San Gorgonio Pass Water Agency

DATE: October 7, 2024

TO: Board of Directors

FROM: Lance Eckhart, General Manager

BY: Emmett Campbell, Senior Water Resources Planner; and
Autumn Dewoody (Albert A. Webb Associates) Senior Environmental Analyst

SUBJECT: Approve Resolution 2024-11: Approving and Adopting the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the County Line Road Recharge Basin and Turnout Project and Approving the Project

RECOMMENDATION

Approve Resolution 2024-11 which includes the following:

1. Adoption of the Initial Study/Mitigated Negative Declaration and Approval of the County Line Road Recharge Basin and Turnout Project; and

2. Adoption of the Mitigation Monitoring and Reporting Program; and

3. Authorize Agency staff to file a Notice of Determination with the Riverside County Clerk Recorder, San Bernardino County Clerk, and the State Clearinghouse

PREVIOUS CONSIDERATION

- No Previous Considerations

BACKGROUND

As State Water Project Contractors and member agencies of the Yucaipa Sustainable Groundwater Management Agency (Yucaipa SGMA), San Gorgonio Pass Water Agency (Pass Agency) and San Bernardino Valley Municipal Water District (Valley District) have identified the County Line Road Recharge Basin and Turnout Project ("Project") as a proactive management action to implement the goals of Yucaipa SGMA by increasing groundwater recharge in the Yucaipa Subbasin (DWR Basin No. 8-002.07).

Valley District will lead the development of a SWP water turnout to convey SWP water to the Calimesa Management Area in the Yucaipa Subbasin. The turnout will be located on an existing 16-inch turnout nozzle located on the California Department of Water Resources (DWR) 54-inch diameter East Branch Extension (EBX) pipeline at the intersection of Bryant Street and County Line Road in the City of Calimesa. The flow would then tie into an existing 14-inch non-potable waterline in County Line Road for a

distance of approximately 5,300 linear feet, then to a proposed 14-inch non-potable waterline for approximately 1,072 linear feet in Fourth Street and will ultimately be conveyed, by gravity, to a proposed recharge basin located on Fourth Street between County Line Road and Avenue L in the City of Calimesa.

SGPWA will lead construction of the recharge basin and associated structures that will result in a basin with an approximate capacity of 14.1 acre-feet (AF) of storage and 2.7 acres of infiltrating surface area at the proposed 6-foot operating depth providing an estimated recharge of 1,470 AF per year based on an assumed infiltration rate of 1.5 feet per day. An elevation control basin will be constructed next to the recharge basin as an emergency overflow basin. The Project also includes relocating an existing 8-inch diameter potable water pipeline owned by South Mesa Water Company that crosses the proposed recharge basin property as well as road improvements on Buena Vista Court. A scientific groundwater monitoring well may be installed on the recharge basin property. Construction will also include a land division of the existing parcel, and onsite and offsite frontage improvements. The pipeline in Fourth Street will cross underneath the Calimesa Creek Channel.

CEQA ANALYSIS

Albert A. Webb Associates (WEBB) prepared an Initial Study/Mitigated Negative Declaration (IS/MND) pursuant to the California Environmental Quality Act (CEQA) for the Project on behalf of SGPWA, the Lead Agency for this Project. After staff reviewed and commented on the document, it was circulated for public review for 30 days beginning August 7, 2024 to September 5, 2024. A Notice of Intent to Adopt the IS/MND containing a link to download the IS/MND was sent to interested parties, Responsible Agencies, Trustee Agencies, Riverside County Clerk, and San Bernardino County Clerk pursuant to Section 15073 of the State CEQA Guidelines. A total of 29 notices were mailed via FedEx and U.S. Postal Service. The IS/MND was also submitted to the State Clearinghouse for the 30-day review period commencing on August 7, 2024. Additionally, the notice was published in The Press Enterprise newspaper on August 7, 2024 and in the Record Gazette newspaper on August 9, 2024.

Timely comments were received from Cahuilla Band of Indians (two letters), Riverside County Flood Control & Water Conservation District, and State Water Resources Control Board Division of Financial Assistance. An additional comment was received after the close of the public review period from the Morongo Band of Mission of Indians. Copies of the comments received and responses to those comments from the SGPWA are included in the Responses to Comment section of the Final IS/MND document for consideration by the Board of Directors. One additional comment from the Agua Caliente Band of Cahuilla Indians (ACBCI) was received after the public review period on October 2, 2024 – as this comment was received near the publication of the Agenda, the response was not included in the “Response to Comments.” The comment requested that SGPWA include the ACBCI in the AB52 and SB18 notification list moving forward. ACBCI is also requesting to receive a copy of the Treatment Plan outlined in MMRP. The Agency will oblige once the Treatment Plan is available. The

letter does not change any of the significance determinations in the MND and it does not raise a new environmental issue.

Based on review of the comments received, no new, unavoidable significant environmental effects were identified and therefore, pursuant to Section 15073.5 of the State CEQA Guidelines, recirculation of the environmental documents for this Project is not required.

Section 15074 of the State CEQA Guidelines requires the SGPWA Board of Directors to consider the proposed IS/MND together with any comments received during the public review process. With the Board's approval today, a Notice of Determination will be filed with the Riverside County Clerk-Recorder, San Bernardino County Clerk, and the State Clearinghouse within five days of Project approval, which begins a 30-day statute of limitations for legal challenges on the Project.

The Initial Study and Mitigated Negative Declaration, along with the Appendices, Response to Comments, and the Mitigation Monitoring and Reporting Program, can be found on our website at:

https://www.sgpwa.com/meeting-listing/regular-board-meeting-10-07-2024/

FISCAL IMPACT

- No impact.

ACTION

Approve Resolution 2024-11, which includes the following:

1. Adoption of the Initial Study/Mitigated Negative Declaration and Approval of the County Line Road Recharge Basin and Turnout Project; and

2. Adoption of the Mitigation Monitoring and Reporting Program; and

3. Authorize Agency staff to file a Notice of Determination with the Riverside County Clerk-Recorder, San Bernardino County Clerk, and the State Clearinghouse

ATTACHMENTS

1. Resolution 2024-11: Approving and Adopting the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the County Line Road Recharge Basin and Turnout Project and Approving the Project

    - Exhibit A: Final Initial Study/Mitigated Negative Declaration (CEQA and CEQA-PLUS), Responses to Comments Regarding the Initial Study/Mitigated Negative Declaration, and Mitigation Monitoring and Reporting Program

RESOLUTION NO. 2024-11

RESOLUTION OF THE BOARD OF DIRECTORS OF SAN GORGONIO PASS WATER AGENCY APPROVING AND ADOPTING THE MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM FOR THE COUNTY LINE ROAD RECHARGE BASIN AND TURNOUT PROJECT AND APPROVING THE PROJECT

WHEREAS, the San Gorgonio Pass Water Agency ("SGPWA" or "Agency") is a member agency of the Yucaipa Sustainable Groundwater Management Agency ("Yucaipa SGMA") that has identified projects and management actions to increase groundwater replenishment in certain groundwater basins; and

WHEREAS, the East Branch Extension ("EBX") of the California Department of Water Resources' (DWRs') State Water Project passes through the SGPWA service area in the City of Calimesa within Bryant Street as a buried pipeline carrying State Water Project water; and

WHEREAS, SGPWA and San Bernardino Valley Municipal Water District ("SBVMWD") have contracts with DWR for delivery of imported water supplies from the State Water Project; and

WHEREAS, SBVMWD is also a member of Yucaipa SGMA and is pursuing a turnout agreement with DWR to install a turnout pipeline on the EBX at the southwest corner of Bryant Street and County Line Road in Calimesa on the border with San Bernardino County; and

WHEREAS, SGPWA owns property on Fourth Street in Calimesa at Assessor's Parcel Number 411-150-027 for the purpose of developing a groundwater recharge basin as part of its commitment to the goals of Yucaipa SGMA; and

WHEREAS, pursuant to the California Public Resources Code section 21067 and the State CEQA Guidelines (Cal. Code Regs, tit. 14 § 1500 et seq.) section 15051, SGPWA is the lead agency for purposes of the Project; and

WHEREAS, SGPWA reviewed the Project and prepared an Initial Study pursuant to State CEQA Guidelines section 15063; and

WHEREAS, after completion of an Initial Study consisting of an environmental checklist form, which concluded that the Project would have potentially significant impacts but that those impacts could be reduced to less than significant levels with implementation of the proposed mitigation measures, the General Manager determined that the Project required a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program pursuant to Public Resources Code sections 21064.5 and 21080, subdivision (c), and the State CEQA Guidelines section 15070 et seq.; and

WHEREAS, on August 7, 2024, using the method required under CEQA Guidelines Section 15072(b), SGPWA provided a Notice of Intent (NOI) to adopt the proposed Initial Study/Mitigated Negative Declaration to the State Clearinghouse, Riverside County Clerk, San Bernardino County Clerk, various agencies and interested parties, and also published said NOI in

the Press-Enterprise on August 7, 2024 and Record Gazette on August 9, 2024, both local general circulation newspapers, regarding the 30-day public review period; and

WHEREAS, the Agency made the proposed Initial Study/Mitigated Negative Declaration available for public review beginning on August 7, 2024, and concluding on September 5, 2024, a period of not less than 30 days as prescribed by law, and which during said public review period, the Agency received four comment letters concerning the proposed Initial Study/Mitigated Negative Declaration and one comment letter after the close of the public review period; and

WHEREAS, pursuant to Public Resources Code section 21081.6 and State CEQA Guidelines section 15074(d), SGPWA has prepared a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects (the "Mitigation Monitoring and Reporting Program"); and

WHEREAS, as contained herein, SGPWA has endeavored in good faith to set forth the basis for its decision on the Project; and

WHEREAS, SGPWA has endeavored to take all steps and impose all conditions necessary to ensure that impacts to the environment would not be significant; and

WHEREAS, all of the findings and conclusions made by SGPWA pursuant to this Resolution are based upon the oral and written evidence before it as a whole; and

WHEREAS, the SGPWA Board of Directors conducted a duly noticed public meeting on October 7, 2024, at the Agency's Board Room, at which public testimony was received concerning the Project, and at which time the Board considered the Project; and

WHEREAS, the Project and the Initial Study/Mitigated Negative Declaration, Response to Comments, and Mitigation Monitoring and Reporting Program have been presented to the Board, attached hereto as Exhibit "A" and made a part thereof, and the Board has carefully reviewed these documents and all of the information contained in the record for the Project; and

WHEREAS, the Project was prepared pursuant to CEQA, and the State CEQA Guidelines; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED BY THE BOARD OF DIRECTORS OF SAN GORGONIO PASS WATER AGENCY AS FOLLOWS:

Section 1. The above recitals are incorporated herein by reference.

Section 2. Environmental Findings. The Board, in light of the whole record before it, including but not limited to the State CEQA Guidelines, the proposed Initial Study/Mitigated Negative Declaration and documents incorporated therein by reference, any written comments received and responses provided, the proposed Mitigation Monitoring and Reporting Program and other substantial evidence (within the meaning of Public Resources Code Sections 21080(e) and

21082.2) within the record and/or provided at the public meeting, hereby finds and determines as follows:

Review Period: That the Agency has provided the public review period for the Initial Study/Mitigated Negative Declaration for the duration required under CEQA Guidelines Sections 15073 and 15105.

Compliance with Law: That the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program were prepared, processed, and noticed in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.) and the Agency's Local CEQA Guidelines.

Independent Judgment: That the Initial Study/Mitigated Negative Declaration reflect the independent judgment and analysis of the Agency.

Mitigation Monitoring Program: That the Mitigation Monitoring and Reporting Program is designed to ensure compliance during Project implementation in that mitigation measures have been incorporated into the Project and are fully enforceable through permit conditions, agreements, or other measures as required by Public Resources Code Section 21081.6.

No Significant Effect: That mitigation measures imposed as conditions of approval on the Project, avoid or mitigate any potential significant effects on the environment identified in the Initial Study to a point below the threshold of significance. Furthermore, after taking into consideration the mitigation measures imposed, the Agency finds that there is no substantial evidence, in light of the whole record, from which it could be fairly argued that the Project may have a significant effect on the environment. Therefore, the Agency finds that the Project will not have a significant effect on the environment.

Section 3. Adoption of the Initial Study/Mitigated Negative Declaration and Approval of the Project. The Board of Directors hereby approves and adopts Initial Study/Mitigated Negative Declaration prepared for the County Line Road Recharge Basin and Turnout Project and approves the Project.

Section 4. Adoption of the Mitigation Monitoring and Reporting Program. The Board hereby approves and adopts the Mitigation Monitoring and Reporting Program for the Project, attached hereto as Exhibit "A."

Section 5. Notice of Determination. The Board directs Agency staff to prepare, execute, and file a Notice of Determination with the Riverside County Clerk, San Bernardino County Clerk, and State Office of Planning and Research State Clearinghouse within five (5) working days of the passage and adoption of this Resolution.

Section 6. Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at 1210 Beaumont Avenue, Beaumont, CA 92223. The custodian of these records is Kevin Walton, Board Secretary.

Section 7. Effective Date. This resolution shall take effect immediately upon its adoption.

ADOPTED this 7th day of October 2024.

_____
Mickey Valdivia, President
San Gorgonio Pass Water Agency

ATTEST:

_____
Kevin Walton, Secretary
San Gorgonio Pass Water Agency

CERTIFICATION

I, Kevin Walton, Secretary of the Board of Directors of San Gorgonio Pass Water Agency, certify that the foregoing resolution was regularly adopted by the Board of Directors of said Agency at a regular meeting held on the 7th day of October, 2024, by the following vote of the Directors:

AYES: Directors

NOES: Director(s)

ABSENT: Director(s)

ABSTAIN: Director(s)

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of San Gorgonio Pass Water Agency, this 7th day of October, 2024.

_____

Kevin Walton
Secretary of the Board of Directors

EXHIBIT A

FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (CEQA AND CEQA-PLUS)

RESPONSES TO COMMENTS REGARDING THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

MITIGATION MONITORING AND REPORTING PROGRAM

-

ALBERT A. WEBB ASSOCIATES

Final Initial Study / Mitigated Negative Declaration

County Line Road Recharge Basin and Turnout Project

State Clearinghouse No. 2024080294

Prepared for:

SAN GORGONIO PASS WATER AGENCY

Established 1961

www.webbassociates.com

October 7, 2024

W.O. 2023-0136

Introduction

This document contains the following three items for the County Line Road Recharge Basin and Turnout Project:

1. **Final Initial Study/Mitigated Negative Declaration** (IS/MND), which shows text added as a result of comments received during the public comment period for the IS/MND with double underscoring as follows: example text. Deleted text is shown with strikethrough as follows: ~~example text~~.

2. **Responses to Comments**, which contains copies of the comments received during the public comment period and responses to those comments from the CEQA Lead Agency, San Gorgonio Pass Water Agency (SGPWA). Section 15074 of the State *CEQA Guidelines* requires the SGPWA Board of Directors to consider the proposed IS/MND together with any comments received during the public review process. The Responses to Comments have been prepared to provide the SGPWA Board of Directors with additional information upon which to base their decision to adopt the IS/MND.

3. **Mitigation Monitoring and Reporting Program** (MMRP), which has been compiled to verify implementation of adopted mitigation measures as required by State *CEQA Guidelines* section 15097.

I. Final Initial Study/Mitigated Negative Declaration

Text added as a result of comments received for the IS/MND during the public comment period (see Section II) has double underscoring as follows: example text. Deleted text is shown with strikethrough as follows: ~~example text~~.

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

FOR

County Line Road Recharge Basin and Turnout Project

Prepared for:

San Gorgonio Pass Water Agency
1210 Beaumont Avenue
Beaumont, CA 92223
(951) 845-2577

Prepared by:

Albert A. Webb Associates
3788 McCray Street
Riverside, CA 92506
(951) 686-1070

October 7, 2024

W.O. 2023-0136

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Appendices

Figures

Tables

ACRONYMS

AB 52	Assembly Bill 52
AQ	Air Quality
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
AWWA	American Water Works Association
BAR	Biological Assessment Report
BMP	Best Management Practices
BSA	Biological Study Area
CCR	California Code of Regulations
CDFW	California Department of Fish & Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGP	Calimesa General Plan
CH_4	Methane
CLTC	County Line Transportation Corridor
CMC	Calimesa Municipal Code
CMA	Calimesa Management Area
CNPS	California Native Plant Society
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2E	Carbon dioxide equivalent
CRHR	California Register of Historical Resources
DOC	Department of Conservation
DTSC	Department of Toxic Substance Control
DWR	Department of Water Resources
EBX	East Branch Extension
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GMA	Groundwater Management Agency
GP	General Plan
GSP	Groundwater Sustainability Plan
gpm	Gallons per minute
IRWMP	Integrated Regional Water Management Plan
IS	Initial Study
LF	Linear Feet
LRA	Local Responsibility Area
LRZ	Local Responsibility Zone
LST	Localized significance threshold
MM	Mitigation measure
MND	Mitigated Negative Declaration
MRF	Materials Recovery Facility

MSHCP	Multiple Species Habitat Conservation Plan
$MTCO_2E$/year	Metric tonnes per year of carbon dioxide equivalents
NAHC	Native American Heritage Commission
N_2O	Nitrous oxide
NO_2	Nitrogen dioxide
NO_X	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PCC	Portland cement-concrete
PM-2.5	Particulate matter less than 2.5 microns in diameter
PM-10	Particulate matter 2.5 to 10 microns in diameter
PRC	Public Resources Code
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RCA	Riverside Conservation Authority
ROW	Right-of-way
RWQCB	Regional Water Quality Control Board
SAWPA	Santa Ana Watershed Project Authority
SBVMWD	San Bernardino Valley Municipal Water District (San Bernardino Valley)
SCAQMD	South Coast Air Quality Management District
SGPWA	San Gorgonio Pass Water Agency
SLF	Sacred Lands File
SMWC	South Mesa Water Company
SO_2	Sulfur dioxide
SRA	State Responsibility Area
SRZ	State Responsibility Zone
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USACE	Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VMT	Vehicles miles traveled
VOC	Volatile organic compounds
WEAP	Worker Environmental Awareness Program
Yucaipa SGMA	Yucaipa Sustainable Groundwater Management Agency

I. INTRODUCTION

This document has been prepared pursuant to the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 et seq.), the *CEQA Guidelines* (California Code of Regulations Sections 15000 et seq.). San Gorgonio Pass Water Agency is the lead agency and the California Department of Water Resources (DWR), City of Calimesa, and San Bernardino Valley Municipal Water District (San Bernardino Valley) are the responsible agencies for CEQA purposes.

Section 15063(c) of the State *CEQA Guidelines* lists the following purposes of an Initial Study (IS):

1. *Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a negative declaration;*
2. *Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;*
3. *Assist in the preparation of an EIR, if one is required;*
4. *Facilitate environmental assessment early in the design of a project;*
5. *Provide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment;*
6. *Eliminate unnecessary EIRs; and*
7. *Determine whether a previously prepared EIR could be used with the project.*

According to Section 15070 (Decision to prepare a Negative Declaration or Mitigated Negative Declaration [MND]) of Article 6 (Negative Declaration Process) of the *CEQA Guidelines*:

> *A public agency shall prepare or have prepared a proposed negative or mitigated negative declaration for a project subject to CEQA when:*
>
> *a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
>
> *b) The initial study identified potentially significant effects, but:*
>
> *1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
>
> *2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to assess at a project level, the potential for any significant environmental effects and impacts resulting from the construction and operation associated with the adoption of the County Line Road Recharge Basin and Turnout Project ("Project").

This IS/MND is organized as follows:

1. Introduction, which provides the context for review along with applicable citation pursuant to CEQA and the State CEQA Guidelines and discusses the purpose and need for the project.
2. Project Description describes the proposed project.
3. Environmental Checklist Form, which as suggested in Section 15063(d)(3) of the State CEQA Guidelines provides an environmental impact assessment consisting of the environmental checklist from Appendix G of the State CEQA Guidelines and accompanying analyses for responding to the checklist questions. The Form is used to evaluate whether or not there are any significant environmental effects associated with implementation of the proposed Project.
4. CEQA-Plus Federal Cross-Cutters Analysis (CEQA-Plus), addresses the requirements of CEQA-Plus and provides project analysis for environmental review and federal coordination.
5. References, which includes a list of reference sources, the location of reference material used in the preparation of this IS/MND and CEQA-Plus document and identifies those responsible for preparation of the IS/MND and other parties contacted during the preparation of the IS/MND.

II. PROJECT DESCRIPTION

This Initial Study analyzes the County Line Road Recharge Basin and Turnout Project (the Project). This Initial Study analyzes the construction and operation of the Project at a project-level. Because this Initial Study evaluates construction and operation of the Project at a project-level, subsequent CEQA review is not required prior to construction of the facilities.

Purpose and Need

The Project is a collaborative effort between the San Gorgonio Pass Water Agency (SGPWA) and San Bernardino Valley, both of which are State Water Contractors to provide imported water to disadvantaged communities located within the Cities of Calimesa and Yucaipa, and the severely disadvantaged communities served by a small mutual water company in Calimesa called South Mesa Water Company (SMWC). The Project consists of new water conveyance pipelines, a new groundwater recharge basin to benefit the Calimesa Management Area (CMA) of the Yucaipa Groundwater Subbasin using State Water Project water, and a new connection on the East Branch Extension (EBX) pipeline. Part of this Project, specifically the repurposed pipeline has previously been evaluated in the County Line Transportation Corridor (CLTC) Addendum to IS/MND, adopted in August 2022, included as **Appendix G** of this IS/MND, herein incorporated by reference as CLTC Addendum.

The Project is consistent with and supported by the Yucaipa Sustainable Groundwater Management Agency (Yucaipa SGMA) and its Yucaipa Subbasin Groundwater Sustainability Plan (GSP), which was approved by DWR as of January 18, 2024. The purpose of the GSP is to prevent undesirable results and increase groundwater replenishment to the Yucaipa Subbasin. This Project will help prevent a net decline of groundwater levels by facilitating recharge of imported State Water Project water supplies when they are available to an area that previously did not have access to such supply. As a result of this Project, San Bernardino Valley and SGPWA as member agencies of the Yucaipa SGMA, will have infrastructure to store water and provide a reliable source of water during drought emergencies, leaving the communities of Calimesa and Yucaipa less vulnerable to drought restrictions and the groundwater basin at less risk of future groundwater level declines as climate change progresses.

The Project components include the turnout facility, conversion/construction/replacement of potable and non-potable pipelines, recharge basin, elevation control basin, monitoring well, and street improvements. Components of the Project will be located within the City of Calimesa, Riverside County (**Figure 1 – Regional Location**, **Figure 2 – Vicinity Map**, and **Figure 3 – Topographic Map**).

The following Project components, which are described below, will be constructed over a period of approximately one year. **Figure 4 – Project Site** depicts the location of these components. Overall, the Project will include repaving approximately 16,495 square feet of existing paved surfaces, and new impervious areas totaling 29,530 square feet; 18,230 square feet will occur onsite (within recharge basin property), and 11,300 square feet will occur offsite (within Buena Vista Court and 4th Street). Operation and maintenance (O&M) activities of the proposed facilities are included in this analysis. They will vary depending on the Project component.

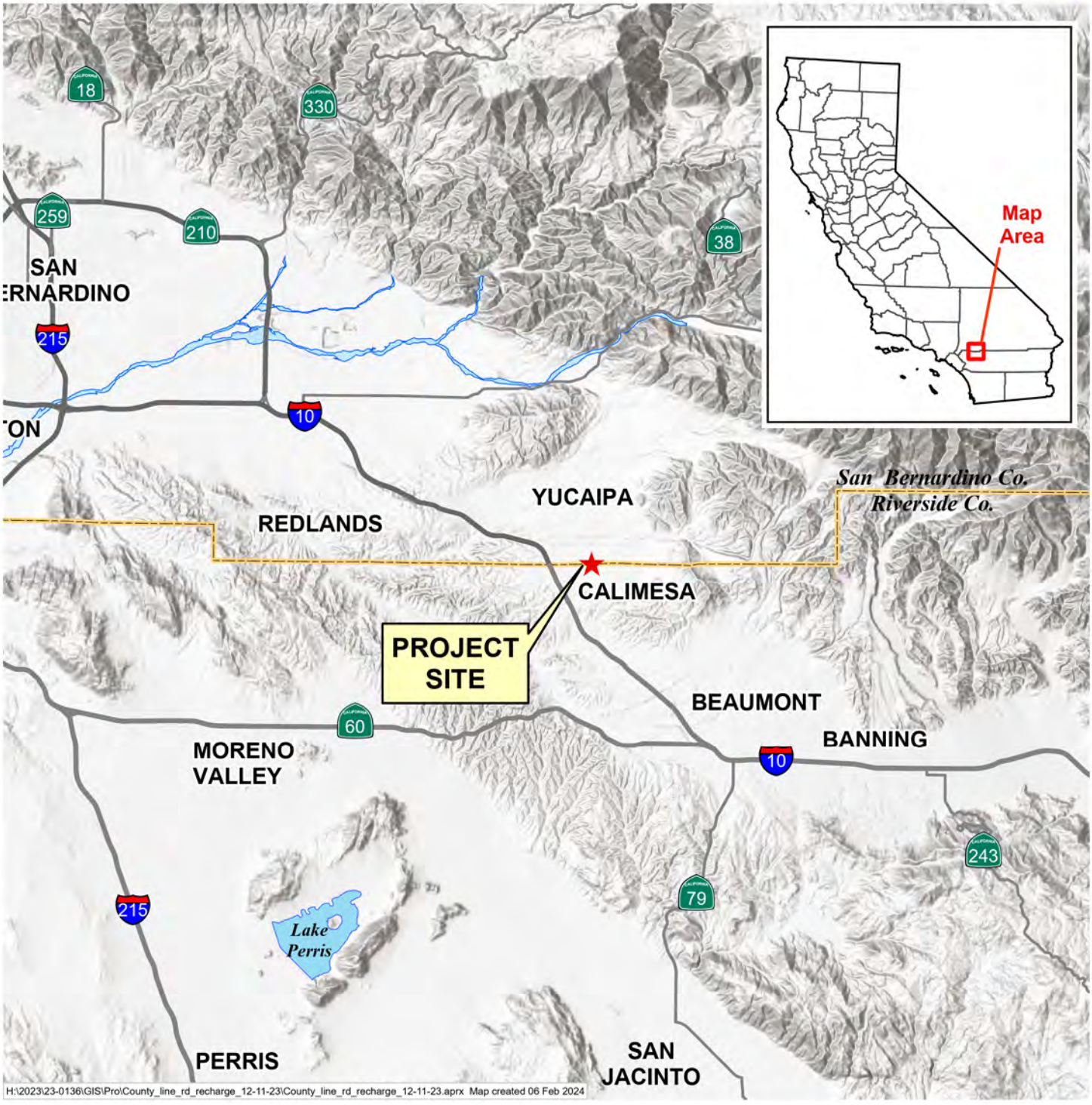
Construction of Turnout Facility at EBX Pipeline

The Department of Water Resources (DWR) owns and operates the EBX pipeline which conveys water from the State Water Project (SWP) into the Project service area. The existing 16-inch diameter turnout nozzle on the 54-inch diameter EBX pipeline is located at the southwest corner of Bryant Street and County Line Road in the City of Calimesa. San Bernardino Valley will connect to the existing 16-inch diameter nozzle and route the flow to the existing 14-inch pipeline in County Line Road with a maximum turnout capacity of 10 cubic feet per second (cfs). The pressure will need to be reduced from the EBX pipeline to the existing 14-inch diameter pipeline, so a vault will be installed with an energy dissipation valve and a flow meter. After the energy dissipation valve, a weir structure vault will be installed. Water will flow from the EBX through the turnout, to the flowmeter, to the energy dissipation valve, and then fill the weir structure. The weir structure will have a stub-out to connect to the existing 14-inch pipeline in County Line Road. The vault and weir box structure will be located on private property, and San Bernardino Valley has obtained a temporary construction easement and a permanent easement. The total disturbance area is approximately 1,942 SF, of which 1,230 SF is on private property and the remainder is within City right-of-way (ROW). In addition, San Bernardino Valley is actively working towards establishing a turnout agreement with DWR.

County Line Road Recharge Basin and Turnout Project

FIGURE 1

Regional Location



N

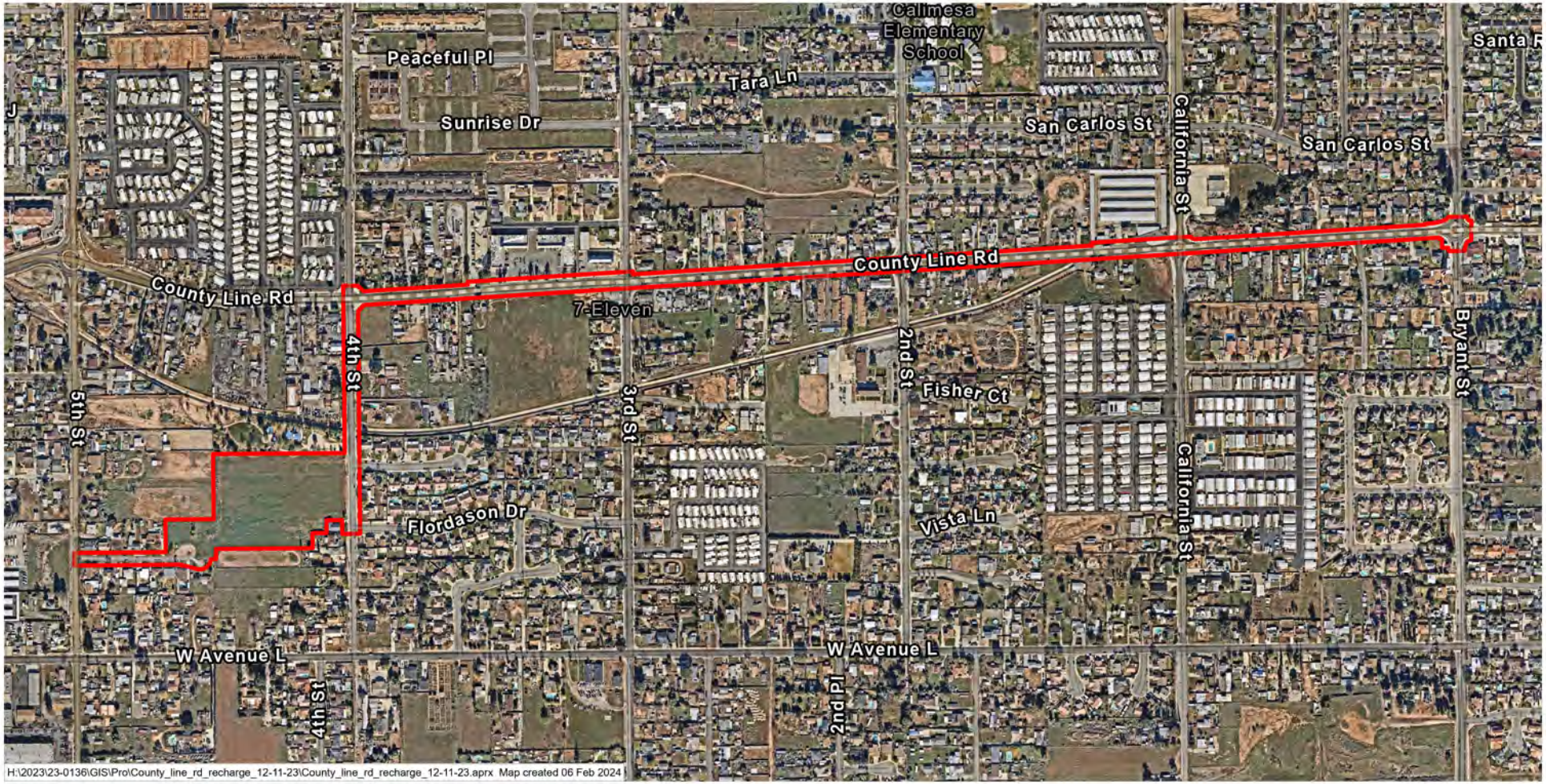
0 10,000 20,000 Feet

Sources: Riverside County GIS, 2020.

ALBERT A. WEBB ASSOCIATES

FIGURE 2

Vicinity Map



LEGEND

Project Site

N

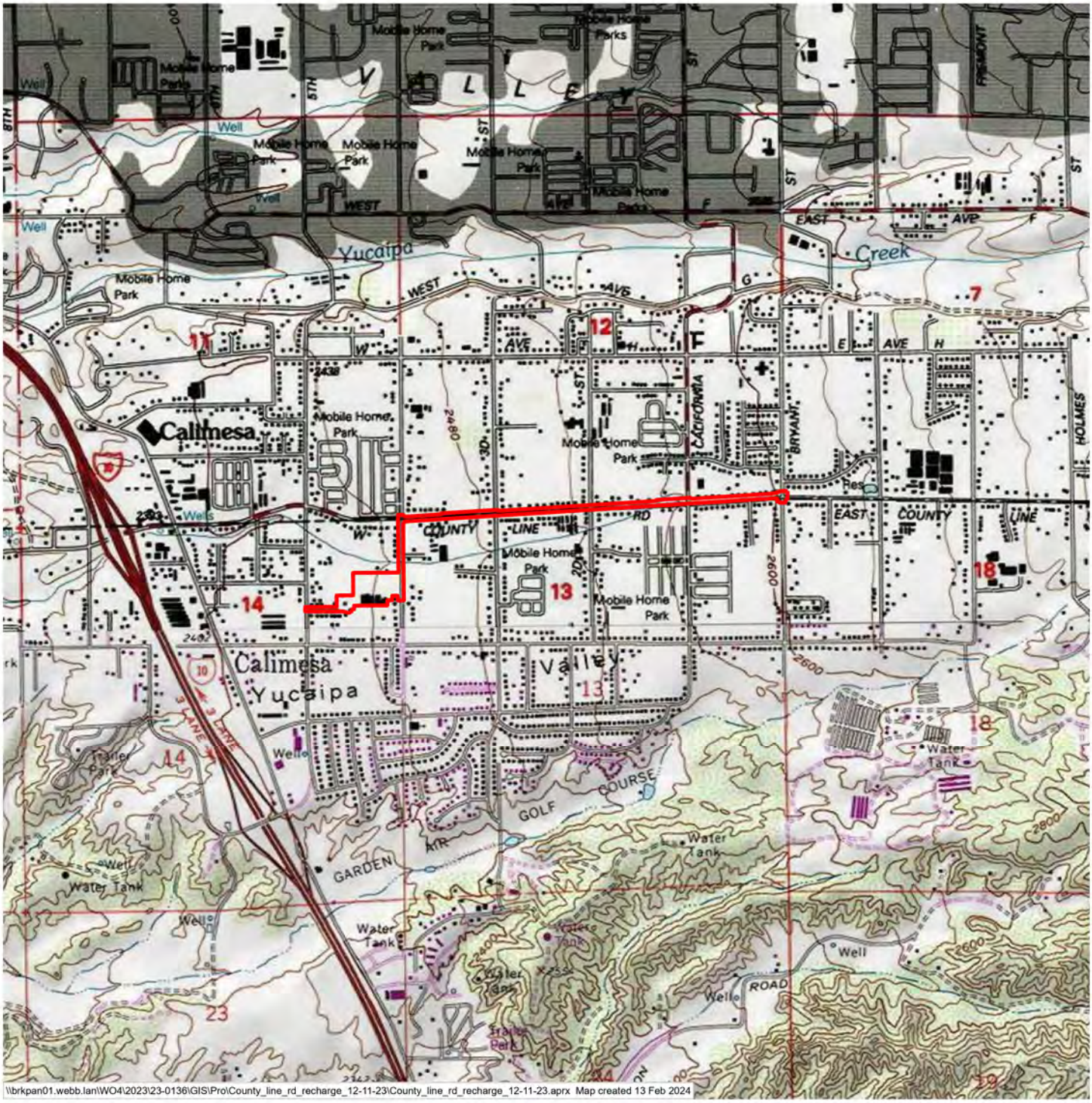
0 387.5 775 Feet

Sources: Nearmap, 2024.

ALBERT A. WEBB ASSOCIATES

FIGURE 3

Topographic Map



LEGEND

Project Site

N

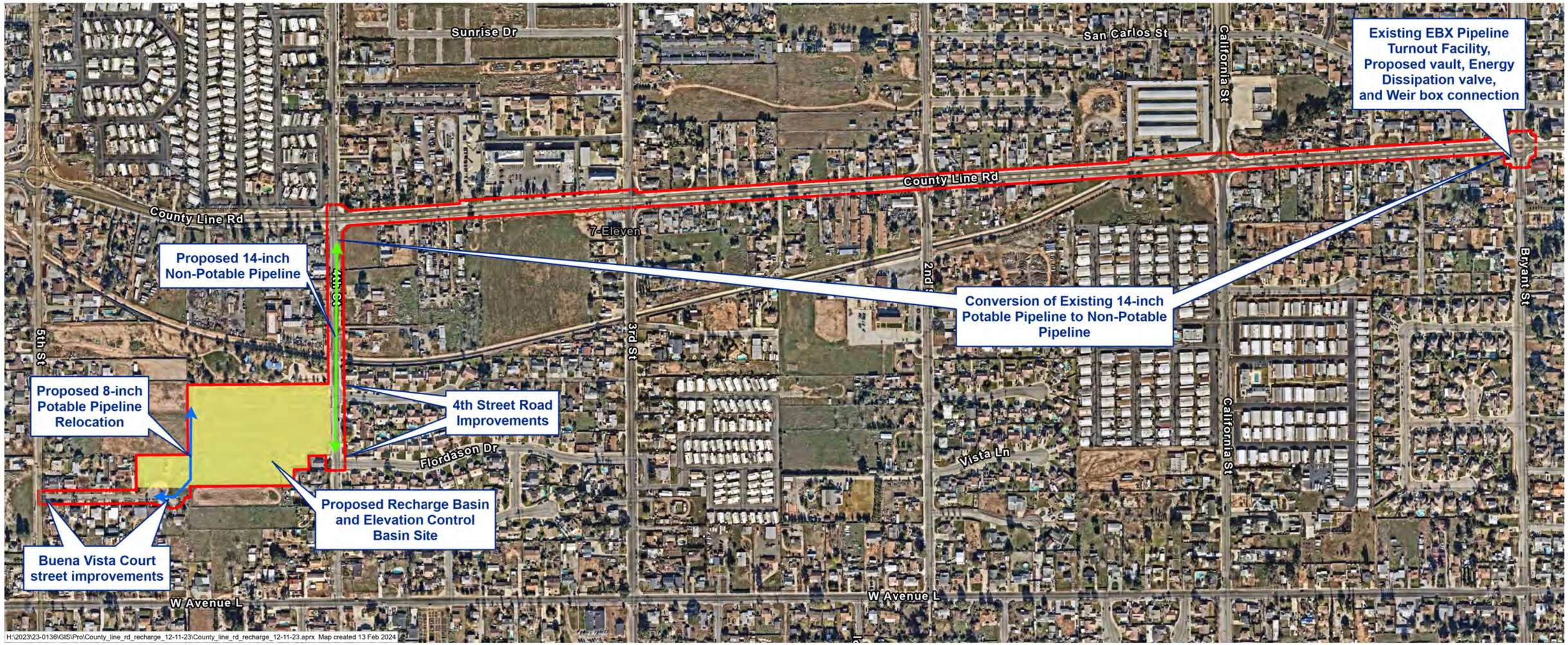
0 1,000 2,000 Feet

Sources: ESRI / USGS 7.5min Quads: YUCAIPA, Sections: 11, 12, 13, 14, 18; Township: 02 South; Ranges: 02 West and 01 West.

ALBERT A. WEBB ASSOCIATES

FIGURE 4

Project Site



LEGEND

Project Site

N

0 230 460 Feet

Sources: Nearmap, 2024.

ALBERT A. WEBB ASSOCIATES

Conversion of Existing 14-inch Potable Pipeline

Water will flow by gravity from the weir structure constructed at the EBX turnout to an existing 14-inch diameter potable water pipeline located in County Line Road from Bryant Street to 4th Street for approximately 5,300 linear feet. This existing water pipeline is currently owned by SMWC. This 5,300-foot section of existing pipeline will be abandoned by SMWC as part of this Project and ownership conveyed to SGPWA. SGPWA, as the new owner of this section of pipeline, will convert the pipeline to a non-potable raw water pipeline conveying diverted EBX SWP water. As part of the conversion process, SGPWA will evaluate the pipe's integrity to determine if repairs and/or sliplining[1] are needed which would take place within the existing Project footprint. Inspection and access to the pipeline would require several manholes dug along the pipeline alignment. The manholes would be permanent access points and can be used for inspections in the future. In exchange for SMWC transferring ownership of this pipeline, SGPWA will provide SMWC one-acre of land adjacent to the new groundwater recharge basin. The Project includes land division of APN 411-150-027 in order for SGPWA to convey one-acre to SMWC. SMWC will utilize the one-acre property as they see fit and to be determined at a later date. Any future uses of this one-acre property transfer will be determined and permitted by SMWC separately and is not a part of the Project.

Construction of Proposed Non-Potable Pipeline in 4th Street

In order to connect the EBX SWP water to the new groundwater recharge basin discussed below, SGPWA will construct a new segment of 14-inch diameter non-potable pipeline within 4th Street for a length of approximately 1,072 linear feet with a maximum excavation depth of 6 feet, aside from the channel crossing at 13 feet depth. This new extended pipeline in 4th Street will cross under the Calimesa Channel, which may require notification to California Department of Fish and Wildlife (CDFW) by SGPWA. The trenchless method of jack and bore drilling will be used to install the pipe underneath Calimesa Channel with entry and exit pits dug on either side of the channel located within the 4th street ROW. The approximate disturbed area width will be 40 feet. The extended pipeline will connect the converted 14-inch diameter pipeline in County Line Road to the proposed recharge basin.

Construction of Proposed 8-inch Potable Pipeline

There is an existing South Mesa Water Company potable water main that crosses the proposed SGPWA recharge basin; the pipeline segment that is within the Project boundary will be abandoned. SGPWA will construct a new 8-inch diameter potable water line from the existing water main south for a length of 469 linear feet along the Project's westerly boundary to an existing potable water main located in Buena Vista Court. This will support a looping connection from Buena Vista Court to 5th Street.

Construction of Proposed Recharge Basin

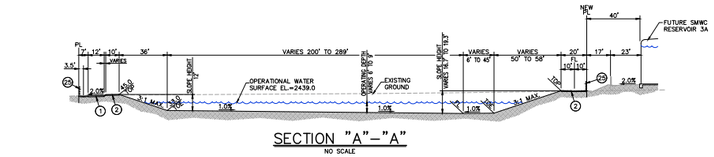
Water from the proposed non-potable pipeline in 4th Street will flow to the proposed recharge basin that will be located on the west side of 4th Street between County Line Road and Avenue L in the City of Calimesa on Assessor's Parcel Number (APN) 411-150-027, as shown on **Figure 5 – Basin Cross Section**, which is owned by SGPWA. APN 411-150-027 is a 7.1-acre gross (6.7-acre net) parcel that contains vacant land historically used for dry farming and currently fallow agricultural land. Excavation of the recharge basin is expected to generate approximately 72,000 cubic yards of export.

[1] Sliplining pipe is a trenchless underground pipe rehabilitation technique that involves installing a pipe of a slightly smaller diameter into the larger host pipe.

