed project modification is an administrative and fiscal action.

4. Basis for Preparation of Addendum:

Section 15164(b) of the State CEQA Guidelines states "An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred."

The proposed modification to the original project would not result in a tangible change in the physical environment. As the Lead Agency for the proposed project modification, the City of Beverly Hills is issuing this addendum in accordance with the State CEQA Guidelines (Section 15164). The minor textual additions provided herein are not considered to 1) constitute a substantial change in the project as originally proposed by the City of Beverly Hills, 2) lead to substantial changes in the circumstances under which the project is undertaken, or 3) constitute new information of substantial importance. Accordingly, an addendum was prepared as opposed to a negative declaration or a subsequent environmental impact report.

Shana E Epstein

March 4, 2021 | 16:42 PST

Signature

Date

Printed Name: Shana Epstein

Title: Director of Public Works



Adopt framework for amending Local Resources Program Agreements; and Authorize the General Manager to Reinstate and Amend the Existing Local Resource Program Agreement for the Beverly Hills Desalter Project Water Planning and Stewardship Committee Item 7-8 October 11, 2021

Local Resource Program Provides incentives to help member agencies develop new local projects Helps to improve regional reliability Continuously refined to support development of new local projects 2014 – New incentive structure 2018 – Established interim LRP target yield 2021 – Approved framework for extensions to

project start of operation performance provision



WP&S Committee

(2014)

Need for Additional Framework

- Staff recognizes that projects face additional challenges
- Current LRP provisions do not provide extensions to contract. term for projects facing unforeseen production issues Resulting in project shut down or; Significant loss of production and incentives The proposed framework provides flexibility and additional time to resolve operational challenges

Proposed Framework for Amending LRP Agreements

- Proposed framework supports projects facing unforeseen production issues that are beyond an agency's control
 - Excludes projects performing poorly
- Amending LRP agreements would provide member agencies:
 - One time pause to contract term;
 - Extension of up to three years (to get project back online)

Unforeseen Production Issues

- Defined for active projects already approved by the board:
 - Acts of God affecting production
 - Earthquakes, flood, lightening strike, etc.
 - Unforeseen changes in water quality that result in project failure
 - Plant shutdown due to water quality constituents not originally detected
 - Facility failure
 - Well collapse, membrane deficiency, etc.
 - Source water issues
 - Unavailability



Approval of LRP Extension Requests

Formal Extension Request by Project Sponsors	Continuing Pursuance of Project by Parties	Project Schedule	(Re)Start of Operation
 Include project- specific circumstances Describe actions being taken to correct the issue 	 Affirm that all parties to the agreement are still pursuing the project 	Provide a revised schedule	 Affirm that project will start operation within requested extension Contract extension may not exceed three fiscal years

Upon Board approval, the agreement would terminate up to three years after the original termination date

- No changes in remaining contract terms
 - All performance provisions would remain in place
 - No increase to maximum financial obligations originally approved by the Board

743

Beverly Hills Desalter Project

- Groundwater Recovery Program (GRP) Agreement executed in 1998 (2,600 AFY)
- Project commenced operation April 2003
- Agreement term 2003 to 2023
- Plant shut down in 2015 due to unforeseen changes in water quality of the Hollywood Basin (beyond agency's control)
- Beverly Hills took significant action to bring project back on-line
- Agreement automatically terminated in July 2020 for 5 consecutive years of nonpayment from Metropolitan

Requested Reinstatement & Amendment

- Reinstate and amend the terminated Beverly Hills Desalter GRP agreement
- Extend termination date from April 30, 2023, to June 30, 2026
- No changes to remaining contractual terms:
 - Contractual capacity remains at 2,600 AFY
 - Sliding scale incentive remains at \$250/AF
- No increase to maximum financial obligations originally approved by the Board in 1998

Summary

- Proposed framework provides projects more flexibility in facing unforeseen production issues:
 - Issues arise after start of operation
 - Agency requests pause and extension to term of agreement
- Considerations consistent with framework approved by the Board in June
- Reinstating and amending the Beverly Hills Desalter Project agreement, Metropolitan would support restarting the project
 - Significant component of agency's water supply portfolio
 - Within Metropolitan's maximum commitment

Board Options

Option #1:

- Review and consider the City of Beverly Hill's approved Final Mitigated Negative Declarations and Addendum and take related CEQA actions; and
- Authorize the General Manager to reinstate and amend the existing Groundwater Recovery Program Joint Participation Agreement for Recovery and Utilization of Degraded Groundwater for the Beverly Hills Desalter Project with the City of Beverly Hills for up to 2,600 AFY of advanced treated brackish groundwater under the terms included in this letter; and
- Approve the proposed framework and one time pause and extension of agreement terms.

Option #2:

Do not authorize the reinstatement or amendment to the original agreement for the Project.



Staff Recommendation

Option #1





• Water Surplus and Drought Management Update *Conditions as of 9/27/2021* Summary

This report provides an accounting of water supply, demand, and storage conditions for calendar year (CY) 2021 as of September 27, 2021.

On September 16, 2021, a settlement agreement was signed between Metropolitan and Imperial Irrigation District (IID). Under the settlement agreement, IID can store additional amounts of conserved water in Metropolitan's Lake Mead account. If Lake Mead continues dropping to a level requiring California to make a contribution under the Drought Contingency Plan, IID will help make that contribution. In addition, the settlement resolves a dispute over water that Metropolitan diverted in 2018 through shared storage of water between agencies.

The State Water Project (SWP) supply estimate remains unchanged compared to last month's Water Surplus and Drought Management (WSDM) report. However, updates were made to the Colorado River supply estimate to reflect the higher priority water use adjustment forecast from the United States Bureau of Reclamation (USBR). Through the priority system, water not used by the higher priority water users becomes a supply to Metropolitan. The USBR forecast indicates that the higher priority water users are projected to use less water than their approved water orders, increasing Metropolitan's projected Colorado River supply by 39 thousand acre-feet (TAF). Per the settlement agreement with IID, Metropolitan will establish a subaccount under Metropolitan's Intentionally Created Surplus (ICS) account in Lake Mead and store up to 25 TAF for IID this year. Including the water projected to be stored in the subaccount, Metropolitan is projecting to add to its Lake Mead ICS account in CY 2021.

The CY 2021 supply/demand gap is currently estimated to be 617 TAF, a slight decrease from last month. Although the current demand estimate did increase slightly to 1.80 million acre-feet, the additional supply made available through the Colorado River priority system reduced the supply/demand gap. To satisfy this supply/demand gap, Metropolitan is withdrawing water from its dry-year storage programs and purchasing north of Delta water transfers. To preserve limited SWP supplies, Metropolitan is making operational adjustments to maximize use of Colorado River supplies, implementing the Operational Shift Cost-Offset Program, and developing additional drought actions. To help manage demands, Metropolitan declared a Water Supply Alert on August 17, 2021 to increase drought awareness and call for consumers and businesses to voluntarily reduce their water use.

Purpose

Informational

Attachments

Attachment 1:	Projected 2021 WSDM Storage Detail (5 percent SWP allocation)
Attachment 2:	Agreements to Exchange or Return Stored Water, Potential Magnitude of California's Drought Contingency Plan Contribution, and Cyclic Program Balances

Detailed Report

This Water Surplus and Drought Management (WSDM) report provides an overview of developing hydrologic conditions and estimated water supply and demand conditions for CY 2021.



Upper Colorado River Basin

- Snowpack peaked at 88% of April 1 normal.
- Precipitation measured 24.7 inches or 80% of normal water year to date.
- \approx Runoff into Lake Powell is forecasted to be 33% of average.



Sacramento River Basin

- Snowpack peaked at 72% of April 1 normal.
- Precipitation measured 23.8 inches or 46% of normal water year to date.
- ≈ Sacramento River runoff is forecasted to be 38% of average.





2021 SUPPLY ESTIMATE

CRA Supplies	Acre-Feet
Basic Apportionment	550,000
IID/ MWD Conservation Program	105,000
PVID Fallowing Program	40,000
Exchange w/ SDCWA (IID/Canal Lining)	283,000
Exchange w/ USBR (San Luis Rey Tribe)	16,000
Lower Colorado Water Supply Project	9,000
Bard Seasonal Fallowing Program	6,000
Quechan Diversion Forbearance	6,000
Higher Priority Water Use Adjustment ¹	39,000
Total CRA Supplie	s 1,054,000
¹ Per USBR Forecast (9/27/21) Does not include a	up to 25 TAF of

¹ Per USBR Forecast (9/21/21). Does not include up to 25 TAF of water to be stored in IID's subaccount within Metropolitan's ICS account.