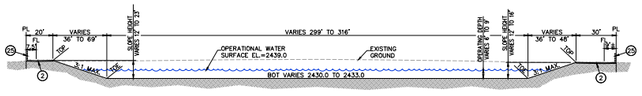
FIGURE 5

County Line Road Recharge Basin and Turnout Project

Basin Cross Section



SECTION "A"–"A"
NO SCALE



SECTION "B"–"B"
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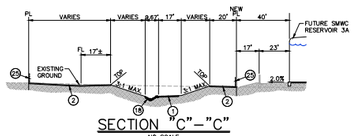

SECTION "C"–"C"
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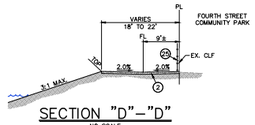
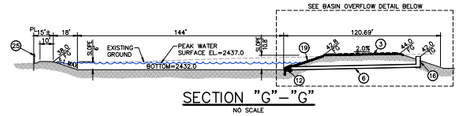
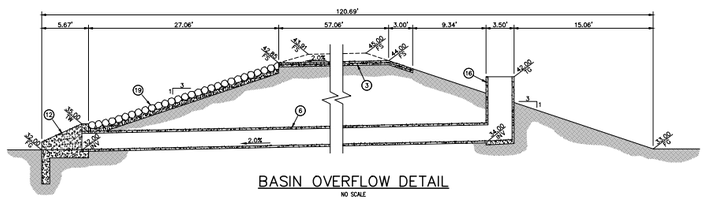


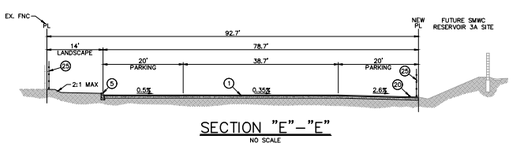
SECTION "D"–"D"
NO SCALE



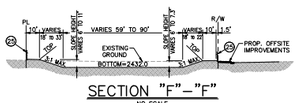
SECTION "G"–"G"
NO SCALE



BASIN OVERFLOW DETAIL
NO SCALE



SECTION "E"–"E"
NO SCALE



SECTION "F"–"F"
NO SCALE

SCALE: 1"=20'

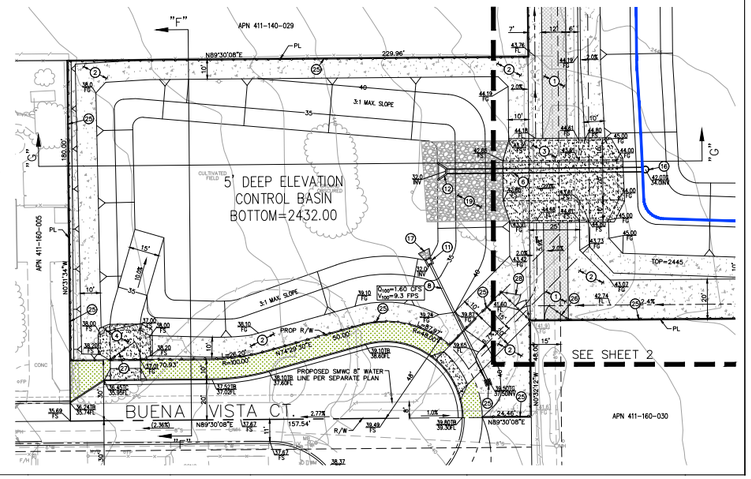
PRECISE GRADING CONSTRUCTION NOTES

1. CONSTRUCT 3" ASPHALT CONCRETE PAVEMENT OVER 6" CLASS II AGGREGATE BASE ON NATIVE SOILS COMPACTED TO 95%.
2. CONSTRUCT 6" CLASS II AGGREGATE BASE ON NATIVE SOILS COMPACTED TO 95%.
3. CONSTRUCT 40' WIDE 6" PCC CONCRETE APRON ON NATIVE SOILS COMPACTED TO 95% W/ #4 BARS AT 18" O.C. BOTH WAYS AND PER DETAIL ON SHEET 4.
4. CONSTRUCT 20' WIDE 6" PCC CONCRETE APRON ON NATIVE SOILS COMPACTED TO 95% W/ #4 BARS AT 18" O.C. BOTH WAYS AND PER DETAIL ON SHEET 4.
5. INSTALL 24" RCP (D1500) DRAIN PIPE AT 1.0% MIN. GRADE, UNLESS NOTED OTHERWISE.
6. INSTALL 12" RCP (D1500) DRAIN PIPE AT 1.0% MIN. GRADE, UNLESS NOTED OTHERWISE.
11. CONSTRUCT LI–TYPE REINFORCED CONCRETE HEADWALL PER DETAIL ON SHEET 4.
12. CONSTRUCT WING–TYPE REINFORCED CONCRETE HEADWALL PER DETAIL ON SHEET 4.
15. INSTALL 24"X24" BROOKS PRODUCTS CATCH BASIN 2424 CB, WITH STEEL TRAFFIC GRATE AND FLOGARD FOP–24F CATCH BASIN INSERT FILTER (OR EQUAL) AND 12" OPEN SUMP AND GRAVEL BOTTOM PER DETAIL ON SHEET 5.
16. CONSTRUCT CONCRETE PIPE INLET RISER PER CALTRANS STD. D75B, TYPE GCP WITH GRATED INLET PER CALTRANS STD. D77B, TYPE 36R.
17. CONSTRUCT VELOCITY REDUCING CONCRETED ROCK RIP–RAP PER DETAIL ON SHEET 4.
18. CONSTRUCT LOOSE ROCK SLOPE PROTECTION PER BASIN OVERFLOW DETAIL AND RIP–RAP DETAIL ON SHEET 4, D=10".

WALL & FENCE CONSTRUCTION NOTES:

25. INSTALL 7' HIGH CHAIN LINK FENCE WITH BARBED WIRE PER SPPWC STD. 600–3.
26. INSTALL 7' HIGH CHAIN LINK DRIVE SWING GATE WITH BARBED WIRE, W=12', PER SPPWC STD. 600–3.
27. INSTALL 7' HIGH CHAIN LINK DRIVE SWING GATE WITH BARBED WIRE, W=15', PER SPPWC STD. 600–3.
28. INSTALL 7' HIGH CHAIN LINK DRIVE DOUBLE SWING GATE WITH BARBED WIRE, W=20', PER SPPWC STD. 600–3.

NOTE:
MINIMIZE UNNECESSARY COMPACTION OF THE BASIN BOTTOM BY LIMITING THE USE OF HEAVY EQUIPMENT DURING EXCAVATION AND GRADING OPERATIONS



NTS

0 0.15 0.3 Feet

Sources: Land Engineering Consultants, Feb. 15, 2024.

H:\2023\23-0136\GIS\Pro\County_line_rd_recharge_12-11-23\County_line_rd_recharge_12-11-23.aprx Map created 20 Feb 2024

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The location of the exported fill is assumed to be at the San Timoteo Canyon landfill located approximately 11 miles from the basin site. The expected route of the exported fill trucks will be W County Line Road, I-10 W to Live Canyon Road to San Timoteo Canyon Road to Refuse Road.

The proposed recharge basin would have an approximate storage capacity of 16.8 acre-feet[2] and 2.6 acres of infiltrating surface area at the proposed 6 to 9-foot operating depth. The total estimated recharge is calculated using the infiltrating surface area and an assumed infiltration rate of 1.5 feet per day which provides 1,420 acre-feet per year of recharge (based on 2 cfs flow rate for 365 days). The maximum flowrate into the basin would be 10 cfs. Once constructed, the basin will have an earthen bottom and side slopes, vary between 6 to 9 feet deep with maximum 3:1 side slopes. The area around the edge of the basin will be landscaped with trees, shrubs, succulents, perennials, and wood mulch ground cover. There will also be a paved entrance and parking area, class 2 base access drive lanes, perimeter fencing, and gates. The total landscaping will be 2,785 SF onsite in the parking area near the entrance to the recharge basin from 4th Street, in addition to 2,928 SF offsite parkway landscaping within the ROW of Buena Vista and 4th Street.

Construction of Proposed Elevation Control Basin

A second, smaller "elevation control" basin will also be constructed on APN 411-150-027 by SGPWA for the unlikely event the recharge basin overflows. If the recharge basin were to overflow, then water would flow down Buena Vista Court to 5th Street and into an existing storm drain located at the northeast corner of 5th Street and Avenue L. The elevation control basin will not be used for groundwater recharge purposes. Therefore, an infiltration rate and total recharge is not available. The elevation control basin will be earthen, with a surface area of 0.25 acres, operating at a maximum depth of 5-feet and an approximate storage capacity of 1.7 acre-feet to maximum ponding depth. The area around the edge of the elevation control basin will be landscaped with trees, shrubs, succulents, perennials, and wood mulch ground cover.

Construction of Proposed Scientific Groundwater Monitoring Well

To evaluate groundwater levels in the CMA of the Yucaipa Subbasin, San Bernardino Valley and SGPWA propose a new scientific groundwater monitoring well on the recharge basin site. The monitoring well will provide data on how much supplemental water is recharged, help agencies determine the net benefit, and evaluate groundwater quality for human consumption through this Project. The monitoring well would also be used to fill groundwater data gaps for the Yucaipa SGMA. The monitoring well will be located within APN 411-150-027 at a location to be determined according to U.S. Geological Survey (USGS) standards at a nested well depth of up to 1,000 feet.

Construction of Proposed Road Improvements

The Project includes asphalt re-paving of the road and creating a combination of crown and asphalt drainage berms with grading along Buena Vista Court for approximately 600 feet. Crown and raised curbs with asphalt along 4th Street will be installed for approximately 367 feet. These road improvements are needed to facilitate SGPWA access and maintenance of the recharge and elevation control basin. Unpaved surfaces that will be paved as part of the Project total 29,530 square feet. SGPWA will obtain an encroachment permit from City of Calimesa for this task, which is a ministerial approval process with the City. The encroachment permit process includes review of traffic control

[2] One acre-foot of water is equivalent to 325,851 gallons.

plans, street plans, and frontage improvement plans. Parkway landscaping will be included in these improvements.

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III. ENVIRONMENTAL CHECKLIST FORM

1. Project title**: County Line Road Recharge Basin and Turnout Project**

2. Lead Agency name and address:
   San Gorgonio Pass Water Agency (SGPWA)
   1210 Beaumont Avenue
   Beaumont, CA 92223
   (951) 845-2577

3. Responsible Agencies name and address:
   California Department of Fish and Wildlife (CDFW)
   715 P Street
   Sacramento, CA 95814
   (916) 445-0411

   California Department of Water Resources (DWR)
   715 P Street
   Sacramento, CA 95814
   (916) 653-5791

   San Bernardino Valley Municipal Water District
   380 East Vanderbilt Way
   San Bernardino, CA 92408
   (909) 387-9200

4. Contact person email address and phone number:
   Mr. Emmett Campbell, Senior Water Resources Planner
   ECampbell@sgpwa.com
   (951) 845-2577

5. Project location:
   The County Line Road Recharge Basin and Turnout Project is within the City of Calimesa. Refer to Section 2 – Project Description and **Figure 1 –Regional Location**, **Figure 2 – Vicinity Map**, and **Figure 3 – Topographic Map** and **Figure 4 – Project Site** for more details.

6. Project sponsor's name and address:
   The proposed Project is a joint endeavor between the San Gorgonio Pass Water Agency and the San Bernardino Valley Municipal Water District.

   San Gorgonio Pass Water Agency
   1210 Beaumont Avenue
   Beaumont, CA 92223
   (951) 845-2577

   San Bernardino Valley Municipal Water District
   380 East Vanderbilt Way
   San Bernardino, CA 92408
   (909) 387-9200

7. General Plan Land Use Designation**:**

The City of Calimesa uses a single General Plan Land Use/ Zoning Map, divided into several zoning districts with more specific land use designations under each category. The City of Yucaipa also uses a single General Plan Land Use/Zoning Map in which the General Plan Land Use Designations and Zoning Categories are the same. Therefore, Yucaipa does not have a separate zoning map.

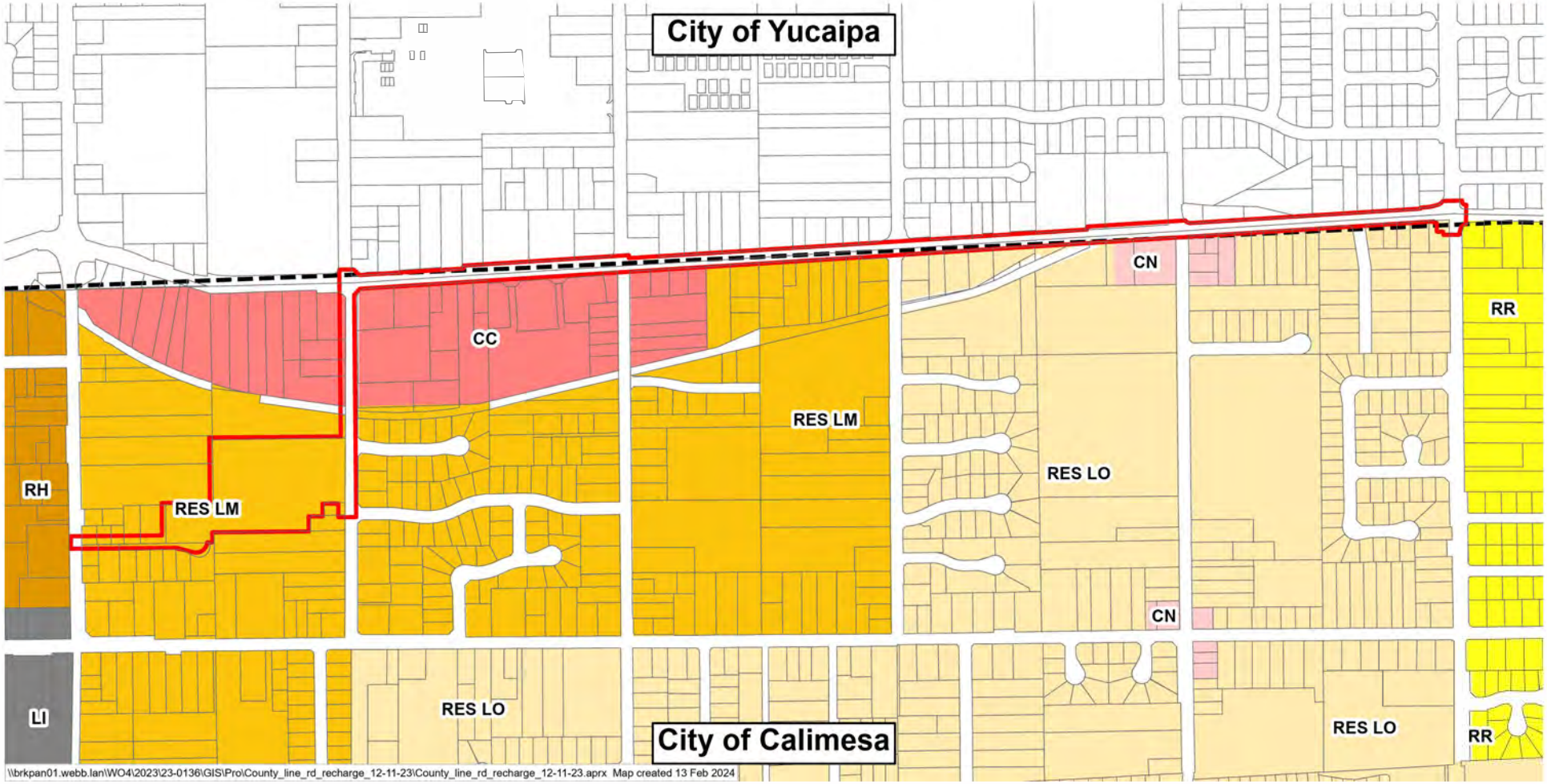
Land use designations of properties adjacent to the County Line Road Recharge Basin and Turnout Project are shown on **Figure 6a – Calimesa General Plan Land Use Designations** and **Figure 6b – Yucaipa General Plan Land Use Designations** and listed below in **Table A – General Plan Land Use Designations.**

Table A – General Plan Land Use Designations

Project Component	Calimesa General Plan Land Use	Yucaipa General Plan Land Use
Turnout Facility at EBX Pipeline	RR – Residential Rural RES-LO – Residential Low	RS-10M – Multiple Residential
County Line Road Pipeline	RES-LM – Residential Low Medium RES-LO – Residential Low CN – Commercial Neighborhood CC – Commercial Community	CG – General Commercial RS-10M – Single Residential RM- 10M – Multiple Residential
4th Street Pipeline	CC – Commercial Community RES-LM – Residential Low Medium	RM- 10M – Multiple Residential
Recharge Basin and Elevation Control Basin	RES-LM – Residential Low Medium	n/a
Buena Vista Court Improvements	RES-LM – Residential Low Medium	n/a

FIGURE 6a

Calimesa General Plan Land Use Designation



LEGEND

- Project Site
- County Boundary

Calimesa General Plan Land Use

- Residential Rural
- Residential Low
- Residential Low Medium
- Residential High
- Commercial Neighborhood
- Commercial Community
- Light Industrial

N

0 390 780 Feet

Sources: Calimesa General Plan Land Use, 2014.

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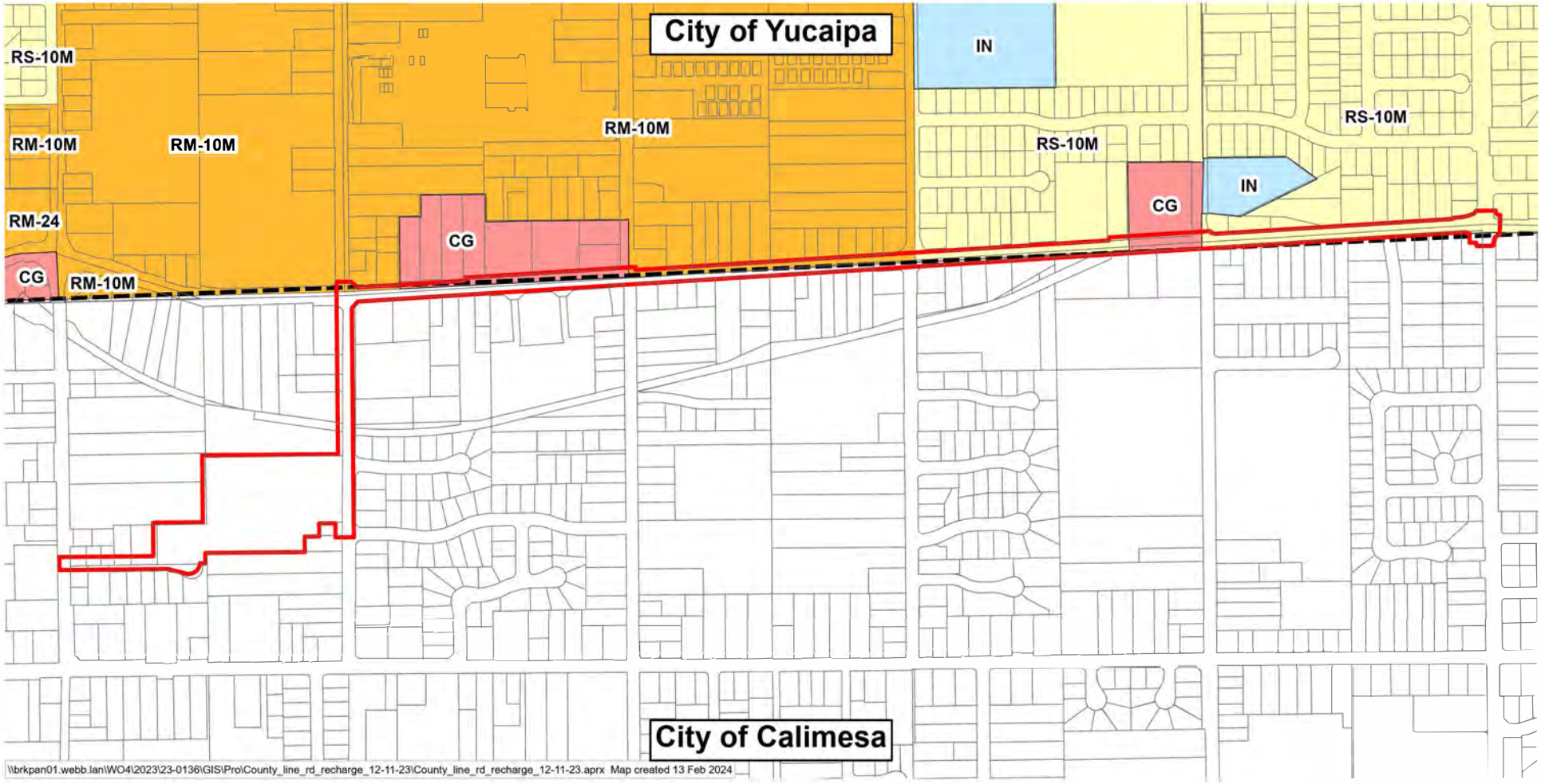
FIGURE 6b

Yucaipa General Plan Land Use Designation



LEGEND

- Project Site
- County Boundary

Yucaipa General Plan Land Use

- Single Residential
- Multiple Residential
- General Commercial
- Institutional

0 375 750 Feet

Sources: Yucaipa General Plan Land Use, 2020.

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8. Zoning**:**

The pipeline conversion and construction will be located mostly within road rights-of-way that are not assigned zoning designations. San Bernardino Valley has acquired an easement for the turnout facility to access the private property located within Residential Low (R-L) Zone. Zoning of properties adjacent to the Project are shown on **Figure 7 – Calimesa Zoning** and included in **Table B – Calimesa Zoning** below (CGP, p. 2-21):

Table B – Calimesa Zoning

Project Component	Calimesa Zoning
Turnout Facility at EBX Pipeline	R-R – Residential Rural R-L – Residential Low
County Line Road Pipeline	R-L-M – Residential Low Medium R-L – Residential Low C-N – Neighborhood Commercial C-C Community Commercial R-R – Rural Residential
4th Street Pipeline	C-C – Community Commercial R-L-M – Residential Low Medium
Recharge Basin and Elevation Control Basin	R-L-M – Residential Low Medium C-C – Community Commercial
Buena Vista Court Improvements	R-L-M – Residential Low Medium R-H – Residential High L-I – Light Industrial

8. Project Description**:**

This Initial Study provides a project-level analysis of the County Line Road Recharge Basin and Turnout Project. Refer to Section 2 – Project Description for project details.

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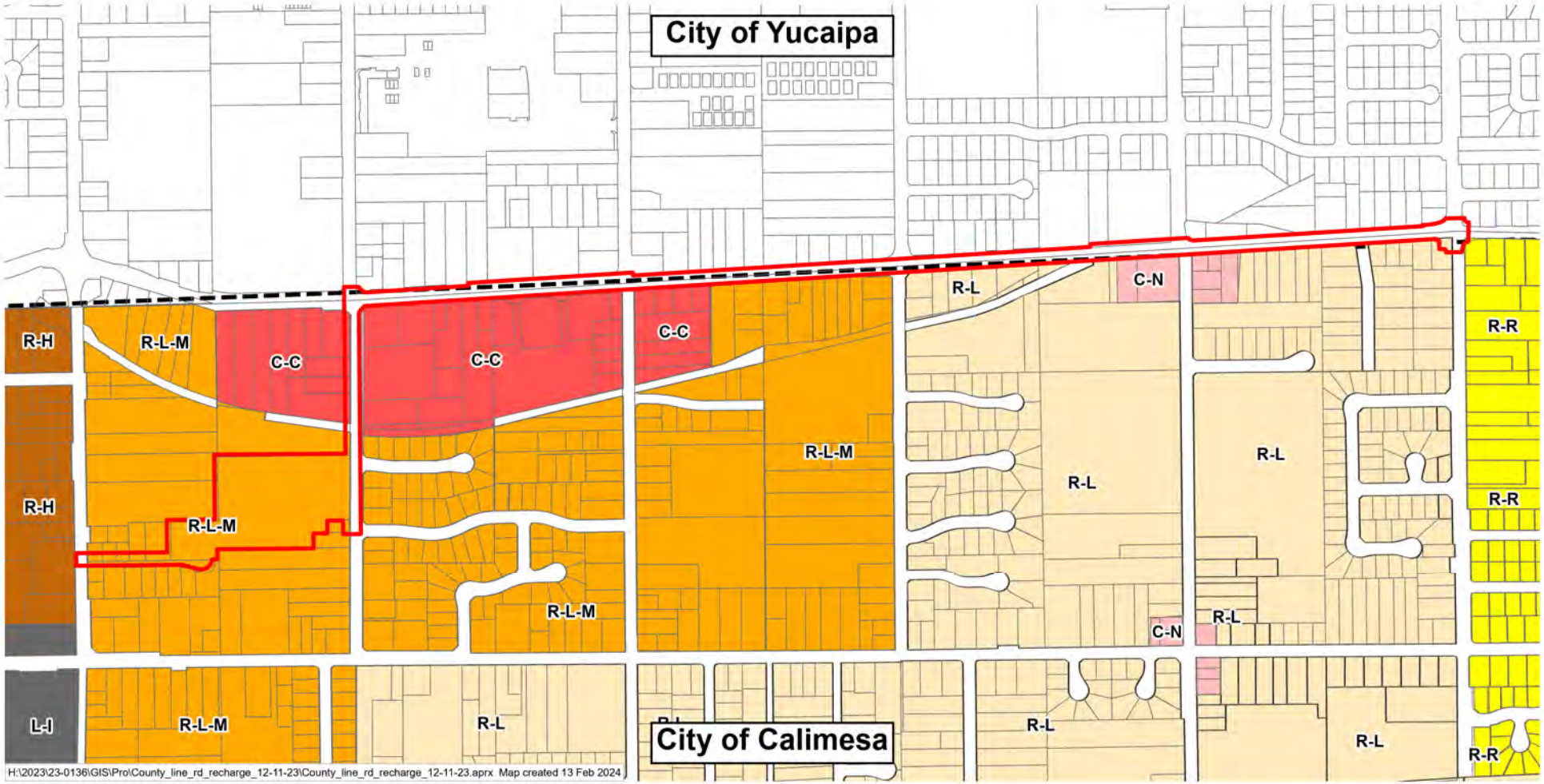
FIGURE 7

Calimesa Zoning



LEGEND

- Project Site
- County Boundary

Calimesa Zoning Designations

- R-R - Rural Residential (0-2 DU/AC)
- R-L - Residential Low (2-4 DU/AC)
- R-L-M - Residential low/Medium (4-7 DU/AC)
- R-H - Residential High (14-20 DU/AC)
- C-N - Neighborhood Commercial
- C-C - Community Commercial
- L-I - Light Industrial

N

0 390 780 Feet

Sources: Calimesa General Plan Land Use, 2014.

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9. Surrounding Land Uses and Setting:

Zoning and Land Use Designations are described above and shown on **Figure 6a – Calimesa General Plan Land Use Designations, Figure 6b – Yucaipa General Plan Land Use Designation,** and **Figure 7 – Calimesa Zoning.** Existing surrounding land uses along the Project site from approximately the intersection of 4th Street to approximately the intersection of Bryant Street, consist of several existing residential (e.g. mobile homes, apartments, single family units), commercial, and vacant lots.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement)**:**

- State Agencies
  - California Department of Water Resources ~~Department of Drinking Water~~: Encroachment permit for access to East Branch Extension and turnout approval
  - California Department of Fish and Wildlife: Notification of Streambed Alteration
  - State Water Resources Control Board: Storm Water Pollution Prevention Plan
- Regional Agencies
  - County of Riverside American Rescue Plan Act (ARPA) - funding allocation through the Coronavirus State and Local Fiscal Recovery Funds Final Rule
  - South Coast Air Quality Management District: Dust Management Plan
- Local Agencies
  - City of Calimesa: Encroachment permit for use of public ROW

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, has consultation begun?[3]

WEBB Associates, on behalf of SGPWA provided "Notification of Tribal Consultation Opportunity" via certified mail on February 28, 2024 pursuant to Assembly Bill 52 (AB 52) to Tribes that have previously requested such a notice from SGPWA, as well as additional local Tribes. Notification was sent to five Tribes: Morongo Band of Mission Indians, Pechanga Band of Mission Indians, Yuhaaviatam of San Manuel Nation (aka San Manuel Band of Mission Indians), Soboba Band of Luiseno Indians, and Torres Martinez Desert Cahuilla Indians.

On March 4, 2024, the Yuhaaviatam of San Manuel Nation responded that the Project is located within Serrano ancestral territory and is of interest to the Tribe. The Tribe requested the following items: cultural report; geotechnical report (if one was required for the project); and Project plans showing the depth of proposed disturbance. SGPWA provided the requested documents on March 12, 2024 and the Cultural Report on May 10, 2024. In response, Tribal Archaeologist Kristen Tuosto provided four mitigation

[3] Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by5 the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

measures to SGPWA on May 15, 2024. The mitigation measures address having a Monitoring and Treatment Plan, Archaeological Monitoring, Treatment of Cultural Resources During Project Implementation, and Inadvertent Discoveries of Human Remains. These have been incorporated into this document.

On March 27, 2024, the Morongo Band of Mission Indians responded that the Project is located within the ancestral territory and traditional use area of the Cahuilla and Serrano people, and Tribe requests government-to-government consultation along with these items: currently proposed Project design and mass grading maps, a records search conducted at the appropriate California Historical Resource Information System center with at least a 1.0-mile search radius from the project boundary (if this work has already been done, the Tribe requests copies of the cultural resource documentation); Tribal participation (a.k.a. tribal monitors) during the pedestrian survey and testing, if this fieldwork has not already taken place. In the event that archaeological crews have completed this work, the Tribe requests a copy of the current Phase I study or other cultural assessments (including the cultural resources inventory); shapefiles of the Projects APE and geotechnical report. SGPWA provided the requested documents on March 28, 2024 and the Cultural Report on May 10, 2024. ~~No subsequent communication has been received from this tribe.~~

The AB 52 letters stated, "If a response is not received within 30 days, the SGPWA will assume the Tribe wishes to forgo consultation on this Project." Therefore, SGPWA assumes the other notified tribes (Pechanga Band of Mission Indians, Soboba Band of Luiseno Indians, and Torres Martinez Desert Cahuilla Indians) wish to forgo consultation.

In addition, two additional Tribes responded to Project scoping letters that were sent out by the Project archaeologist, Applied Earthworks, to 14 Tribes during preparation of the Project's cultural resources report: Cahuilla Band of Indians and Agua Caliente Band of Cahuilla Indians. Neither Tribe requested formal AB 52 consultation. Agua Caliente Band of Cahuilla Indians requested a copy of the records search information, shapefiles, and a copy of the cultural report. The Cahuilla Band asked to be advised of the Project's progress, any cultural findings, and tribal monitoring during construction. SGPWA provided cultural resources report, records search, and shapefiles to both Tribes on May 10, 2024.

An AB 52 Tribal Consultation meeting was held between Yuhaaviatam of San Manuel Nation (Kristen Tuosto, Tribal Archaeologist), SGPWA (Emmett Campbell, Senior Water Resources Planner), and its consulting archaeologist, Applied EarthWorks, Inc. (Joan George, Principal Archaeologist) on June 13, 2024. The meeting resulted in slight modification to the mitigation measures requested by the tribe, which has been incorporated herein. The modification focuses archaeological monitoring to "undisturbed native soils."

Morongo Band of Mission Indians (Laura Chatterton, Cultural Resource Specialist) notified SGPWA on July 9, 2024 that the Tribal Historic Preservation Office completed review of the cultural resource documents provided to them. In response, the tribe requests tribal participation (a.k.a. tribal monitors) during all ground disturbing activities and requested eight mitigation measures added to this IS/MND. The mitigation measures for cultural resources and tribal cultural resources in this IS/MND have been revised accordingly. Refer to the discussions in threshold 5, Cultural Resources and threshold 18, Tribal Cultural Resources for additional information.

IV. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ 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/Service Systems
☐ Mandatory Findings of Significance		

V. DETERMINATION

On the basis of this initial evaluation (to be completed by Lead Agency):

☐ 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 "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.

Signature _____ Date _____

_____

Printed Name

VI. EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved *(e.g., the project falls outside a fault rupture zone)*. A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards *(e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis)*.
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). Earlier analyses are discussed below:
    a. **Earlier Analysis Used.** Identify and state where they are available for review.
    b. **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measure which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts *(e.g., general plans, zoning ordinances)*. Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached and other sources used or individuals contacted should be cited in the discussion.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) The explanation of each issue should identify:
    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significant.

VII. ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
1. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
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 public accessible vantage points.) 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 day or nighttime views in the area?	☐	☐	☒	☐

(Sources: Caltrans Scenic Highways, CGP, CMC, County Scenic Highways, DOF, Project Description))

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

A scenic vista is a distant and picturesque view of a natural landscape. On a clear day there are views of the San Gabriel Mountains (northwest), San Bernardino Mountains (northeast), San Jacinto Mountains (southeast), and the Santa Ana Mountains (southwest) from the Project area. The scenic and visual resources are protected by the City of Calimesa in the City's general plan. The City of Calimesa's Resource Management Goal RM-1 identifies conservation and protection of significant landforms and hillside areas. The City of Calimesa recognizes hillsides and canyon vistas as important scenic resources to be protected (CGP, p. 6-9.) The Project area is generally located on level topography due to its central location within Calimesa.

No impact. The proposed Project components will be underground or below grade, except for fencing around the property. The Project pipelines will be underground and therefore, will not have a substantial adverse effect on a scenic vista. The Project basins will also be below grade. The recharge basin will have an operating depth of about 6-9 feet with a maximum 3:1 side slopes and will be landscaped with trees, shrubs, succulents, perennials, and wood mulch ground cover. The elevation control basin will have an operating maximum depth of 5 feet and will also be landscaped with trees, shrubs, succulents, perennials, and wood mulch ground cover. There are no facilities being constructed as part of the Project that would affect scenic vistas. As such the Project would not obstruct any scenic views as identified by the City of Calimesa (CGP, p. 6-9.) Therefore, no impacts would occur in this regard.

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

No impact. There are no state designated, state eligible, or county eligible scenic highways within the Project Area (Caltrans Scenic Highways, County Scenic Highways). The Project components are mostly within right-of-way so there will be no impact to trees, rock outcroppings, or historic buildings. Views from the Project site and the Project components are shown in **Appendix A**. The recharge basin and elevation control basin will be located on a vacant lot which undergoes regular maintenance; therefore, Project construction and operation at the recharge basin site will not substantially damage a scenic resource. There are no scenic resources that would be damaged by the construction and operation of the Project. Therefore, no impacts would occur in this regard.

1.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 public accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. According to CEQA Statue Section 21071, the City of Calimesa meets the definition of an urbanized area because the City has a combined population with its neighboring cities of Yucaipa and Beaumont that adds up to more than 100,000 residents. As of 2023, the City of Calimesa, the City of Beaumont and the City of Yucaipa have a population of 10,962, 56,590, and 53,991, respectively (DOF). Because it is in an urbanized area as defined in the CEQA Guidelines Section 21071, the proposed Project does not conflict with applicable zoning and other regulations governing scenic quality. The City of Calimesa General Plan identifies various policies in the Land Use and Resource Management sections for the protection of significant landforms and hillside areas. The Calimesa General Plan recognizes hillsides as an important scenic resource that should be protected (Policy LU-39); however, there are no hillsides within the Project area. Because the Project is located within central Calimesa where it is relatively flat, and all components are located at or below grade, zoning and regulations governing scenic quality are not applicable. As such, implementation of the proposed Project would be less than significant.

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

Less than significant impact. The Project would not provide new substantial sources of light. The Project will remove an existing light pole along 4th Street at the recharge basin site and introduce no new sources of lighting. Temporary nighttime lighting may be used for security purposes during the construction phase. However, any security lighting would be directed downward and not onto adjacent properties. Thus, the Project would not create a new source of substantial light or glare and potential impacts would be less than significant.

Aesthetics Mitigation Measures

Aesthetic impacts resulting from the Project are less than significant; therefore, no mitigation is required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
2. AGRICULTURAL and FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
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 n 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 conversionof 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?	☐	☐	☐	☒

(Source: DOC-A, CGP, CMC, Project Description, Site Visit)

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

No impact. According to the California Department of Conservation, the general location of the Project is within areas designated as Urban and Built-Up Land. Because the Project components are not located within or adjacent to areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, the construction of the Project would not convert special status Farmland and there would be no impacts in this regard. (DOC-A).

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

No impact. The Project components are located within Calimesa in areas zoned for residential and commercial uses. As shown on **Figure 7 – Calimesa Zoning**, there is no agriculturally-zoned property in this portion of Calimesa. Additionally, based on a review of current data available from the California Department of Conservation, the Project site is not located within, or adjacent to, any Williamson Act contracted lands. For these reasons there would be no impact in this regard.

2.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))?

Forest land, as defined in Public Resources Code (PRC) section 12220(g) is land that can support 10 percent of native tree cover of any species under natural conditions and that allows for the management of one or more forest resources. Timberland, as defined in PRC section 4526, means land other than land owned by the federal government and land designated as experimental forest land, which is capable of growing a crop of trees for any commercial species, including Christmas trees.

No impact. There are no properties zoned for forest land, timberland, or Timberland Production within Riverside County, other than Christmas tree farms (cultivated, not farmed), and such farms are not known in the Project site. Because the Project components do not traverse through nor adjacent to areas zoned for forest land, timberland, or Timberland Production there would be no impact in this regard.

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

No impact. There is no forest land in proximity to the Project site. Construction of the turnout facility, pipelines, basins, and roadway improvements would not result in the loss or conversion of forest land; thus, there would be no impact in this regard.

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

No impact. The Project site is designated "Urban and Built-Up Land" by the California Department of Conservation, which is not a Farmland designation. The proposed Project does not include any component that would result in the conversion of Farmland or forest land to other uses. No other changes in the existing environment from that which have been described in the Project Description are proposed. As such, no impacts would occur.

Agriculture and Forestry Resources Mitigation Measures

There are no impacts to agricultural and forestry resources; therefore, no mitigation is required.

	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 the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
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?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

(Sources: CARB 2005, CARB 2022, SCAQMD 1993, SCAQMD 2003, SCAQMD 2022, WEBB-A, Project Description)

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

The Project is located in the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) prepares the Air Quality Management Plan (AQMP) for the Basin. The SCAQMD sets forth a comprehensive program that would lead the Basin into compliance with all federal and state air quality standards. The AQMP's control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, if a project demonstrates compliance with local land use plans and/or population projections, then the AQMP would have taken into account such uses when it was developed. The SCAQMD is required to update its plans on a regular basis; the 2022 AQMP is the most recent plan (SCAQMD 2022).

No impact. The proposed Project consists of public utility improvements (basin, pipelines, and turnout connection) and minor road paving that do not directly impact population projections or conflict with local land use plans. The purpose of the Project is to fulfill the requirements of the Yucaipa SGMA GSP which will provide stable water supplies to existing disadvantaged communities of Calimesa and Yucaipa. No land use changes are proposed as a result of this Project. Thus, no indirect impacts will occur. For these reasons, the Project does not conflict with or obstruct implementation of the AQMP.

3.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?

The portion of the Basin within which the proposed Project is located in is designated as a non-attainment area for ozone, particulate matter less than 10 microns in diameter (PM-10), and particulate matter less than 2.5 microns in diameter (PM-2.5) under the State standards and for ozone and PM-2.5 under Federal standards. (CARB 2022.) The SCAQMD considers the thresholds for project-specific impacts and cumulative impacts to be the same (SCAQMD 2003). Therefore, projects that exceed project-specific significance thresholds are considered by SCAQMD to be cumulatively considerable. Based on SCAQMD's regulatory jurisdiction over regional air quality, it is reasonable to rely on its thresholds to determine whether there is a cumulative air quality impact.

Less than significant impact. Air quality impacts can be described in a short- and long-term perspective. Short-term impacts occur during site grading and Project construction and consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Long-term air quality impacts occur once the Project is in operation. The Project consists of non-potable raw water infrastructure, operational emissions would be primarily from infrequent visits by vehicles driven by existing maintenance personnel and are considered negligible; therefore, only short-term impacts were quantified. (WEBB-A, p. 2.)

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 or more acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of this Project's disturbance area (approximately 9.63 acres) a Fugitive Dust Control Plan or a Large Operation Notification Form would not be required. (WEBB-A, p. 2.)

The air quality impacts from the Project were evaluated in the Air Quality and Greenhouse Gas (AQ/GHG) Analysis prepared for the Project (WEBB-A) and provided in **Appendix B**. The focus of the air quality analysis is to evaluate the impacts of regulated air pollutants, which are the amounts of foreign and/or natural substances occurring in the atmosphere that may result in human health impacts due to their release from numerous sources. Health-based ambient air quality standards have been established for seven air pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns in size (PM-10), particulate matter less than 2.5 microns in size (PM-2.5), and lead (Pb). Short-term emissions were evaluated for the Project using the California Emissions Estimator Model (CalEEMod) version 2022.1 computer program. The results of this analysis are summarized in **Table C – Estimated Maximum Daily Construction Emissions**.

Table C – Estimated Maximum Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
2024	**5.53**	**58.70**	**51.90**	**0.12**	**8.35**	**4.48**
2025	2.30	7.37	11.90	0.02	0.57	0.34
Maximum	**5.53**	**58.70**	**51.90**	**0.12**	**8.35**	**4.48**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: WEBB-A, Table 2

Note: See the detailed model output reports attached in Appendix B. Numbers are the maximum of summer or winter emissions in a given year and may not match due to rounding within the model.

As shown in **Table C** above, volatile organic compound (VOC), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2) particulate matter less than 10 microns in diameter (PM-10), and particulate matter less than 2.5 microns in diameter (PM-2.5) emissions from construction of the Project are below the SCAQMD Daily construction thresholds for all criteria pollutants in 2024 and 2025. Therefore, the Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment and the impacts would be less than significant. No mitigation is required.

3.c Expose sensitive receptors to substantial pollutant concentrations?

A sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant including children, the elderly, and persons with pre-existing respiratory and/or cardiovascular illness. SCAQMD defines a "sensitive receptor" as a land use or facility such as residences, schools, child care centers, athletic facilities, playgrounds, retirement homes, and convalescent homes where these persons are typically located (SCAQMD 1993). Staff at the SCAQMD has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short- and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Project is located within SRA 28.

Less than significant impact. According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO_X, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. The LST tables can be used as a screening tool to determine if dispersion modeling would be necessary. If project-related emissions are below the LST table emissions, no further analysis is necessary. Based on this SCAQMD guidance, the Project will disturb approximately three acres per day during basin grading. Therefore, the two-acre LST was used to compare the on-site emissions estimated by CalEEMod to be conservative.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The closest sensitive receptor locations are residences adjacent to the Project alignment, including Bryant Street, County Line Road, 4th Street, Buena Vista, as well as the 4th Street Park. According to LST methodology, projects with boundaries closer than 25 meters (82 feet) to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, a receptor distance of 25 meters was used. The results are summarized in **Table D – LST Results for Daily Construction Emissions**, below.

Table D – LST Results for Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)			
	VOC	NO_X	PM-10	PM-2.5
LST Threshold for 2-acres at 25 meters	**234**	**1,100**	**7**	**4**
Turnout Construction	**17.50**	**18.30**	**2.49**	**1.61**
Basin Grading/Construction	**33.40**	**29.20**	**3.83**	**2.26**
Pipeline Trenching	7.07	10.50	0.29	0.27
Paving	3.73	4.99	0.17	0.16
Maximum[(a)]	**50.90**	**47.50**	**6.32**	**3.87**
Exceeds LST Threshold?	**No**	**No**	**No**	**No**

Source: WEBB-A, Table 3, LST = Localized Significance Threshold.
(a) Maximums are the greater of either the sum of Turnout Construction and Basin Grading/Construction because these activities overlap, or Pipeline Trenching alone, or Paving activities alone. Maximums are shown in bold.

As shown in **Table D** above, emissions from construction of the Project are below the LST daily construction thresholds established by SCAQMD. Therefore, construction-related air quality impacts would be less than significant. No mitigation is required.

This Project involves non-potable water infrastructure, with no stationary sources of emissions present. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site; such as warehouse/transfer facilities. The proposed Project does not include such uses. Due to the lack of stationary source emissions, no long-term LST analysis is needed (WEBB-A, pp. 5-6.) Therefore, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations and operational impacts are considered less than significant. No mitigation is required.

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

Less than significant impact. The proposed Project presents the potential to result in other emissions, such as those leading to odors in the form of diesel exhaust during construction in the immediate vicinity of the proposed Project site. The closest sensitive receptors to the Project construction are the residences adjacent to the Project alignment, including Bryant Street, County Line Road, 4th Street, Buena Vista, as well as the 4th Street Park. However, odors generated during construction would be short-term (11-month construction period) and would not result in a long-term odorous impact to the surrounding area.

Additionally, the California Air Resources Board (CARB) has developed an Air Quality and Land Use Handbook to outline common sources of odor complaints, including: sewage treatment plants, landfills, recycling facilities, and petroleum refineries (CARB 2005). The Project involves non-potable raw water infrastructure, which is not included on CARB's list of facilities that are known to be prone to generate odors. Recognizing the short-term duration and quantity of construction emissions in the proposed Project area, impacts with regard to other emissions such as odors affecting a substantial number of people would be less than significant.

Air Quality Mitigation Measures

Air quality impacts resulting from the Project are less than significant; therefore, no mitigation is required.