- Monsoon activity brought rainfall which decreased demands for the higher priority water users. Through the priority system, water not used by the higher priority water users becomes a supply to Metropolitan.
- Lake Mead storage is currently at 9.01 MAF (elevation 1067.56 feet).
- The Lower Basin will be in a Level 1 shortage in CY 2022. Supplies to Metropolitan will not be curtailed and Metropolitan will have full access to its ICS in CY 2022.

SWP Supplies	Acre-Feet
Table A (5% SWP allocation)	96,000
Article 21	0
Port Hueneme ¹	0
SWC Buyers Group Transfers ²	6,000
Yuba Accord Dry-Year Purchase Program	2 24,000
Total SWP Supplies	s 126,000
Total Supplies (CRA + SWP)) 1,180,000
(Prior to storage actions))

¹ Rounded to the nearest thousand. Supply is 92.5 AF.

² Current estimates subject to change based on buyer/seller participation and losses.

Staff is aware of two member agency-managed SWP storage programs. Neither are moving water into MWD service area in 2021.



- Storage in Lake Oroville is currently at 788 TAF or 36% of average.
- Staff anticipates the initial SWP allocation for 2022 to be as low as 0%.
- Under a 0% SWP allocation, the Department of Water Resources may provide for, at a minimum, essential human health and safety needs for the SWP Contractors. Metropolitan is assessing its health and safety needs for the SWP only areas for CY 2022.

Current Demand Member Agency Consumptive ¹	Acre-Feet 1,635,000	liveries (TAF)	180 - 160 - 140 - 120 - 100 -	Excludes losse CUP/Cyclic de
Member Agency Replenishment	46,000	De	80 -	1 1 1 1 1 1 1 1 1 1
Coachella Valley Water District Agreement	50,000	Σ	60 -	
Exchange w/ San Luis Rey Tribe	16,000	onth	40 -	
System and Storage Losses	50,000	Ĕ	20 -	
Cyclic Deliveries	0		20	
Total Deman	ds 1,797,000			Jan Feb Mai
¹ Includes exchange w/ SDCWA (IID/Canal Lin CUP sales.	ning) and			

2021 Demand Estimate es, obligations, and liveries





Apr May Jun Jul Aug Sep Oct Nov Dec

MANAGING SUPPLIES AND DEMANDS

Current Trend Demands of 1,797 TAF		
617 TAF Potential WSDM Actions & Additional Imported Supplies	Current Supply Estimate of 1,180 TAF	
	126 TAF SWP	
1,054 TAF CRA	Includes +39 TAF of Higher Priority Water Use Adjustment	
	Current Trend	

200 \

2021 Projected Supply

Dry-Year WSDM Strategies/Actions

The following WSDM actions are being pursued or are underway to satisfy the estimated supply/demand gap and to preserve SWP storage for a potentially low SWP allocation in 2022.

- Withdrawing water from dry-year storage reserves.
- Purchasing north of Delta transfers through the Yuba Accord and the SWC Buyers Group.
- Adjusting system operations to preserve SWP supplies and maximize use of Colorado River or stored supplies. These actions include pumping at the Greg Avenue pump station, drafting water from Diamond Valley Lake to serve Mills Plant, and shifting demand to Colorado River service connections.
- Los Angeles Department of Water and Power and Three Valleys Municipal Water District continue to shift deliveries in September under the Operational Shift Cost-Offset Program.
- Metropolitan, in coordination with member agencies, are evaluating additional drought actions targeted at Metropolitan's SWP only areas. Categories for the drought actions are system and operations, shift timing of deliveries, increase local supplies, increase conservation, and expand WSDM programs.