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	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?	☐	☐	☒	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

(Sources: CMC, BLUE-A, FEMA, RCA MSHCP, Site Visit)

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

Less than significant with mitigation. A Biological Assessment Report (BAR) was prepared for the Project by BLUE Consulting Group (BLUE) on June 10, 2023 and updated July 31, 2024, a copy of which is located in **Appendix C** of this Initial Study. The purpose of the BAR is to review and assess the biological resources that have been reported from the vicinity of, or have the potential to occur, on and adjacent to the turnout facility, pipelines, and recharge basin plus a 100-foot buffer (the biological study area or BSA). The BSA is shown in **Figures 8a-8b – Biological Study Area**. The BAR identifies the conservation status of special status species, suitable habitat for these species, and the potential for each to occur on or near the Project components. The BAR consisted of a review of pertinent literature, on-line databases and mapping tools and a field reconnaissance survey to determine locations and types of biological resources having the potential to exist within the region and CNPS Inventory of Rare and Endangered Plants. Areas of the survey where potential habitat was present were surveyed on foot. All flora and fauna detected (e.g., through direct observation, vocalizations, presence of scat, tracks,

and/or bones) within the BSA during the survey were recorded. BLUE biologist conducted the habitat assessment site surveys within the BSA on April 6, 2023 and July 28, 2024. (BLUE-A, pp. 3-5.)

Vegetation Communities – Two vegetation communities/land cover types were observed onsite: Disturbed and Developed. The Disturbed habitat is comprised of the maintained, disked and irrigated agricultural area. Within this partially dirt lot, the following non-native weedy species were dominant: prickly sow thistle (*Sonchus asper*), common sow thistle (*Sonchus oleraceus*), bristly ox-tongue (*Picris echioides*), Russian thistle (*Salsola tragus*), mustard ssp., hottentot-fig (*Carpobrotus edulis*), wild lettuce (*Lactuca serriola*), tree tobacco (*Nicotiana glauca*), castor-bean (*Ricinus communis*), red-stem filaree (*Erodium cicutarium*), short-beak filaree (*Erodium brachycarpum*) and white-stem filaree (*Erodium moschatum*). These maintained urban lands do not support natural, native vegetation or provide essential habitat connectivity and therefore have a significantly reduced biological value. The Developed habitat is comprised of the surrounding streets and the existing single-family residence. No native or sensitive vegetation is present within this land cover type.

Plants – There were 11 special-status plant species reported to occur based on the biological literature reviews conducted by BLUE. Three species are listed under the federal and California Endangered Species Acts: San Jacinto Valley crownscale (*Atriplex coronata var. notatior*), thread-leaved brodiaea (*Brodiaea filifolia*), and spreading navarretia (*Navarretia fossalis*). All 11 special-status plant species were determined to have an "Absent" potential for occurrence within the survey area (BLUE-A, p. 7.)

Wildlife – There were 15 special-status wildlife species (including 8 federally listed as threatened or endangered species listed in the USFWS Information for Planning and Conservation (IPaC) resource list) reported to occur within the vicinity of the BSA based on the biological literature reviews conducted by BLUE. Due to the developed and disturbed/maintained quality of vegetation onsite and within the BSA, all 15 special-status wildlife species were determined to have an "Absent" potential for occurrence within the survey area.

The literature review and field assessment data confirm that no special-status species currently utilize the BSA. The BSA lacks suitable habitat that would typically support special-status species. No special status species were observed, and none are expected to occur. (BLUE-A, p. 10.) Furthermore, the Project site is fully within the boundary of the Western Riverside County MSHCP. SGPWA is not a permittee to the plan.

Because of the disturbed nature of the site, it has limited potential to support nesting birds. During a Project site visit conducted by Webb staff on February 15, 2024, scattered and poor-quality nesting bird habitat was observed along the Project roadways (ornamental front-yard vegetation), and poor quality habitat was observed at the proposed basin recharge site: low-nesting quality trees are present in the southwest corner of the recharge basin site, but the remainder of the site is mowed and disked regularly. Project pipeline alignments are located within existing paved ROW and will not directly affect ornamental front-yard vegetation. Though the proposed recharge basin site supports poor quality habitat for ground and vegetation nesting bird species, a pre-construction nesting bird survey (see **MM BIO-1** below) will be conducted three (3)-days prior to project commencement to ensure that the Project is compliant with nesting bird rules and regulations.

With the implementation of existing regulations for the protection of plant and animal species, and **MM BIO-1** for compliance with the Migratory Bird Treaty Act, (see below) impacts to special status species will be less than significant.

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

Less than significant impact. According to the BAR, there is no riparian habitat or federally designated critical habitat present within the Project's BSA (BLUE-A, p. 9). Vegetation communities identified within the BSA of the Project area include Disturbed and Developed and are shown on **Figures 8a-8b – Biological Study Area**. Calimesa Creek Channel is a concrete-lined channel that crosses under 4th Street. The Project will use trenchless methods (jack and bore) to install the proposed pipeline in 4th Street underneath Calimesa Creek Channel. Although concrete-lined, the channel is potentially jurisdictional and SGPWA will notify CDFW pursuant to Fish and Game Code Section 1602. There are no other sensitive habitats or natural communities within the Project area therefore, impacts to riparian and other sensitive habitats are less than significant.

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

Less than significant impact. Refer to the responses to thresholds 4.a and 4.b, above. The BAR did not identify any wetlands or jurisdictional aquatic resources that would be adversely affected by the Project. The Project will include installation of a pipeline in 4th Street under the concrete-lined Calimesa Creek Channel. The Project will employ trenchless (jack and bore) methods to avoid impacts during construction to the channel itself. Pursuant to standard practice, CDFW will be notified of the channel crossing pursuant to Fish and Game Code Section 1602. Notification to RWQCB or USACE is not required because Calimesa Creek Channel is concrete-lined and trenchless methods will be used to cross underneath. Therefore, impacts are less than significant.

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

No impact. As noted in threshold 4.a above, the Project site is not located within a MSHCP Criteria Area, Cell, Group, or Linkage Area; therefore, conservation of the Project site is not required pursuant to the MSHCP. Additionally, as noted in threshold 4.b above, the proposed Project is not located within a riparian habitat or federally designated critical habitat. The Project would be within previously disturbed paved right of way, regularly mowed vacant land, and portions of existing developed parcels. The proposed Project would not interfere substantially with the movement of wildlife or impede the use of a native wildlife nursery site. Therefore, no impacts are anticipated.

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

Less than significant impact. Because of the disturbed and developed conditions of the Project site, conflicts with local policies or ordinances protecting biological resources are not anticipated. No oak trees are located within the Project footprint; therefore, the City of Calimesa municipal code provisions regarding tree preservation and removal (Ord. 342 § 3 (Exh. A), 2016) are not applicable. Through compliance with the applicable provisions of the Calimesa Municipal Codes, impacts regarding conflict with local policies to protect biological resources would be less than significant.

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

Less than significant impact. As previously described in threshold 4.a, the Project site is located within the MSHCP area. The MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan/Natural Community Conservation Plan focusing on conservation of species and their associated habitats in western Riverside County. The Project is not located within any MSHCP designated Criteria Areas or Subunits. SGPWA is not a Permittee to the MSHCP, the proposed Project would not conflict with the MSHCP as discussed below. While SGPWA is not a Permittee to the MSHCP, the SGPWA has the responsibility to make sure its Project does not conflict with the MSHCP.

The proposed Project would be constructed on existing roadways and portions of acquired parcels which have been previously disturbed, portions of vacant lots, or portions of developed parcels. Based on the existing developed nature of the Project site, the proposed Project would not impact riparian/riverine habitat (MSHCP Section 6.1.2), narrow endemic plant species survey area (MSHCP Section 6.1.3), criteria area species survey area (MSHCP Section 6.3.2), and Guidelines Pertaining to Urban/Wildlands Interface (MSHCP Section 6.1.4) as described below:

> Section 6.1.2 of the MSHCP requires assessment of riparian, riverine, fairy shrimp, and vernal pool habitats. None of these features, habitats or vegetation communities are present within BSA. Therefore, the Project would not conflict with Section 6.1.2 of the MSHCP (BLUE, p. 9).
>
> Section 6.1.3 requires assessment of sites in a designated survey area for narrow endemic plants to be completed. The BSA is not within a narrow endemic plant survey area and is therefore not required to survey for any narrow endemic plants. The Project would not conflict with Section 6.1.3 of the MSHCP.
>
> Section 6.1.4 requires projects located adjacent or near MSHCP conservation areas to consider edge effects or conditions of their urban/wildlife interface into the project design. The BSA is not located near lands identified for MSHCP conservation. Therefore, the Project would not conflict with Section 6.1.4 of the MSHCP.
>
> Section 6.3.2 requires assessments for particular species in designated survey areas. The BSA is not within designated survey areas for particular species; thus, the Project would not conflict with Section 6.3.2 of the MSHCP (BLUE, p. 8).

For the reasons set forth above, the Project would not conflict with the MSHCP and impacts to approved conservation plans are considered less than significant.

Biological Resources Mitigation Measures

MM BIO-1: Nesting bird survey.

A preconstruction survey for nesting birds shall be conducted no more than 72 hours prior to commencement of project activities, including project staging. The survey shall be conducted by a qualified biologist with prior experience conducting nesting bird surveys for construction projects. The study area should include the affected area and suitable habitat within a 500-foot buffer, or a buffer size determined by the qualified biologist based on level of proposed disturbance and access. Results of the survey shall be provided to SGPWA. If no active nests are found, no additional measures are required. If active nests are found, then the biologist will map the location and document the species and nesting stage for SGPWA. A no-work buffer will be established around the active nest as determined by the qualified biologist and based on the species sensitivity to disturbance and the type and duration of the disturbance. No construction activities shall occur within the no-work buffer until the biologist has determined the nest is no longer active.

With implementation of existing regulations and the incorporation of **MM BIO-1** biological resource impacts resulting from the Project will be less than significant.

FIGURE 8a

BSA

H:\2023\23-0136\GIS\Pro\County_line_rd_recharge_12-11-23\County_line_rd_recharge_12-11-23.aprx Map created 30 Jul 2024

LEGEND

- Project Footprint
- Developed Area
- Disturbed Habitat

NTS

Sources: Biological Assessment Report for the County Line Road Recharge Basin and Turnout Project, BLUE Consulting Group, Jun 10, 2023; Nearmap, 2024.

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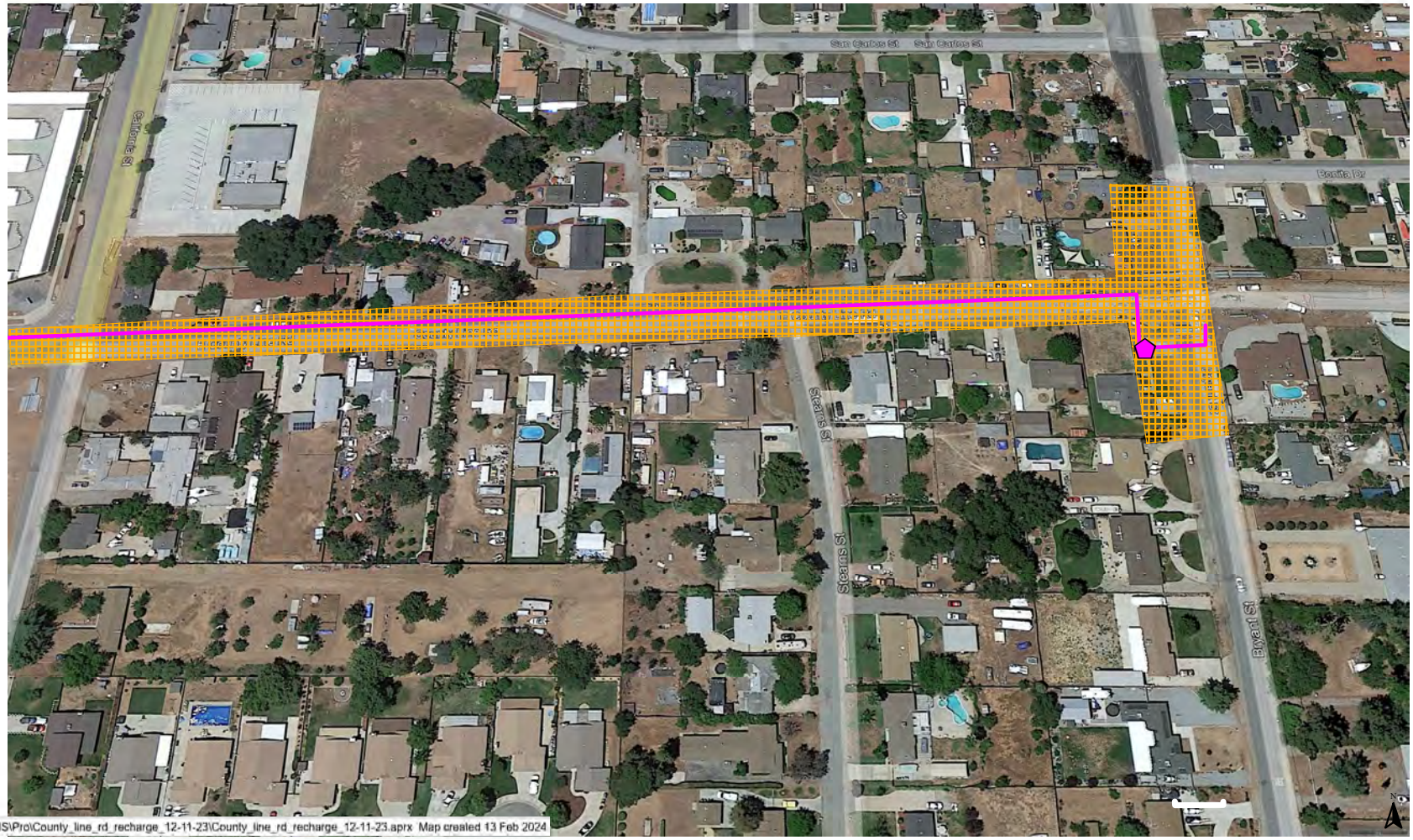
FIGURE 8b

BSA



LEGEND

- Project Footprint
- Developed Area
- Disturbed Habitat

NTS

Sources: Biological Assessment Report for the County Line Road Recharge Basin and Turnout Project, BLUE Consulting Group, Jun 10, 2023.

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	Potentially Significant Impact	*Less Than 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 as defined in §15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

(Sources: AE-A, AB 52 Consultation, CHSC)

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

For purposes of CEQA, a cultural resource considered "historically significant" is considered a "historical resource," if it is more than 50 years of age and is included in a local register of historical resources or is listed in or determined eligible for listing in the California Register of Historical Resources (CRHR) under any one of the following criteria (California Code of Regulations, Title 14, Section 15064.5 [14 CCR 15064.5]):

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.

Compliance with CEQA's cultural resource provisions typically involves several steps. Briefly, archival research and field surveys are needed, and identified cultural resources are inventoried and evaluated in prescribed ways (AE-A, p. 4).

For purposes of projects with a federal nexus, Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their undertakings on historic properties. Undertakings include any federally funded, licensed, or permitted project (36 CFR 800.16[y]). A historic property as defined in 36 CFR 800.16(l)(1) means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). In the context of a federally permitted undertaking, which may include this Project, the significance of cultural resources is measured against the NRHP criteria (Criteria A, B, C, and D) for evaluation (36 CFR 60.4):

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

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

C. That embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or

D. That has yielded, or is likely to yield, information important to prehistory or history.

A property must meet one or more of Criteria A, B, C, or D and retain sufficient integrity to qualify as a good representative of a significant historical theme or pattern. Unless a site is of exceptional importance, it is not eligible for listing in the NRHP until it is 50 years of age. (AE-A, p.5.)

DETERMINATION. Applied Earthworks conducted a literature and records search at the Eastern Information Center (EIC) of the California Historical Resource Information System (CHRIS), which is housed at U.C. Riverside. A copy of the Cultural Resources Investigation (AE-A) is located in **Appendix D.1**. Because the records search limits extend into San Bernardino County, Applied Earthworks also conducted a literature and records search at the South Central Coastal Information Center of the CHRIS, housed at California State University, Fullerton. The objective of these records searches was to determine whether any precontact or historical cultural resources had been recorded previously within the Project area and a 0.5-mile search radius of the proposed Project. Results of the records search indicate 22 cultural resource studies have been conducted previously within the 0.5-mile search radius. Six of the previous studies involved the Project area. As a result, 80 percent of the Project area has been investigated previously.

The records search also identified four previously recorded cultural resources within the 0.5-mile search radius, but no previously recorded cultural resources are located within the Project area. Two of the four previously recorded resources in the search radius are historical and the other two are built-environment resources, as shown in **Table E – Cultural Resources in 0.5-Mile Search Radius**. None of the previously recorded cultural resources listed in **Table E** are documented within the Project area.

Table E – Cultural Resources in 0.5-Mile Search Radius

ID Number	Existing Condition	Resources Located Within Project Area?
Historic Resources		
33-015299	Two glass bottle fragments	No
33-015300	Electrical utility line	No
Built-Environment Resources		
33-016792	1929 single-family residence	No
33-023900	1930 storm drain	No

Source: AE-A, p. 16.

Following the records searches, Applied Earthworks conducted a pedestrian survey of the Project area on February 28, 2024. The survey results found the unpaved portion of the Project area (i.e., the

recharge basin parcel) is a heavily disturbed open field with evidence of tilling. Survey transects were oriented east to west, moving southward with 15-meter spacing. Ground visibility was generally poor, approximately 35 percent, due to extensive pinweed growth. Sparse patches of modern refuse were observed on the south side of the recharge basin parcel. The sediments appear to be a brown loam. Moving eastward, the survey covered a long stretch of County Line Road, which is entirely paved and developed. The survey concluded that no cultural resources were encountered within the Project area during the survey. (AE-A, p. 19.) As a result, there is a low likelihood that archaeological deposits or features will be found during construction. Because none of the previously recorded resources (**Table E**) are within the Project area, and no resources were found during the onsite pedestrian survey, the undertaking will not affect historic properties and a NHPA recommendation of No Historic Properties Affected for the Project is recommended. Likewise, no resources determined to be listed or eligible for listing in the CRHR were identified by the literature and records searches and the pedestrian survey. Therefore, no further cultural resource management within the Project area is recommended for historic resources and impacts are **less than significant**.

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

DETERMINATION. As shown in **Table E** in Threshold 5.a, the cultural resources records searches identified four previously recorded cultural resources within the 0.5-mile search radius of the Project area. Two of the four identified resources are historical (an electrical utility line and two amethyst bottle finishes) and the other two are built-environment resources (a residence and a storm drain). No archaeological resources were identified by the records searches, or during the pedestrian survey of the Project site conducted February 28, 2024. Furthermore, the soil under existing roadways has been previously disturbed during installations of the road, and other pipelines and utilities. As a result, there is a low likelihood that archaeological deposits or features will be found during construction.

Applied Earthworks contacted the Native American Heritage Commission (NAHC) on January 16, 2024, for a review of their Sacred Lands File (SLF) to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity) are present within or adjacent to the Project area. The NAHC responded on March 6, 2024, stating the SLF search was completed with negative results. The NAHC requested that Native American individuals and organizations should be contacted to elicit information regarding cultural resource issues related to the proposed Project. Project scoping letters were sent via email and U.S. Postal Service by Applied Earthworks on March 8, 2024 to 14 individuals and organizations on the NAHC's Native American contact list that may have traditionally and culturally affiliated with the geographic region of the Project. Copies of the letters, the list of contacts, and received responses are in **Appendix D.1**. Follow-up emails were sent March 22, 2024 to the organizations who had not responded to the initial request.

As of March 26, 2024, the following three responses to the Project scoping letter were received (AE-A, p. 18):

1 The Agua Caliente Band of Cahuilla Indians stated that the Project is not located within the boundaries of the Agua Caliente Band of Cahuilla Indians' Reservation. However, the Project does fall within their Traditional Use Area. For this reason, the Tribe requests a copy of the records search, survey reports, site records from the EIC, copies of any cultural resource documentation generated from the current Project, and shapefiles of the Project area.

2 The Cahuilla Band of Indians stated that they desire to consult on the Project. Their people inhabited this area and established villages, camps, food processing areas, resource areas, and other areas. They request to be advised of the Project's progress and any cultural findings. Subsurface cultural resources are always possible, and they would ask that their Native American monitors be present for the work.

3 The Yuhaaviatam of San Manuel Nation stated that the Project area may be considered sensitive for subsurface cultural resources due to their proximity to previously recorded sites of a highly sensitive nature. As the area is of concern, the Tribe wishes to engage in government-to-government consultation pursuant to Assembly Bill 52 (AB 52) with the Lead Agency for the Project.

Because these Tribes expressed that the Project area may contain buried archaeological resources, mitigation measure **MM CR-1** for preparation of a Monitoring and Treatment Plan and **MM CR-2** for the provision of an archaeological monitor shall be implemented in areas of undisturbed native soils. With incorporation of these mitigation measures, potential impacts to archaeological resources would be reduced to less than significant with mitigation incorporated.

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

Less than significant impact. Human remains are not expected to be disturbed as a result of construction of the Project. In the unlikely event that unknown human remains or funerary objects are uncovered during construction, pursuant to law, the proper authorities would be notified and standard procedures for the respectful handling of human remains would be adhered to in compliance with CCR Title 14, Chapter 3, Section 15064.5(e); Public Resources Code Division 5, Chapter 1.75, Section 5097.98; and State Health and Safety Code Division 7, Part 1, Chapter 2, Section 7050.5. By request of Yuhaaviatam of San Manuel Nation, mitigation measure **MM CR-3** will provide for a buffer around any human remains or funerary objects that are found. Through implementation of the mitigation measure and compliance with existing regulations would reduce potential impacts from the disturbance of human remains to less than significant with mitigation incorporated.

Cultural Resources Mitigation Measures

Implementation of the following mitigation measures would reduce impacts to cultural resources to less than significant.

MM CR-1: MONITORING AND TREATMENT PLAN

Prior to the pre-grade/kickoff meeting, the San Gorgonio Pass Water Agency shall retain a qualified project archaeologist that meets the Secretary of the Interior Standards. A Monitoring and Treatment Plan that is reflective of the project mitigation measures ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the Project archaeologist and submitted to the San Gorgonio Pass Water Agency for dissemination to the Consulting Tribes (Morongo Band of Mission Indians (MBMI), and Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known as San Manuel Band of Mission Indians)). Once all parties review and approve the plan, it shall be adopted by San Gorgonio Pass Water Agency – the plan must be adopted prior to the start of ground disturbing activities for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan. This Plan shall

allow for monitors to be present that represent the Consulting Tribes for the remainder of the project construction, should the Tribe(s) elect to place a monitor on-site.

The final report(s) created as a part of the project (e.g., monitoring and treatment plan, isolate records, site records, survey reports, testing reports, etc.) shall be submitted to the San Gorgonio Pass Water Agency and the Consulting Tribes for review and comment. After approval of all parties, the final reports are to be submitted to the Eastern Information Center, and the Consulting Tribes.

MM CR-2: ARCHAEOLOGICAL MONITORING

Due to the heightened cultural sensitivity of the undisturbed native soil in the proposed project area, the Project archaeologist or designated archaeological monitor with at least 3 years of regional experience in archaeology that is retained by San Gorgonio Pass Water Agency to conduct a Cultural Resource Sensitivity Training at the pre-grade/kick-off meeting. The purpose of the training is to explain and coordinate the requirements of the monitoring plan (see MM CR-1). The archaeologist shall also be present for all ground-disturbing activities that occur within the proposed project area of undisturbed native soil (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.

MM CR-3: INADVERTENT DISCOVERY OF HUMAN REMAINS

If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted immediately pursuant to State Health and Safety Code Section 7050.5 and that code enforced for the duration of the project. No photographs are to be taken by anyone other than the coroner, except with written approval by the Consulting Tribes. The area shall be protected; project personnel/observers will be restricted. The County Coroner has 48 hours to make his/her determination pursuant to State Health and Safety Code Section 7050.5. If the County Coroner contacts the Native American Heritage Commission pursuant to Health and Safety Code section 7050.5(c), then the procedures in Public Resources Code (PRC) Section 5097.98 for the discovery of human remains shall be implemented.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*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?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

(Sources: Project Description, WEBB-A, WEBB-B)

6.a Would the Project 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. As an infrastructure project, operational emissions would be primarily from infrequent visits by vehicles driven by existing maintenance personnel and are considered negligible. The majority of impacts would be considered short term. As described in the AQ/GHG Analysis (WEBB-A), the Project's short-term construction would last approximately 11 months. Project construction would require the use of construction equipment for the turnout, basin, pipeline installation, and paving construction operations, as well as construction workers and vendors traveling to and from the Project site. Construction equipment requires diesel as the fuel source and construction worker and vendor trips use both gasoline and diesel fuel. Project-related fuel consumption was estimated and is included in **Appendix E** (WEBB-B). Construction of the Project is estimated to use approximately 51,785 gallons of diesel fuel and 3,106 gallons of gasoline (WEBB-B).

Fuel consumption from on-site heavy-duty construction equipment and construction would be temporary in nature and uses a limited number of equipment, which would represent a negligible demand on energy resources. Furthermore, there are no unusual Project site characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State.

For these reasons, the Project would not result in a potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy during Project construction or operation. Impacts are less than significant and no mitigation is required.

6.b Would the Project conflict with or obstruct a state or local plan for renewable energy or energy

Less than significant impact. Implementation of the Project will not result in an inefficient, unnecessary, or wasteful consumption of energy, as outlined in the response to Threshold 6a. The proposed Project would be required to comply with state and federal energy conservation measures related to construction and operations, as applicable. As such, impacts to obstructing a state or local plan for renewable energy or energy efficiency during construction or operation will be less than significant. No mitigation measures are required.

Energy Mitigation Measures

Energy impacts resulting from the Project are less than significant; therefore, no mitigation is required.

		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?	☐	☐	☒	☐
iii.	Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv.	Landslides?	☐	☐	☒	☐
b.	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Sources: (Construction General Storm Water Permit Order 2009-0009-DWQ, DOC-B, DOC-C, AE-B, CBSC, CGP, CGP DEIR, LOR-A, LOR-B)

The analysis in this section is based in-part on the *Infiltration/Percolation Feasibility Investigation* and *Preliminary Geotechnical Investigation for APN 411-150-027* reports prepared by LOR Geotechnical Group, Inc. (LOR-A and LOR-B), which are located in **Appendix F.1** and **Appendix F.2**, respectively.

7.a.(i) Would the project 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.

Surface rupture refers to the actual "tearing apart" of the ground surface along a fault trace resulting from an earthquake. The effects of surface rupture may be mitigated by placing structures a specific distance from the known fault trace. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) and to issue appropriate maps. Local agencies must then regulate most development projects within the zones.

Less than significant impact. Seismic activity is expected in Southern California; however, the Project is not located within an Alquist-Priolo zone. The Project area does not contain any known faults; therefore, the potential for on-site fault rupture is very low. The closest fault is El Casco – San Gorgonio Pass Fault, located approximately 0.85 miles from the turnout facility and approximately 1.35 miles from the recharge basin. As previously discussed, the proposed Project includes pipeline replacement, construction of new pipeline, turnout facility, and recharge basins, along with roadway improvements. The Project does not propose any structures, habitable or otherwise, that could pose a substantial risk to people or other structures in the event of strong seismic ground shaking. The Project components would be designed to incorporate standard seismic design criteria, including those set forth by SGPWA. Therefore, the potential for impacts that would expose people or structures to substantial adverse effects associated with the rupture of a known earthquake fault is less than significant.

7.a.(ii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking

Given the proximity of known faults as shown in **Figure 9 – Fault Zones**, the Project area, like almost all of California, is susceptible to potentially intense seismic ground shaking. The effects of ground shaking on structures and underground pipelines are difficult to predict, and depend on the intensity of the quake, the distance from the epicenter to the site, the composition of soils and bedrock, construction design, and other physical criteria. Based on these factors, ground shaking may cause none, little, or major structural damage or destruction to the proposed facilities. However, compliance with current seismic design measures to minimize the effects of seismic movement on water infrastructure will ensure risks from seismicity is reduced.

Less than significant impact. Although the Project components would be subject to seismic activity from faults located in the vicinity, no habitable structures that would involve exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving earthquake rupture are proposed. Therefore, the impact would be less than significant.

7.a.(iii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction commonly occurs in loose, saturated, sandy sediments that are subjected to ground vibrations greater than 0.2g (g-force). When liquefaction occurs, the sediments involved have a substantial loss of shear strength and behave like a liquid or semi-viscous substance, which can result in structural distress or failure due to ground settlement, a loss of load-bearing capacity in foundation soils, and the buoyant rise of buried structures.

Less than significant impact. According to the California Department of Conservation and the City of Calimesa General Plan, the Project site is identified as having low liquefaction susceptibility (CGP, p.8-4). According to the Project's Preliminary Geotechnical Investigation for APN 411-0150-027, prior to construction, near-surface loose soils will be removed and replaced with compacted fill during site grading (LOR-B, p. 8). Additionally, Project components will incorporate standard seismic design criteria. As such, the potential for impacts that would expose people or structures to the risk of loss, injury, or death associated with seismic related ground failure including liquefaction is less than significant.

FIGURE 9

Fault Zones

LEGEND

Alquist-Priolo Fault Traces
- Accurately Located
- Approximately Located
- Inferred
- Concealed

- Project Site
- Alquist-Priolo Fault Zones

N

0 1,250 2,500 Feet

Sources: California Department of Conservation and California Geological Survey, Alquist-Priolo Earthquake Fault Zones and Active Fault Traces, accessed Feb 13, 2024; Nearmap, 2024.

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7.a.(iv) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Strong ground motions can result in landslides, rockslides, and rock falls, particularly where saturated ground conditions exist. During an earthquake, groundwater conditions also have an influence in the development of seismically induced slope failures, as well as landslides and mudflows. Lateral spreading is a type of landslide that can occur on gentle to steep slopes where seismic-induced liquefaction occurs in saturated soils.

Less than significant impact. The Project site along the pipeline alignment has been previously excavated, filled, graded, and leveled and is currently paved. The recharge basin site is on a vacant lot and due to its flat gradient and the absence of known landslides within or immediately adjacent to the site, the potential for landslides at the site is very low. As such, the potential for impacts associated with landslides are considered less than significant. (LOR-B, p. 2.)

7.b Would the Project result in substantial soil erosion or the loss of topsoil?

Less than significant impact. The Project components will be constructed along existing roadways and along portions of parcels that will be acquired by SGPWA, SMWC, and San Bernardino Valley. The construction will take place on previously disturbed portions of vacant lots, or portions of developed parcels. Because they are located underground, installation of the proposed pipelines would not result in significant changes to existing topography. The Project roads are currently being used and are presently travelled upon. Grading and excavation associated with construction of the recharge basin and elevation control basin may lead to localized erosion as wind and water carry loose soil offsite. Maximum excavation depth crossing underneath Calimesa Creek Channel will be 13 feet, and the rest of the Project facilities will be at a depth of 5.5-6 feet.

To minimize soil disturbance, non-storm water discharges, construction materials, and construction waste during its construction phase, the Project will implement an effective Storm Water Pollution Prevention Plan (SWPPP) pursuant to the California General Permit for Stormwater Discharges Associated with Construction Activities. Project–related construction would involve excavation and earthmoving. With implementation of the SWPPP, substantial loss of topsoil is not anticipated and the construction phase of the Project would not be exposed to extensive rain during the rainy season. Therefore, impacts related to substantial soil erosion or the loss of topsoil, are considered less than significant.

7.c Would the Project 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?

Impacts related to landslide and lateral spreading are addressed in threshold 7.a.iv above; impacts related to liquefaction are addressed in threshold 7.a.iii above. This analysis addresses impacts related to unstable soils, as a result of lateral spreading, subsidence, or collapse.

Less than significant impact. The Project components will be constructed on existing roadways and portions of parcels that are previously developed/disturbed and generally flat. No steep slopes are present in the Project area. Furthermore, the potential for land-sliding at the site is very low (LOR-B p. 8). Implementation of the Project will not contribute to or expose people or structures to substantial adverse

effects associated with on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, impacts would be less than significant.

7.d Would the Project 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?

This question makes specific reference to a definition from the Uniform Building Code (1994), which has been replaced by the California Building Code (2016) and the definition of expansive soil provided in section 1803.5.3. Expansive soils are those that contain a significant amount of clay particles that have a high shrink (dry) and swell (wet) potential. The upward pressures induced by the swelling of expansive soils under moist conditions can damage structures.

Less than significant impact. Geologic and engineering reports indicate that soils in Calimesa generally have low shrink-swell potential because they are generally sandy. As a result, soil in the north-central portion of Calimesa are generally suitable for development purposes (CGP DEIR, p. 3.6-8.) The site on 4th Street where the basins are proposed has very low expansion potential (LOR-B, p. 11). Portions of the Project traverse through existing roadways which have already been determined suitable for development. Therefore, potential impacts related to being located on expansive soils that would create substantial risks to life or property, are considered less than significant.

7.e Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No impact. The Project does not include the handling of wastewater, the use of septic tanks, or alternative wastewater disposal systems. The Project would not dispose of any wastes, including by applying to soil. Thus, there would be no impact in terms of having soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

7.f Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources include fossils of plant and animal remains from prehistoric eras.

Determination. Applied Earthworks conducted a Paleontological Resource Assessment (PRA) for the Project (AE-B), a copy of which is located in **Appendix F.2**. The PRA was completed from a combination of desktop studies and fieldwork. The desktop studies included a review of published and unpublished literature and maps, as well as museum records searches. The purpose of these studies was to identify the geologic units in the Project area and to determine whether previously recorded paleontological localities occur either within the Project area, or within the same geologic units nearby but outside the Project area.

The desktop analysis suggests that deposits of middle to late Pleistocene old axial-valley deposits, Unit 1 (“Qoa1”) have a high potential of preserving significant paleontological resources. The geotechnical reports for the Project (LOR-A and LOR-B) described sediments matching the descriptions of Qoa1 at 0–2 feet below ground surface within the western terminus (recharge basin area). Although no subsurface

data was available for the roadway portions of the Project area, Qoa1 deposits are mapped throughout the entire extent (AE-B, p. 19).

Fieldwork was conducted by Applied Earthworks, Inc. on February 28, 2024 to confirm presence or absence of exposed fossils and to evaluate geologic exposures for their potential to yield significant subsurface paleontological resources (AE-B, p. 10). Prevalent hardscaping, including roads, extensive vegetation, and the absence of geologic outcrops or road cuts in the Project area limited close field examinations of the surficial geology in the Project area. Specifically, the surficial geology was only visible in sparse patches between vegetation in the open field at the west terminus (i.e., recharge basin area). The remainder of the Project area, including all of 4th Street and County Line Road, are paved and developed, with no geological exposures. The field survey found no notable changes in lithology and did not encounter any paleontological resources.

Because the field survey did not yield much useful information that would affect the determination of paleontological resource potential in the Project area, the results of the desktop studies that show the Project area underlain with Qoa1 deposits, which have the potential contain significant paleontological resources, suggest that the Project area has High A ("Ha") Sensitivity. Based on the Ha Sensitivity mapping across the entire Project area, and the Project excavation to extend beyond artificial fill, there exists the potential for inadvertent impacts to unknown paleontological resources. Therefore, mitigation measure **MM PALEO 1** will require implementation of a Paleontological Resource Impact Mitigation Program (PRIMP) by a qualified paleontologist for construction activities that extend below the depth of artificial fill and below road pavement. With implementation of existing regulations related to the discovery of paleontological resources and **MM PALEO 1**, impacts to a unique paleontological resource or site or unique geologic feature are **less than significant with mitigation incorporated**.

Geology and Soils Mitigation Measures

Implementation of the following mitigation measure would reduce impacts to geology and soils to less than significant.

MM PALEO-1: PALEONTOLOGICAL RESOURCE IMPACT MITIGATION PROGRAM

Construction activities that extend below the depth of artificial fill and below road pavement may impact significant paleontological resources throughout the Project area. Therefore, prior to the issuance of grading permits and consistent with Riverside County General Plan policies (i.e., Open Space Element Policy 19.6), a Paleontological Resource Impact Mitigation Program (PRIMP) shall be prepared by a qualified professional paleontologist as defined by mitigation paleontology industry standards (Murphey et al., 2019) and/or the Society of Vertebrate Paleontology (SVP, 2010). The PRIMP will include a Worker's Environmental Awareness Program training prepared prior to the start of Project-related ground disturbance and presented in person to all field personnel to describe the types of paleontological resources that may be found and the procedures to follow if any are encountered; the PRIMP ~~monitoring plan~~ will indicate where construction monitoring should occur and the frequency of required monitoring (e.g., full-time, spot-checks, etc.); the PRIMP ~~monitoring plan~~ will also provide details about fossil collection, analysis, and preparation for permanent curation at an approved repository; and lastly, the PRIMP ~~monitoring plan~~ will describe the different reporting standards to be used, such as monitoring with negative findings versus monitoring resulting in fossil discoveries.

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

(Sources: Project Description, WEBB-A)

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

The focus of the Greenhouse Gas (GHG) analysis is to evaluate the impacts of GHG. GHG, like carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases are responsible for trapping heat in the Earth's atmosphere, leading to global warming and climate change. For analysis purposes, emissions of CO_2, CH_4, and N_2O were evaluated because these gases are the primary contributors to GHG from development.

GHG are typically evaluated on an annual basis using the metric system and not presented in pounds per day (lbs/day) like criteria pollutants. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. SCAQMD has worked on GHG thresholds for development projects. In December 2008, the SCAQMD adopted a threshold of 10,000 metric tonnes per year of carbon dioxide equivalents ($MTCO_2E/yr$) for stationary source projects where SCAQMD is the lead agency. The most recent draft proposal was in September 2010 and included screening significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 $MTCO_2E/yr$, respectively. Alternatively, a lead agency has the option to use 3,000 $MTCO_2E/yr$ as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. The SCAQMD significance thresholds also recommend amortizing construction emission over an expected project life of 30 years. (WEBB-A, p. 6.)

Less than significant impact. The AQ/GHG Analysis prepared for the Project (WEBB-A) estimated GHG emissions from fuel usage by construction equipment and construction-related activities, such as construction worker trips. The results of the analysis for construction-related GHG emissions provide for carbon dioxide (CO_2), methane (CH4), nitrous oxide (N_2O), refrigerants (R), and carbon dioxide equivalent (CO_2E) as shown in **Table F – Project Construction Equipment GHG Emissions**.

Table F – Project Construction Equipment GHG Emissions

Year	Metric Tonnes per year (MT/yr)				
	Total CO_2	Total CH_4	Total N_2O	Total R	Total CO_2E
2024	478.00	0.02	0.03	0.19	487.00
2025	99.20	0.00	0.00	0.03	100.00
Total	**577.20**	**0.02**	**0.03**	**0.22**	**587.00**
				Amortized	**19.57**

Source: WEBB-A, Table 2
Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Table F indicates that an estimated total of 19.57 $MTCO_2E$ per year would occur from Project construction equipment over the course of the estimated 11-month construction period. The draft SCAQMD GHG threshold guidance document released in October 2008 recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies.

Long-term emissions, as discussed under the response to threshold 3.b, Air Quality, would primarily be in the form of mobile source emissions from infrequent maintenance. Therefore, GHG emissions from operations would be negligible.

The proposed Project does not fit into the categories provided (industrial, commercial, and residential) in the draft thresholds from SCAQMD. The Project's emissions were compared to the 3,000 $MTCO_2E$/yr threshold for non-industrial projects because it is more conservative. Since the draft SCAQMD GHG threshold Guidance document released in October 2008 recommends that construction emissions be amortized for a project lifetime of 30 years, the total GHG emissions from Project construction were amortized and found to be less than the lowest SCAQMD recommended screening level of 3,000 $MTCO_2E$/yr. Due to the lack of adopted emissions thresholds, the estimated amount of emissions from Project construction and negligible operational emissions from infrequent maintenance vehicles, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and impacts would be less than significant. No mitigation is required.

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

No impact. Because the proposed Project involves non-potable raw water infrastructure, it is not considered a significant source of operational GHG emissions. The Project will not result in any changes to the existing land use patterns within the Project area and its construction does not generate significant amounts of GHG (refer to **Table F**); therefore, the Project will not conflict with any applicable plan, policy, or regulation for the reduction in GHG emissions. No impacts would occur and no mitigation is required.

Greenhouse Gas Mitigation Measures

Greenhouse gas impacts resulting from the Project are less than significant; therefore, no mitigation is required.

	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?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would 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?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

(Sources: Cal Fire, CCR; CFR; CGP, Cortese List; CFR Title 40, Chapter 1, Subchapter I, Part 261; Google Earth; Gov. Code 65962.5, Health and Safety Code, Project Description, SWRCB-A, SWRCB-B)

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

Construction activities may include the transport and storage of hazardous materials, such as fuels for construction equipment. The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. A number of federal and state agencies prescribe strict regulations for the safe transportation of hazardous materials. Hazardous material transport, storage and response to upsets or accidents are primarily subject to federal regulation by the U.S. Department of Transportation, Office of Hazardous Materials Safety in accordance with Title 49 of the Code of Federal Regulations (CFR). California regulations applicable to hazardous material transport, storage, and response to upsets or accidents are codified in Title 13 (Motor Vehicles), Title 8 (Cal/OSHA), Title 22 (Management of Hazardous Waste), Title 26 (Toxics) of the California Code of Regulations (CCR), and the Chapter 6.95 of the Health and Safety Code (Hazardous Materials Release Response Plans and Inventory).

Less than significant impact. Construction of the Project elements (recharge basin, pipelines, turnout facility, and roadway improvements) may include the transport and storage of hazardous materials, such as fuels for the construction equipment. The transportation of hazardous materials can result in

accidental spills, leaks, toxic releases, fire, or explosion. However, Project construction is not expected to create the need for an excessive amount of hazardous materials being used on-site.

Compliance with applicable federal and state laws related to the transportation, use, storage, and response to upsets or accidents that may involve hazardous materials would reduce the likelihood and severity of upsets and accidents during transit and storage. Additionally, construction and operation of the Project is not expected to result in the use of large amounts of hazardous materials that would create a hazard to the public or environment. Therefore, potential impacts would be less than significant.

9.b Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. The Project would not create a significant hazard to the public or to the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, because the storage, handling, and disposal of any hazardous materials that could be used during construction would be done in accordance with applicable best management practices (BMPs) to manage clean-up of potential spills of hazardous materials. The operation of the Project does not include the use of hazardous materials. Through compliance with applicable regulations, impacts would be less than significant.

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

Less than significant impact. The County Line Road pipeline component is located within one-quarter mile of Mesa Grande Academy Children's Center and Calimesa Elementary School. Construction and operation of the Project would not require atypical chemicals associated with construction methods and equipment. Fuels, lubricants, and solvents can be anticipated but would not create a route of hazardous exposure to students at nearby schools because construction activities would be limited to roadways and transient as they progress along the alignment. In addition, the construction of the Project would comply with state and federal regulations governing the use and transport of hazardous materials. Therefore, the proposed Project would not expose nearby schools to hazardous materials, substances, or waste and impacts would be less than significant.

9.d Would the Project 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?

No impact. There are no sites on the list compiled pursuant to Government Code Section 65962.5 within the general area in which the Project components would be located or along or adjacent to pipeline alignments. There are no USTs within a quarter mile of the Project site. Therefore, there would be no impact.

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

No impact. There are no public airports, public use airports, or private airstrips in the City of Calimesa. The closest airport is the Redlands Municipal Airport, located approximately 10 miles north of the Project Site. As such, implementation of the Project would not result in a safety hazard or excessive noise for hazard for people residing or working on the Project site. No impact would occur.

9.f Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City of Calimesa identified the following evacuation routes in its General Plan: Interstate 10 and California Street for north-south movement of traffic; and County Line Road for east-west movement of traffic. Additional streets that can augment the routes include Calimesa Boulevard, 3rd Street and 5th Street for north-south traffic flow, as well as Avenue L and Singleton Road for east-west traffic movement (CGP, pp. 8.11 – 8.12).

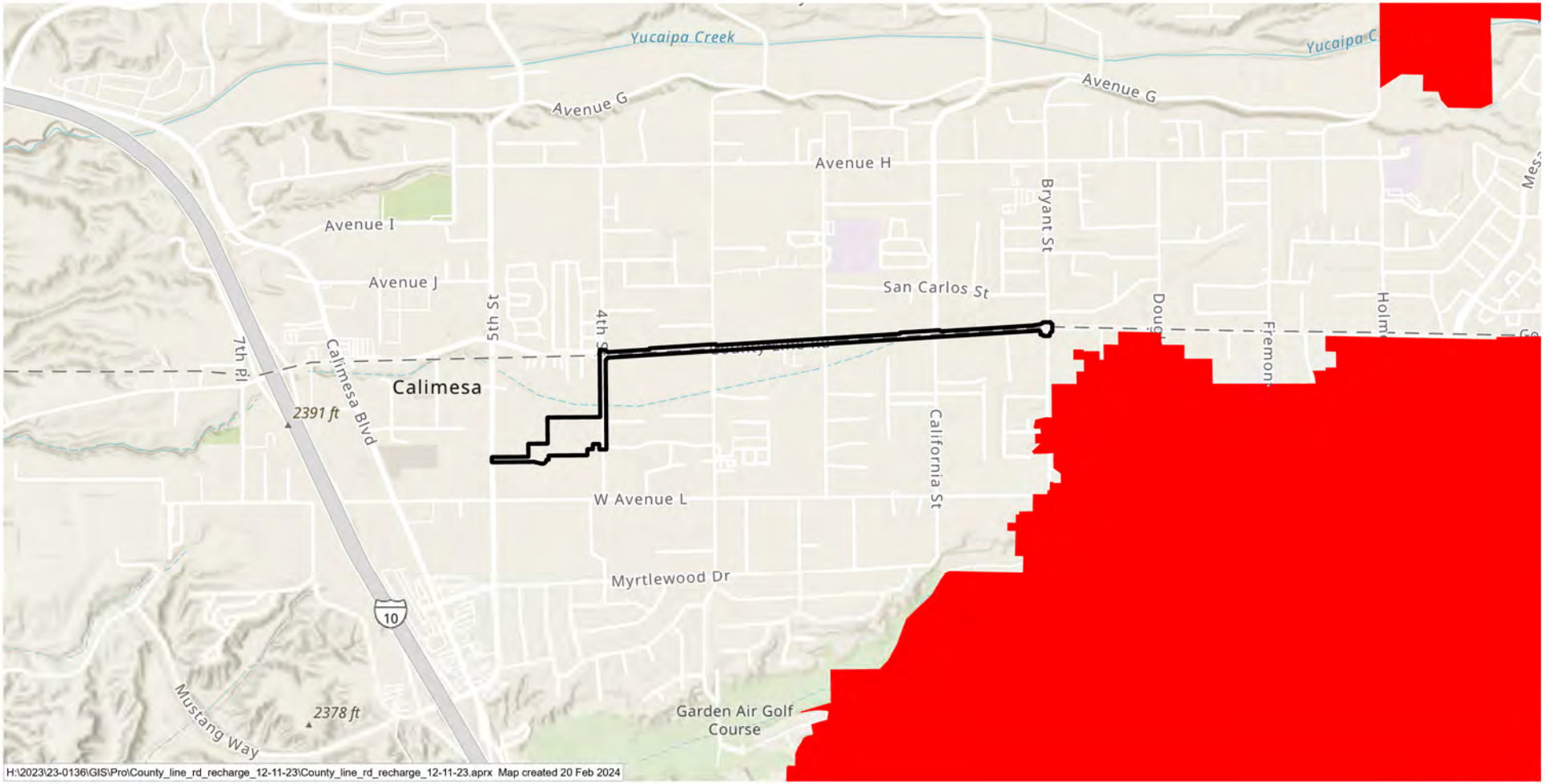
Less than significant impact. Construction of the Project components would cause traffic delays if lane closures are required, which may affect response times for emergency vehicles or travel time for evacuees. As part of the final design for the any Project component, traffic control plans shall be prepared and shall be approved for which a lane closure or encroachment permit is required. The traffic control plans shall provide adequate pass-by features for emergency vehicles. Through compliance with required traffic control plans and encroachment permits, the details of which would be dictated by the City of Calimesa, the ability of emergency vehicles to pass by the construction site(s) safely, efficiently, and quickly would not be limited. Therefore, impacts related to the interference with an adopted emergency response plan or emergency evacuation plan would be less than significant.

9.g Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than significant impact. Based on the Fire Hazard Severity Zones in State Responsibility Areas map, the Project is not located in a Local Responsibility Zone (LRA) or a State Responsibility Zone (SRZ) as shown on **Figure 10 – Fire Hazard Severity Zones**. The eastern portion of the Project site is near a LRA Very High Fire Severity Zone. Project construction activities would require workers to be present at the Project; however, these workers would not be at significant risk to wildland fires since they would not be confined within structures, as the construction would be outside, mostly in ROW. The pipeline component of the Project would be located underground and as such would not expose people or structures to a significant level of risk from wildland fires. Therefore, the potential for impacts that would expose people or structures to a significant risk or loss, injury or death involving wildland fires is less than significant.

FIGURE 10

Fire Hazard Severity Zones



LEGEND

Project Site

Local Responsibility Fire Hazard Severity Zones

Very High

0 500 1,000 Feet

Sources: California Department of Forestry and Fire Protection, Riverside West and San Bernardino South West, Nov, 2009; Esri (imagery), 2024.

ALBERT A. WEBB ASSOCIATES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
10. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
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 through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

(Sources: Yucaipa SGMA, CMC, SWRCB-A, SWRCB-B, SWRCB-C, USEPA-A, USEPA-B, FEMA)

10.a Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Water quality standards are the combination of water quality objectives (i.e., numeric, and narrative thresholds) that are established to protect the beneficial uses of downstream receiving waters. Waste discharge requirements are permitted discharges of waste.

Less than significant impact. The Project involves constructing a groundwater recharge basin with associated piping in order to recharge imported State Water Project (SWP) water. The Project is located within the regulatory jurisdiction of the California Regional Water Quality Control Board – Santa Ana Region (RWQCB) which is guided by the Santa Ana Regional Water Quality Control Plan (i.e., Basin Plan). The Basin Plan sets forth the water quality standards for each surface water and groundwater body in the Santa Ana River Watershed as well as the beneficial uses and the water quality objectives that have been established by the RWQCB. The Project area is tributary to Calimesa Creek. Calimesa Creek flows westerly to join with San Timoteo Creek, which outlets to the Santa Ana River and ultimately the Pacific Ocean. The Project is also within the Yucaipa Groundwater Basin. Both groundwater and surface water bodies have assigned beneficial uses and water quality objectives. Although Calimesa Creek and Wildwood Canyon Creek are not listed in the Basin Plan, water quality objectives still apply.

The segment of San Timoteo Creek that the Project discharges to (i.e., Reach 3) is listed by the RWQCB as an impaired waterbody for high concentrations of Indicator Bacteria (*Final California 2020 Integrated Report (303(d) List/305(b) Report)*. As such, construction projects and new developments that are tributary to Reach 3 of San Timoteo Creek are expected to ensure no release of new sources of bacteria. The proposed Project only handles imported SWP water, which would be infiltrated to the groundwater, and is not expected to release sources of bacteria.

Construction of the facilities identified in the Project would involve actions that have the potential to degrade surface or groundwater quality. Construction of the Project facilities could result in degraded downstream water quality because of polluted stormwater runoff coming from the construction site. Construction-phase stormwater quality is regulated by a statewide National Pollutant Discharge Elimination System (NPDES) permit with waste discharge requirements (the Construction General Permit, NPDES No. CAS000002) to minimize the discharge of construction stormwater to the maximum extent practicable. To achieve this, the Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer (QSD) and implemented onsite by a Qualified SWPPP Practitioner (QSP) for the duration of construction until disturbed ground areas are hardened or stabilized. SGPWA will be required to have a SWPPP in place during construction in order to prevent violating water quality standards.

Operation of the Project facilities would recharge imported SWP water to the local groundwater basin, known as the Calimesa Management Area of the Yucaipa Groundwater Basin (Basin No. 8-002.07). Imported SWP water originates from the Sacramento/San Joaquin Delta in Northern California and is considered non-potable for direct human consumption but does not present a source of pollutants to the groundwater basin. In addition, the process of infiltration through soil is highly effective in removing pollutants. Therefore, no additional treatment is required, and the infiltration provided by the proposed basin would be sufficient to address operational-phase sources of pollutants. The Project activities at the turnout facility and roadways will be underground and/or hardened after construction and operation of said facilities would not threaten downstream waterbodies. If discharges of SWP water should occur during operation of the Project as part of flushing or maintenance activities, then no degradation of downstream waterbodies would occur because of the relatively high, albeit non-potable, quality of SWP water. The Project includes relocating an existing 8-inch diameter potable water pipeline, which may require flushing during the reinstalling process. Releases originating from drinking water pipelines are regulated by Order No. R8-2015-0004 (NPDES No. CAG998001), General Waste Discharge Requirements for Insignificant Threat Discharges to Surface Waters and Order WQ 2014-0194-DWQ (NPDES No. CAG140001), Drinking Water System Discharges to Waters of the United States.

Through compliance with existing water quality regulations for surface and groundwaters including NPDES permits, the Project would not substantially degrade surface or groundwater quality during construction or operational phase activities. Impacts are considered less than significant.

10.b Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No impact. The Project proposes several components including the construction and operation of water conveyance pipelines and a groundwater recharge basin for the purpose of increasing water supply reliability, improving groundwater conditions, and enhancing drought resiliency.

The Project would contribute water supplies for the purpose of groundwater recharge to Yucaipa Subbasin within the Calimesa Management Area and would therefore not decrease groundwater supplies or interfere with recharge. The Yucaipa SGMA includes eight local and regional member agencies: South Mesa Water Company, South Mountain Water Company, Western Heights Water Company, Yucaipa Valley Water District, City of Redlands, City of Yucaipa, San Bernardino Valley Municipal Water District, and San Gorgonio Pass Water Agency. The Yucaipa SGMA manages the local groundwater resource in order to maintain sustainable and long-term beneficial use pursuant to the Sustainable Groundwater Management Act of 2014 (SGMA). The Yucaipa Subbasin is the principal alluvial aquifer that provides the majority of municipal water served to residents and businesses in portions of the cities of Yucaipa, Calimesa, and Redlands. Over the last decade, extreme drought conditions have impacted groundwater levels in the Yucaipa Subbasin. Although the region has a supplemental source of water by way of the SWP Contractors, the region lacks the facilities to utilize the supplemental supply. The SWP Contactors, SGPWA and San Bernardino Valley, will receive imported State Water Project supplies when available from DWR. This SWP water would be received through the turnout facility and ultimately directed to the recharge basin to improve the overall health of the Yucaipa Subbasin. The Yucaipa SGMA collaboratively prepared the Yucaipa Subbasin GSP, which identifies this project as an important/critical component project to support water supply reliability, healthy groundwater management and enhance regional drought resiliency. Because the Project represents a key implementing project of not only the GSP, but also the Santa Ana Watershed Project Authority (SAWPA) and IRWMP (Integrated Regional Water Management Plan) to increase groundwater supplies through groundwater recharge, no adverse impacts to groundwater are anticipated. Therefore, no adverse impacts are expected.

10.c.i. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on-or-off-site?

Less than significant impact. The Project consists of constructing a groundwater recharge basin with associated piping to recharge imported SWP water. The Project does not include altering the course of a waterbody and will add a minimal area of new imperviousness of 25,530 square feet and will repave 16,495 square feet after installation of the pipelines within existing roadways. Calimesa Channel is a concrete, trapezoidal channel that bisects 4th Street. Because installation of the proposed pipe will go underneath Calimesa Creek Channel, its flows will not be altered by the Project. Also, the existing drainage pattern of the Project area would not be altered since the facilities are underground related to the turnout and pipelines. At the recharge basin site, the site is surrounded by existing roads or existing rural development, and therefore there is no pattern of a larger drainage that would be interrupted by constructing the recharge basin.

During construction there exists the potential for erosion or siltation on- or off-site. Therefore, the Project will comply with existing regulations for construction-phase stormwater pollution. Construction-phase stormwater quality is regulated by a statewide NPDES permit with waste discharge requirements (the Construction General Permit, NPDES No. CAS000002). The Construction General Permit requires the development of a SWPPP, for certain types of projects, by a certified Qualified SWPPP Developer (QSD) and implemented onsite by a Qualified SWPPP Practitioner (QSP) for the duration of construction. Permit coverage under the statewide Construction General Permit from the State Water Resources

Control Board (SWRCB) and preparation of an effective SWPPP is required because the Project site and anticipated area of disturbance is greater than one-acre. Therefore, through implementation of existing regulations to address construction-phase potential for erosion or siltation, and operational activities that are belowground, impacts are less than significant.

10.c.ii. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or-off-site?

Less than significant impact. The Project consists of constructing a groundwater recharge basin with associated piping to recharge imported SWP water. The existing storm drain system in the area would not be affected by the proposed Project. The Project pipelines would be underground and would not impact the storm drain system. The Project recharge basin has a capacity of 16.8-acre feet. In the unlikely event the recharge basin overflows, the Project has proposed an emergency overflow basin (i.e., elevation control basin) with the capacity of 1.7-acre feet. In the unlikely event the elevation control basin capacity is reached, flows would be directed down Buena Vista Court. Buena Vista Court will be improved by SGPWA as part of the Project to its design width with pavement, asphalt drainage berms, and crown to accommodate any overflow. Stormwater currently flows from Buena Vista Court to 5th street south to existing storm drain inlets at L Street. The maximum additional contribution from the Project if the Elevation Control Basin were to overflow would be limited to the rate coming through the Turnout Facility, which has a maximum turnout capacity of 10 cfs. This is considered a negligible contribution to the existing storm drain facilities. Therefore, impacts from flooding on- or off-site are less significant.

10.c.iii. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than significant impact. The Project consists of constructing a groundwater recharge basin with associated piping in order to recharge imported SWP water. Within the Project area, there are existing storm drain inlets along County Line Road but none on 4th Street or Buena Vista Court. Runoff from Buena Vista Court sheet flows west onto 5th Street and then south to an inlet at L Avenue. Runoff from the Project's portion of 4th Street sheet flows partly to Calimesa Creek Channel and partly toward inlets on L Avenue to the south. Construction activities present the risk of pollutant discharges and are therefore handled by implementing an effective SWPPP, as described previously in threshold 10.c.i. Because the Project pipelines would be underground, and they would not result in an exceedance of the existing drainage system. Runoff generated on the recharge basin parcel will be directed to flow into the recharge basin and into the elevation control basin. The recharge basin has a capacity of 16.8-acre feet, and in the event the recharge basin overflows, the Project has proposed an emergency overflow basin (i.e., elevation control basin) with the capacity of 1.7-acre feet. In the unlikely event the elevation control basin capacity is reached, flows would be directed down Buena Vista Court. Buena Vista Court would be improved to its design width with pavement, asphalt drainage berms, and crown by SGPWA to accommodate any overflow during extreme weather events. The maximum flow coming out of the elevation control basin and out of Buena Vista Court out-letting into the storm drain system at the

northeast corner of 5th Street and L Avenue would be a maximum of 10 cfs, which is considered a negligible contribution to the area. Therefore, impacts from exceeding capacity of existing or planned drainages systems, or additional sources of polluted runoff on- or off-site are less significant.

10.c.iv. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would impede or redirect flood flows?

Less than significant impact. Construction of the Project would not alter the existing drainage pattern of the Project area because the Project does not include a vertical component that would redirect or impede flows. The Project would not alter the course of a stream or river. Regarding the potential for substantial erosion, siltation, and polluted runoff, refer to the response to threshold 10.a. Regarding the potential for flooding, refer to the response to threshold 10.d.

According to FEMA FIRM Maps, there are no flood hazard zones in the Project area except within the confines of the Calimesa Creek Channel, which is designated Zone AE, meaning the channel is a Regulatory Floodway[4] and the 100-year storm event is contained within the channel. FEMA has designated the remainder of the Project components to be within Zone X, which is defined as areas of 0.2 percent annual chance flood (500-year storm event); areas of 1 percent annual chance flood (100-year storm event) with average depths of less than 1 foot or within drainage areas less than 1 square mile; and areas protected by levees and 1 percent annual chance flood. See Figure 11 – FEMA Flood Hazard Zone. The Project would install the proposed pipeline in 4th Street underneath Calimesa Channel using a trenchless method (i.e., jack and bore) and will not affect Calimesa Creek Channel's function of conveyance of flood flows.

Construction of the water conveyance pipelines would occur within paved road ROWs. Roadways and construction areas would be returned to their original line and grade. With implementation of the SWPPP and dewatering/de minimus permits, as well as Project design to avoid Calimesa Creek Channel, the Project would not result in substantial erosion or siltation. Therefore, impacts from impeding and redirecting flood flows would be less than significant.

10.d In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?

The Project location is too far inland from the ocean to be subject to tsunamis and there are no seiche zones in the Project area. FEMA Flood Hazard Zones for the Project area are shown in **Figure 11 – FEMA Flood Hazard Zone**.

Less than significant impact. The Project would not result in the release of pollutants as the result of inundation since no chemicals or potential pollutants will be stored on the recharge basin site. The Project site is not within a FEMA Flood Hazard Zone or Dam Inundation Zone (CGP, p. 8-9.) Inundation

[4] The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachments so that the 1% annual chance flood (100-Year flood) can be carried without substantial increases in flood heights.

of any Project component facilities at these locations would pose limited risk of pollutant release because chemicals are not anticipated to be stored on site. The pipeline component of this Project is buried underground, the risk of pollutant release during inundation is less than significant. Therefore, through existing regulations and project design, impacts from release of pollutants during inundation would be less than significant.

10.e Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. The Project is within the RWQCB Basin Plan for the Santa Ana River Watershed. The Basin Plan outlines the RWQCB's regulatory programs and priorities for regulating water quality of surface and ground water bodies. Because the Project will comply with the NPDES requirements related to construction activities and operational activities, the Project would not conflict or obstruct the implementation of the local Basin Plan.

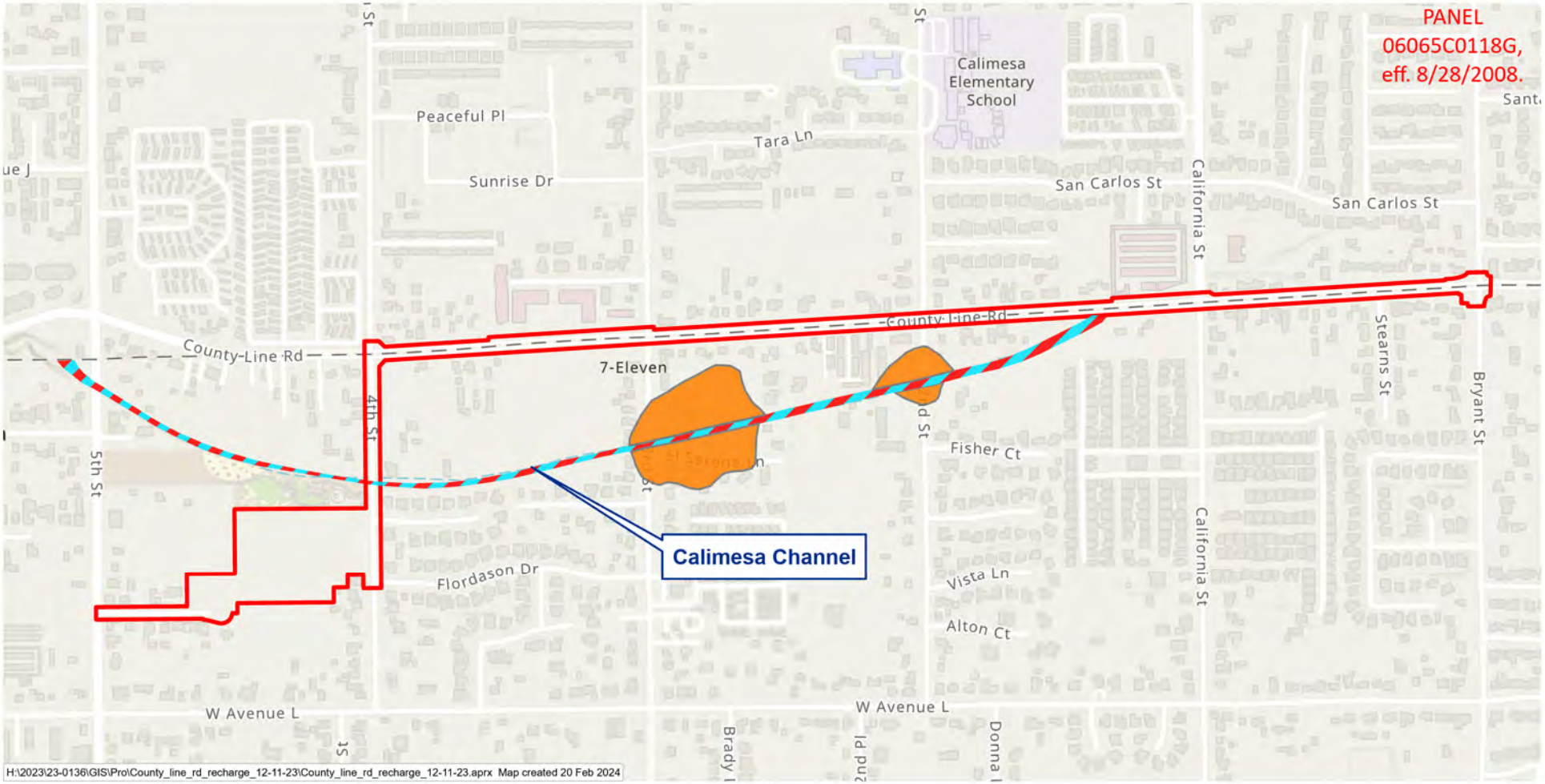
The Project will benefit users in multiple sectors by implementing a collaborative, cost-efficient, and multi-benefit water management solution to address water supply issues to meet the needs of many. The proposed Project would assist the region and Yucaipa SGMA in meeting their goals by improving the ability to better manage surface supplies when they are available for use as a more reliable and resilient water supply. Therefore, the Project is consistent with, and supported by the Yucaipa SGMA GSP. This Project would help prevent a net decline of groundwater levels by facilitating recharge of imported SWP water supplies when they are available to an area that previously did not have access to such supply. As a result of this Project, San Bernardino Valley and SGPWA as member agencies of the Yucaipa SGMA, will have infrastructure to store water and provide reliable source of water during drought emergencies, leaving the communities of Calimesa and Yucaipa less vulnerable to drought restrictions and the groundwater basin at less risk of future groundwater level declines as climate change progresses. The construction and operation of the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; therefore impacts would be less than significant.

Hydrology and Water Quality Mitigation Measures

Impacts regarding hydrology and water quality are less than significant; therefore, no mitigation is required.

FIGURE 11

FEMA Flood Hazard Zone



LEGEND

- Project Site
- **FEMA Flood Hazard Zones**
  - Other Flood Areas, Zone X
  - Regulatory Floodway, Zone AE

0 390 780 Feet

Sources: Esri (imagery), 2024; FEMA NFHL, 2022.

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	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
11. LAND USE PLANNING. Would the project				
a. Physically divide an established community?	☐	☐	☒	☐
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

(Sources: Google Earth, Project Description, CGC, CGP, Opinion No. 94-902, Yucaipa SGMA)

11.a Would the Project physically divide an established community?

Less than significant impact. The physical division of an established community typically refers to the construction of a physical feature (such as a wall, interstate highway, or railroad tracks) or the removal of a means of access (such as a local road or bridge) that would impair mobility. Construction of the Project components such as the pipelines and recharge basin are not large enough to constitute a physical barrier. The pipelines and turnout facility are underground facilities and once construction is complete, any roads in which the pipelines were installed would be returned to their original condition and access restored. For these reasons impacts regarding physically dividing an established community would be less than significant.

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

No impact. The Project is located fully within the City of Calimesa, which has local land use authority. SGPWA does not have land use authority but is a public agency organized by the State Legislature in 1961 by the San Gorgonio Pass Water Agency Law (Stats.1961, c. 1435, p. 3239) and has jurisdiction over the Project. San Bernardino Valley and SGPWA will acquire the encroachment permits needed from DWR and the City in order to implement the Project. SGPWA owns the recharge basin parcel, which has a land use and zoning designation of Residential Low Medium (R-L-M, 4-7 units per acre) (**Table A** and Figures 6a and 7). Pursuant to San Gorgonio Pass Water Agency Law, SGPWA will develop the parcel for purposes of supporting its purpose and mission.

The Project is an effort planned by the Yucaipa SGMA to support the implementation of infrastructure to store water and provide a reliable source of drinking water during drought emergencies in order for the communities of Calimesa and Yucaipa to be less vulnerable to drought restrictions. The Yucaipa GSP describes the Project and others, which has been approved by DWR. Therefore, with regards to conflicts with any applicable land use plan, policy or regulation, no impacts are anticipated.

Land Use Planning Mitigation Measures

There are no impacts to land use planning; therefore, no mitigation is required.

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

(Sources: CGP DEIR, CGP, DOC-C)

12.a Would the Project 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?

Mineral resources are naturally occurring chemicals, elements, or compounds formed by inorganic processes or organic substances. These resources include bituminous rock, gold, sand, gravel, clay, crushed stone, limestone, diatomite, salt, borate, potash, geothermal, petroleum, and natural gas resources. Construction aggregate, another mineral resource, refers to sand and gravel (natural aggregates) and crushed stone (rock) that are used as Portland cement-concrete (PCC) aggregate, asphaltic-concrete aggregate, road base, railroad ballast, riprap, fill, and the production of other construction materials.

No impact. The Project would not 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, because there are no known valuable mineral resources in City of Calimesa, including the Project area. Given the level of existing development in the Project area, it is highly unlikely that any surface mining or mineral recovery operation could feasibly take place on the Project site. Therefore, there is no impact related to the loss of a mineral resource.

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

No impact. As discussed in threshold 12.a above, the Project would not 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, because no mining operations or other resource recovery sites exist on or near the Project area. Therefore, no impact would occur.

Mineral Resources Mitigation Measures

There are no impacts to mineral resources; therefore, no mitigation is required.

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

(Sources: CGP DEIR, CMC, FHWA, FTA, CLTC Addendum)

13.a Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels 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?

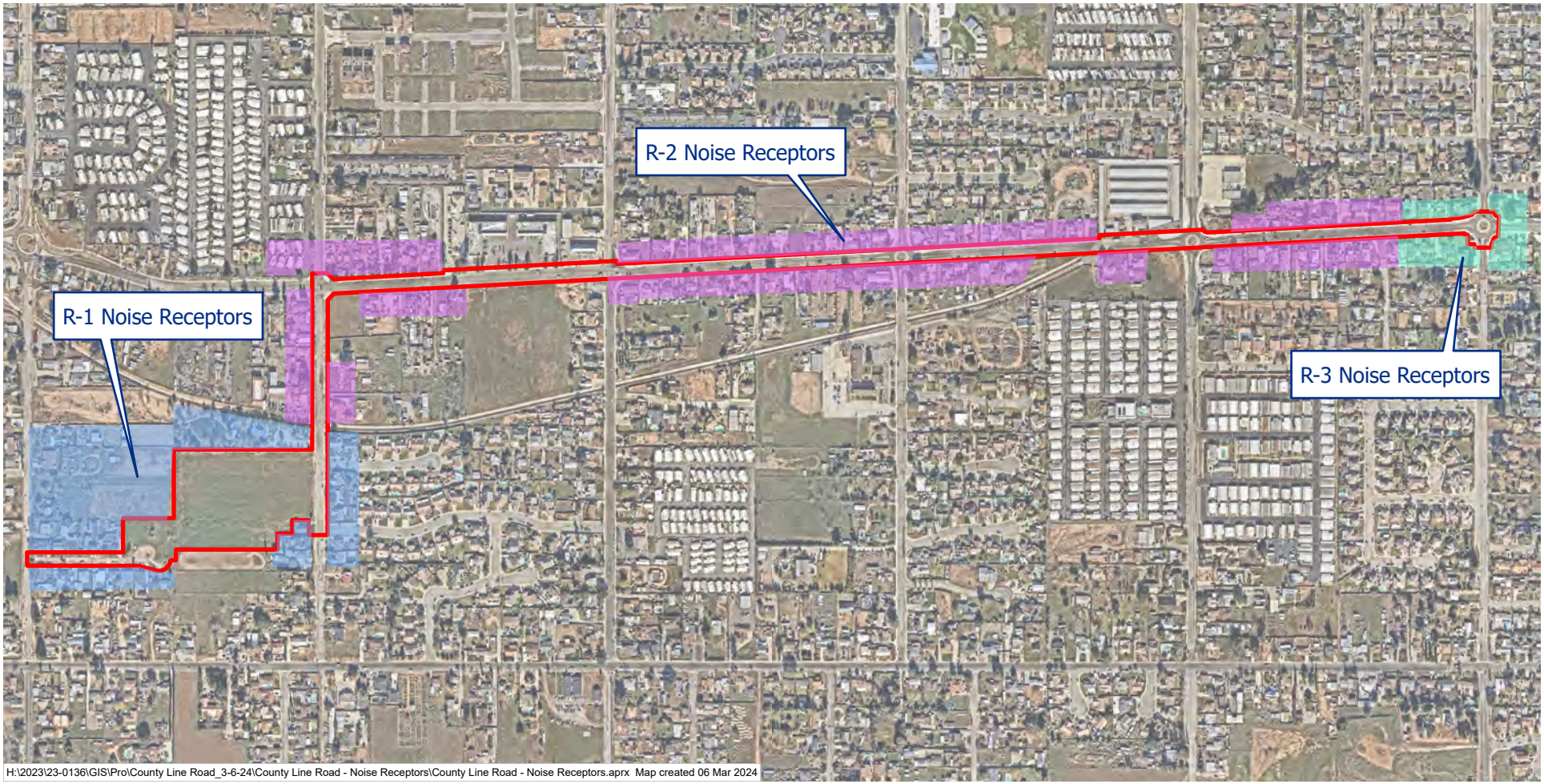
Less than significant impact with mitigation incorporated. Temporary increases to ambient noise levels would occur during Project construction. Noise would derive from the use of various types of construction equipment such as compactors, pavers, excavators, generators, drills, and from a worker-related increase in traffic in the vicinity of Project components. Maximum noise levels (Lmax) associated with the construction equipment expected to be used, ranges from 80 dBA Lmax at 50 feet to 85 dBA Lmax at 50 feet. The pipelines and turnout components will not generate noise once construction is complete because they are underground. Operational noise may come from equipment used at the recharge basin site such as gas-powered leaf blowers, weed whackers, generators, ripper attachment for a tractor, and traffic associated with maintenance. All the Project components are within or adjacent to residential neighborhoods and commercial developments. Receptors within the vicinity of the various Project components are the residences along the pipeline alignment, turnout facility, and basin site, as well as the public park adjacent to the location of the recharge basin as shown in **Figure 12 – Sensitive Noise Receptors**.

The Project components will be constructed within Calimesa. Noise standards for Calimesa are summarized below:

> **City of Calimesa Municipal Code Noise Abatement and Control Regulations Chapter 8.15.080** Construction Equipment: Construction equipment can operate Monday through Friday from 7:00 am to 7:00 pm, Saturday and Sundays from 10:00 am to 5:00pm, and holidays, as set forth in section 8.15.080(A). No equipment, or a combination of equipment regardless of age or date of acquisition, shall be operated so as to cause noise at a level in excess of 75 decibels for more than eight hours during any 24-hour period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes. Should the Project exceed the standards of the Municipal Code, it is under the jurisdiction of Code Enforcement to respond to any complaints regarding noise from the Project construction (CMC.)

FIGURE 12

Sensitive Noise Receptors



LEGEND

Project Site

0 445 890 Feet

Sources: Nearmap, 2024

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Construction noise will vary in conjunction with the type of construction activity and equipment used. Although construction may be continuous throughout an 8-hour workday, construction equipment is not operated consistently for the entire workday. That is, there are times when the equipment is not in use and is powered down. Sensitive receptors, in the form of residences, are located adjacent to the roadways where construction activities will take place. Attenuation of construction noise would be provided to interior receptors by the structural elements (i.e., walls, doors, closed windows) of the building in which they reside. Typical building construction provides a minimum 12 dBA (12 dBA Lmin[5]) interior noise reduction with windows open and 20 dBA Lmin interior noise reduction with windows closed. (CLTC Addendum, **Appendix G**)

Construction of the turnout facility will use equipment including dozers, pavers, rollers, tractors, backhoes, and excavators. The noisiest pieces of equipment are the dozer, paver, roller, and excavator that will generate maximum noise levels of approximately 85 dBA Lmax at 50 feet. The nearest sensitive receptor is a private residence in the R3 – Noise Receptor Zone shown on **Figure 12.** The turnout facility is located approximately 10 feet from the residence's fence. Construction of the turnout component is expected to generate noise levels of approximately 99 dBA Lmax at the fence. The use of mufflers as required by **MM Noise 1** would reduce the exterior noise level at the fence by approximately 15 dBA Lmax which would result in a exterior noise level of 84 dBA Lmax. Applying the 20 dBA Lmin attenuation from building construction for the windows and doors closed scenario, the interior noise level is expected to be 64 dBA Lmax. Assuming a window and doors open scenario, applying the 12 dBA Lmin attenuation from building construction results in an expected interior noise level of 72 dBA.

Construction of the basin will use equipment including excavators, graders, and backhoes. The excavator and grader produce noise levels of 85 dBA Lmax at 50 feet. The nearest sensitive receptors are located south of the basin at a distance of approximately 10 feet (R-1 – Noise Receptors, **Figure 12**). The construction of the basin will generate exterior noise levels of approximately 99 dBA Lmax at the fence. The use of mufflers as required by **MM Noise 1** would reduce the exterior noise level at the fence by approximately 15 dBA Lmax which would result in a exterior noise level of 84 dBA Lmax. Applying the 20 dBA Lmin attenuation from building construction for the windows and doors closed scenario, the interior noise level is expected to be 64 dBA Lmax. Assuming a window and doors open scenario, applying the 12 dBA Lmin attenuation from building construction results in an expected interior noise level of 72 dBA.

Street improvements within Buena Vista Court will require the use of grading equipment. The grader produces noise levels of 85 dBA Lmax at 50 feet. The nearest sensitive receptors are located within this street on both the north and south sides at varying distances. The residence on the corner of Buena Vista Court and 5th Street is the closest sensitive receptor at a distance of approximately 10 feet. The street improvements in Buena Vista Court will generate exterior noise levels of approximately 99 dBA Lmax at the fence. The use of mufflers as required by **MM Noise 1** would reduce the exterior noise level at the fence by approximately 15 dBA Lmax which would result in a exterior noise level of 84 dBA Lmax. Applying the 20 dBA Lmin attenuation from building construction for the windows and doors closed scenario, the interior noise level is expected to be 64 dBA Lmax. Assuming a window and doors open scenario, applying the 12 dBA Lmin attenuation from building construction results in an expected interior noise level of 72 dBA.

[5] Lmin is defined as the minimum sound level, during a measurement period or a noise event.

Construction of the 4th Street pipeline alignment will also produce noise levels of 85 dBA Lmax at 50 feet. The nearest sensitive receptor is located east of the basin at a distance of approximately 10 feet. The construction of the pipeline alignment will generate noise levels of approximately 99 dBA Lmax at the fence. The use of mufflers as required by **MM Noise 1** would reduce the exterior noise level at the fence by approximately 15 dBA Lmax which would result in a exterior noise level of 84 dBA Lmax. Applying the 20 dBA Lmin attenuation from building construction for the windows and doors closed scenario, the interior noise level is expected to be 64 dBA Lmax. Assuming a window and doors open scenario, applying the 12 dBA Lmin attenuation from building construction results in an expected interior noise level of 72 dBA.

Sensitive receptors for pipeline construction are shown on **Figure 12** as R-2 – Noise Receptors. In compliance with **MM Noise 1**, all construction equipment shall operate with mandated noise control equipment which would reduce the exterior noise levels associated with construction.

Pipeline construction within 4th Street will require crossing Calimesa Channel through trenchless methods. Noise from trenchless construction operations is similar to cut-and-cover pipeline construction; however, rather than the noise progressing linearly, it would be confined to entry and exit locations. Thus, noise impacts could last for several weeks rather than a few days in the areas adjacent to tunnel access points. Underground pipelines do not generate noise above ground. In addition, noise would not be emitted from the above-ground structures (i.e., pressure relief valves/blow-offs) that are needed for the pipelines.

Operational noise from the basin involves landscaping maintenance which will occur periodically and within noise level standards identified by the City of Calimesa. In order to maintain the effectiveness of the recharge basin ripping by a tractor of the basin may be required approximately every 4 months. This will only occur if needed and will not be a regular occurrence. Noise levels produced from the tractor are 84 dBA Lmax at 50 feet. The nearest sensitive receptors are west of the basin at a distance of approximately 10 feet. The operational maintenance of the basin will generate exterior noise levels of approximately 98 dBA Lmax at the fence. Applying the 20 dBA Lmin attenuation from building construction for the windows and doors closed scenario, the interior noise level is expected to be 78 dBA Lmax. Assuming a window and doors open scenario, applying the 12 dBA Lmin attenuation from building construction results in an expected interior noise level of 86 dBA. Operational equipment will be used within an 8-hour period per day and therefore, will not operate in excess of the City of Calimesa's Noise Ordinance.

Although, construction equipment will produce exterior noise levels of approximately 99 dBA Lmax to sensitive receptors, and interior noise levels between 79 and 87 dBA Lmax, construction will occur within an 8-hour day and will not be continuous. Therefore, no sensitive receptor would be exposed to continuous construction noise for more than 8 hours during any 24-hour period. Through compliance with Calimesa's noise standards for construction which limits the hours of construction to daytime and implementation of **MM Noise 1** the proposed Project would not expose people to, or generate noise levels in excess of, standards established in the local noise ordinance and potential impacts would be less than significant with mitigation incorporated.

13.b Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?

Construction projects can generate ground-borne vibration. Construction equipment such as vibratory compactors or rollers, pile drivers and pavement breakers can generate perceptible vibration during construction activities.

Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore, usually confined to short distances (i.e., 500 feet or less) from the source. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and the sick), and vibration sensitive equipment. Ground vibrations from construction activities do not often reach the levels that can damage structures, but they can achieve the audible and feelable ranges in buildings very close to the site.

Various types of construction equipment have been measured under a wide variety of construction activities with an average of source levels reported in terms of velocity as shown in **Table G – Vibration Source Levels for Construction Equipment**. Although the table gives one level for each piece of equipment, it should be noted that there is a considerable variation in reported ground vibration levels from construction activities. The data provide a reasonable estimate for a wide range of soil conditions.

Table G – Vibration Source Levels for Construction Equipment

Equipment[a]	PPV at 25 feet (inches/second)	RMS[b] at 25 feet
Large Bulldozer	0.089	87
Loaded Truck	0.076	86
Small Bulldozer	0.003	58
Vibratory Roller	0.21	94

Notes: PPV = Peak Particle Velocity;

[a] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018 Table 7-4

[b] Root mean square (RMS) velocity in vibration decibels (VdB) re 1 micro-inch/second.

Regarding impacts from ground-borne vibration, the Federal Transit Administration (FTA) has published guidance in their document titled *Transit Noise and Vibration Impact Assessment Manual*. According to the FTA, although the perceptibility threshold for humans is approximately 65 VdB, human response to vibration is not usually significant unless the vibration exceeds 70 VdB. If the vibration level of a residence reaches 85 VdB, most people would be strongly annoyed by the vibration.

Table H– Typical Human Reaction and Effect on Buildings Due to Groundborne Vibration, displays some of the common human reactions to various levels of groundborne vibration (expressed in PPV) and its effect on buildings.

Table H – Typical Human Reaction and Effect on Buildings Due to Groundborne Vibration

Vibration Level (PPV[b]) (inches/second)	Human Reaction[a]	Effect on Buildings
0.006-0.019	Threshold of perception	Vibrations unlikely to cause damage of any type
0.08	Vibration readily perceptible	Recommended upper level of vibration to which ruins ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Notes:

[a] Source: California Department of Transportation, Compiled from Table 5 (p. 22) and Table 12 (p. 24).

[b] PPV = Peak Particle Velocity.

Less than significant impact. Construction of the Project would require standard construction equipment and methods that could produce ground-borne vibrations as shown in **Table H** above. Operation of the Project components is not anticipated to result in ground-borne vibrations or ground-borne noise. A majority of the pipeline alignment, turnout facility and recharge basin is located in a developed, urban area. Based on the information in **Tables G and H**, above, if it is assumed that the distance construction to the nearest sensitive receptor is approximately 10 feet, ground-borne vibration generated during construction may be perceptible but would not reach the threshold of annoyance. The vibratory roller will be used for paving and will generate vibration levels based on the speed and frequency chosen. The vibratory roller will not operate continuously for longer than 8-hour periods within a 24-hour day as dictated by CMC. Because Project construction and operation would be consistent with Calimesa's noise ordinances, and construction methods are not anticipated to generate any significant sources of ground-borne vibration above those that would normally be associated with construction, impacts regarding the exposure and generation of excessive ground-borne vibration or ground-borne noise levels would be less than significant.

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

No impact. As discussed in response to Threshold 9.e, The Project is not located in the vicinity of a public airport or public use airport land use plan. Additionally, the Project does not propose any habitable structures that would expose people, whether working or residing, in the Project area to excessive noise levels. Therefore, regarding the exposure of people to excessive noise levels sourced from airports, no impacts are anticipated.

Noise Mitigation Measures

Implementation of the following mitigation measure would reduce impacts to noise to less than significant.

MM NOISE 1: PROPER MUFFLERS & STATIONARY EQUIPMENT

During all Project-related construction, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturer's standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.

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

(Source: Yucaipa SGMA, CGP, Project Description)

14.a Would the Project 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 new residential or commercial development which would create population growth. The purpose of the Project is to implement a project of the Yucaipa SGMA GSP which will provide stable water supplies to existing disadvantaged communities of Calimesa and Yucaipa. No land use changes are proposed as a result of this Project. The Project does not create indirect pathways for population growth because it is supporting existing land uses, and also provides sustainable storage in the groundwater basin for drought when SWP water is available in wet years for recharge. For these reasons, impacts are considered less than significant regarding inducing substantial unplanned population growth within the SGPWA service area.

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

No impact. Construction and operation of the Project facilities and pipelines would not necessitate the demolition or relocation of existing housing units. The turnout facility located on Bryant Street in the front and side yards of a private residence will not displace existing housing. Construction activities in this area total approximately 1,230 square feet, all of which will be returned to prior condition. Since no housing would be displaced, no people would be displaced because of Project construction and no impacts would occur.

Population and Housing Mitigation Measures

There are no impacts to population and housing; therefore, no mitigation is required.

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
15. PUBLIC SERVICES. Would the project:				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒

(Sources: Project Description, CGP)

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

15.a Fire Protection?
15.b Police Protection?

Less than significant impact. Once construction is complete, the pipeline components would be underground and would not affect fire or police protection services. Construction of the proposed pipelines may cause traffic delays if lane closures are required, which may affect response times for emergency vehicles. The construction of the recharge basin and elevation control basin would be at surface level on a vacant lot. The recharge basin and elevation control basin are fire breaks and would not physically impact government facilities or the need for an increase in fire or police protection services. As part of the final design for the Project, traffic control plans shall be prepared and shall be approved by the City of Calimesa. The traffic control plans shall provide adequate pass-by features for emergency vehicles. Through compliance with required traffic control plans and encroachment permits, the details of which would be dictated by City of Calimesa, impacts would be less than significant**.**

15.c Schools?
15.d Parks?
15.e Other Public Facilities?

No impact. As discussed in response to threshold 14.a, the Project is implementing the Yucaipa GSP to serve the surrounding communities with SWP water, when available, to improve drought resiliency. The Project is not an extension of water services to individual customers. Thus, the Project in and of itself would not result in population increases that would require additional schools, parks, or other

public facilities. The Project does not propose new schools, parks, or other public facilities other than the components described in the Project Description. As such the proposed Project would not result in or contribute to the need for new or physically altered schools, parks, or other public facilities and there would be no impact in this regard.

Public Services Mitigation Measures

Impacts to public services are less than significant; therefore, no mitigation is required.

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

(Source: Project Description)

16.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 proposed Project consists of constructing a groundwater recharge basin and associated piping. The recharge basin property will be fenced and closed to the public. The construction of the Project components would not cause an increase in the population. Therefore, the proposed Project would not 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 would occur in this regard.

16.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 Project does not include new public recreational facilities or require the construction or expansion of recreational facilities. Therefore, there would be no impact in this regard.

Recreation Mitigation Measures

There are no impacts to parks or recreational facilities; therefore, no mitigation is required.

	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?	☐	☐	☒	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☒	☐

(Sources: Project Description)

17.a Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than significant impact. The Project pipeline alignments pass through existing paved rights-of-way in Calimesa. Construction of certain Project components may require lane closures. Construction will take place during daytime hours. Traffic may be temporarily increased along the roadways used to access a specific Project component as a result of construction personnel, supply trucks, and hauling of heavy-duty equipment. However, this congestion would be short-term and relatively minor. The Project would not conflict with an established circulation performance measure because the work would be temporary in nature and would be in compliance with encroachment permits. Additionally, as part of the final design of any Project component that would require a lane closure, a traffic control plan shall be prepared and approved by the City of Calimesa. For these reasons, impacts to transit system plans, ordinances, or policies would be less than significant.

17.b Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines section 15064.3(a) describes specific considerations for evaluating a project's transportation impacts and states "Generally, vehicle miles traveled is the most appropriate measure of transportation impacts." As stated in CEQA Guidelines section 15064.3(b)(2), "projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact."