2021 WSDM Storage Detail

	1/1/2021 Estimated	CY 2021	2021 Total
WSDM Storage	Storage Levels	Take Capacity -	Storage Capacity
Colorado River Aqueduct Delivery System	1,293,000	21,000	1,657,000
Lake Mead ICS	1,293,000 ²	21,000 ³	1,657,000
State Water Project System	1,052,000	499,000	1,879,000
MWD SWP Carryover ⁴	207.000	207 000	250.000
DWCV SWP Carryover ⁴	207,000	207,000	550,000
MWD Articles 14(b) and 12(e)	0	0	N/A
Castaic Lake (DWR Flex Storage)	154,000	154,000	154,000
Lake Perris (DWR Flex Storage)	65,000	65,000	65,000
Arvin Edison Storage Program	142,000	4,000 ⁵	350,000
Semitropic Storage Program	261,000	42,000	350,000
Kern Delta Storage Program	177,000	27,000	250,000
Mojave Storage Program	19,000	0	330,000
AVEK Storage Program	27,000	0	30,000
In-Region Supplies and WSDM Actions	872,000	491,000	1,246,000
Diamond Valley Lake	704,000	447,000	810,000
Lake Mathews and Lake Skinner	127,000	14,000	226,000
Conjunctive Use Programs (CUP) ⁶	41,000	30,000	210,000
Other Programs	694,000	57,000	1,181,000
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	313,000	57,000	800,000
Total	3,911,000	1,068,000	5,963,000
Emergency	750,000	0	750,000
Total WSDM Storage (AF) 7	3,161,000	1,068,000	5,213,000

¹ Take capacity assumed under a 5 percent SWP Table A Allocation. Storage program losses included where applicable.

² Reflects USBR's final accounting for 2020, released in May 2021.

³ Take capacity based on planned maintenance activities and current CRA supply estimate.

⁴ Total storage capacity varies year to year based on prior year remaining balance added to current year contractual limits.

⁵ Take amounts dependent on exchange capabilities. Began receiving exchange of surface water supplies in August.

⁶ Total of all CUP programs including IEUA/TVMWD (Chino Basin); Long Beach (Central Basin); Long Beach (Lakewood); Foothill (Raymond and Monk Hill); MWDOC (Orange County Basin); Three Valleys (Live Oak); Three Valleys (Upper Claremont); and Western.

⁷ Total WSDM Storage level subject to change based on accounting adjustments.

Agreements to Exchange or Return Stored Water

	Future
	Returns ¹
California ICS Agreement – IID ²	243,000
Storage and Interstate Release Agreement with Southern Nevada Water Authority ³	330,000
Total (AF)	573,000 ⁴

¹ Rounded to the nearest thousand.

² Increased by 79,000 AF due to the September 16, 2021 IID/MWD Settlement Agreement. IID can request return in any year, conditional on whether or not Metropolitan is implementing a Water Supply Allocation Plan.

³ Up to 30,000 AF per year beginning no earlier than 2022.

⁴ Subject to change based on accounting adjustments.

Potential Magnitude of California's Drought Contingency Plan Contribution

	2022	2023	2024	2025	2026
Likelihood of Required California Drought Contingency Plan Contribution ¹	0%	6%	64%	71%	72%
Average Metropolitan DCP Contribution When Contributions Are Required (AF)	0	180,000	264,000	286,000	303,000

¹ Results from USBR's August 2021 Colorado River Simulation System (CRSS) model run which resamples the 1988-2019 natural flow record. Study assumes no drought response activities; any new water added to Lake Mead would reduce the probabilities in the table.

Cyclic Program Activity

	Starting	CY Actions (AF)				
CY	Balance	Cyclic	Cyclic Cost-Offset	Total	Sale Out of	Balance
	(AF)	Pre-Delivery	Pre-Delivery	Pre-Delivery	Cyclic	(AF)
2019	50,000	147,000	19,000	166,000	91,000	125,000
2020	125,000	2,000	0	2,000	50,000	77,000
2021 ¹	77,000	0	0	0	32,000	45,000

¹ Projected Cyclic program activity for the year. Subject to change.



Update on Water Surplus and Drought Management

Water Planning and Stewardship Committee Item 6a October 11, 2021
Outline

- Water Year 2020/21 Recap
- 2021 Supply/Demand Balance and 2022 Outlook
- Coordination with DWR on Health and Safety Needs
- Preparing for 2022

Water Year 2020/21 Recap

How dry was it this past year?



Record low precipitation

WP&S Committee

Highly variable snowpack in both imported watersheds

Northern Sierra



Upper Colorado River Basin



WP&S Committee

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How hot was it this past year?