No impact. Construction of the Project components would not change land uses or create the need for more vehicle trips in the Project area. Since water facilities are not trip generators, there would be no net increase in vehicle miles traveled (VMTs). Therefore, Project implementation would not conflict with or be inconsistent with CEQA Guidelines section 15064.3. subdivision (b) and no impacts related to VMT are expected.

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

No impact. The proposed Project would not change roadway design configurations. All pipeline construction would be within existing roadways and surfaces would be replaced in kind after construction is completed, except for Buena Vista Court which will be repaved and improved to full width and asphalt drainage berms. There would be no impact in this regard.

17.d Result in inadequate emergency access?

Less than significant impact. The proposed Project would not reconfigure current roadways. Through compliance with the conditions of the required encroachment permits and traffic control plans, access would be maintained throughout the construction period and impacts would be less than significant. Also refer to the response to threshold 9.f.

Transportation Mitigation Measures

Transportation impacts are less than significant; therefore, no mitigation is required.

	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 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), or	☐	☒	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

(Sources: AB 52 Consultation Process, AE-A)

18.a Listed or eligible for listing in the California Register of Historical Resources (CRHR), or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

18.b A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than significant with mitigation incorporated. SGPWA provided written notice of tribal consultation opportunity via U.S. Postal Service mail on February 28, 2024, pursuant to Assembly Bill 52 (AB 52) to the Tribes that have previously requested such a notice from SGPWA and others who have been noticed in the past. AB 52 notification letters were sent to five Tribes: Morongo Band of Mission Indians, Pechanga Band of Indians, Yuhaaviatam of San Manuel Nation, Soboba Band of Luiseño Indians, and Torres-Martinez Desert Cahuilla Indians. As of April 25, 2024, two of the five Tribes had responded and both requested formal AB 52 government-to-government consultation: Morongo Band of Mission Indians (MBMI) and Yuhaaviatam of San Manuel Nation (YSMN).

SGPWA and AE provided MBMI Cultural Resource Specialist Laura Chatterton project plans, geotechnical report, project shapefile, and records search results on March 28, 2024. The cultural resources report was provided to MBMI on May 10, 2024 and no subsequent communication from MBMI has been received. Likewise, SGPWA provided YSMN Tribal Archaeologist Kristen Tuosto the project plans and geotechnical report on March 12, 2024. The cultural resources report was provided to YSMN on May 10, 2024 and AE provided the records search results and project shapefile on May 13, 2024.

In response on May 15, 2024, the YSMN provided SGPWA four mitigation measures regarding a Monitoring and Treatment Plan, Archaeological Monitoring, Treatment of Cultural Resources During

Project Implementation, and Inadvertent Discoveries of Human Remains. All four measures have been incorporated herein; three in Cultural Resources Section (**MM CR-1, MM CR-2,** and **MM CR-3**) and one in Tribal Cultural Resources Section (MM TCR-1).

An AB 52 Tribal Consultation meeting was held between Yuhaaviatam of San Manuel Nation (Kristen Tuosto, Tribal Archaeologist), SGPWA (Lance Eckhart, General Manager and Emmett Campbell, Senior Water Resources Planner), and its consulting archaeologist, Applied EarthWorks, Inc. (Joan George, Principal Archaeologist) on June 13, 2024. The meeting resulted in slight modification to the mitigation measures requested by the tribe, which has been incorporated herein. The modification focuses archaeological monitoring to "undisturbed native soils."

Morongo Band of Mission Indians (Laura Chatterton, Cultural Resource Specialist) notified SGPWA on July 9, 2024 that the Tribal Historic Preservation Office completed review of the cultural resource documents provided to them. In response, the tribe requests tribal participation (a.k.a. tribal monitors) during all ground disturbing activities and requested eight mitigation measures added to this IS/MND. The mitigation measures for cultural resources and tribal cultural resources in this IS/MND have been revised accordingly.

As a result of the AB 52 consultation process, in addition to mitigation measures **MM CR-1, MM CR-2,** and **MM CR-3** (refer to threshold 5, Cultural Resources), mitigation measure **MM TCR-1** shall be implemented. Therefore, through implementation of these mitigation measures, impacts with regard to tribal cultural resources would be less than significant with mitigation incorporated.

Tribal Cultural Resources Mitigation Measures

Implementation of the following mitigation measure would reduce impacts to tribal cultural resources to less than significant.

MM TCR-1: TREATMENT OF CULTURAL RESOURCES DURING PROJECT IMPLEMENTATION

San Gorgonio Pass Water Agency shall enter into a Tribal Monitoring Agreement with the Morongo Band of Mission Indians (MBMI) prior to the start of ground disturbance activities. The agreement shall include MBMI attendance at the Cultural Resource Sensitivity Training to occur at the pre-grade/kick-off meeting.

If a pre-contact cultural resource (i.e., those that predate Native American contact with Europeans) is discovered during project construction, then ground-disturbing activities shall be suspended for a distance of 60 feet around the resource(s), and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The Project Archaeologist that is retained by San Gorgonio Pass Water Agency per MM CR-1 will evaluate the resource. Representatives from the Consulting Tribes (Morongo Band of Mission Indians [MBMI] and Yuhaaviatam of San Manuel Nation [YSMN]), the Project Archaeologist, and the San Gorgonio Pass Water Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the resource's archaeological significance, its potential as a Tribal Cultural Resource (TCR), and avoidance (or other appropriate treatment) of the discovered resource. Removal of

any cultural resource(s) shall be conducted with the presence of Tribal monitor(s) representing the Consulting Tribes (unless a Consulting Tribe opts otherwise). All plans for analysis shall be reviewed and approved by the San Gorgonio Pass Water Agency and the Consulting Tribes prior to implementation, and all removed material shall be temporarily curated on-site.

It is the preference of MBMI that significant cultural resources are fully avoided and if full avoidance is not feasible, then preservation in-place. It is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by the Consulting Tribes and the San Gorgonio Pass Water Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to San Gorgonio Pass Water Agency, California Historical Resource Information System (CHRIS) Center, and the Consulting Tribes. All reburials are subject to a reburial agreement that shall be developed between the San Gorgonio Pass Water Agency and the Consulting Tribes outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts.

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the San Gorgonio Pass Water Agency shall relinquish all ownership and rights to this material and confer with the Consulting Tribes to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines and Federal Curation Standards (CFR 79.1). A curation agreement with an appropriately qualified repository shall be developed between the San Gorgonio Pass Water Agency and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.

All draft records and reports containing the significance and treatment findings and data recovery results shall be prepared by the Project Archaeologist and submitted to San Gorgonio Pass Water Agency and the Consulting Tribes for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Center, the San Gorgonio Pass Water Agency, and the Consulting Tribes.

	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 water or expanded wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities or the construction of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulation related to solid waste?	☐	☐	☐	☒

(Sources: AB 939, SGPWA UWMP; Project Description, San Timoteo Landfill)

19.a Would the Project require or result in the construction of new water or expanded wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities or the construction of which could cause significant environmental effects?

Less than significant impact. The Project includes the construction of infrastructure needed to bring SWP water to a new groundwater recharge basin to provide sustainable storage for the local groundwater basin. The Project does not include new or expanded water or wastewater treatment facilities. The Project does not include storm water drainage facilities, electrical, natural gas, or telecommunications facilities. The impacts of constructing the facilities needed to bring the water to the recharge basin has been evaluated throughout this document. Impacts related to new or expanded utilities are considered less than significant.

19.b Would the Project 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. The Project does not, in and of itself, consume water supplies and does not have a water demand like other land uses. The Project facilitates infiltration of SWP water when it is available to the local groundwater basin for beneficial use by groundwater pumpers. The Project is being conducted consistent with the Yucaipa SGMA GSP to increase groundwater replenishment with the goal of preventing net decline of groundwater levels. The Project will leave the communities of Calimesa and Yucaipa less vulnerable to drought restrictions. Therefore, impacts are considered less than significant.

19.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?

Less than significant impact. There is no Project component that would produce wastewater (sewage). The conveyance of water to the recharge basin will infiltrate to the underlying groundwater basin and will not require treatment prior to infiltrating to the ground. The pipeline components will not generate wastewater. For these reasons the impact would be less than significant.

19.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. Some construction waste would be generated during construction of the Project components, some of which may be recycled. Standard conditions in SGPWA's construction specifications require the contractors to dispose of construction waste in facilities licensed to accept such waste. It is estimated 72,000 cubic feet of soil export will occur for the recharge basin and elevation control basin. The closest landfill to the Project site is about 11 miles away at the San Timoteo Landfill.

Construction waste generated in connection with the Project components would entail the removal of pavement, which must be disposed of at a legal landfill and may entail demolition of other structures. Construction-generated solid waste would be delivered via private haulers to an MRF or licensed landfill. Given the number of landfills in proximity to SGPWA's service areas and estimated closure dates in excess of 20 years, sufficient capacity is expected for the temporary increase of solid waste to be disposed of at nearby landfills. Impacts would be less than significant.

19.e Would the Project comply with federal, state, and local management and reduction statutes and regulation related to solid waste?

No impact. Given that the Project entails construction of water pipelines and a groundwater recharge basin, no solid waste would be generated by the operation of the Project. Solid waste would be generated by the contractors during construction. The collection and disposal of solid waste would conform to applicable federal, state, and local plans and regulations, including AB 939 (Integrated Waste Management Act) that require local jurisdictions divert at least 50 percent of all solid waste. The proposed Project would adhere to all federal, state, and local regulations related to solid waste during construction and operation. Therefore, the proposed Project would have no impact in terms of complying with federal, state, and local statutes and regulations related to solid waste.

Utilities and Service Systems Mitigation Measures

Impacts to utilities and service systems are less than significant; therefore, no mitigation is required.

	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?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

(*Sources: Cal Fire, CGP DEIR, Figure SAF-6 CGP, Map My County, Project Description)*

20.a. Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. Construction of the Project would not substantially impair adopted emergency response or evacuation plans. There are no State Responsibility Areas (SRAs) or Local Responsibility Areas (LRAs) within areas in which the Project components would be constructed. There is an LRA near the Project area categorized as Very High Fire Hazard Severity. According to Cal Fire, (**Figure 10 – Fire Hazard Severity Zones**) there are no zones of severity within the Project area. The City of Calimesa has designated County Line Road as one of the evacuation routes. Because construction of the Project would entail work within designated evacuation routes, a ministerial encroachment permit would be required from Calimesa for ROW access. As part of the design process for the Project components, traffic control plans would be prepared to provide adequate pass-by features for emergency and other vehicles. Through compliance with required traffic control plans and encroachment permits, the details of which would be dictated Calimesa, temporary construction impacts would be reduced to less than significant.

20.b Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than significant impact. The Project is located within a flat, urban area that has very low susceptibility to landslides and is not within a Fire Hazard Severity (SRA or LRA) designated zone. Therefore, construction and operations at these sites would not change the current level of fire risk that exists within the area or exacerbate landslides. The Project pipelines would be installed underground within paved roadways. Additionally, the recharge basin, elevation control basin, and turnout facility are not occupied structures and would not entail grading that would create new or change existing slopes or otherwise change the current level of fire risk that exists within the area. Therefore, impacts regarding

the exposure of Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant.

20.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?

Less than significant impact. The Project is proposed to be a groundwater replenishment and conveyance mechanism consistent with the Yucaipa GSP, in order to recharge the high-priority Yucaipa Subbasin and the critical Calimesa Management Area while aiding the underserved and disadvantaged communities who rely on this water supply. The Project does not include roads, fire breaks, power lines, or installation of new utilities that would exacerbate fire risk. As discussed in response to threshold 20.b, implementation of the Project would not change the current level of fire risk that exists within the area. Impacts would be less than significant.

20.d Would the Project 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. The proposed Project does not include habitable structures, nor would it substantially alter existing drainage pattens. Therefore, there would be no impacts with regard to exposing people or structures to significant wildfire risks.

Wildfire Mitigation Measures

Impacts to state responsibility areas or lands classified as very high fire hazard severity zones are less than significant; therefore, no mitigation is required.

	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 an 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?	☐	☒	☐	☐

(Source: Above Initial Study, BLUE, AE-A)

21.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 an endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than significant with mitigation incorporated. This Initial Study provides a project-level analysis of the potential environmental impacts that would result with implementation of County Line Road Recharge Basin Project.

Potential to Degrade the Quality of Environment: As indicated in the foregoing analysis, the Project with implementation of the mitigation measures identified herein, does not have the potential to degrade the quality of the environment.

Potential to Impact Biological Resources: As discussed in Threshold 4, Biological Resources, implementation of the proposed Project would not:

- substantially reduce the habitat of a fish or wildlife species;
- cause a fish or wildlife population to drop below self-sustaining levels; or
- threaten to eliminate a plant or animal community.

The results of the *Biological Assessment Report* and the analysis in Threshold 4.a, indicate that through implementation of existing regulations, and implementation of mitigation measure **MM BIO-1** for Nesting Bird Survey, impacts to biological resources would be less than significant.

Potential to Eliminate Important Examples of the Major Periods of California History or Prehistory:

As discussed in threshold 5, Cultural Resources, no known historic or archaeological resources are located within the Project area based on pedestrian surveys and desktop research (**Table E**). Regarding archaeological resources, responses from Tribes that were consulted during preparation of the Cultural Resources Investigation report (**Appendix D.1**) suggest there is potential for buried resources to be uncovered. Therefore, mitigation measures **MM CR-1** for a Monitoring and Treatment Plan and **MM CR-2** for an archaeological monitor would be implemented. Consistent with state law, mitigation measure **MM CR-3** requires a buffer around any uncovered human remains or funerary items. Regarding Tribal Cultural Resources, based on the outcome of AB 52 consultation, mitigation measures **MM TCR-1** would be implemented for the handling of uncovered precontact items. As discussed in Threshold 5, Cultural Resources, which is based on the Cultural Resources Investigation in **Appendix D.1**, implementation of the Project would not eliminate important historical or prehistorical resources through implementation of existing regulations as well as mitigation measures **MM CR-1, MM CR-2,** and **MM CR-3**. Furthermore, as discussed in Threshold 18, Tribal Cultural Resources, which is based on the AB 52 Consultation conducted for the Project, the Project would not eliminate important Tribal Cultural Resources through implementation of mitigation measure **MM TCR-1**.

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

Less than significant impact. The Project would construct a groundwater recharge basin and associated piping in order to facilitate the recharge of SWP water when it is available. An existing connection to SWP does not currently exist in this groundwater basin, although there are many similar turnouts and recharge facilities throughout the state all along the SWP. San Bernardino Valley and SGPWA are developing this connection and recharge basin well within the rights and authorities they possess as State Water Contractors to put SWP water to beneficial use, especially when there is water available for recharge purposes. The Project is consistent with the goals of the GSP for the Yucaipa Subbasin, which was recently approved by DWR. The Project is consistent with local and regional plans, and the Project's air quality emissions do not exceed established thresholds of significance. The Project adheres to all other land use plans and policies with jurisdiction in the Project area and would not increase VMTs within the Project area. The Project is not considered growth-inducing as defined by *CEQA Guidelines* Section 15126.2(d) and would not induce, either directly or indirectly, population and/or housing growth beyond what is envisioned by the Calimesa General Plan. Therefore, impacts would be less than significant.

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

Less than significant with mitigation incorporated. Effects on human beings were evaluated as part of the aesthetics, air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, population and housing, and transportation thresholds sections of this initial study and found to be less than significant for each of the above sections with implementation of mitigation measure **MM NOISE-1.** Based on the analyses and conclusions in this initial study, the proposed Project will not cause substantial adverse effects directly or indirectly to human beings. Therefore, potential

direct and indirect impacts on human beings that result from the proposed Project are considered less than significant with mitigation incorporated.

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VIII. CEQA PLUS ANALYSIS

State Water Resources Control Board (State Water Board)
Drinking Water State Revolving Fund Program

Evaluation for Environmental Review and Federal Coordination

1. Potential Co-Funding Sources

Will the project potentially be co-funded by any other federal agencies?

☐ *No – No other federal agencies will provide funding for the project.*

☒ *Yes – The project will potentially receive funding from other federal agency(s). Please list the agency(ies) and explain the funding status.*

- American Rescue Plan Act (ARPA) funding through Riverside County is anticipated though contracts have not been finalized.

2. United Stated Forest Service, Bureau of Land Management, and Other Federal Land

Is any portion of the proposed project site located on United States Forest Service (USFS), Bureau of Land Management (BLM), or any other federally managed land?

☒ *No – The proposed project will not be located on USFS, BLM, or any other federally managed land.*

☐ *Yes – The proposed project will be located on USFS, BLM, or other federally managed land. Please explain or indicate where more information can be found (e.g., biological report/assessment, CEQA document, etc.), and attach a colored map identifying the project location with respect to the USFS, BLM, or other federal land. Attach a copy of the appropriate authorization/permit for the use of federal land (e.g., USFS Special-Use Authorization, BLM Land Use Permit) or indicate the status of the authorization/permit below.*

3. Environmental Alternative Analysis

The SRF Programs require an environmental alternative analysis for projects that have a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report. Please attach a copy of the environmental alternative analysis or indicate where it can be found (e.g., Project Technical Report/Engineering Report):

The Yucaipa Sustainable Groundwater Management Agency ("Yucaipa SGMA") evaluated two potential sites to develop surface water spreading basins for recharging the Calimesa Management Area. The U.S. Geological Survey (USGS) Yucaipa Integrated Hydrologic Model (YIHM) tool[6] was used by the

[6] Cromwell, G., and Alzraiee, A., eds., 2022, Hydrology of the Yucaipa groundwater subbasin: Characterization and integrated numerical model, San Bernardino and Riverside Counties, California: U.S. Geological Survey Scientific Investigations Report 2021–5118, 4 p., https://doi.org/10.3133/sir20215118.

member agencies to evaluate the feasibility of operating spreading basins at the two proposed sites. Feasibility studies evaluated the beneficial impact of recharging the aquifer at these two potential locations. (GSP, p. 4-20)

The Project's recharge basin property was selected for several reasons including its location at the middle of the Calimesa Management Area, its proximity to the existing EBX pipeline in Bryant Street, and because of its proximity to SMWC's pipeline in County Line Road that is to be abandoned/reused. By reutilizing this existing infrastructure, the project's overall footprint is greatly reduced. A siting study was conducted where percolation rates were tested at various points in the basin (TODD-A). The study had fairly comprehensive percolation tests across the entire Yucaipa Subbasin, including one site in the Calimesa Management Area (that was not the Project site). Riverside County Flood Control & Water Conservation District (Flood Control) conducted a comprehensive percolation test on a parcel along County Line Road near the Project, which had promising results as well as the other site in the Calimesa Management Area. The 4th St property ultimately became the preferred site for this Project for the reasons noted previously and its proximity to the Flood Control property.

Please briefly summarize the direct and indirect environmental impacts associated with each project alternative considered, including a "no project/no action" alternative, and the environmental considerations behind the selected project alternative. Also, include any mitigation measures to reduce potential environmental impacts:

The Project's Initial Study evaluates the proposed Project's impacts on the environment. Impacts that were found to be significant can be reduced to less than significant levels with implementation of mitigation measures; thus, there is no environmentally superior alternative. A no project/no action alternative would result in no environmental impacts; however, it would not achieve the Project's intent of developing a groundwater recharge project that will benefit SGPWA and other members of the Yucaipa Sustainable Groundwater Management Agency (Yucaipa SGMA) by increasing groundwater supply, enhancing water supply resiliency, and promoting sustainability. In addition to compliance with existing regulations, the Project will implement the following mitigation measures to reduce impacts to less than significant:

MM BIO-1: NESTING BIRD SURVEY

A preconstruction survey for nesting birds shall be conducted no more than 72 hours prior to commencement of project activities, including project staging. The survey shall be conducted by a qualified biologist with prior experience conducting nesting bird surveys for construction projects. The study area should include the affected area and suitable habitat within a 500-foot buffer, or a buffer size determined by the qualified biologist based on level of proposed disturbance and access. Results of the survey shall be provided to SGPWA. If no active nests are found, no additional measures are required. If active nests are found, then the biologist will map the location and document the species and nesting stage for SGPWA. A no-work buffer will be established around the active nest as determined by the qualified biologist and based on the species sensitivity to disturbance and the type and duration of the disturbance. No construction activities shall occur within the no-work buffer until the biologist has determined the nest is no longer active.

MM CR-1: MONITORING AND TREATMENT PLAN

Prior to the pre-grade/kickoff meeting, the San Gorgonio Pass Water Agency shall retain a qualified project archaeologist that meets the Secretary of the Interior Standards. A

Monitoring and Treatment Plan that is reflective of the project mitigation measures ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the Project archaeologist and submitted to the San Gorgonio Pass Water Agency for dissemination to the Consulting Tribes (Morongo Band of Mission Indians (MBMI), and Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known as San Manuel Band of Mission Indians)). Once all parties review and approve the plan, it shall be adopted by San Gorgonio Pass Water Agency – the plan must be adopted prior to the start of ground disturbing activities for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan. This Plan shall allow for monitors to be present that represent the Consulting Tribes for the remainder of the project construction, should the Tribe(s) elect to place a monitor on-site.

The final report(s) created as a part of the project (e.g., monitoring and treatment plan, isolate records, site records, survey reports, testing reports, etc.) shall be submitted to the San Gorgonio Pass Water Agency and the Consulting Tribes for review and comment. After approval of all parties, the final reports are to be submitted to the Eastern Information Center, and the Consulting Tribes.

MM CR-2: ARCHAEOLOGICAL MONITORING

Due to the heightened cultural sensitivity of the undisturbed native soil in the proposed project area, the Project archaeologist or designated archaeological monitor with at least 3 years of regional experience in archaeology that is retained by San Gorgonio Pass Water Agency to conduct a Cultural Resource Sensitivity Training at the pre-grade/kick-off meeting. The purpose of the training is to explain and coordinate the requirements of the monitoring plan (see MM CR-1). The archaeologist shall also be present for all ground-disturbing activities that occur within the proposed project area of undisturbed native soil (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.

MM CR-3: INADVERTENT DISCOVERY OF HUMAN REMAINS

If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted immediately pursuant to State Health and Safety Code Section 7050.5 and that code enforced for the duration of the project. No photographs are to be taken by anyone other than the coroner, except with written approval by the Consulting Tribes. The area shall be protected; project personnel/observers will be restricted. The County Coroner has 48 hours to make his/her determination pursuant to State Health and Safety Code Section 7050.5. If the County Coroner contacts the Native American Heritage Commission pursuant to Health and Safety Code section 7050.5(c), then the procedures in Public Resources Code (PRC) Section 5097.98 for the discovery of human remains shall be implemented.

MM PALEO-1: PALEONTOLOGICAL RESOURCE IMPACT MITIGATION PROGRAM

Construction activities that extend below the depth of artificial fill and below road pavement may impact significant paleontological resources throughout the Project area. Therefore, prior to the issuance of grading permits and consistent with Riverside County General Plan policies (i.e., Open Space Element Policy 19.6), a Paleontological Resource Impact Mitigation Program (PRIMP) shall be prepared by a qualified professional paleontologist as defined by mitigation paleontology industry standards (Murphey et al., 2019) and/or the Society of Vertebrate Paleontology (SVP, 2010). The PRIMP will include a Worker's Environmental Awareness Program training prepared prior to the start of Project-related ground disturbance and presented in person to all field personnel to describe the types of paleontological resources that may be found and the procedures to follow if any are encountered; the PRIMP ~~monitoring plan~~ will indicate where construction monitoring should occur and the frequency of required monitoring (e.g., full-time, spot-checks, etc.); the PRIMP ~~monitoring plan~~ will also provide details about fossil collection, analysis, and preparation for permanent curation at an approved repository; and lastly, the PRIMP ~~monitoring plan~~ will describe the different reporting standards to be used, such as monitoring with negative findings versus monitoring resulting in fossil discoveries.

MM NOISE 1: PROPER MUFFLERS

During all Project-related construction, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturer's standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.

MM TCR-1: TREATMENT OF CULTURAL RESOURCES DURING PROJECT IMPLEMENTATION

San Gorgonio Pass Water Agency shall enter into a Tribal Monitoring Agreement with the Morongo Band of Mission Indians (MBMI) prior to the start of ground disturbance activities. The agreement shall include MBMI attendance at the Cultural Resource Sensitivity Training to occur at the pre-grade/kick-off meeting.

If a pre-contact cultural resource (i.e., those that predate Native American contact with Europeans) is discovered during project construction, then ground-disturbing activities shall be suspended for a distance of 60 feet around the resource(s), and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The Project Archaeologist that is retained by San Gorgonio Pass Water Agency per MM CR-1 will evaluate the resource. Representatives from the Consulting Tribes (Morongo Band of Mission Indians [MBMI] and Yuhaaviatam of San Manuel Nation [YSMN]), the Project Archaeologist, and the San Gorgonio Pass Water Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the resource's archaeological significance, its potential as a Tribal Cultural Resource (TCR), and avoidance (or other appropriate treatment) of the discovered resource. Removal of any cultural resource(s) shall be conducted with the presence of Tribal monitor(s) representing the Consulting Tribes (unless a Consulting Tribe opts otherwise). All plans for analysis shall be reviewed and approved by the San Gorgonio Pass Water Agency and the Consulting Tribes prior to implementation, and all removed material shall be temporarily curated on-site.

It is the preference of MBMI that significant cultural resources are fully avoided and if full avoidance is not feasible, then preservation in-place. It is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by the Consulting Tribes and the San Gorgonio Pass Water Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to San Gorgonio Pass Water Agency, California Historical Resource Information System (CHRIS) Center, and the Consulting Tribes. All reburials are subject to a reburial agreement that shall be developed between the San Gorgonio Pass Water Agency and the Consulting Tribes outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts.

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the San Gorgonio Pass Water Agency shall relinquish all ownership and rights to this material and confer with the Consulting Tribes to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines and Federal Curation Standards (CFR 79.1). A curation agreement with an appropriately qualified repository shall be developed between the San Gorgonio Pass Water Agency and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.

All draft records and reports containing the significance and treatment findings and data recovery results shall be prepared by the Project Archaeologist and submitted to San Gorgonio Pass Water Agency and the Consulting Tribes for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Center, the San Gorgonio Pass Water Agency, and the Consulting Tribes.

4. Archaeological and National Historic Preservation Act of 1974 (AHPA)

Will the project cause the irreparable loss or damage to a significant archaeological or historic resource or data through alteration of the terrain resulting from dam or reservoir construction (i.e., flooding, building of access roads, or construction of a reservoir) and require compliance under the AHPA?

☒ *No – The project construction will not cause an irreparable loss or damage of significant archaeological or historic resources or data through alteration of the terrain resulting from dam or reservoir construction. The project does not require compliance with the AHPA. Please explain or indicate where this information can be found.*

Impacts to archaeological and historic resources were evaluated in the *Cultural Resources Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside and San Bernardino*

Counties, California, prepared by Applied Earthworks, Inc. dated April 2024, which is included as Appendix D.1 to this Initial Study.

☐ *Yes – The project construction will cause an irreparable loss or damage of a significant archaeological or historic resource or data through alteration of the terrain resulting from dam or reservoir construction. The project requires compliance with the AHPA. Please explain or indicate where this information can be found.*

5. Bald and Golden Eagle Protection Act (https://www.fws.gov/birds/policies-andregulations/laws-legislations/bald-and-golden-eagle-protection-act.php)

The purpose of the Bald and Golden Eagle Protection Act is to not agitate the bald and golden eagle to the extent of not 1) Abusing an eagle, 2) Interfering with its substantial lifestyle, including shelter, breeding, feeding, or 3) Nest abandonment.

Will the project conflict with the intent of the Bald and Golden Eagle Protection Act?

☒ *No – The project does not conflict with the intent of the Bald and Golden Eagle Protection Act*

☐ *Yes – The project may not conflict with the intent of the Bald and Golden Eagle Protection Act*

Explain: Suitable nesting habitat for eagles is not present within the Project area.

6. Clean Air Act

Name of Air Basin: South Coast Air Basin

Local Air District: South Coast Air Quality Management District

Complete the following table:

Pollutant	Federal Status (Attainment, Nonattainment, Maintenance, or Unclassified)[1]	Nonattainment Rates (i.e., marginal, moderate, serious, severe, or extreme)[1]	Threshold of Significance for Project Air Basin (if applicable – contact Local Air District))[2]	Estimated Construction Emissions (Tons/Year)	Estimated Operation Emissions (Tons/Year)
Ozone (O_3)	Nonattainment	Extreme	10 tons/year	N/A	N/A
Carbon Monoxide (CO)	Maintenance	N/A	100 tons/year	1.80	N/A
Oxides of Nitrogen (NO_X)	N/A	N/A	10 tons/year	2.02	N/A
Reactive Organic Gases (ROG) or Volatile Organic	N/A	N/A	10 tons/year	0.19	N/A

Pollutant	Federal Status (Attainment, Nonattainment, Maintenance, or Unclassified)[1]	Nonattainment Rates (i.e., marginal, moderate, serious, severe, or extreme)[1]	Threshold of Significance for Project Air Basin (if applicable – contact Local Air District))[2]	Estimated Construction Emissions (Tons/Year)	Estimated Operation Emissions (Tons/Year)
Compounds (VOC)					
Lead (Pb)	Attainment	N/A	N/A	N/A	N/A
Particulate Matter less than 2.5 microns in diameter ($PM_{2.5}$)	Nonattainment	Serious	70 tons/year	0.16	N/A
Particulate Matter less than 10 microns in diameter (PM_{10})	Maintenance	N/A	100 tons/year	0.29	N/A
Sulfur Dioxide (SO_2)	Unclassified	N/A	N/A	0.00	N/A

Notes: [1] Federal criteria pollutant status and nonattainment rate, if applicable, per EPA Green Book. Available at https://www.epa.gov/green-book.
[2] Federal *de minimus* thresholds per Code of Federal Regulations Title 40, part 93.153. Available at https://www.ecfr.gov/cgi-bin/text-idx?SID=2f19c374f01438b8787cf80e8c4cea43&mc=true&node=pt40.20.93&rgn=div5#se40.22.93_1153.

Is the project subject to a General Conformity determination?

☒ *No. The project is in an attainment or unclassified area for all federal criteria pollutants, and/or the project emissions are below the federal de minimis levels. The project is not subject to General Conformity determination. Please include supporting documents utilized to compile the data, and any air quality studies/models (e.g., CalEEMod report) that have been completed for the project. Indicate where more information can be found (e.g., CEQA document, etc.):*

An air quality assessment was prepared using the California Emissions Estimator Model® (CalEEMod) program to quantify Project-related emissions from the Project. This assessment is provided in Appendix B of this Initial Study.

As shown in the above table, maximum construction-related emissions per year are estimated to be below the federal *de minimus* levels for all constituents. Moreover, operational emissions for the Project will be negligible. Therefore, the Project is not subject to General Conformity determination.

☐ *Yes. The project is in a nonattainment area or maintenance area subject to maintenance plans for a federal criteria pollutant and project emissions are above the federal de minimis levels. The project is subject to General Conformity determination. Please include supporting documents utilized to compile the data, and any air quality studies/models (e.g., CalEEMod report) that have been completed for the project. Indicate where more information can be found (e.g., CEQA document, etc.).*

7. Coastal Barriers Resources Act:

Will the project impact or be located within or near the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near-shore waters? (Note that since there are currently no Coastal Barrier Resources System in California, projects located in California are not expected to impact the Coastal Barrier Resources System. If there is a special circumstance in which the project may impact a Coastal Barrier Resource System, indicate your reasoning below.)

☒ *No – The project will not impact or be located within or near the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near-shore waters,*

☐ *Yes – The project will impact or be located within or near the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near-shore waters. Describe the project location with respect to the Coastal Barrier Resources System or indicate where this information can be found (e.g., biological report/assessment, CEQA document, etc.). Please provide the status of any consultation with the appropriate Coastal Zone management agency and the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS):*

The Project is not located near a Coastal Barrier Resources System as there are none in the State of California or anywhere along the western coast of the United States. Further, the Project will not involve a special circumstance in which a Coastal Barrier Resource System would be affected.[7]

8. Coastal Zone Management Act:

Is any portion of the project site located within the coastal zone? [NOTE: California's coastal zone generally extends 1,000 yards inland from the mean high tide line but may extend further if the area is located in significant coastal estuarine, habitat, and/or recreational areas, or to a lesser extent if the area is located in a developed urban area or within a coastal zone of the San Francisco Bay Conservation and Development Commission.] (To help determine if the project is located within a coastal zone, please visit https://coastal.ca.gov/maps/ and/or https://coast.noaa.gov/czm/media/StateCZBoundaries.pdf, or contact your local California Coastal Commission office or the city or county in which the project is located.)

☒ *No – The project is not within the coastal zone.*

☐ *Yes – The project is located within the coastal zone. Attach a copy of the coastal zone permit or coastal exemption or indicate the status of the coastal zone permit below (http://www.coastal.ca.gov/enforcement/cdp_pamphlet.pdf). Describe the project location with respect to coastal areas or indicate where this information can be found (e.g., CEQA document, biological report/assessment, etc.).*

9. Endangered Species Act (ESA)

Required documents: Attach a project-level biological report/assessment prepared by a qualified professional biologist that includes an up-to-date field survey and species list information (from the USFWS, the NMFS, the California Natural Diversity Database, and the California Native Plant Society)

[7] Source: http://www.fws.gov/ecological-services/habitat-conservation/Coastal.html

analyzing the project's direct and indirect impacts on special status species in the project area. An official species list is required from the USFWS and NMFS. Refer to the USFWS Midwest Region website for guidance on preparing a biological report/assessment that meets ESA, Section 7 requirements: https://www.fws.gov/Midwest/endangered/section7/index.html. Refer to the following resources for information regarding possible biological impacts and to obtain official and unofficial species lists for analysis: https://ecos.fws.gov/ipac/, http://www.rareplants.cnps.org, http://www.nmfs.noaa.gov/pr/consultation/, and/or https://www.wildlife.ca.gov/Data/CNDDB.

The biological assessment report prepared for the Project is included in Appendix C. The field reconnaissance survey of the Project site took place on April 6, 2023.

Does the project involve any direct or indirect impacts from construction or operation activities that may affect federally listed threatened or endangered species, or their critical habitat, that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area?

☒ *No – The project will not have an impact on any federally listed species or their critical habitat. Please explain or indicate where this information can be found (e.g., biological report/assessment, CEQA document, etc.*

Impacts to biological resources for the Project site were evaluated in the *Biological Assessment Report*, which is included as Appendix C to this Initial Study.

There is no critical habitat within the biological study area.

Mitigation measures for biological resources are listed in the response to item 3, Environmental Alternatives above.

Please refer to Appendix C this Initial Study for the *Biological Assessment Report*, prepared for the Project.

No consultations with any state or federal biological agencies have been conducted.

☐ *Yes – The project will have an impact on one or more federally listed species or their critical habitat. Please provide information on the federally listed species that could potentially be affected by the project any proposed avoidance and conservation measures. Please indicate below where more information can be found (e.g., biological report/assessment, CEQA document, etc.) If any consultations with state or federal agencies have been conducted for the project, please discuss the consultation efforts.*

10. Environmental Justice

Does the project involve an activity that is likely to be of particular interest to or have particular impact upon minority, low-income, or indigenous populations?

☐ *No – The project is not likely to be of any particular interest to or have an impact on certain minority, low-income, or indigenous populations. Please explain or indicate where this information can be found.*

☒ Yes – The project is likely to be of particular interest to or have an impact on certain minority, low-income, or indigenous populations.

Check the appropriate box(es):

☐ *The project is likely to affect the health of these populations.*

☐ *The project is likely to affect the environmental conditions of these populations.*

☐ *The project is likely to present an opportunity to address an existing disproportionate impact of these populations.*

☐ *The project is likely to result in the collection of information or data that could be used to assess potential impacts on the health or environmental conditions of these populations.*

☐ *The project is likely to affect the availability of information to these populations.*

☒ *Other reasons (please describe):*

A SLF search was conducted with the California NAHC with negative results. Five tribes were contacted for the opportunity to consult pursuant to AB 52 and two responded. As part of the AB 52 consultation process, the Yuhaaviatam San Manuel Nation (aka San Manuel Band of Mission Indians) requested four mitigation measures and the Morongo Band of Mission Indians requested eight mitigation measures. Those mitigation measures are incorporated as **MM CR-1, MM CR-2, MM CR-3,** and **MM TCR-1.** The Project is also located in a disadvantaged community and provides groundwater recharge to underserved and disadvantaged communities, including the Cities of Calimesa and Yucaipa.

11. Farmland Protection Policy Act

Is any portion of the project located on prime, unique, or important farmland? (Please refer to the following resources regarding important farmland: http://maps.conservation.ca.gov/ciff/ciff.html, and or http://www.conservation.ca.gov/DLRP/fmmp/Pages/Index.aspx)

☒ *No – The project is not located on and will not impact prime, unique, or important farmland. Please explain or indicate where this information can be found (e.g., farmland conversion assessment, CEQA document, etc.).*

According to the California Department of Conservation, the location of the Project is located on areas designated as Urban and Built Up Land.

Refer to the discussion under threshold 2, Agricultural and Forestry Resources in this Initial Study.

☐ *Yes – The project is located on and/or will impact prime, unique, or important farmland. Attach documents/assessments evaluating the conversion of prime/unique farmland and farmland of statewide/local importance to non-agricultural uses, as well as any consultation(s) conducted with relevant agencies. Include information on the acreage that would be converted from important farmland to other uses. Indicate if any portion of the project boundaries is under a Williamson Act Contract and specify the amount of acreage affected. Include this information here or indicate it can be found (e.g., farmland conversion assessment, CEQA document, etc.).*

12. Fish and Wildlife Coordination Act (FWCA)
(https://www.fws.gov/ecological-services/es-library/pdfs/fwca.pdf)

Will the project impact any bodies of water by impounding, diverting, deepening a channel, or otherwise controlling/modifying flow (including navigation and drainage)?

☒ *No – The project will not impact any bodies of water and will not require compliance with the FWCA.*

☐ *Yes – The project will impact a body of water and will require compliance with the FWCA. Consultation with the USFWS and the California Department of Fish and Wildlife will be required. Please discuss the potential project impacts to the water body or indicate where this information can be found (e.g., biological report/assessment, CEQA document, etc.).*

13. Flood Plain Management: Executive Orders 11988, 12148 and 13690
(https://www.fema.gov/executive-order-11988-floodplain-management,Executive, https://www.archives.gov/federal-register/codification/executive-order/12148.html, and https://www.whitehouse.gov/the-press-office/2015/01/30/executive-order-establishing-federal-flood-risk-management-standard-and-)

- *Required documents: Attach an official floodplain map that includes the project area. Please refer to the Federal Emergency Management Agency (FEMA) Flood Map Service Center for official floodplain maps: https://msc.fema.gov/portal. If the project area is unmapped by the FEMA, please explain below.*

Is any portion of the project located within a 100-year floodplain as depicted on a floodplain map or otherwise designated by the Federal Emergency Management Agency?

☒ *No – The project is not located within a 100-year floodplain.*

☐ *Yes – The project or a portion of the project is located within a 100-year floodplain. Attach any reports (floodplains/hydrological assessment) completed for the project and provide information of any consultations completed with relevant agencies. Describe the floodplain and any proposed measures that will be implemented to minimize or avoid redirection of the flood flow by the project or indicate where this information can be found (e.g., floodplains/hydrological assessment, CEQA document, etc.).*

The Project will install a non-potable raw water pipeline underneath concrete-lined Calimesa Creek Channel in 4th Street, which is shown on Figure 11 of this IS/MND as a FEMA Regulatory Floodway and the 1% annual event is fully contained within the channel. No other areas of the Project intersect with FEMA flood hazard areas. Because the pipeline will be installed under the channel, the form and functionality of the channel to contain the 1% annual event will not be impacted. A map showing the FEMA Flood Zones is included as **Figure 11** in this Initial Study.

14. Magnuson-Stevens Fishery Conservation and Management Act:
Does the project involve any direct or indirect impacts from construction or operational activities or changes in water quality/quantity that may impact Essential Fish Habitat (EFH)? (Please refer to the NMFS

Mapper to help determine the project's proximity and potential direct/indirect impacts to EFH, and to obtain a NMFS species list for the project location: http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html.)

☒ *No – The project will not impact EFH. Please explain or indicate where this information can be found (e.g., biological report/assessment, EFH impact assessment/evaluation, CEQA document, etc.).*

As discussed in the *Biological Assessment Report* prepared for the Project (Appendix C of the Initial Study), no fish species were identified with a potential for occurrence in the literature search.

☐ *Yes – The project may* adversely impact EFH and consultation with the NMFS will be required. Describe how EFH could potentially be impacted by this project and any proposed avoidance and conservation measures or indicate where this information can be found (e.g., biological report/assessment, EFH impact assessment/evaluation, CEQA document, etc.). Please attach an official NMFS species list, obtained through the NMFS Mapper link above, and explain any previous consultations/coordination conducted with the NMFS for the project:

15. Marine Mammal Protection Act:

Does the project involve any direct or indirect impacts from construction or operational activities or changes in water quality/quantity that may impact marine mammals?

☒ *No – The project will not impact Marine Mammals.*

☐ *Yes – The project may adversely impact marine mammals and consultation with the NMFS and/or the USFWS will be required. Describe how marine mammals could potentially be impacted by this project and any proposed avoidance and conservation measures or indicate where this information can be found (e.g., biological report/assessment, marine mammals impact assessment/evaluation, CEQA document, etc.). Please attach an official copy of the USFWS/NMFS species list(s) and explain any previous consultations/coordination conducted with the USFWS/NMFS for the project.*

16. Migratory Bird Treaty Act:

Will the project impact protected migratory birds that are known or have a potential to occur on the project site, or the surrounding area? (Please refer to the USFWS' iPaC tool to request an official list of "birds of conservation concern" with the potential to occur in the project area: https://ecos.fws.gov/ipac/)

☒ *No – The project will not impact protected migratory birds. Please explain or indicate where this information can be found (e.g., biological report/assessment, CEQA document, etc.).*

☐ *Yes – The project may impact protected migratory birds. Attach documentation (e.g., biological report/assessment) that includes an official USFWS IPaC list of all the "birds of conservation concern" that could occur where the project is located. Discuss the project's direct and indirect impacts (such as noise, vibration impacts, or modification of habitat) to migratory birds, and the mitigation measures that will be implemented to reduce or eliminate these impacts. Please indicate where more information can be found [e.g., page number(s) of the biological report/assessment, CEQA document, etc.].*

The USFWS' IPaC tool was used for the Project area to generate the following table, which identifies birds of conservation concern with the potential to occur in the Project area.

Bird Species	Protective Status (F=Federal; C=California)	Habitat	BSA Occurrence Probability
Polioptila californica californica **coastal California gnatcatcher**	F: Threatened S: None MSHCP: C Global rank: G4G5T2Q State rank: S2 Other: MBTA	Inhabits sage scrub in low-lying foothills and valleys, and sparse chaparral habitats.	**Nesting: Absent** No suitable habitat (sage scrub in low-lying foothills and valleys, sparse chaparral) is present within the project alignment. **Foraging: Absent** Same as above
Vireo bellii pusillus **least Bell's vireo**	F: Endangered S: Endangered Global rank: G5T2 State rank: S2 Other: MBTA	Inhabits riparian forests and willow thickets. Nests from central California to northern Baja California and winters in southern Baja California.	**Nesting: Absent** No suitable habitat (riparian forests and willow thickets) is present within the project alignment. **Foraging: Absent** Same as above
Empidonax traillii extimus **southwestern willow flycatcher**	F: Endangered S: Endangered Global rank: G5T2 State rank: S2 Other: MBTA	For nesting, requires dense riparian habitats (cottonwood/willow and tamarisk vegetation).	**Nesting: Absent** No suitable habitat (riparian forests and willow thickets) is present within the project alignment. **Foraging: Absent** Same as above

KEY TO ABOVE TABLE

Definitions of occurrence probability:

Occurs: Observed on the site by biologists or recorded on-site by other qualified biologists.
High: Observed in similar habitat in region by qualified biologists, or habitat on the site is a type often utilized by the species and the site is within the known range of the species.
Moderate: Reported sightings in surrounding region, or site is within the known range of the species and habitat on the site is a type occasionally used by the species.
Low: Site is within the known range of the species but habitat on the site is rarely occupied by the species.
Absent: A focused study failed to detect the species, or, no suitable habitat is present.
Unknown: Distribution and habitat use has not been clearly determined.

Federal designations: (F = federal Endangered Species Act or federal agency designations)
ND: No designation

***State designations*:** (C = California Endangered Species Act or CDFG designations)
CDFW state rankings are a reflection of the overall condition of an element throughout its California range. The number after the decimal point represents a threat designation attached to the rank:
S1 = Critically Imperiled. Less than (<) 6 Element Occurrences (EOs) OR < 1,000 individuals OR < 2,000 acres
S1.1 = very threatened
S1.2 = threatened
S1.3 = no current threats known
S2 = Imperiled. 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres
S2.1 = very threatened

S2.2 = threatened
S2.3 = no current threats known
S3 = Vulnerable. 21-80 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres
S3.1 = very threatened
S3.2 = threatened
S3.3 = no current threats known
S4 = Apparently Secure. Uncommon but not rare in the state; some cause for long-term concern.
S5 = Secure. Common, widespread, and abundant in the state.
SH = All known California sites are historical, not extant**.**

17. National Historic Preservation Act (NHPA)

Required documents: A Historic Properties Identification Report (HPIR) written by a cultural resources professional who meets the Secretary of the Interior's Professional Qualification Standards in Archaeology or Architectural History (www.nps.gov/history/local-law/arch_stnds_9.htm), as appropriate. The report must include a current records search (not older than five years) from the California Historical Resources Information System (CHRIS) (http://ohp.parks.ca.gov/?page_id=1068) extending to a half-mile beyond the Project's area of potential effects (APE), maps showing all recorded resources and surveys in relation to the APE, records of Native American outreach (http://nahc.ca.gov), and resource records from the CHRIS search and newly identified resources. Please contact State Water Board staff to receive additional details. Refer to the OHP website (under the Section 106 Submission Checklists header) for guidance regarding the information required to consult under Section 106: http://ohp.parks.ca.gov/pages/1071/files/106Checklist_Details.pdf.

If the project is a type of activity that does not have the potential to cause effects to historic properties, a HPIR is not necessary. Contact the State Water Board to discuss this. This decision is based on the type of activities, not on the presence or absence of historic properties.

Note: Please do not upload confidential documents to the FAAST system. Contact the Project Manager or Division of Financial Assistance Environmental Review Staff for guidance regarding submission of confidential documents.

Identify the National Historic Preservation Act, Section 106 finding of effect contained in the cultural resources report:

☒ No Historic Properties Affected
☐ No Adverse Effect to Historic Properties
☐ Adverse Effect to Historic Properties

Provide a brief explanation for the above identified determination, or indicate where this information can be found (e.g., HPIR cultural report):

As indicated in the *Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside and San Bernardino Counties, California* (Appendix D.1 of the Initial Study). For the purposes of the study, the Project area (CEQA terminology) encompasses the Area of Potential Effects (APE; NHPA terminology). No cultural resources were identified in the Project APE (AE-A, p. 16). The Cultural Resources Assessment recommends a finding of **No Historic Properties Affected under Section 106 of NHPA** (AE-A, p. 21).

18. Protection of Wetlands:

Will any portion of the project be located in or potentially affect a wetland?

☒ *No – The project will not be located in and/or will not potentially affect a wetland. Please explain, or indicate this information can be found (e.g., wetland assessment/delineation report, biological report/assessment, CEQA document, etc.).*

Refer to the Biological Assessment Report included as Appendix C of this Initial Study.

☐ *Yes – The project will involve the construction of structures and/or one or more of the listed regulated activities in, under, or over navigable waters of the United States, and will require a Section 10 permit. Please provide a copy of the permit obtained from the USACE, or the current status of the permit. Indicate below where more information on the project's construction and regulated activities can be found (e.g., Project Technical Report/Engineering Report, CEQA document, etc.).*

19. Rivers and Harbors Act, Section 10

Will the project involve the construction of structures or any other regulated activities in, under, or over navigable waters of the United States? (NOTE: Regulated activities include the placement/removal of structures, work involving dredging, disposal of dredged material, filling, excavation, or any other disturbance of soils/sediments or modification of a navigable waterway.)

☒ *No – The project is not located in or near navigable waters of the United States. There will be no construction of structures, modification of existing structures, or any other regulated activity work in, under, or over navigable waters of the United States.*

☐ *Yes – The project will involve the construction of structures and/or one or more of the listed regulated activities in, under, or over navigable waters of the United States, and will require a Section 10 permit. Please provide a copy of the permit obtained from the USACE, or the current status of the permit. Indicate below where more information on the project's construction and regulated activities can be found (e.g., Project Technical Report/Engineering Report, CEQA document, etc.).*

20. Safe Drinking Water Act, Sole Source Aquifer Protection:

Is the project located in an area designated by the USEPA, Region 9, as a Sole Source Aquifer?

☒ *No – The project is not within the boundaries of a sole source aquifer.*[8]

The Project is within the boundary of the Yucaipa Subbasin of the Upper Santa Ana Valley Groundwater Basin, which are not Sole Source Aquifers. The nearest Sole Source Aquifer is Campo-Cottonwood Creek Aquifer located due east of San Diego along the U.S./Mexico Border.

☐ *Yes – The project is located in and/or will impact the below-marked Sole Source Aquifer:*

[8] Source: http://www.epa.gov/region9/water/groundwater/ssa.html.

☐ *Fresno County Aquifer (Recharge Area or Streamflow Source Zone)*
☐ *Santa Margarita Aquifer, Scotts Valley*
☐ *Campo/Cottonwood Creek Aquifer*
☐ *Ocotillo-Coyote Wells Aquifer*

Provide the necessary information, including an alternative project location and/or adequate mitigation measures, for the State Water Board to initiate consultation with the USEPA, Region 9, Ground Water Office, or indicate where this information may be found (e.g., biological report/assessment, CEQA document, etc.)

21. Wild and Scenic Rivers Act:
Identify the watershed within the project location: Santa Ana River Watershed

Will the project affect a wild and scenic river?

☒ *No – The project will not impact any of the wild and scenic rivers listed above. Please explain or indicate where this information can be found (e.g., biological report/assessment, CEQA document, etc.).*

The nearest river to the Project is the Santa Ana River, which is not designated as wild and scenic.[9]

☐ *Yes - The project will impact the below-marked wild and scenic river. Attach a map of the impacted wild and scenic river and identify the relative project location.*

☐ *Amargosa River*	☐ *Cottonwood Creek*	☐ *Klamath River*	☐ *Sespe Creek*
☐ *American River (Lower)*	☐ *Eel River*	☐ *Merced River*	☐ *Sisquoc River*
☐ *American River (North Fork)*	☐ *Feather River*	☐ *Owens River Headwaters*	☐ *Smith River*
☐ *Bautista Creek*	☐ *Fuller Mill River*	☐ *Palm Canyon Creek*	☐ *Trinity River*
☐ *Big Sur River*	☐ *Kern River*	☐ *Piru Creek*	☐ *Tuolumne River*
☐ *Black Butte River*	☐ *Kings River*	☐ *San Jacinto River (North Fork)*	

Explain how the project will impact the wild and scenic river, or indicate where this information can be found (e.g., biological report/assessment, CEQA document, etc.):

22. Wilderness Act (www.justice.gov/enrd/wilderness-act-1964)
Except as specifically provided for in this Wilderness Act (Act), and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment, or

[9] Source: http://www.rivers.gov/california.php.

motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such areas. Is the project located in an area designated as wilderness?
☒ *No - The project is not within the boundaries of a Wilderness Area.*

☐ *Yes – The project is located in and/or will impact a Wilderness Area: Provide the necessary information, including an alternative project location and/or adequate mitigation measures, for the Division of Financial Assistance Environmental Review Staff to coordinate with the USEPA to complete the consultation with the National Park Service and indicate where this information may be found (e.g., biological report/assessment, CEQA document, etc.). Provide the necessary information, including an alternative project location and/or adequate mitigation measures, for the Division of Financial Assistance Environmental Review Staff to coordinate with the USEPA to complete the consultation with the National Park Service and indicate where this information may be found (e.g., biological report/assessment, CEQA document, etc.).*

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IX. REFERENCES

The following documents were referred to as information sources during preparation of this document. They are available for public review at the locations abbreviated after each listing and spelled out at the end of this section.

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AE-B	Applied Earthworks, Inc. *Paleontological Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside and San Bernardino Counties, California.* April 2024 (Appendix D.2)
BLUE-A	BLUE Consulting Group, *Biological Assessment Report for the County Line Road Recharge Basin and Turnout Project*. June 10, 2023, updated July 31, 2024 (Appendix C)
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INITIAL STUDY PREPARERS

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Quality Control: Cheryl DeGano, Environmental Services Practice Area Leader
Eliza Laws, Senior Environmental Analyst
Monica Tobias, Associate Environmental Analyst
Julia Archibeque, Assistant Environmental Analyst
Virginia Waters, Assistant Environmental Analyst

APPENDIX A

Photo Log

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 1

Photo 1: Facing northwest on Bryant St. towards County Line Rd. at Turnout Facility location.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 2

Photo 2: Facing north on Bryant St. close-up of Turnout Facility location

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 3

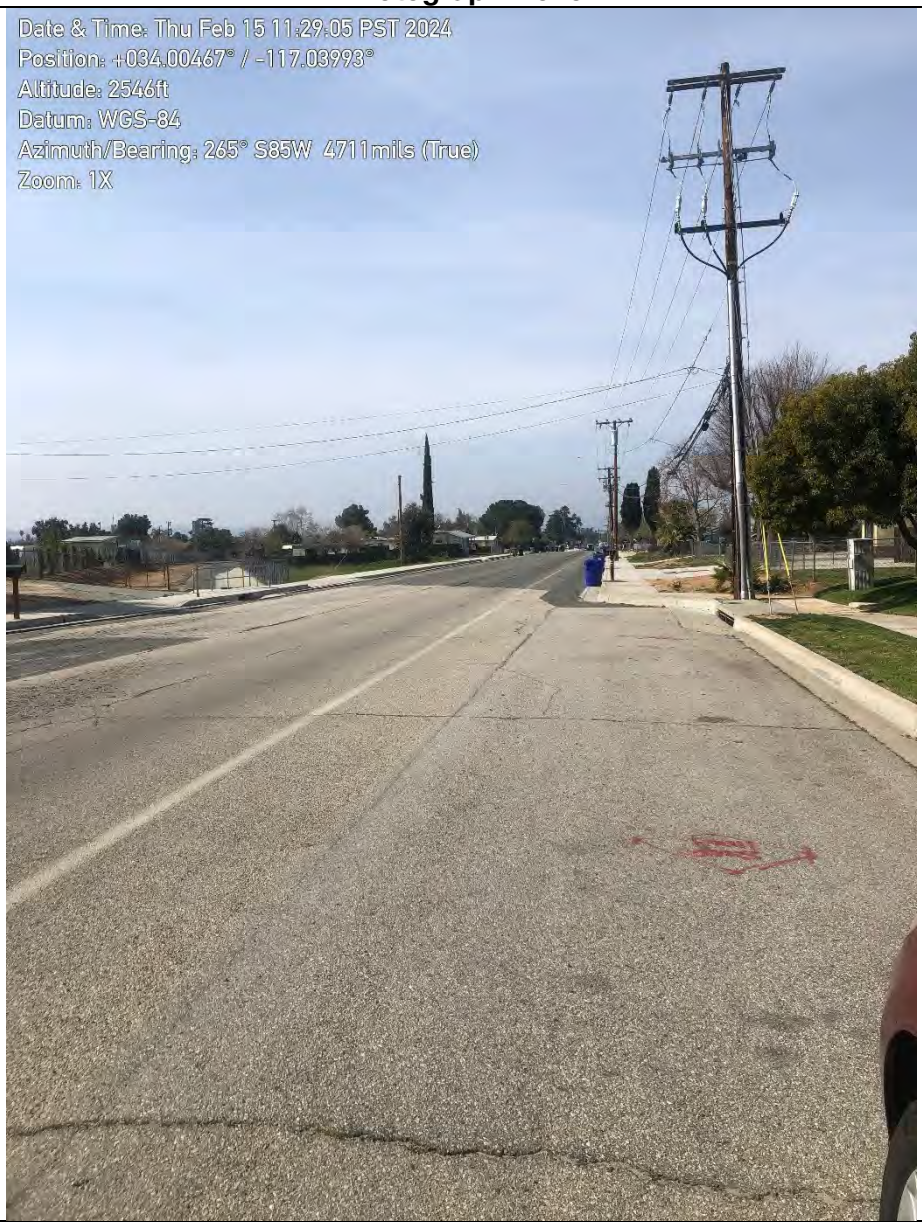

Photo 3: Facing west on County Line Rd. just past California Street.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 4

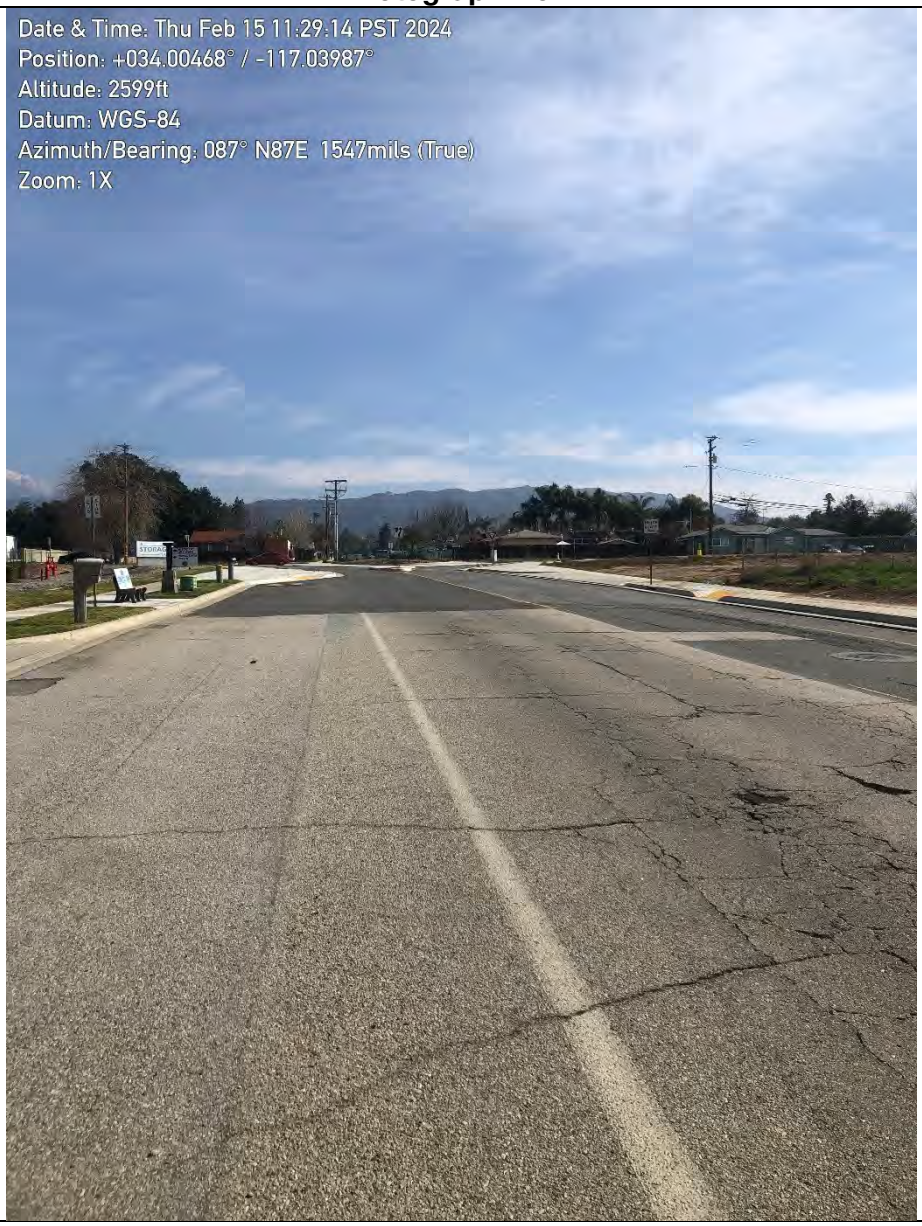

Photo 4: Facing east on County Line Rd. towards California Street roundabout.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 5

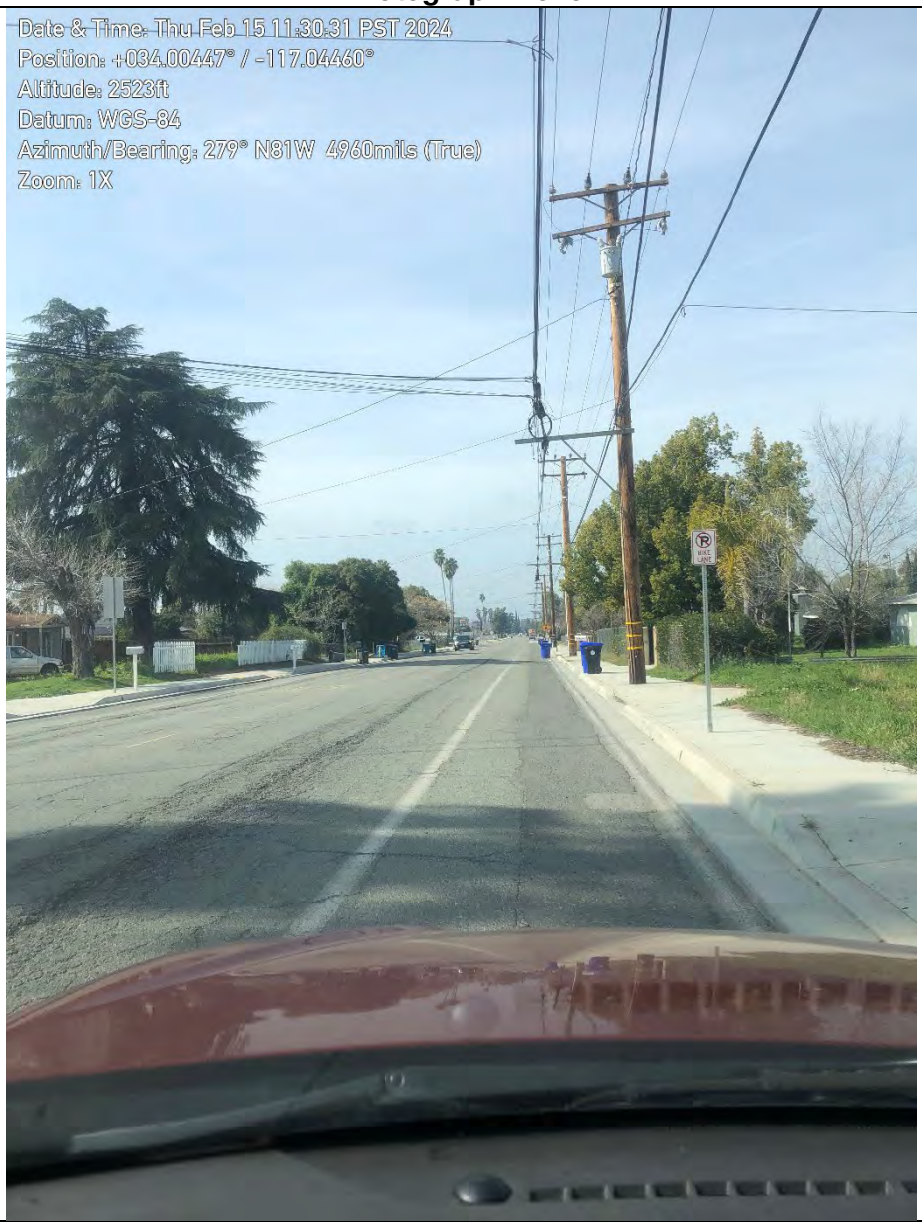

Photo 5: Facing west on County Line Rd. just past 2nd Street

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 6

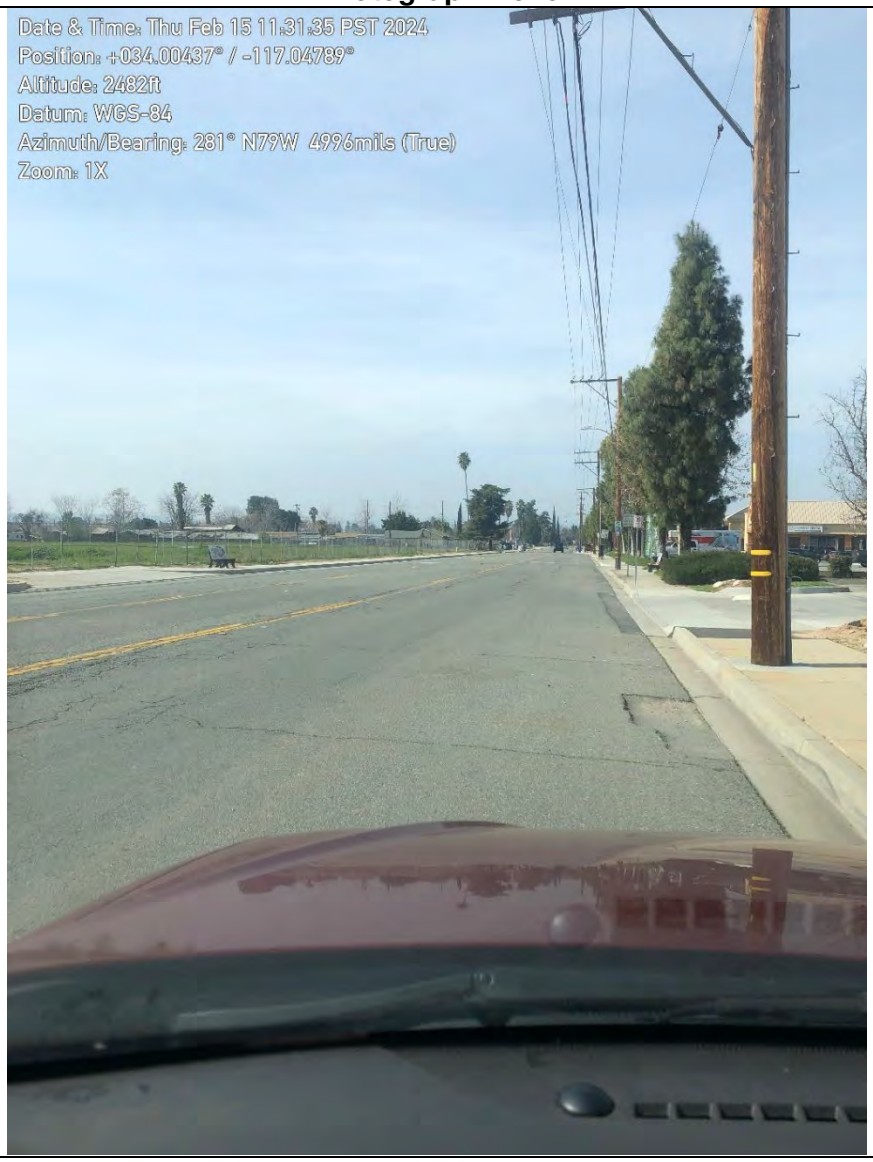

Photo 6: Facing west on County Line Rd. just past 3rd Street.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 7

Photo 7: Facing north on 4th Street from Recharge Basin site.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 8

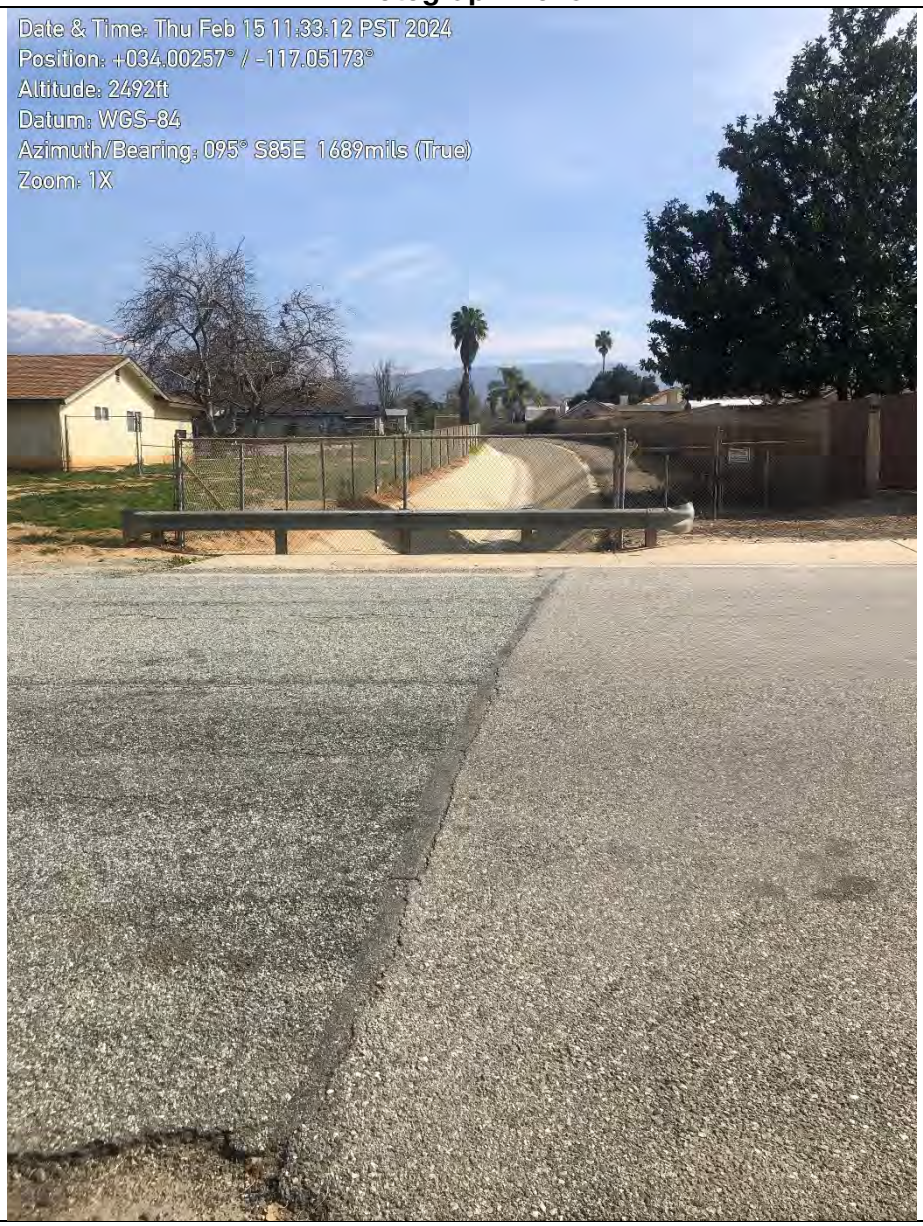

Photo 8: Facing east on 4th Street looking upstream at Calimesa Channel.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 9

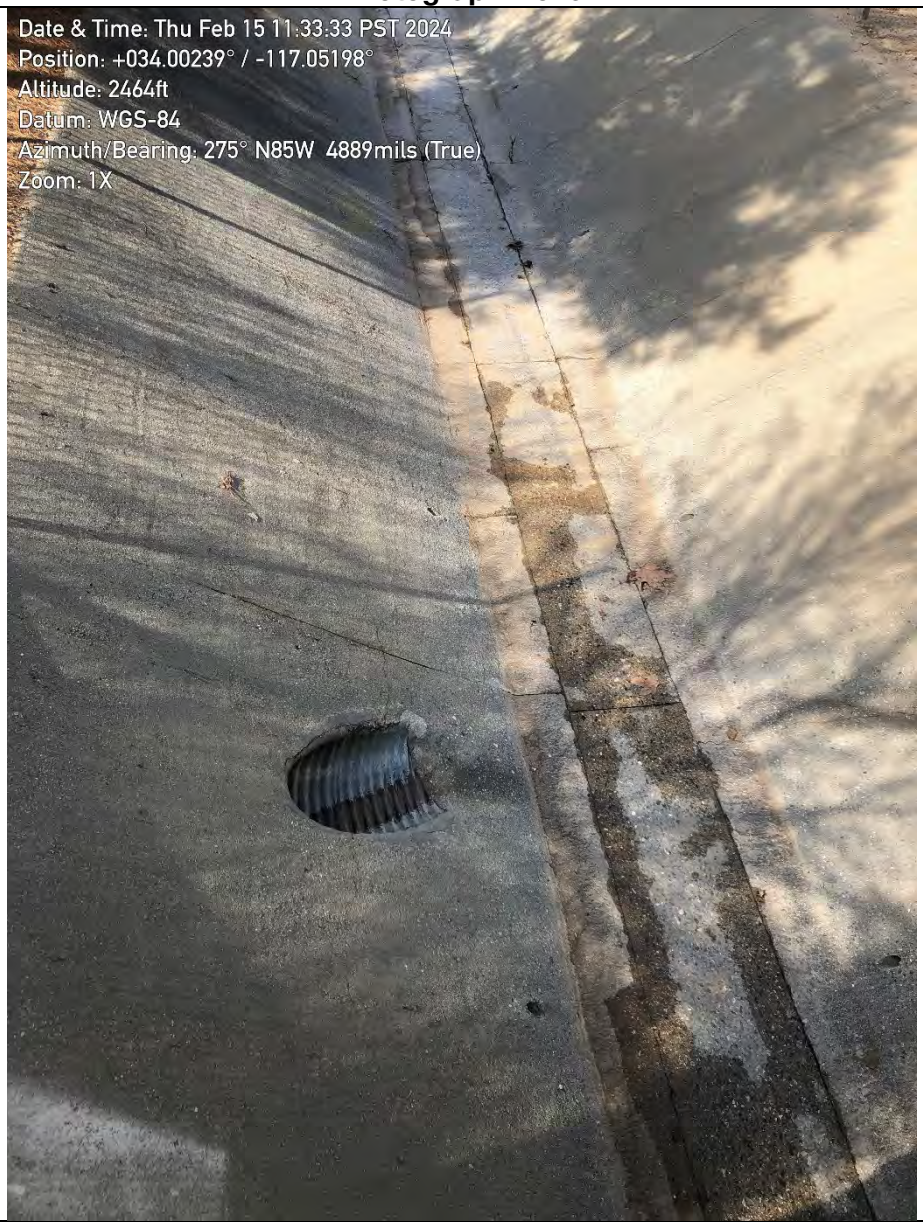

Photo 9: Facing down at Calimesa Channel from 4th Street. Flows move from bottom to top of photo.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 10

Photo 10: Facing west from 4th Street edge at northern property line of Recharge Basin site.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 11

Photo 11: Facing southwest from 4th Street at the middle of Recharge Basin site.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 12

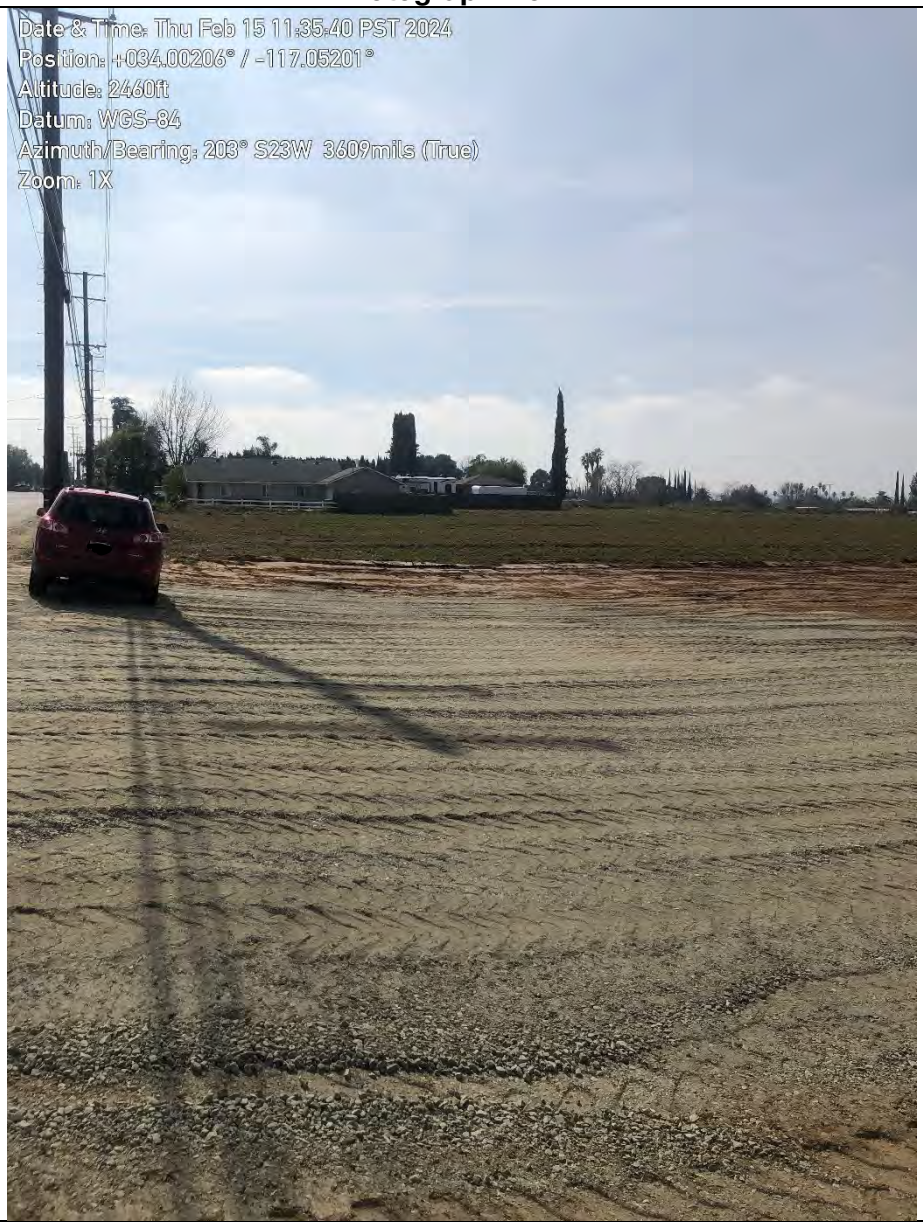

Photo 12: Facing south along 4th Street frontage of Recharge Basin site.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 13

Photo 13: Facing east from Buena Vista Ct. cul-de-sac at Elevation Control Basin site.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 14

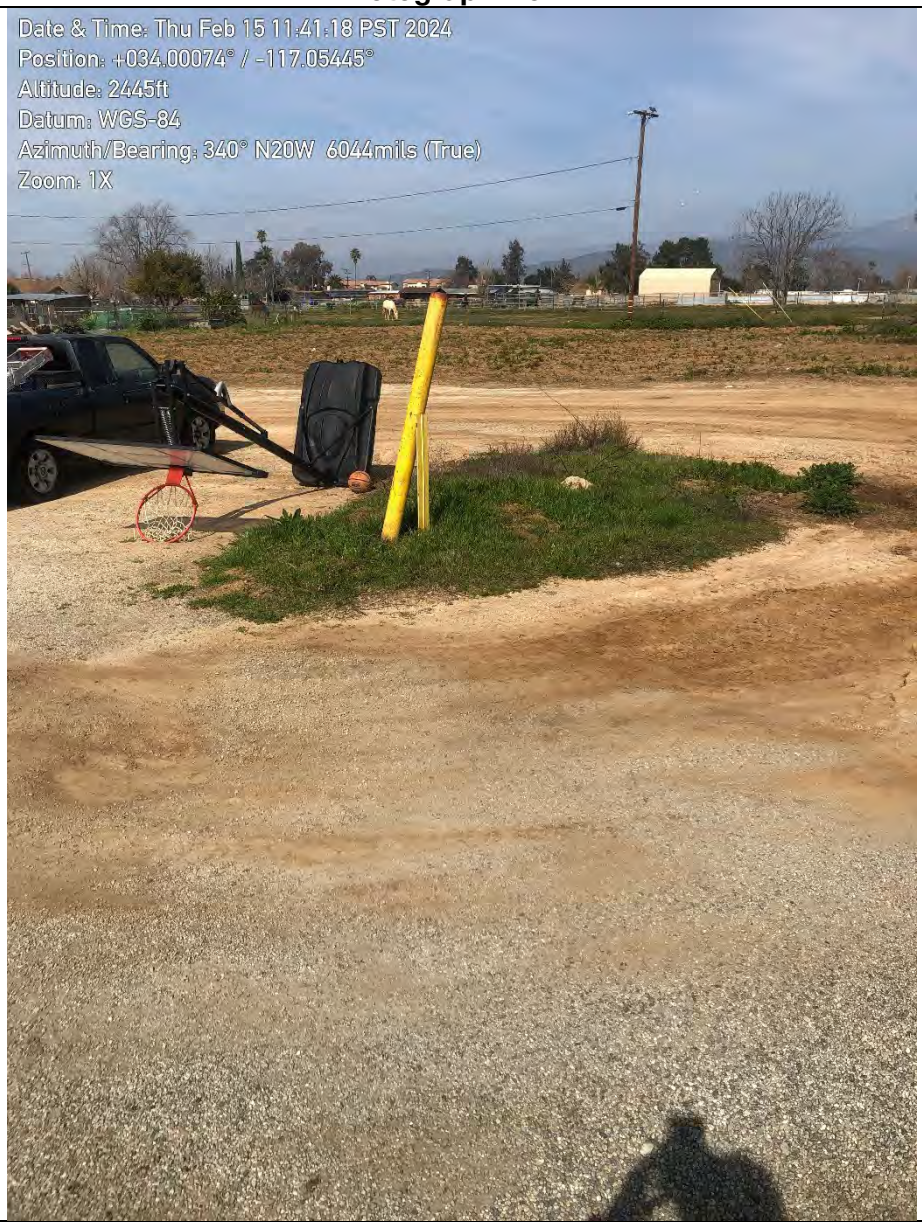

Photo 14: Facing north at existing Buena Vista Ct. cul-de-sac.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 15

Photo 15: Facing north in general location of potable water line relocation along west edge of Recharge Site.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 16

Photo 16: Facing west at Buena Vista Ct. from the end of the cul-de-sac.

Albert A. Webb Associates PHOTOGRAPHIC RECORD	
Client: San Gorgonio Pass Water Agency	**Job Number:** 2023-0136
Site Name: County Line Rd. Recharge Basin & Turnout Project	**Location:** Calimesa, CA
Photographer: Autumn DeWoody	**Date:** February 15, 2024

Photograph No. 17

Photo 17: Facing south on 5th Street across from Buena Vista Ct. towards L Avenue.

APPENDIX B

Air Quality and Greenhouse Gas Analysis

ALBERT A. WEBB ASSOCIATES

Technical Memorandum

To: Mr. Emmett Campbell, Senior Water Resources Planner

From: Eliza Laws, Senior Environmental Analyst
Monica Tobias, Associate Environmental Analyst

Date: February 29, 2024

Re: Air Quality/Greenhouse Gas Analysis for the County Line Road Recharge Basin and Turnout Project, City of Calimesa

The following air quality assessment was prepared to evaluate whether the expected criteria air pollutant emissions generated as a result of construction and operation of the proposed Project would cause exceedances of the South Coast Air Quality Management District's (SCAQMD) thresholds for air quality in the Project area. The greenhouse gas (GHG) assessment was prepared to evaluate whether the expected criteria GHG emissions generated as a result of construction and operation of the proposed Project would exceed the SCAQMD draft screening significance thresholds. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 et seq.). The methodology follows the *CEQA Air Quality Handbook* prepared by the SCAQMD for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD staff, the **Cal**ifornia **E**missions **E**stimator **Mod**el version 2022.1 (CalEEMod) was used to quantify Project-related emissions.

The San Gorgonio Pass Water Agency (SGPWA) proposes the County Line Road Recharge Basin and Turnout Project (Project) in the City of Calimesa. The Project involves the construction or repurposing of 5,300 linear feet of water conveyance pipelines in County Line Road between 4th Street and Bryant Street, construction of 469 linear feet of new potable water pipeline in Buena Vista Court, 1,072 linear feet of new non-potable water pipeline in 4th Street, a new groundwater recharge basin and elevation control basin and a monitoring well at SGPWA-owned vacant property located along 4th Street, and a new turnout facility with a weir structure vault that would connect to existing nearby water pipelines at the southwest corner of Bryant Street and County Line Road. The Project's pipeline alignment would cross Calimesa Creek at 4th Street and may be installed using either open-trench or trenchless construction methods. The 5,300 linear feet of pipeline and the turnout facility components are part of a separate project undertaken by the City of Calimesa.[1] Additionally, the Project involves repaving and raised curbs along portions of Buena Vista Court and along 4th Street.

[1] These facilities were evaluated in the *County Line Road Transportation Corridor Project* Addendum (SCH 2019109030) approved in August 2022 for the South Mesa Water Company Pipeline Replacement and Well No. 11 Relocation Project and construction of these facilities is the responsibility of South Mesa Water Company. Nonetheless, these facilities have been evaluated in the Project's analysis herein.

▪ Regional Significance Thresholds

The thresholds contained in the *SCAQMD CEQA Air Quality Handbook*[2] and posted in a supplemental table as mass daily thresholds on SCAQMD's website[3] are considered regional thresholds and are shown in **Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**, below. These regional thresholds were developed based on the SCAQMD's treatment of a major stationary source.

Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds

Emission Threshold	Units	VOC	NO_X	CO	SO_X	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operation	lbs/day	55	55	550	150	150	55

Air quality impacts can be described in a short- and long-term perspective. Short-term impacts occur during site grading and Project construction and consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Long-term air quality impacts occur once the Project is in operation. The Project consists of potable water infrastructure, operational emissions would be primarily from infrequent visits by vehicles driven by existing maintenance personnel and are considered negligible; therefore, only short-term impacts were quantified.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 or more acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of this Project's disturbance area (approximately 9.63 acres) a Fugitive Dust Control Plan or a Large Operation Notification Form would not be required.

Short-Term Analysis

Short-term emissions from Project construction were evaluated using the CalEEMod version 2022.1 program. The total construction period estimated for the proposed Project is approximately 11 months, beginning no sooner than August 2024. The default parameters within CalEEMod were used, except as identified below, and these default values reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated emissions. In addition to the default values used, shown in the CalEEMod output attached herewith, assumptions relevant to model inputs for short-term construction emission estimates used are:

- Construction is anticipated to begin no sooner than August 2024. The modeled construction schedule for each activity is shown below:

[2] South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993. (Available at SCAQMD.)

[3] Air Quality Analysis Handbook (aqmd.gov)

Construction Activity	Start Date	End Date	Total Working Days
Turnout Construction	August 1, 2024	November 13, 2024	75 days
Basin Grading/Construction	October 1, 2024	December 31, 2024	66 days
Pipeline Trenching	January 1, 2025	April 30, 2025	86 days
Paving	May 1, 2025	June 30, 2025	43 days

- The off-road equipment to be used for each activity is shown below based on input from SGPWA. The engine tier for each piece of equipment is calculated using CalEEMod defaults for the statewide fleet average emissions factors. Each piece of equipment is assumed to operate 8 hours per day:

Activity	Off-Road Equipment	Quantity
Turnout Construction	Rubber Tired Dozers	1
	Tractor/Loader/Backhoes	2
	Excavators	1
	Rollers	1
	Pavers	1
	Paving Equipment	1
Basin Grading/Construction	Graders	1
	Excavators	1
	Scrapers	2
	Tractor/Loader/Backhoes	2
	Rubber Tired Dozers	1
Pipeline Trenching	Excavators[1]	2
	Rollers	1
	Rubber Tired Loaders	1
	Generator Set[1]	1
	Tractor/Loader/Backhoes	2
Paving	Pavers	1
	Paving Equipment	1
	Rollers	1

[1] One Excavator and Generator Set are included for pipeline sliplining activities.

- The Turnout Construction and pipeline sliplining,[4] included in Pipeline Trenching components were analyzed in a previous environmental document.[5] Nonetheless, they are analyzed as part of this Project because the basins would connect to the converted water pipeline in County Line Road and the new turnout component at the intersection of County Line and Bryant Street.

- To evaluate Project compliance with SCAQMD Rule 403 for fugitive dust control, the Project utilized the option of watering the Project site three times daily which achieves a control efficiency of 74 percent for PM-10 and PM-2.5 emissions. Two (2) daily vendor trips per day were added to each construction activity to account for water truck trips.

[4] Sliplining pipe is a trenchless underground pipe rehabilitation technique that involves installing a pipe of a slightly smaller diameter into the larger host pipe.

[5] *County Line Road Transportation Corridor Project* Addendum (SCH 2019109030) approved in August 2022 for the South Mesa Water Company Pipeline Replacement and Well No. 11 Relocation Project. Construction of this facility is the responsibility of South Mesa Water Company.