Record warm temperatures

WP&S Committee

Unprecedented warming trend since the turn of the century





Predominately below average runoff as a result of both dry and progressively hotter conditions

Sacramento River Runoff







WP&S Committee

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2021 Supply/Demand Balance and 2022 Outlook

Colorado River WSDM accounting adjustments

Higher Priority Water Use

- A portion of supply not used by higher priority water users becomes a supply to Metropolitan
- Reclamation estimates 64 TAF of additional supply to Metropolitan
- More certainty with higher priority water usage as the year develops

IID Settlement Agreement

- Resolves a dispute over water that Metropolitan diverted in 2018 through shared storage of water between agencies
- IID may store an additional 25 TAF of conserved water in MWD's Lake Mead Account
- IID helps satisfy California's DCP contribution if Lake Mead continues to drop

Colorado River WSDM accounting adjustments

Higher Priority Water Use IID Settlement Agreement Resolves a dispute over water that A portion of sy ted in 2018 higher priority age of water becomes a su Net increase of 39 TAF to Metropolitan Reclamation e litional 25 TAF • **Colorado River Supply** additional sur n MWD's Lake More certainty • water usage as the year develops IID helps satisfy California's DCP contribution if Lake Mead continues to drop



WP&S Committee

Supply/demand gap to be satisfied with storage End of Year Balances



* Estimate – May change based on supply/demand conditions

2021 Supply/Demand Balance for SWP Only Area



WP&S Committee

Storage in SWP accounts is being utilized



WP&S Committee

Storage in SWP accounts is being utilized



WP&S Committee

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772

Coordination with DWR on Health and Safety Needs

DWR is signaling and planning for a dry 2022

- DWR expects to announce a 0% initial allocation by December 1st
- Planning for the worst case (a third consecutive dry year) with offramps if conditions improve
- Planning objectives include:
 - Conserve storage to meet future critical needs
 - Focus on maintaining water quality in the Delta
 - Provide for minimum health and safety needs
- No Table A allocation expected at least through January
- Mandatory water use restrictions possible

Metropolitan has assessed its health and safety needs for the "SWP Only" areas



WP&S Committee

DWR's heath and safety needs request

- Article 18 (a) stipulates that if required, DWR may allocate SWP supplies on the basis of meeting minimum demands of contractors domestic, fire protection, or sanitation water needs during the year.
- Metropolitan's interpretation of this minimum demand includes the following components:



Critical Needs



Preparing for 2022

Fall 2021 Precipitation Outlook



Fall 2021 Temperature Outlook



Potential actions for consumers to reduce non-critical water use

- Restrict landscape watering days
- Prohibit irrigation within 48 hours after rain event
- Prohibit car washing
- Restaurants to only serve water upon request
- Lodging establishment to offer opt out of linen service

Summary

Below normal snowpack, hot and dry conditions, and extremely low runoff for both imported supply watersheds in water year 2020/21

DWR is signaling and planning for a dry 2022

- Metropolitan completes its health and safety needs assessment for the SWP only areas
- Metropolitan has been planning for a 0% initial SWP allocation
- Metropolitan is prepared to make calls for additional steps to save water should dry conditions continue through the fall





Overview of Metropolitan's Water Supply Allocation Plan Water Planning and Stewardship Committee Item 6b October 11, 2021

Overview

- Background and Purpose
- History and Development
- Next Steps

Background and Purpose



WSDM Plan Guiding Principle

"Metropolitan will encourage storage of water during periods of surplus and <u>work jointly with its Member Agencies to minimize the</u> <u>impacts of water shortages on the region's retail consumers and</u> <u>economy during periods of shortage</u>"

> Recognize Imported Water Need

Recognize Resource Development Limit Regional Economic Impact

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Water Supply Allocation Plan (WSAP)

- Adopted in 2008; provides an approach for allocating available supplies to Member Agencies in times of water shortages
- Needs-based approach maintaining equity among Member Agencies and minimizing impacts on region

Accounts for

- Relative dependence on MWD
- Population and economic growth
- Local supply investments
- Changes in local supplies
- Demand hardening from recycled water use and conservation

State Law Allows Conservation Response

- Water Code § 350 et seq. (1953)
 - Grants wide discretion to address water shortage emergencies
 - Allows regulations to conserve supplies for "greatest public benefit"
 - Regulations prevail over other laws during period of emergency
- Water Code § 375 et seq. (1977)
 - Authorizes implementation of water conservation programs "notwithstanding any other law"
 - Can encourage water conservation through rate structure design
 - Allows enforcement of use limitations through volumetric penalties