- Four (4) one way vendor trips per day per construction activity were added for material delivery/removal.
- The Project consists of improvements on paved and unpaved surfaces and would disturb approximately 9.63 acres. Approximately 2.90 acres are assumed to be asphalt surfaces and approximately 6.73 acres are assumed to be non-asphalt surfaces.
- Basin Grading/Construction would include approximately 72,000 cubic yards of soil export that is assumed to be transported to the San Timoteo Landfill, located approximately 11 miles from the Project site. Based on the CalEEMod default truck capacity of 16 cubic yards, approximately 136 one-way truck trips per day would occur during grading, or approximately 68 truckloads per day of soil would be exported.
- The proposed water pipeline within County Line Road is assumed to be constructed via sliplining that would disturb approximately 1.5 acres based on a total of no more than 6 entry/exit pits.
- The Pipeline Trenching equipment list modeled is representative of both open trench and trenchless construction methods.
- Construction staging and storage for all proposed facilities would be onsite and/or within road right of way.

The results of this analysis are summarized below.

Table 2 –Estimated Maximum Daily Construction Emissions

Construction Activity	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
2024	**5.53**	**58.70**	**51.90**	**0.12**	**8.35**	**4.48**
2025	2.30	7.37	11.90	0.02	0.57	0.34
Maximum	**5.53**	**58.70**	**51.90**	**0.12**	**8.35**	**4.48**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: See the detailed model output reports attached herewith. Numbers are the maximum of summer or winter emissions in a given year and may not match due to rounding within the model.

As shown in the table above, the emissions from construction of the Project are below the SCAQMD Daily construction thresholds for all criteria pollutants.

▪ Localized Significance Threshold Analysis

Background

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology[6] that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short- and long-term). LSTs represent the

[6] South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, Revised July 2008. (Available at http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds, accessed February 2024.)

maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Project is located within SRA 28.

Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO_2, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables[7] to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. The LST tables can be used as a screening tool to determine if dispersion modeling would be necessary. If project-related emissions are below the LST table emissions, no further analysis is necessary.

The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds is used to determine the maximum site acreage that is actively disturbed.[8] Based on this SCAQMD guidance, the Project will disturb approximately three acres per day during basin grading. Therefore, the two-acre LST was used to compare the on-site emissions estimated by CalEEMod to be conservative.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The closest sensitive receptor locations are residences adjacent to the Project alignment, including Bryant Street, County Line Road, 4th Street, and Buena Vista, as well as the 4th Street Park. According to LST methodology, projects with boundaries closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, a receptor distance of 25 meters (82 feet) was used. The results are summarized below.

Table 3 – LST Results for Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)			
	NO_X	CO	PM-10	PM-2.5
LST for 2-acres at 25 meters	**234**	**1,100**	**7**	**4**
Turnout Construction	**17.50**	**18.30**	**2.49**	**1.61**
Basin Grading/Construction	**33.40**	**29.20**	**3.83**	**2.26**
Pipeline Trenching	7.07	10.50	0.29	0.27
Paving	3.73	4.99	0.17	0.16
Maximum	**50.90**	**47.50**	**6.32**	**3.87**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Note: Maximums are the greater of either the sum of Turnout Construction and Basin Grading/Construction because these activities overlap, or Pipeline Trenching alone, or Paving activities alone. Maximums are shown in bold.

Emissions from construction of the Project will be below the LST established by SCAQMD for the Project.

Long-Term Analysis

This Project involves potable water infrastructure, with no stationary sources of emissions present. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and

[7] https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds

[8] http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2

idling at the site; such as warehouse/transfer facilities. The proposed Project does not include such uses. Therefore, due to the lack of stationary source emissions, no long-term LST analysis is needed.

▪ Greenhouse Gas Analysis

Greenhouse gases (GHG) are not presented in lbs/day like criteria pollutants; they are typically evaluated on an annual basis using the metric system. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. One of those agencies is the SCAQMD, which was working on GHG thresholds for development projects. In December 2008, the SCAQMD adopted a threshold of 10,000 metric tonnes per year of carbon dioxide equivalents ($MTCO_2E$/yr) for stationary source projects where SCAQMD is the lead agency. The most recent draft proposal was in September 2010[9] and included screening significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 $MTCO_2E$/yr, respectively. Alternatively, a lead agency has the option to use 3,000 $MTCO_2E$/yr as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. The SCAQMD significance thresholds evaluate construction emissions by amortizing them over an expected project life of 30 years.

Short-Term Analysis

Construction-Related Emissions

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the Project. CalEEMod also calculates the indirect GHG emissions related to electricity consumption (CalEEMod Version 2022.1 User's Guide, p. 2). The CalEEMod output results for construction-related GHG emissions present the GHG emissions estimates for the Project for CO_2, methane (CH_4), nitrous oxide (N_2O), refrigerants (R) and CO_2E[10] as shown on **Table 4**.

Table 4 – Project Construction Equipment GHG Emissions

Year	Metric Tons per year (MT/yr)				
	Total CO_2	Total CH_4	Total N_2O	Total R	Total CO_2E
2024	478.00	0.02	0.03	0.19	487.00
2025	99.20	0.00	0.00	0.03	100.00
Total	**577.20**	**0.02**	**0.03**	**0.22**	**587.00**
				Amortized	**19.57**

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Evaluation of the table above indicates that an estimated 587.00 $MTCO_2E$ will occur from Project construction equipment over the course of the estimated approximately 11-month construction period, which is approximately 19.57 $MTCO_2E$ amortized for a project lifetime of 30 years.

The proposed Project does not fit into the categories provided (industrial, commercial, and residential) in either the draft thresholds from SCAQMD. The Project's GHG emissions do not exceed the SCAQMD recommended screening level of 3,000 $MTCO_2E$/yr. Due to the estimated amount of emissions from Project construction, and negligible operational emissions from the infrequent visits by maintenance vehicles, the proposed Project will not generate GHG emissions that exceed the draft screening threshold.

[9] http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2

[10] CO_2E is the sum of CO_2 emissions estimated plus the sum of CH_4 and N_2O and refrigerant emissions estimated multiplied by their respective global warming potential (GWP).

▪ Conclusion

The conclusion of this analysis indicates that the proposed Project's construction emissions will not exceed criteria pollutant thresholds established by SCAQMD on a regional or localized level. The Project will also not generate GHG emissions that exceed the GHG screening threshold recommended by SCAQMD. No mitigation is required.

Should you have any questions, please contact me at (951) 686-1070.

CALEEMOD OUTPUT FILES

County Line Road Recharge Basin and Turnout Project Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	County Line Road Recharge Basin and Turnout Project
Construction Start Date	8/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	29.6
Location	34.001479719771936, -117.05234884617923
County	Riverside-South Coast
City	Calimesa
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5623
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	6.73	Acre	6.73	0.00	—	—	—	—

Other Asphalt Surfaces	2.90	Acre	2.90	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.27	2.30	17.8	19.8	0.03	0.79	1.98	2.78	0.73	0.94	1.67	—	3,295	3,295	0.13	0.06	1.52	3,317
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.71	5.53	58.7	51.9	0.12	2.32	6.03	8.35	2.14	2.34	4.48	—	15,505	15,505	0.53	1.01	0.37	15,820
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.27	1.05	11.1	9.87	0.02	0.44	1.13	1.57	0.40	0.45	0.85	—	2,885	2,885	0.10	0.18	1.12	2,944
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	0.19	2.02	1.80	< 0.005	0.08	0.21	0.29	0.07	0.08	0.16	—	478	478	0.02	0.03	0.19	487

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.27	1.91	17.8	19.8	0.03	0.79	1.98	2.78	0.73	0.94	1.67	—	3,295	3,295	0.13	0.06	1.52	3,317
2025	1.13	2.30	7.35	11.9	0.02	0.29	0.28	0.57	0.27	0.07	0.34	—	2,041	2,041	0.08	0.05	1.43	2,059
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.71	5.53	58.7	51.9	0.12	2.32	6.03	8.35	2.14	2.34	4.48	—	15,505	15,505	0.53	1.01	0.37	15,820
2025	1.12	2.29	7.37	11.6	0.02	0.29	0.28	0.57	0.27	0.07	0.34	—	2,021	2,021	0.08	0.05	0.04	2,038
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.27	1.05	11.1	9.87	0.02	0.44	1.13	1.57	0.40	0.45	0.85	—	2,885	2,885	0.10	0.18	1.12	2,944
2025	0.32	0.61	2.21	3.39	< 0.005	0.09	0.08	0.17	0.08	0.02	0.10	—	599	599	0.02	0.02	0.19	605
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.23	0.19	2.02	1.80	< 0.005	0.08	0.21	0.29	0.07	0.08	0.16	—	478	478	0.02	0.03	0.19	487
2025	0.06	0.11	0.40	0.62	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	99.2	99.2	< 0.005	< 0.005	0.03	100

3. Construction Emissions Details

3.1. Turnout Connection (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.82	17.5	18.3	0.03	0.79	—	0.79	0.73	—	0.73	—	2,856	2,856	0.12	0.02	—	2,866

Dust From Material Movement	—	—	—	—	—	—	1.70	1.70	—	0.88	0.88	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.82	17.5	18.3	0.03	0.79	—	0.79	0.73	—	0.73	—	2,856	2,856	0.12	0.02	—	2,866
Dust From Material Movement	—	—	—	—	—	—	1.70	1.70	—	0.88	0.88	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.60	3.76	0.01	0.16	—	0.16	0.15	—	0.15	—	587	587	0.02	< 0.005	—	589
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.66	0.69	< 0.005	0.03	—	0.03	0.03	—	0.03	—	97.2	97.2	< 0.005	< 0.005	—	97.5
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.46	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	252	252	0.01	0.01	1.00	256
Vendor	0.01	0.01	0.21	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	186	186	< 0.005	0.03	0.52	195
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.10	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	231	231	0.01	0.01	0.03	234
Vendor	0.01	0.01	0.22	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	186	186	< 0.005	0.03	0.01	195
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.2	48.2	< 0.005	< 0.005	0.09	48.9
Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.3	38.3	< 0.005	0.01	0.05	40.1
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.98	7.98	< 0.005	< 0.005	0.01	8.09
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.34	6.34	< 0.005	< 0.005	0.01	6.63
Hauling	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	0.00

3.3. Basin Grading/Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.07	3.42	33.4	29.2	0.06	1.42	—	1.42	1.31	—	1.31	—	6,456	6,456	0.26	0.05	—	6,479
Dust From Material Movement	—	—	—	—	—	—	2.41	2.41	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	6.05	5.27	0.01	0.26	—	0.26	0.24	—	0.24	—	1,167	1,167	0.05	0.01	—	1,171
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.10	0.96	< 0.005	0.05	—	0.05	0.04	—	0.04	—	193	193	0.01	< 0.005	—	194
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.10	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	231	231	0.01	0.01	0.03	234
Vendor	0.01	0.01	0.22	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	186	186	< 0.005	0.03	0.01	195
Hauling	0.27	0.11	7.09	2.08	0.04	0.10	1.36	1.46	0.10	0.38	0.48	—	5,356	5,356	0.12	0.86	0.29	5,617
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.21	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.4	42.4	< 0.005	< 0.005	0.08	43.0
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.7	33.7	< 0.005	0.01	0.04	35.3
Hauling	0.05	0.02	1.28	0.37	0.01	0.02	0.24	0.26	0.02	0.07	0.09	—	968	968	0.02	0.16	0.86	1,016
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.02	7.02	< 0.005	< 0.005	0.01	7.12
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.58	5.58	< 0.005	< 0.005	0.01	5.84
Hauling	0.01	< 0.005	0.23	0.07	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.02	—	160	160	< 0.005	0.03	0.14	168

3.5. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.40	3.73	4.99	0.01	0.17	—	0.17	0.16	—	0.16	—	756	756	0.03	0.01	—	758
Paving	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.44	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.0	89.0	< 0.005	< 0.005	—	89.3
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	106	106	< 0.005	< 0.005	0.39	107
Vendor	0.01	< 0.005	0.20	0.06	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	184	184	< 0.005	0.03	0.52	193
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.6	11.6	< 0.005	< 0.005	0.02	11.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.6	21.6	< 0.005	< 0.005	0.03	22.7
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.92	1.92	< 0.005	< 0.005	< 0.005	1.95
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.58	3.58	< 0.005	< 0.005	< 0.005	3.75
Hauling	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	0.00

3.7. Pipeline Trenching (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.86	7.07	10.5	0.02	0.29	—	0.29	0.27	—	0.27	—	1,611	1,611	0.07	0.01	—	1,616
Architectural Coatings	—	1.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.86	7.07	10.5	0.02	0.29	—	0.29	0.27	—	0.27	—	1,611	1,611	0.07	0.01	—	1,616
Architectural Coatings	—	1.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.67	2.47	< 0.005	0.07	—	0.07	0.06	—	0.06	—	380	380	0.02	< 0.005	—	381

Architect Coatings	—	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.30	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.8	62.8	< 0.005	< 0.005	—	63.1
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.35	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	247	247	0.01	0.01	0.91	250
Vendor	0.01	< 0.005	0.20	0.06	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	184	184	< 0.005	0.03	0.52	193
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.02	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	227	227	0.01	0.01	0.02	230
Vendor	0.01	< 0.005	0.21	0.06	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	184	184	< 0.005	0.03	0.01	192
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.1	54.1	< 0.005	< 0.005	0.09	54.9
Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.3	43.3	< 0.005	0.01	0.05	45.3
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.96	8.96	< 0.005	< 0.005	0.02	9.08

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.16	7.16	< 0.005	< 0.005	0.01	7.50
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Turnout Connection	Site Preparation	8/1/2024	11/13/2024	5.00	75.0	—
Basin Grading/Construction	Grading	10/1/2024	12/31/2024	5.00	66.0	—
Paving	Paving	5/1/2025	6/30/2025	5.00	43.0	—
Pipeline Trenching	Trenching	1/1/2025	4/30/2025	5.00	86.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Turnout Connection	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Turnout Connection	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Turnout Connection	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Turnout Connection	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Turnout Connection	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Turnout Connection	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Basin Grading/Construction	Graders	Diesel	Average	1.00	8.00	148	0.41
Basin Grading/Construction	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Basin Grading/Construction	Tractors/Loaders/Backh oes	Diesel	Average	2.00	8.00	84.0	0.37
Basin Grading/Construction	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Basin Grading/Construction	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Pipeline Trenching	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Pipeline Trenching	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Pipeline Trenching	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Pipeline Trenching	Tractors/Loaders/Backh oes	Diesel	Average	2.00	8.00	84.0	0.37
Pipeline Trenching	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Turnout Connection	—	—	—	—
Turnout Connection	Worker	17.5	18.5	LDA,LDT1,LDT2
Turnout Connection	Vendor	6.00	10.2	HHDT,MHDT
Turnout Connection	Hauling	0.00	20.0	HHDT
Turnout Connection	Onsite truck	—	—	HHDT
Basin Grading/Construction	—	—	—	—
Basin Grading/Construction	Worker	17.5	18.5	LDA,LDT1,LDT2
Basin Grading/Construction	Vendor	6.00	10.2	HHDT,MHDT
Basin Grading/Construction	Hauling	136	11.0	HHDT
Basin Grading/Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	7.50	18.5	LDA,LDT1,LDT2
Paving	Vendor	6.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Pipeline Trenching	—	—	—	—
Pipeline Trenching	Worker	17.5	18.5	LDA,LDT1,LDT2
Pipeline Trenching	Vendor	6.00	10.2	HHDT,MHDT
Pipeline Trenching	Hauling	0.00	20.0	HHDT
Pipeline Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Pipeline Trenching	0.00	0.00	0.00	0.00	25,169

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Turnout Connection	—	—	37.5	0.00	—
Basin Grading/Construction	—	72,000	102	0.00	—
Paving	0.00	0.00	0.00	0.00	9.63

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	6.73	0%
Other Asphalt Surfaces	2.90	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	29.6	annual days of extreme heat
Extreme Precipitation	5.60	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	26.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	100
AQ-PM	46.7
AQ-DPM	62.3
Drinking Water	49.6
Lead Risk Housing	31.0
Pesticides	2.00
Toxic Releases	42.8
Traffic	61.1
Effect Indicators	—
CleanUp Sites	0.00

Groundwater	0.00
Haz Waste Facilities/Generators	65.9
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	29.1
Cardio-vascular	59.6
Low Birth Weights	33.7
Socioeconomic Factor Indicators	—
Education	53.1
Housing	28.2
Linguistic	5.64
Poverty	44.1
Unemployment	65.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	49.39047863
Employed	7.955857821
Median HI	28.39727961
Education	—
Bachelor's or higher	26.08751444
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—

Auto Access	49.51879892
Active commuting	1.039394328
Social	—
2-parent households	69.19029899
Voting	52.71397408
Neighborhood	—
Alcohol availability	64.81457718
Park access	7.108943924
Retail density	18.0803285
Supermarket access	33.60708328
Tree canopy	28.66675221
Housing	—
Homeownership	88.78480688
Housing habitability	65.43051456
Low-inc homeowner severe housing cost burden	14.98780957
Low-inc renter severe housing cost burden	43.75721802
Uncrowded housing	68.66418581
Health Outcomes	—
Insured adults	54.27948159
Arthritis	0.0
Asthma ER Admissions	71.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	6.1
Cognitively Disabled	17.4
Physically Disabled	20.3
Heart Attack ER Admissions	14.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	45.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	16.1
SLR Inundation Area	0.0
Children	90.2
Elderly	16.2
English Speaking	59.2
Foreign-born	10.6
Outdoor Workers	12.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.4
Traffic Density	61.9
Traffic Access	23.0
Other Indices	—

Hardship	60.4
Other Decision Support	—
2016 Voting	74.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	35.0
Healthy Places Index Score for Project Location (b)	26.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Per SGPWA
Construction: Off-Road Equipment	Per SGPWA
Construction: Dust From Material Movement	72,000 cy of soil export; Per Rule 403 water 3xs a day

Construction: Trips and VMT	Two (2) daily vendor trips added for water trucks during each activities. Four (4) daily vendor trips are assumed for material delivery and removal during each activity. One-way trip length for soil hauling trucks is approximately 11 miles to nearest landfill.

APPENDIX C

Biological Assessment Report

Biological Assessment Report
for the
County Line Road Recharge Basin and Turnout Project
City of Calimesa

Prepared For:

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July 31, 2024

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USFWS IPaC Resource List

1.0 INTRODUCTION

This report documents the findings of an evaluation of biological resources conducted by BLUE for the proposed water storage/water pipeline re-development project (Project). The proposed project is located in the City of Calimesa (Riverside County, south of County Line Road) on the border of the City of Yucaipa (San Bernardino County; north of County Line Road). The proposed water storage is located on a 6.9-acre parcel located on the west side of 4th Street, north of Buena Vista Court and south of West County Line Road. It is connected to the proposed replacement water lines from the east, along West County Line Road and south on Bryant Street. Overall, the Project includes three general parts:

1. The development of Assessor's Parcel Number (APN) 411-150-027-3 (a 6.9-acre lot in the west) for a recharge pond constructed to replenish groundwater, including possible improvements to Buena Vista Court (in the southwest corner).

2. The conversion and installation of water pipelines (approximately 6,100 linear feet) in 4th Street, West County Line Road and Bryant Street.

3. The construction of a new San Bernardino Valley Municipal Water District (SBVMWD) turnout that connects to existing nozzle on the East Branch Extension. SBVMWD will obtain an easement to construct on an existing single family residential lot (APN 410-112-015). This turnout will connect to the pipe that South Mesa Water Company is abandoning. This potable pipeline will be converted to a raw water pipeline.

4. The proposed pipeline running below 4th Street will be constructed below (jack/bore) the concrete lined flood control channel it intersects. No impacts to the flood control channel are proposed.

The Project is not located within any Planning Area designated Criteria Areas or Subunits. The project is also outside of mandatory protocol Burrowing Owl Survey area. A burrowing owl assessment was conducted due to the occurrence of potentially appropriate habitat (disturbed area/agriculture). The Project footprint does not fall within any Public/Quasi-Public (PQP) or other Conserved Lands.

The Biological Study Area (BSA) includes the Project proposed ground disturbance footprint, plus a 100-foot buffer. The BSA is located within the United States Geological Survey (USGS) 7.5-minute Yucaipa Topographic Map. The Project falls within the San Bernardino Meridian, Section 5, Township 4 South, Range 3 West on the Yucaipa, CA 7.5-minute topographic quadrangle map (USGS 2020) in the city of Calimesa, at an approximate elevation of 2,450 feet.

The intended use of this document is to disclose and evaluate habitat conditions and determine the potential for occurrence of common and special-status species and their habitats within survey area limits pursuant to the California Environmental Quality Act (CEQA). Special-status species refers to any species that has been afforded special protection by federal, state, or local resource agencies (e.g., U.S. Fish and Wildlife Service [USFWS], California Department of Fish and Wildlife [CDFW]) or resource conservation organizations (e.g., California Native Plant Society [CNPS]). The term "special-status species" excludes those avian species solely identified under Section 10 of the Migratory Bird Treaty Act (MBTA) for federal protection and CDFW Code Sections 3503, 3503.5, 3513. The CDFW code and MBTA species (protected by Section 10 measures per federal requirements) are afforded avoidance and minimization.

2.0 METHODS

Prior to beginning the field survey, a literature review was completed to determine locations and types of biological resources having the potential to exist within the region (USFWS Critical Habitat Mapper and File data [USFWS], California Natural Diversity Data Base (CNDDB) and CNPS Inventory of Rare and Endangered Plants [CNPS]). The MSHCP Transportation and Land Management Agency Geographic Information Services Database and Western Riverside County RCA website and GIS data bank was also reviewed (County of Riverside, 2023).

In addition to utilizing on-line databases and mapping tools, the Yucaipa topographic map was reviewed to determine the locations of any potential special aquatic resource areas (e.g., wetlands or other Waters of the United States or Waters of the State) under regulatory jurisdiction of the US Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB), and Riparian/Riverine habitats prior to beginning field surveys of the BSA.

Additionally, the United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) on-line Web Soil Survey tool (NRCS 2015) was reviewed to determine the types and percent cover of soils within the BSA.

Lands within the BSA that were potentially suspected of being potential special aquatic resource and Riparian/Riverine habitats were then assessed by visual observation during the field survey. Potential special aquatic resource areas and riparian/riverine habitats were further evaluated by determining the presence of definable channels and/or hydrophytic vegetation, riparian habitat, and hydrologic regime.

Michael Jefferson, senior BLUE biologist, then conducted a pedestrian-based biological survey to observe, document, and evaluate plant and wildlife resources and determine the potential for occurrence of special-status plant and wildlife species. Approximately 100-foot-wide meandering transects were utilized to provide visual coverage of the BSA.

Vegetation community type descriptions were based on observed dominant vegetation composition and derived from the criteria and definitions of vegetation classification systems (Holland, 1986; Sawyer and Keeler-Wolf, 1995; Sawyer et al., 2009). Plants were identified in the field to the lowest taxonomic level sufficient to determine positive identity and status. Plants of uncertain identity were subsequently identified using taxonomic keys, and scientific and common species names were recorded according to Baldwin (2012).

The presence of a wildlife species was based on direct observation or wildlife sign (e.g., tracks, burrows, nests, scat, or vocalization). Field data compiled for wildlife species included scientific name, common name, and evidence of sign when no direct observations were made. Wildlife of uncertain distinctiveness was documented and subsequently identified from field guides and related literature (Burt and Grossenheider, 1980; Halfpenny, 2000; Sibley, 2000; Elbroch, 2003; and Stebbins, 2003).

Burrowing Owl Habitat Assessment

A burrowing owl habitat assessment was conducted onsite following the burrowing owl survey instructions outlined in the Staff Report on Burrowing Owl Mitigation State of California Natural Resources Agency (Department of Fish and Game; 2012). While potentially appropriate habitat for burrowing owl (agricultural fields)

occurs within the BSA, a review of CNDDB indicates that no burrowing owl are recorded onsite or within 2 miles of the project footprint, and none in the Yucaipa USGS quad. Burrowing owls use a variety of natural and modified habitats for nesting and foraging that is typically characterized by low growing vegetation. Burrowing owl habitat includes, but is not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf-courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas.

Burrowing owls typically use burrows made by fossorial (adapted for burrowing or digging) mammals, such as ground squirrels (*Spermaphilus beecheyi*) or badgers (*Taxidea taxus*). They also often utilize manmade structures, such as earthen berms; cement culverts; cement, asphalt, rock, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

As required by the assessment process, the property and a 500-foot-deep buffer (where appropriate) was walked/surveyed to identify the presence of burrowing owl habitat and/or burrowing owls surrounding the Project and in the BSA.

In addition, the BSA was also assessed for its potential to support special-status species, based on habitat suitability comparisons with reported occupied habitats.

The following definitions were used to determine the need for subsequent surveys and to assess project-related effects to special-status species:

- Absent (A): No habitat occurs within the survey area and no further surveys are necessary
- Habitat Present (HP): Habitat is present within the survey area
- Present (P): The species was observed within the survey area during the survey
- Critical Habitat (CH): The survey area is located within designated critical habitat

3.0 RESULTS

BLUE biologist Mike Jefferson conducted the surveys for the Project on April 6, 2023, beginning at 9:30 am and ending at 11:30 am. A follow up survey was conducted for the Buena Vista Court road extension area on July 28, 2024, between 10:30-11:15. Weather conditions during the April/July survey included mostly clear skies/clear skies, with temperatures ranging from 66°-69° / 83°-85° Fahrenheit, and winds from 1 to 3 miles per hour.

3.1 VEGETATION COMMUNITIES/LAND COVER TYPES

A total of two (2) vegetation community/land cover types were observed onsite, Developed and Disturbed vegetation (Table 1; Figures 3a and 3b). No native plant species were located within the survey area.

Table 1: On-Site/Linear Component Vegetation

Community Type	Total (approx.)
Disturbed (lot)	6.9 acres
Developed (in roadway; linear pipe replacement)	6,100 feet

Communities/Land Cover Types Observed Onsite

3.1.1 Disturbed (orchard/ruderal/maintained)

The disturbed areas are typically located adjacent to urbanization and contain a mix of unmaintained bare dirt and primarily weedy species, including non-native forbs, annuals, and grasses, usually found pioneering on recently disturbed soils. Maintained undeveloped areas supporting native vegetation/habitat are considered disturbed habitat – ornamental vegetation.

Onsite, the Disturbed habitat is comprised of the maintained, disked and irrigated agricultural area. Within this partially dirt lot, the following non-native weedy species were dominant: prickly sow thistle (*Sonchus asper*), common sow thistle (*Sonchus oleraceus*), bristly ox-tongue (*Picris echioides*), Russian thistle (*Salsola tragus*), mustard ssp., hottentot-fig (*Carpobrotus edulis*), wild lettuce (*Lactuca serriola*), tree tobacco (*Nicotiana glauca*), castor-bean (*Ricinus communis*), red-stem filaree (*Erodium cicutarium*), short-beak filaree (*Erodium brachycarpum*) and white-stem filaree (*Erodium moschatum*).

These maintained urban lands do not support natural, native vegetation or provide essential habitat connectivity and and therefore have a significantly reduced biological value.

3.1.2 Developed

Developed lands onsite include the paved roadways where the replacement pipe is located (4th Street, West County Line Road and Bryant Street), street/access improvements to Buena Vista Court (southwest corner) and the existing single-family residence and parking area located at 906 Bryant Street (eastern connection point). Within the BSA, developed area consists of the surrounding streets and the existing single-family residence. No native or sensitive vegetation is present within this land cover type.

3.2 PLANT AND WILDLIFE SPECIES

Plant and wildlife species observed within the survey area were typical of developed and disturbed habitats. All plant and wildlife species observed within the survey area are listed in the respective report sections.

3.2.1 SPECIAL-STATUS PLANTS

Eleven special-status plant species have been reported to occur within the Yucaipa quadrangle (Figure 1) (CDFW, CNPS, County of Riverside). Three species are designated with federal and/or state listing status: San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), thread-leaved brodiaea (*Brodiaea filifolia*), and spreading navarretia (*Navarretia fossalis*). Due to the developed and disturbed/maintained quality of vegetation onsite, all eleven special-status plant species were determined to have an "Absent" potential for occurrence within the survey area and no further survey is necessary to determine presence or absence of those species.

3.2.2 SPECIAL-STATUS WILDLIFE

Fifteen special-status wildlife species (including eight USFWS designated species) have been reported to occur within the Yucaipa quadrangle (CDFW, County of Riverside). Due to the developed and disturbed/maintained quality of vegetation onsite and within the BSA, all fifteen special-status wildlife species were determined to have an "Absent" potential for occurrence within the survey area and no further survey is necessary to determine presence or absence of these species.

Eight special-status wildlife species under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction with the potential to occur are listed in the IPaC resource list (USFWS, 2023; attached). None were observed onsite and all habitat assessments are negative for the potential to occur.

Species Name	Status	Habitat	Critical Habitat Overlap (onsite)	Onsite Status
San Bernardino Merriam's Kangaroo Rat	Endangered	Alluvial fan sage scrub and coastal sage scrub in San Bernardino County	No	Absent. No appropriate habitat onsite. No potential to occur.
Coastal California Gnatcatcher	Threatened	Coastal sage scrub	No	Absent. No appropriate habitat onsite. No potential to occur.
Least Bell's Vireo	Endangered	Mesquite scrub within arroyos, palm groves, and hedgerows bordering agricultural	No	Absent. No appropriate habitat onsite. No potential to occur.

		and residential areas		
Species Name	**Status**	**Habitat**	**Critical Habitat Overlap (onsite)**	**Onsite potential**
Southwestern Willow Flycatcher	Endangered	Dense riparian habitats (cottonwood/willow and tamarisk vegetation)	No	Absent. No appropriate habitat onsite. No potential to occur.
Mountain Yellow-legged Frog	Endangered	Mid- to high-elevation aquatic habitat	No	Absent. No appropriate habitat onsite. No potential to occur.
Santa Ana Sucker	Threatened	Shallow portions of rivers and streams	No	Absent. No appropriate habitat onsite. No potential to occur.
Monarch Butterfly	Candidate	Milkweed and flowering plants	No	Absent. No appropriate habitat onsite. No potential to occur.
Slender-horned Spineflower	Endangered	Isolated patches of large floodplain habitats categorized as alluvial scrub	No	Absent. No appropriate habitat onsite. No potential to occur.

Due to the disturbed and low quality of vegetation onsite, all special-status species were determined to have an "Absent" potential for occurrence within the survey area and no further survey is necessary to determine presence or absence of these species.

3.2.3 WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP)

The Project is located within the Western Riverside County MSHCP area. The Project is not located in any MSHCP designated Criteria Cells or Cell Groups (County of Riverside, 2023). The Project is not subject to Cell Criteria compliance under the MSHCP. The Project does not include any MSHCP Conserved Lands. Public and private development projects that are carried out are permitted under the MSHCP subject to compliance with MSHCP policies that apply outside Criteria Areas. In addition, the San Gorgonio Pass Water Agency is not a permittee nor a Participating Special Entity (PSE) to the MSHCP.

The Project does not occur within any Amphibian, Mammalian, or Special Linkage Areas, as identified by MSHCP Section 6.3.2.

<u>Additional Surveys Needs and Procedures</u>
A burrowing owl assessment was completed over the entire Project footprint and buffer area (see all Figures). No

quality habitat, burrowing owls, or owl sign, were located during the assessment. No potentially appropriate burrows were observed onsite and within the BSA.

A habitat assessment for nine potential Criteria Area Species was completed and due to a lack of appropriate habitat and lack of observations, there is no potential for occurrence. Species include: Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), little mouestail (*Myosurus minimus* var. *apus*), mud nama (*Nama stenocarpum*), Parish's brittlescale (*Atriplex parishii*), round-leaved filaree (*Erodium macrophyllum*), San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and thread-leaved brodiaea (*Brodiaea filifolia*).

A habitat assessment for five Narrow Endemic Plant Species was completed and due to a lack of appropriate habitat and lack of observations, there is no potential for occurrence. Species include: San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wrights trichocoronis (*Trichocoronis wrightii* var. *wrightii*).

3.2.4 RIPARIAN/RIVERINE

Section 6.1.2 of the MSHCP defines Riparian/Riverine areas are defined as "lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year."

Riparian/Riverine are not present within the survey area and will not be impacted by the Project.

3.2.5 VERNAL POOL AND FAIRY SHRIMP

Vernal pools, vernal swales, alkali scalds or flats, or other seasonal wet habitats were not identified within the BSA during field surveys conducted by a qualified biologist.

The BSA lacks suitable habitat for fairy shrimp species or other vernal pool species, including plants.

3.3 AQUATIC RESOURCES

The BSA does not contain any special aquatic resource area such as wetlands or other Waters of the United States or Waters of the State under regulatory jurisdiction of the USACE, CDFW, or RWQCB.

4.0 CONCLUSIONS

The literature review and field assessment data confirm that no special-status species currently utilize the BSA. The BSA does not support sensitive native habitat and/or riparian, riverine and/or vernal pool habitat.

As a result, the BSA lacks suitable habitat that would typically support special-status species or receive California Endangered Species Act (CESA) or federal Endangered Species Act (ESA) protections. No special status species were observed and none are expected to occur. Consequently, there is no reasonable presumption of adverse impact to any special status species or their habitats as a result of Project implementation.

Suitable burrowing owl habitat is present on the basin site and dirt roadway shoulders. No direct observations or burrowing owl sign (feathers, pellets, fecal material, prey remains, etc.) were made during the site assessment. No potentially suitable burrows were present on site. No ground squirrels (an important indicator species) were observed on site.

No Narrow Endemic Plant Species/Criteria Area plant species were observed on site during the habitat assessment. Given the Project footprints' exposure to recurring surface disturbances associated with vegetation management, these species are not expected to occur on site. The BSA supports no riparian/riverine/vernal pool habitats or species associated with these habitat types, and none were observed on site.

No special aquatic resource areas were discovered within the BSA and none are expected to be impacted by the Project.

To comply with the Migratory Bird Treaty Act and relevant sections of California Fish and Game Code (e.g., Sections 3503, 3503.5, and 3513, et seq.), vegetation clearing should take place outside of the typical avian nesting season (i.e., February 1st to August 31st), to the maximum extent practical. If vegetation removal occurs during the nesting bird season, a qualified biologist shall conduct a nesting bird survey within 72 hours of the scheduled activity.

The services performed by BLUE and documented in this report have been conducted in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representations are either express or implied, and no warranty or guarantee is included in this report. Opinions relating to presence, absence, or potential for occurrence of biological resources are based on limited data and actual conditions may vary from those encountered at the times and locations where the data were obtained despite due professional care. The services provided have been performed in accordance with the negotiated scope of work. Any reliance on this report by any other party shall be at such party's sole risk unless that party has written authorization from BLUE to use this work product.

5.0 PREPARER

The following Qualified Senior Biologist completed the stated field survey(s) and preparation of this report:
Michael Jefferson

CERTIFICATION: *I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.*

Signed:

Michael K. Jefferson
BLUE Consulting Group
Senior Biologist

6.0 REFERENCES

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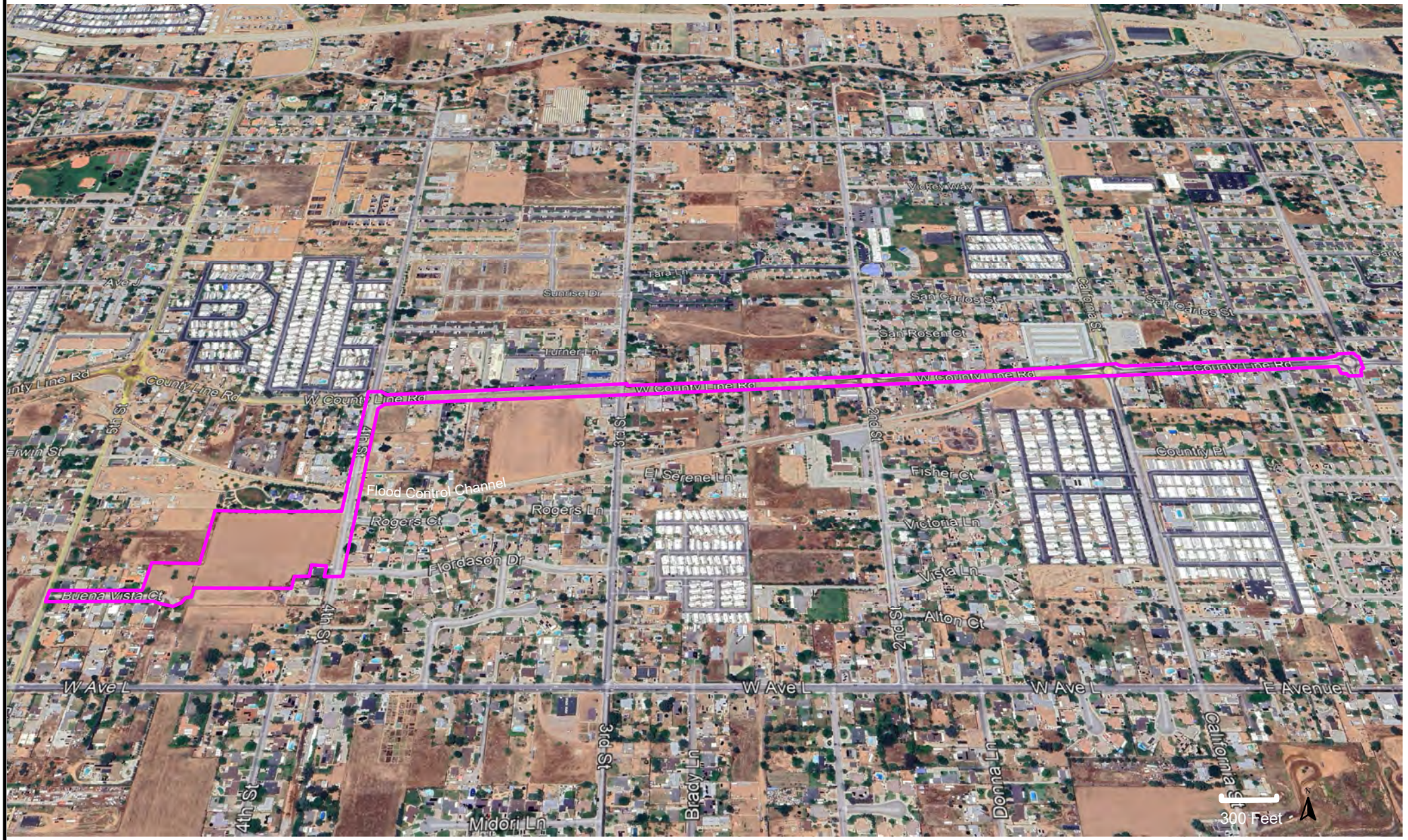
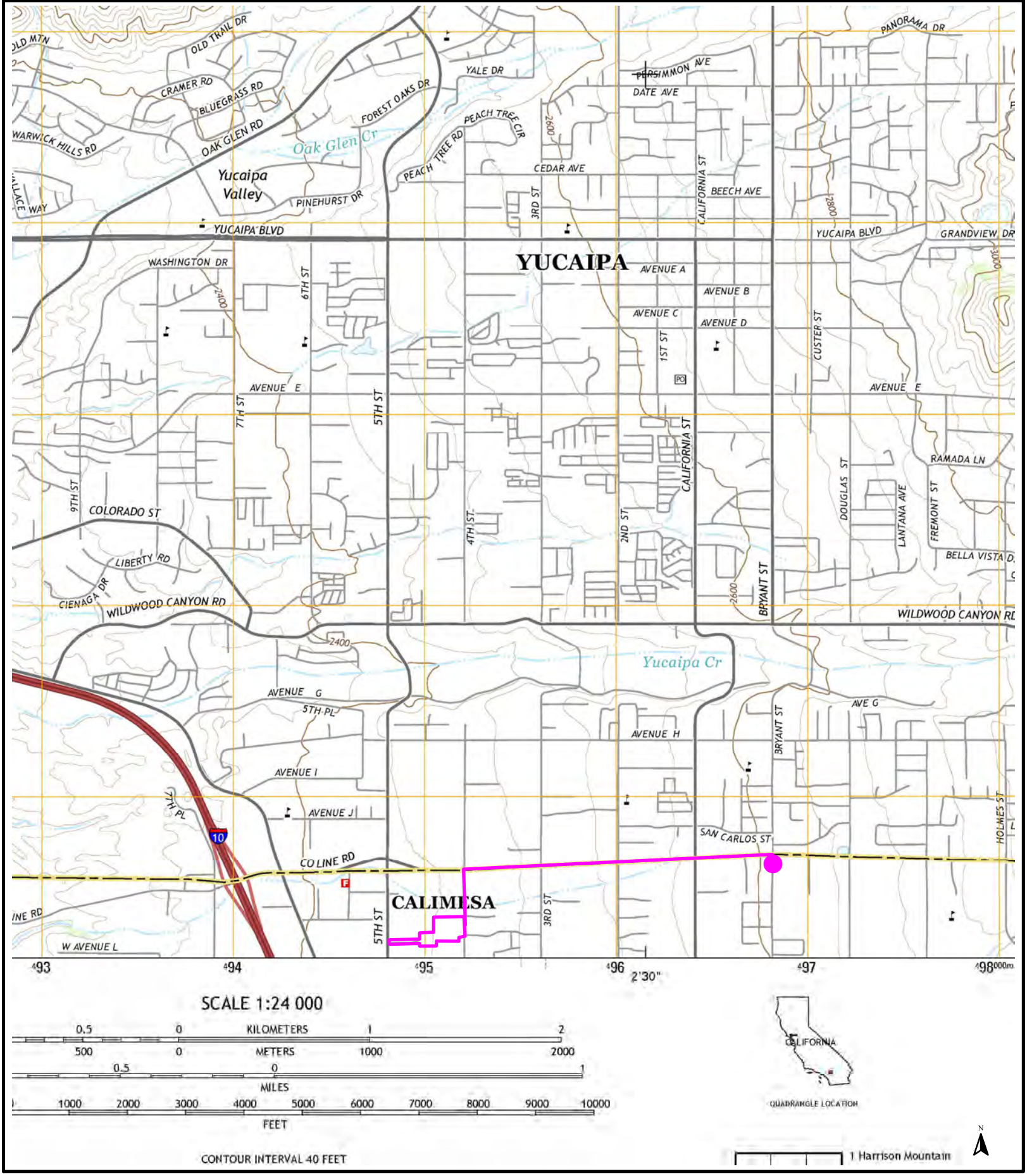


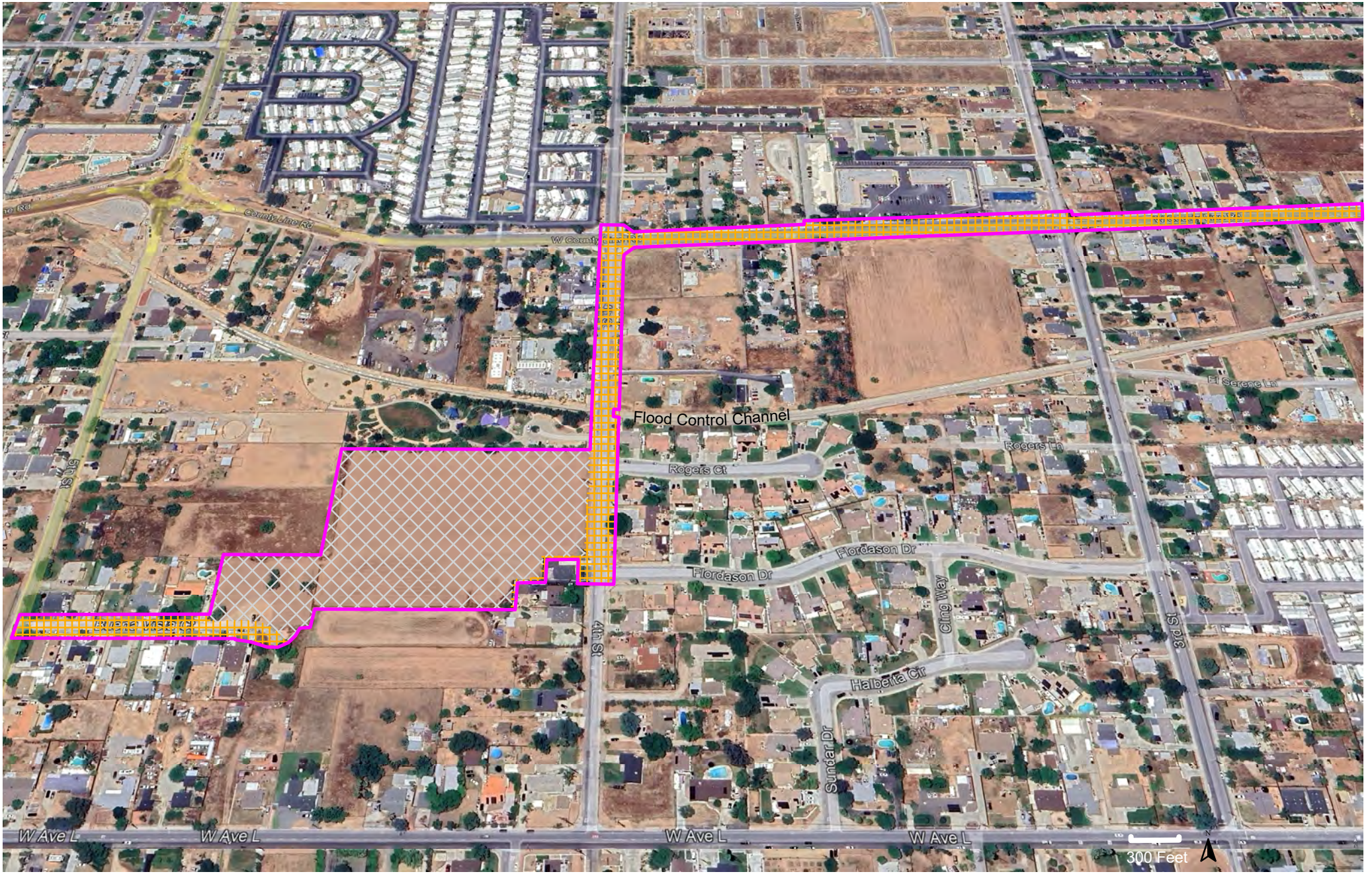
Project Footprint

FIGURE 1
Project Aerial



Proposed Project Location (Lot and Linear)