788

Key Takeaways: WSAP and Preferential Rights

- Staff briefed Water Planning & Stewardship Committee on preferential rights in August 2021
 - Each agency maintains a preferential right to water
 - Preferential rights not preempted by WSAP
 - Agencies subject to rate surcharge, but not delivery shutoff
 - WSAP aligns with conservation provisions in California Water Code

WSAP Implementation is a WSDM Shortage Action

WSDM Resource Stages and Actions Matrix

790

	Figure 8. Resource Stages and Actions Matrix						
			Shortage Stages				
		Surplus 5 4 3 2	1 Actions	Shortage	Severe Shortage 5 6	Extreme Shortage 7	
			Make Cyclic Deliveries Fill Semitropic, Arvin-Edison Store supplies in SWP Carryover Fill Contractual GW Fill Monterey Res. Fill Eastside				
W	SAP Shortage Leve		Take from Eastside Take from Semitropic, Arvin-Ed. Cut LTS and Repien. Deliveries Take from Contractual GW Take from Monterey Res. Call for Extraordinary Conservation Reduce IAWP Deliveries Call Options Contracts				
Table 1: Shortage Allocation Index			Buy Spot Water				
			Potential Simultaneous Actions				
(a)	(b)	(c)					
Regional Shortage	Wholesale Minimum	Maximum Retail Impact			V	vater	Supply Conditions Framework
Level	Percentage				BASEL	INE	Oppoing conservation, recycling, and outreach
1	92.5%	2.5%		Wat	tor Lico F	fficienc	to build storage
2	85.0%	5.0%			ter ose E	ancienc	V to party storage
3	77.5%	7.5%			CONDITI	<u>ON 1</u>	Local agency voluntary dry-year
4	70.0%	10.0%		Wat	ter Supp	lv Watcl	conservation measures and <u>use</u> of regional
5	62.5%	12.5%				2	storage reserves
6	55.0%	15.0%			CONDITI	<u>ON 2</u>	Regional call for conservation through drought
7	47.5%	17.5%		Wa	iter Supp	ly Alert	ordinances and other measures to mitigate use
8	40.0%	20.0%					Implement Water Curphy Allocation Dians
9	32.5%	22.5%		8	CONDITI	ON 3	The supply Allocation Plan:
10	05.00/	25.0%		🔍 🔰 Wate	er Supply	Allocatio	Level: 1 2 3 4 5 6 7 8 9 10 73

History and Development



WSAP Development and History


Historical Metropolitan Storage Balances End of Year Balances



WSAP Implementation Timeline



WSAP Implementation in 2009/10

- Level 2 Allocation, effective July 1, 2009 to June 30, 2010
- WSAP Baseline Allocation:
- WSAP Level 2 Allocation:
- Actual Member Agency purchases

2.2 MAF 1.9 MAF 1.8 MAF

- 400 TAF under Baseline, an 18% reduction in use
- 100 TAF of additional reduction from Level 2 Allocation
- No member agency exceeded its allocation no penalties or surcharges were applied

Next Steps



Potential Policy Questions and Next Steps

- Does the current WSAP approach meet the needs of the member agencies during times of shortage?
- Does the current WSAP approach need to be revised and/or updated?
- Potential topics for updating the current WSAP:
 - Base Period and Adjustments
 - Conservation Savings Estimate
 - Minimum Per Capita Water Use Credit
 - Allocation Surcharge





THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Office of the General Manager

• Colorado River Management Report

Summary

This report provides a summary of activities related to management of Metropolitan's Colorado River resources for the month of September 2021.

Purpose

Informational

Detailed Report

Colorado River Basin States Coordination Update

The 2007 Interim Guidelines for operation and management of the Colorado River expire at the end of 2025, and in anticipation of the development of new operating rules, representatives of the Colorado River Basin States (Basin States) have started to meet regularly to coordinate in advance of formal reconsultation on the guidelines, a process that will begin when the U.S. Department of the Interior starts the National Environmental Policy Act process necessary for adoption of new guidelines. In advance of the next set of negotiations, the Basin States have been working on a sensitivity analysis that is intended to evaluate how various parameters are effected by incremental changes, especially with the projections of reduced runoff into the Colorado River and lower reservoir elevations at Lake Powell and Lake Mead.

Representatives of the Upper and Lower Basins are also coordinating separately to work on issues in each Basin's Drought Contingency Plan that have been triggered by elevation declines in Lake Powell and Lake Mead. In the Lower Basin, Metropolitan is engaged in the discussions regarding possible Lower Basin response to the 24-Month Study showing that Lake Mead will decline to an elevation of 1,030 feet in the minimum probable scenario. The Lower Basin Drought Contingency Plan includes a provision that requires the Lower Division States (Arizona, California and Nevada) and the Department of the Interior to consult when this occurs to discuss actions that will be taken by the Secretary and Lower Division States to prevent Lake Mead from declining below 1,020 feet. The Governor's representatives from the Lower Division States have set up four Workgroups to develop approaches to accomplish this goal and have been given until early December to develop approaches that could be implemented in 2022. Metropolitan staff is participating in each of these Workgroups and will provide updates to the Committee as the action plan develops.

Metropolitan's Colorado River Water Order for 2022

On September 15, Metropolitan submitted its Colorado River Diversion Estimate and Part 417 Consultation Questionnaire (Water Order) to Reclamation for calendar year 2022. Submitting the Water Order helps ensure Metropolitan's ability to fully access available Colorado River supplies. Metropolitan's 2022 Water Order estimates a total Colorado River water supply of 998,700 acre feet (AF), with a minimum diversion of 601,300 AF and a maximum creation of 400,000 AF of Extraordinary Conservation Intentionally Created Surplus. The Water Order reflects the 50,800 AF of water that will be generated through the Palo Verde Irrigation District/Metropolitan Forbearance and Fallowing Program and left in Lake Mead as system conservation water.

Metropolitan and Imperial Irrigation District (IID) Execute Settlement Agreement

Following Metropolitan's September Board authorization, on September 16 Metropolitan and IID executed an agreement to settle two lawsuits that had been filed by IID related to Metropolitan's approval of the Colorado River Drought Contingency Plan. Per the terms of the agreement, IID will dismiss both of those lawsuits, and following their dismissal, IID has indicated that it intends to request Metropolitan to store 25,000 acre-feet of water that it conserved this year in a sub-account to Metropolitan's Intentionally Created Surplus Account in Lake Mead.



Water Resource Management Manager's Report Water Planning and Stewardship Committee Item 7b October 11, 2021

Conservation Expenditures FY 20/21-21/22⁽¹⁾

	Paid ⁽²⁾	Committed ⁽³⁾
Regional Devices	\$5.0M	\$4.2M
Member Agency Administered	\$1.7M	\$9.2M
Turf Replacement	\$9.9M	\$8.3M
Advertising	\$0.1M	\$1.0M
Other	\$1.9M	\$1.1M
TOTAL	\$18.6M	\$23.8M

(1) The Conservation Program biennial expenditure authorization was \$86M and expected expenditures were \$50M.

(2) As of 7/1/2020 -8/31/2021.

(3) Committed dollars as of September 10, 2021.



Drought Relief Grant Program Comments

- Budget Trailer Bill allocated \$300 million to DWR for interim & immediate drought relief
 - Agencies could apply for funding to support conservation activities
 - Draft solicitation package did not clearly identify demand management as eligible
 - Comments coordinated with Member Agencies and sent on Oct. 8

2021 Urban and Multibenefit Drought Relief Grant Program Guidelines and Proposal Solicitation Package

> Public Review Draft September 2021

Future Supply Actions Webinar: Brackish Water Treatment

- Held on October 7
- Manganese pre-treatment and groundwater modeling





BRACKISH GROUNDWATER **DESIGN STUD** OLIVENHAL ter Study uito Groundwater Study, ient of Water Resources r nistligture Supp Actions Proaram Webinar Series Learn about the innovative ways Olivenhain Municipal Water District and San Diego County Water Authority are advancing the San Dieguito Valley Brackish Groundwater Desalination Design Pilot. Hear from pilot study partners as they work to verify the field testing of manganese pre-treatment to

> recalibrate their groundwater basin model. Results, findings, and lessons learned will be discussed.

reparing for tomorrow, TODAY



San Diego County

Thursday, October 7, 10:00 a.m. Register in advance for this webinar



Association of Women in Water, Energy & Environment

- Water Resource Management's Krista Guerrero featured as guest speaker as part of "Our Thirsty State" series
- More than 280 attended virtual event
 - Conservation strategies
 - Innovation
 - Common myths & misconceptions