FIGURE 2
USGS Topo Map



Project Footprint

Developed Area

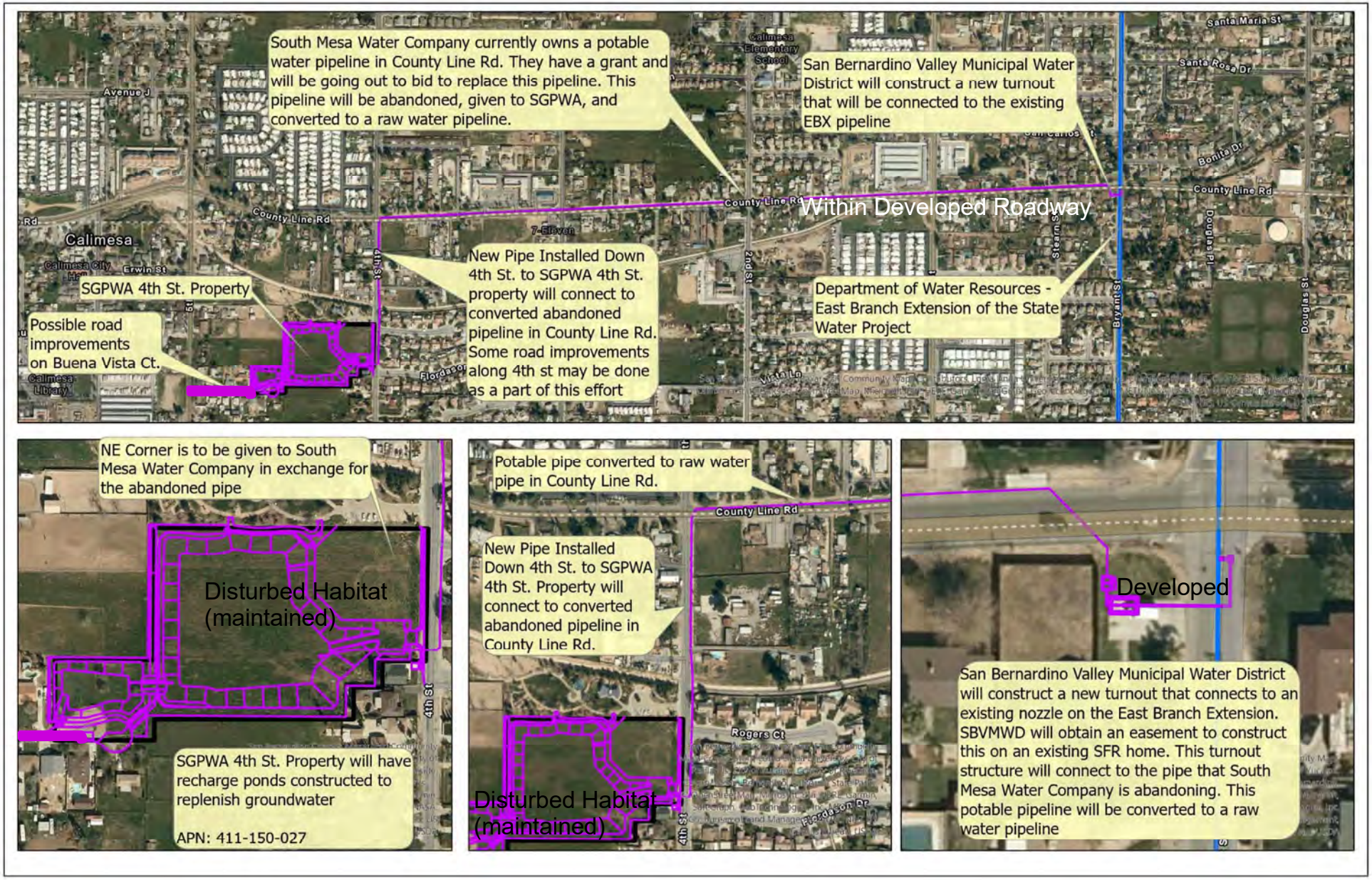
Disturbed Habitat

FIGURE 3a
Project Vegetation Map (west)

Project Footprint

Developed Area

FIGURE 3b
Project Vegetation Map (east)

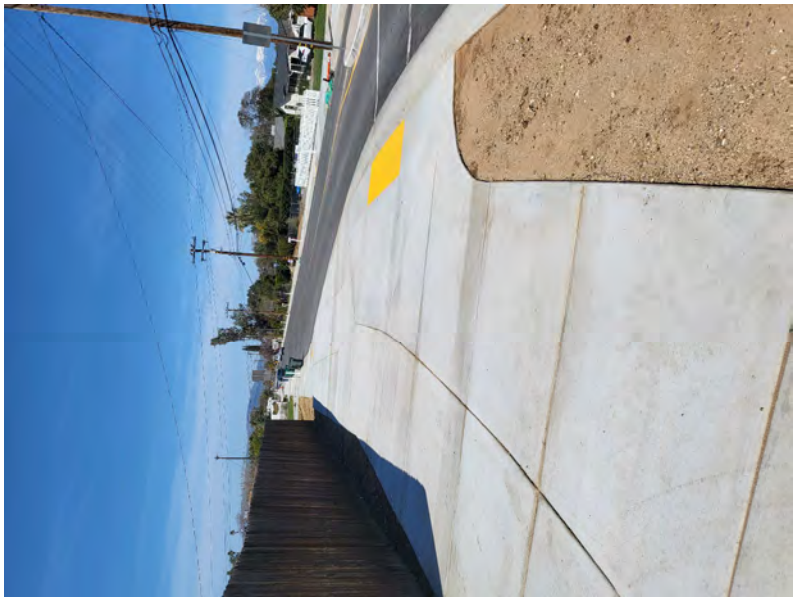


Project Footprint
(alll within disturbed/developed area)

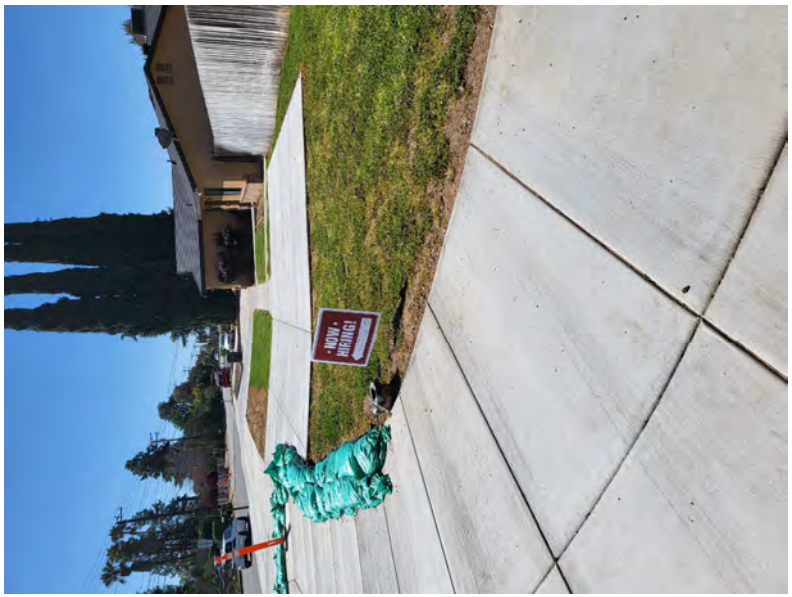
FIGURE 4
Project Impact Map

Photograph 1 - SW corner looking N over disturbed lots

Photograph 2 - Close-up of Maintained Disturbed Habitat



Photograph 3 - Looking W. down County Line Road (pipe installation)



Photograph 4 - Looking S at connection point at intersection of Bryant and W. County Line Road

Photographs 1-4 Photographs of the Project Footprint (maintained lot and developed linear roadway)

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Riverside and San Bernardino counties, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an

office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat Dipodomys merriami parvus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2060	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS

Mountain Yellow-legged Frog Rana muscosa There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8037	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker Catostomus santaanae There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Slender-horned Spineflower Dodecahema leptoceras Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4007	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list,click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure

you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

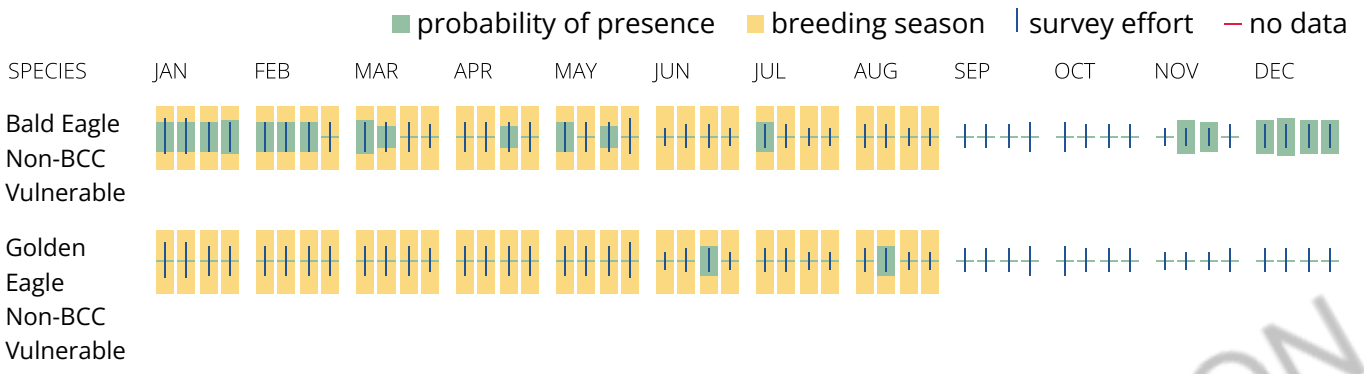
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Belding's Savannah Sparrow Passerculus sandwichensis beldingi — Breeds Apr 1 to Aug 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8

Black Swift Cypseloides niger — Breeds Jun 15 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8878

Black-chinned Sparrow Spizella atrogularis — Breeds Apr 15 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9447

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Cassin's Finch Carpodacus cassinii — Breeds May 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9462

Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird

Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

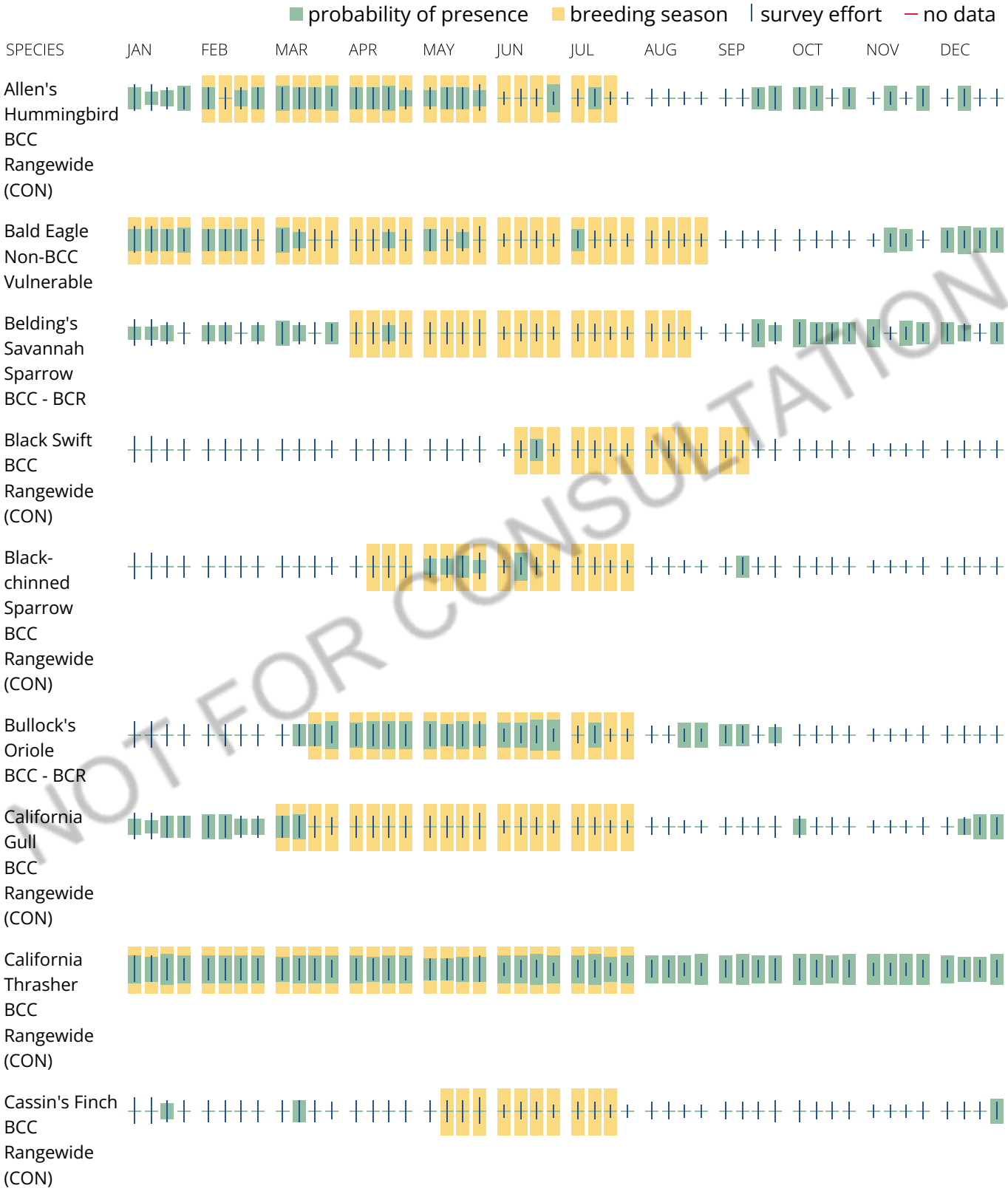
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

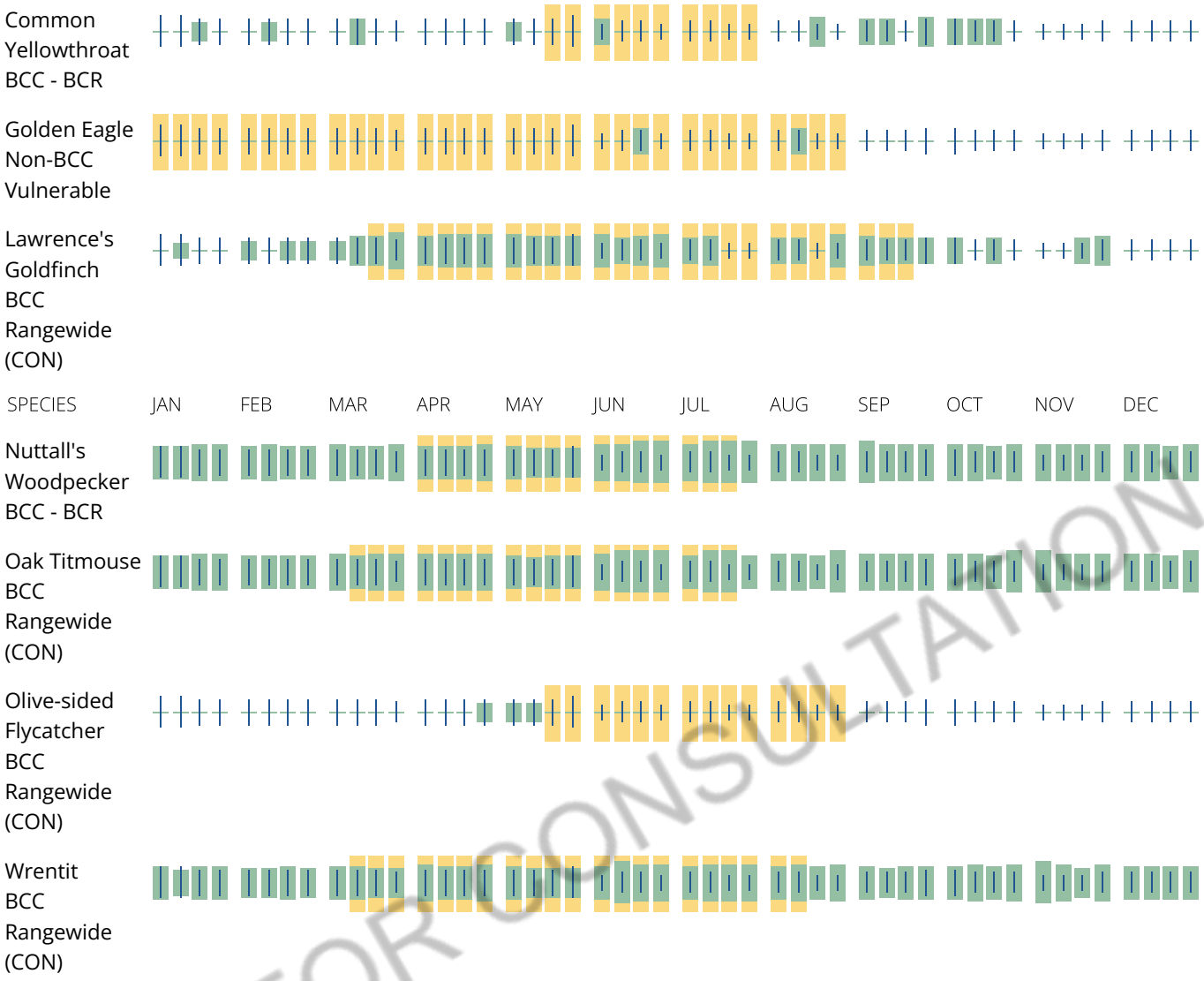
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently

relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge

Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must

undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work.

There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX D.1

Cultural Resources Investigation

Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project City of Calimesa, Riverside and San Bernardino Counties California

Jessica Cochrane

Prepared By

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Prepared For
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April 2024

USGS Yucaipa 7.5-minute topographic quadrangle
Sections 7 and 18, T2S/R1W; and Sections 11-14, T2S/R2W, SBBM
Level of Investigation: CEQA Phase I
Keywords: San Gorgonio Pass Water Agency; ~6.9 acres surveyed

MANAGEMENT SUMMARY

The San Gorgonio Pass Water Agency (SGPWA) proposes the construction of new water conveyance pipelines, a turnout, and a groundwater recharge basin to the existing pipeline for the County Line Recharge Basin and Turnout project (Project), in the city of Calimesa, Riverside County, and in San Bernardino County. Under contract to the Albert A. Webb Associates, Applied EarthWorks, Inc. (Æ) conducted a cultural resource study of the Project in accordance with the California Environmental Quality Act (CEQA). The SGPWA is the lead agency for compliance with CEQA. As this Project may receive federal funding, this report also complies with Section 106 of the National Historic Preservation Act.

This report summarizes the methods and results of the cultural resource study, including a records search and literature review, communication with Native American Tribal representatives, and an archaeological survey of the Project area. The purpose of the investigation was to determine the potential for the proposed Project to impact historical resources eligible for or listed in the California Register of Historical Resources.

The literature and records search at the Eastern Information Center and the South Central Coastal Information Center of the California Historical Resource Information System indicated four cultural resources have been documented within a 0.5-mile radius of the Project area. None of these previously identified cultural resources is within the Project area.

Results of the Native American Heritage Commission (NAHC) Sacred Lands File search was negative for Native American cultural resources within the Project area. Per the NAHC's request, Æ contacted 14 Native American individuals and organizations to elicit information on Native American resources within the Project area and received responses from representatives of three tribes—Agua Caliente Band of Cahuilla Indians, the Cahuilla Band of Indians, and the San Manuel Band of Mission Indians.

Æ archaeologist Andrew DeLeon completed an intensive pedestrian archaeological survey of the Project area on February 28, 2024. No cultural resources were encountered within the Project area during the survey.

The unpaved portion of the Project area is highly disturbed, with evidence of tilling. Ground visibility was generally poor due to extensive pinweed growth, and sparse patches of modern refuse were observed on the south side of the open field. As a result, there is a low likelihood that archaeological deposits or features will be discovered during construction and Æ recommends a finding of No Historic Properties Affected for the Project. Consequently, no further cultural resource studies are recommended within the Project area.

Field notes documenting the current investigation are on file at Æ's Hemet office. A copy of this report will also be submitted to the Eastern Information Center.

CONTENTS

FIGURES AND TABLES

1
INTRODUCTION

The San Gorgonio Pass Water Agency (SGPWA) proposes the construction of new water conveyance pipelines, a turnout, and a groundwater recharge basin to the existing pipeline for the County Line Recharge Basin and Turnout project (Project). The Project involves development within Assessor's Parcel Number 411-150-027 (approximately 6.9 acres) south of County Line Road and west of 4th Street, plus an additional approximately 956 linear feet of new pipeline along 4th Street to connect the recharge basin to the existing pipeline within County Line Road. The Project also involves construction of a new turnout to connect the existing pipeline within County Line Road to the existing pipeline within Bryant Street (approximately 160 linear feet). Under contract to the Albert A. Webb Associates, Applied EarthWorks, Inc. (Æ) conducted a cultural resource study of the Project in accordance with the California Environmental Quality Act (CEQA). The SGPWA is the lead agency for compliance with CEQA. In anticipation of federal funding, this report also complies with Section 106 of the National Historic Preservation Act (NHPA).

Æ Principal Investigator Joan George (B.S., Registered Archaeologist 28093) was responsible for overall quality control for the Project and served as project manager. The report was compiled and written by Jessica Cochran (B.A.). Fieldwork was conducted by Æ Senior Archaeologist Andrew DeLeon (M.A., Registered Professional Archaeologist 17087).

For the purposes of this study, the Project area (CEQA terminology) encompasses the Area of Potential Effects (NHPA terminology). Consequently, "Project area" is utilized throughout the remainder of this report.

1.1 PROJECT LOCATION AND DESCRIPTION

The Project is within the western portion of the city of Calimesa in Riverside County (Figure 1-1). Specifically, the Project is within Sections 7, and 18, Township 2 South, Range 1 West; and Sections 11, 12, 13, and 14, Township 2 South, Range 2 West, as depicted on the U.S. Geological Survey (USGS) Yucaipa 7.5-minute topographic quadrangle map (Figure 1-2). The elevation is approximately 3,293 feet above mean sea level.

The Project involves the construction of new water conveyance pipelines and a groundwater recharge basin in the Calimesa Management Area of the Yucaipa Groundwater Basin. The new pipeline will be approximately 956 linear feet along 4th Street to connect the recharge basin to the existing pipeline within County Line Road. Additionally, the construction of the new turnout will connect the pipeline within County Line Road to the existing pipeline within Bryant Street (approximately 160 linear feet). The Project consists of several components, including constructing a turnout facility at the East Branch Extension (EBX) pipeline. The 16-inch-diameter turnout nozzle on the 54-inch-diameter EBX pipeline will be connected to the basin conveyance pipeline.

Figure 1-1 Project vicinity in Riverside and San Bernardino Counties, California.

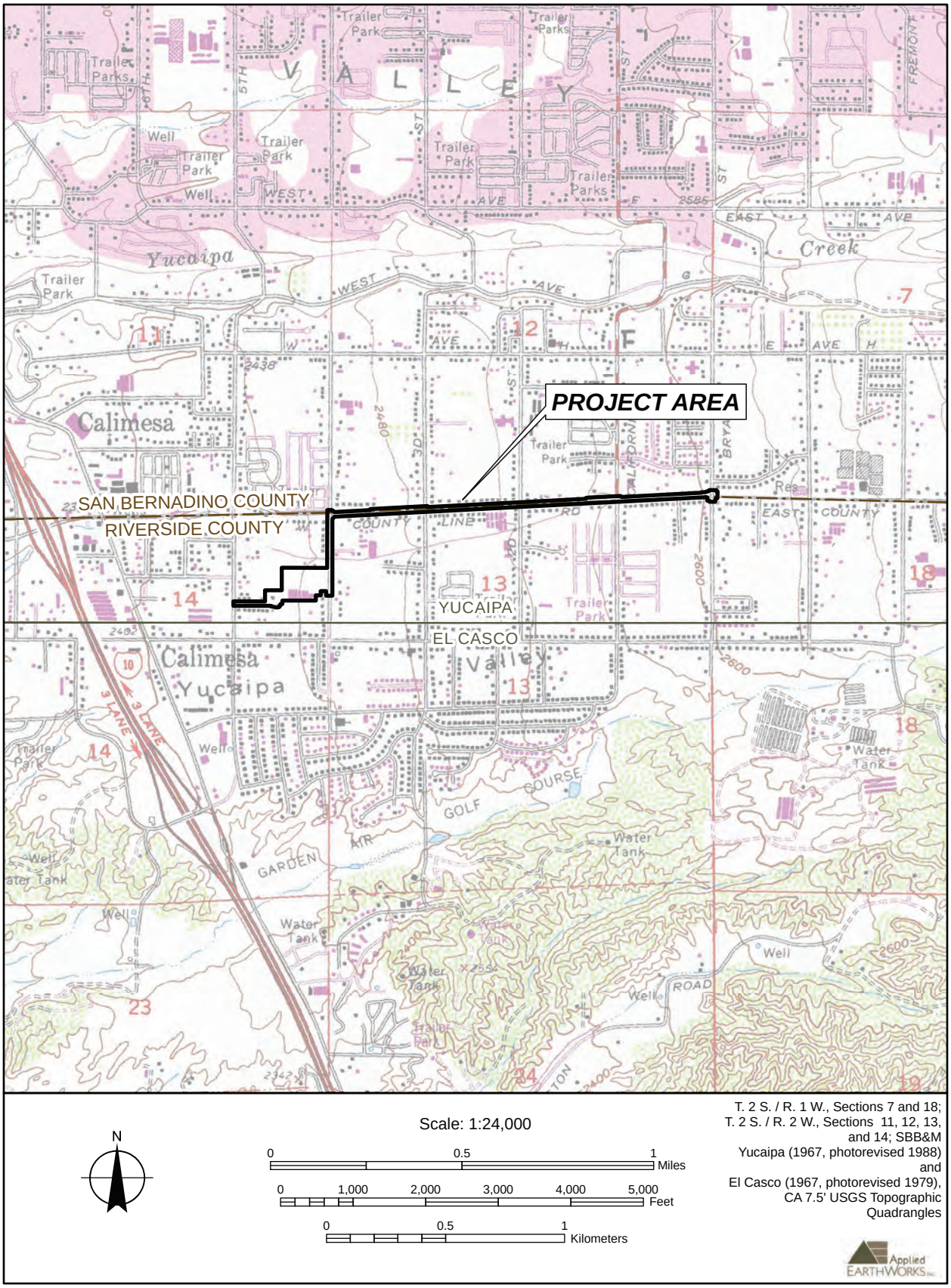

Figure 1-2 Project location on USGS Yucaipa 7.5-minute topographic quadrangle.

Additionally, an existing 14-inch potable pipeline will be converted to nonpotable use for approximately 5,300 linear feet. A new segment of a 14-inch diameter nonpotable pipeline will be constructed along 4th Street. An existing 8-inch potable pipeline will be redirected, and a new 8-inch diameter potable water line will be constructed. A recharge basin and an elevation control basin will be constructed. The recharge basin will have a maximum excavation depth of approximately 25 feet and an approximate storage capacity of 16.8 acre-feet. The elevation control basin will have a maximum ponding depth of 5 feet and a storage capacity of 1.7 acre-feet. The maximum depth of ground disturbance during Project construction is not expected to exceed 25 feet.

1.2 REGULATORY CONTEXT

1.2.1 California Environmental Quality Act

The Project requires discretionary approval from the SGPWA and is therefore subject to the requirements of CEQA. The CEQA Statute and Guidelines directs lead agencies to determine whether a project will have a significant impact on historical resources. A cultural resource considered "historically significant" is considered a "historical resource," if it is more than 50 years of age and is included in a local register of historical resources or is listed in or determined eligible for listing in the California Register of Historical Resources under any one of the following criteria (California Code of Regulations, Title 14, Section 15064.5 [14 CCR 15064.5]):

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.

Compliance with CEQA's cultural resource provisions typically involves several steps. Briefly, archival research and field surveys are needed, and identified cultural resources are inventoried and evaluated in prescribed ways. Prehistoric and historical archaeological sites, as well as standing structures, buildings, and objects deemed historically significant and sufficiently intact (i.e., historical resources), must be considered in project planning and development.

A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (14 CCR 15064.5[b]), and the lead agency is responsible for identifying potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource (14 CCR 15064.5[b]4).

1.2.2 National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. Undertakings include any federally funded, licensed, or permitted project (36 CFR 800.16[y]). A historic property as defined in 36 CFR 800.16(l)(1) means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). Historic properties illustrate the quality of significance in American history, architecture, archaeology, and culture present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, association.

In the context of a federally permitted undertaking, such as this Project, the significance of cultural resources is measured against the NRHP criteria for evaluation (36 CFR 60.4):

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

B) that are associated with the lives of persons significant in our past; or

C) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D) that have yielded, or may be likely to yield, information important in prehistory or history.

A property must meet one or more of these specific criteria and retain sufficient integrity to qualify as a good representative of a significant historical theme or pattern. Unless a site is of exceptional importance, it is not eligible for listing in the NRHP until it is 50 years of age.

1.3 REPORT ORGANIZATION

This report documents the results of a cultural resource investigation of the proposed Project area. Chapter 1 has described the Project and its location, defined the scope of the cultural resource investigation, and stated the regulatory context. Chapter 2 summarizes the natural and cultural setting of the Project area and surrounding region. Chapter 3 presents the results of the archaeological literature and records search. Chapter 4 summarizes the Sacred Lands File (SLF) search with the Native American Heritage Commission (NAHC) and Native American communications. The field survey methods and results are discussed in Chapter 5. Cultural resource management recommendations are provided in Chapter 6, and references cited are listed in Chapter 7. Results of the SLF search and correspondence with Native American groups are included as Appendix A.

2
SETTING

This chapter describes the prehistoric, ethnographic, and historic cultural setting of the Project to provide a context for understanding the type, nature, and significance of cultural resources identified within the region. Precontact, ethnographically, and historically, the nature and distribution of human activities in the region have been affected by such factors as topography and the availability of water and natural resources. Therefore, prior to a discussion of the cultural setting, the environmental setting of the area is summarized below.

2.1 ENVIRONMENTAL SETTING

The Project is within the Southern California's Inland Valley at the western edge of the San Gorgonio Pass between San Bernardino and Palm Springs. The Project area is located in a narrow alluvial valley between the foothills of the San Gorgonio and San Jacinto mountains near the northern end of the Peninsular Ranges Geomorphic Province of Southern California. The province is a seismically active region characterized by a series of northwest-trending strike-slip faults. The most prominent of the nearby fault zones include the San Andreas, San Jacinto, and Elsinore fault zones, all of which have been known to be active during Quaternary time. The elevation of the Project area is approximately 3,293 feet above mean sea level (amsl).

Water resources within the Project area consist of three intermittently flowing unnamed creeks. Two of the creeks converge within the center of the Project area where Cherry Valley Boulevard and Interstate 10 (I-10) intersect. The third creek is located in the western portion of the Project area. All three flow westward into San Timoteo Creek, which eventually joins the Santa Ana River at the southern edge of the City of San Bernardino.

The climate of the Project area is Mediterranean, with hot, dry summers and cool, moist winters. It has a semi-arid precipitation regime with significant changes in temperature and moisture based on elevation and exposure, particularly in the nearby mountains. Annual precipitation in the area ranges from 13 to 17 inches. Situated approximately 0.5 mile south of the foothills of the San Bernardino National Forest, the Project area is located within the Inland Valley subregion of the Southern California/Northern Baja Coast Ecoregion (Griffith et al. 2016). Vegetation includes Riversidian coastal sage scrub typical species, California coastal sagebrush (*Artemisia californica*), California sunflower (*Encelia californica*), brittlebush (*E. farinose*), flat-top buckwheat (*Eriogonum fasciculatum*), and various species of white sage (*Salvia, S. apiana*), purple sage (*S. leucophylla*), and black sage (*S. mellifera*) (Beyers and Wirtz 1997) in addition to valley grasslands, and some riparian woodlands. The ecoregion now is heavily urbanized with a few areas of pasture or cropland.

2.2 PRECONTACT SETTING

The data presented herein regarding the sequence of precontact use, adaptation, and occupation of the interior valleys and mountains of Southern California are summarized from a synthesis of more than 10 years of archaeological research conducted at Diamond Valley Lake, approximately 23 miles south of the Project area, as part of the Eastside Reservoir Project (ESRP) (Goldberg et al. 2001; McDougall 1995). For the most part, the prehistory of the inland

valleys of Southern California has been less thoroughly understood than that of the nearby desert and coastal regions. Prior to the ESRP cultural resources studies, no comprehensive synthesis had been developed specifically for the interior valley and mountain localities of cismontane ("this side of the mountain" west of the Sierra Nevada) Southern California. The following has been adapted from Horne and McDougall (2008).

For purposes of this report, Native American occupation of the region can be divided into six periods: Early Archaic (circa 9500–7000 before present [B.P.]); Middle Archaic (circa 7000–4000 B.P.); Late Archaic (circa 4000–1500 B.P.); Saratoga Springs (circa 1500–750 B.P.); Late Prehistoric (circa 750–410 B.P.); and Protohistoric (circa 410–180 B.P.), which ended in the ethnographic period.

2.2.1 Early Archaic Period (9500–7000 B.P.)

During this period, the environment of the interior deserts was less arid and possessed an abundance of water sources and was therefore more favorable for human occupation than the cismontane valleys of Southern California, where the Project is located. Populations exploiting the interior valleys would have been tethered to the few reliable, drought-resistant water sources such as Lake Elsinore, Mystic Lake, and possibly the Cajalco Basin. In general, small, highly mobile groups traveled widely, utilizing highly portable tool kits to procure and process critical resources, with brief and anticipated intervals of seasonal sedentism near predictable water locations. Due to isolated locations where the conditions for occupation were met, Early Archaic sites are rare compared to later periods of prehistory (Goldberg et al. 2001; Horne and McDougall 2008; McDougall 1995).

2.2.2 Middle Archaic Period (7000–4000 B.P.)

The Middle Archaic Period saw a reversal of the weather patterns that had prevailed throughout much of cismontane Southern California for several millennia. By about 6000 B.P., local environmental conditions ameliorated while conditions in the deserts deteriorated, reaching the maximum aridity of the postglacial period (Antevs 1952; Hall 1985; Haynes 1967; Mehringer and Warren 1976; Spaulding 1991, 1995). Middle Archaic sites are associated with the margins of pluvial lakes and now-extinct springs. Pinto-series projectile points are a distinctive artifact type of this period (Justice 2002), though other artifacts include leaf-shaped bifacial knives; split cobble choppers and scrapers; scraper-planes; and small milling slabs and manos. Most sites from this interval are small surface deposits of lithic artifacts, suggesting temporary and perhaps seasonal occupation by small groups of people.

2.2.3 Late Archaic Period (4000–1500 B.P.)

The Late Archaic Period was one of cultural intensification coinciding with the Little Pluvial, a period when increased moisture allowed for more extensive occupation of the region. Sedentism likely increased during this period, with large occupation sites located adjacent to permanent water sources such as perennial springs and streams. Chronologically diagnostic projectile points of this period include Humboldt, Gypsum, and Elko-series dart points (Warren 1984), though Rose Spring arrow points appeared late within this period in the deserts. The mortar and pestle, used for processing acorns and hard seeds, also first appeared. A warming and drying trend

began around 2100 B.P., leading to intensification of use of certain resources (Goldberg et al. 2001).

2.2.4 Saratoga Springs Period (1500–750 B.P.)

Occupants of the region continued to adapt to the arid environment in the deserts (Warren 1984). Lake Cahuilla likely refilled the Coachella Valley around 1450 B.P. and was the focus of exploitation of fish and wetland resources. Occupation around Lake Elsinore and other large local water sources declined as these dried, however, and people became tethered to springs (Goldberg et al. 2001). Cultural trends continued from the Late Archaic Period, as Saratoga Springs projectile points, also associated with early use of the bow and arrow, appeared. The sparse assemblages found within the region, however, obscure the timing of local adaptation to bow and arrow (Goldberg et al. 2001). Shoshonean language speakers likely moved into Southern California at this time. Brown and buffware pottery first appeared on the lower Colorado River at about 1200 B.P. and started to diffuse across the California deserts by about 1100 B.P. (Moratto 1984). The warmer and drier Medieval Warm Period set in throughout the Southwest by about 1060 B.P. (Stine 1994; Warren 1984) and led to the withdrawal of Native American populations from marginal desert areas.

2.2.5 Late Prehistoric Period (750–400 B.P.)

A period of lower temperatures and increased precipitation known as the Little Ice Age resulted in increased resource productivity in the region and subsequent population increase. Cottonwood Triangular points appeared in inland assemblages and Obsidian Butte obsidian became much more common (Goldberg et al. 2001). Lake Cahuilla began to recede (Waters 1983) and the large Patayan populations occupying its shores moved westward to areas including the San Jacinto Plain (Wilke 1976). The final recession of Lake Cahuilla, which had occurred by approximately 400 B.P., resulted in a population shift away from the lakebed into the Peninsular Ranges to the west and the Colorado River regions to the east.

2.2.6 Protohistoric Period (circa 400 to 150 B.P.)

Sedentism intensified during the Protohistoric Period. Increased hunting with bow and arrow and widespread exploitation of acorns, other hard nuts, and berries (indicated by the abundance of mortars and pestles) provided reliable and storable food resources. Reliable food sources likely prompted the establishment of small, completely sedentary villages with resource catchment areas around them (True 1966, 1970). Ceramic technology first appeared in the region around 350 B.P. Cottonwood Triangular points were supplemented by Desert Side-notched points. This period ended in 1769 A.D. when Spanish settlement began in Upper California (aka Alta California).

2.3 ETHNOGRAPHIC SETTING

Based on reliable information passed down from Tribal elders, published academic works in the areas of anthropology, history, and ethnohistory, and through recorded ethnographic and linguistic accounts (Kroeber 1976; Smith and Freers 1994; Strong 1929; Vane 2000), the Project lies within the ancestral cultural territory of the Luiseño Native American cultural group, the Cahuilla Native American cultural group, and the Serrano Native American cultural group. The

three tribes speak languages of the Cupan branch of the Northern Uto-Aztecan family, part of the larger Uto-Aztecan language family (Golla 2011; Hill 2011; Shaul 2014). Their lifeways were organized around hunting, collecting, and harvesting as well as an understanding of the universe in terms of power, sentient and willful, as the causative agent for all natural phenomena.

2.3.1 Luiseño Native Americans and the Cahuilla Native Americans

Ethnographically, Cahuilla territory spanned from the summit of the San Bernardino Mountains in the north to Borrego Springs and the Chocolate Mountains in the south, a portion of the Colorado Desert west of Orocopia Mountain to the east, the San Jacinto Plain near Riverside and the eastern slopes of Palomar Mountain to the west (Bean 1978). Strong (1929:150) stated that several clans of the Mountain Cahuilla, under the leadership of Juan Antonio, moved from their mountain homes first to "pulatana" in the vicinity of Riverside, then called Jurupa. Later their village was moved to a village known as Sahatapa in the San Timoteo Canyon area near El Casco, immediately south of the Project area.

Luiseño territory in ethnographic times encompassed a stretch of the California coast and included most of the drainage of the San Luis Rey and Santa Margarita rivers. Inland, Luiseño territory extended south from Santiago Peak, including the Elsinore and Temecula valleys, and extended farther south to Mount Palomar and the San Jose Valley, then west to the coast at Agua Hedionda Creek. The coastal territory of the Luiseño extended north to near San Mateo Creek in Orange County (Bean 1978).

Prior to the Mission Period (prior to 1769), the Cahuilla and Luiseño organized themselves into patrilineal clans composed of 3 to 10 lineages, distinctly different, named, and claiming a common genitor, with one lineage recognized as the founding lineage (Bean 1978; Bean and Vane 2001). Clans owned a large territory in which each lineage owned a village site and specific resource areas. Clan lineages cooperated in large communal subsistence activities including animal drives, hunts, and controlled brush burning, and in performing rituals.

The Cahuilla and Luiseño were, for the most part, hunters, collectors, and harvesters. Clans were apt to own land in valley, foothill, and mountain areas, providing them with the resources of many different ecological niches. Individual lineages or families owned specific resource areas within the clan territory. Although any given village had access to only some of the necessary resources, briskly flourishing systems of trade and exchange gave them access to neighboring and distant resources. Rules that forbade marriage to anyone related within five generations or belonging to the same moiety ensured that everyone had relatives living in many ecozones; this was an important arrangement because relatives were invited to ceremonies where the gift exchanges provided a way for drought-stricken groups to get food in exchange for treasure goods.

The Cahuilla and Luiseño, like other California Indians, understand the universe in terms of power. They assume power to be the principal causative agent for all phenomena. Power is believed to be sentient and to have will. Unusual natural phenomena are viewed as especially sacred, being the repositories of concentrations of power. Mountain tops, and especially particular mountain tops, are held sacred, as are unusual rock formations, springs, and streams. Rock art sites are sacred, having been the sites of ceremonies. Burial and cremation sites are also sacred, as are many other places of residual power. Various birds, especially eagles, condors,

hawks, and other birds of prey are revered as sacred beings of great power and sometimes were killed ritually and mourned in mortuary ceremonies similar to those for important individuals. For this reason, bird cremation sites are sacred.

Because of these strong beliefs, rituals were (and remain) a constant factor in the life of every Native American individual. Some rituals were scheduled and routine (e.g., birth, puberty, death, mourning, and the eagle ritual and first rites), while others were sporadic and situationally performed (e.g., deer ceremony, bird dance, enemy songs, and rain ritual) (Bean and Vane 2001: VII.A-3-10).

2.3.2 Serrano Native Americans

The Serrano, or "mountaineers" in Spanish, occupied the territory of the San Bernardino Mountains east to Mount San Gorgonio, the San Gabriel Mountains west to Mount San Antonio, and portions of the desert to the north and the fringe of the San Bernardino Valley to the south (Kroeber 1976:615–616). Numbering no more than perhaps 1,500 people, the Serrano were scattered over a rugged, expansive landscape. The Serrano were Shoshonean peoples, speakers of languages in the Takic sub-family of the larger Uto-Aztecan language family (Kroeber 1976:578–579). Their most intensive cultural contacts were with the Pass Cahuilla, who occupied the territory to the southeast, and the Gabrielino, who occupied the lands westward to the Pacific coast.

There were numerous clans of Serrano people located across the Mojave Desert and the San Bernardino Mountains. The Serrano subgroup, known as the Yuhaaviatam clan, occupied the portions of the San Bernardino Mountains and Valley that encompass the Project area, and thus this term refers here to the smaller cultural unit.

Serrano clans were politically autonomous and both patrilineal and exogamous. A moiety structure conditioned Serrano social life, all clans belonging to either the Coyote or Wildcat moiety. These moieties were exogamous. Each Serrano clan had a hereditary leader, or kika, and an assistant who was a ceremonial leader, or paha (Strong 1929:17–18). These individuals were central to the ritual life of the Serrano, providing leadership during yearly ceremonial periods. Kroeber (1976:617) indicates that villages were generally located where streams emerged from the foothills. Bean et al. (1981:85–86) indicate groups of lineages lived in villages at the valley margins in the winter and in smaller encampments at higher elevations in the summer. Proximity to water sources and adequate arrays of resources predictably dictated settlement location choices. Bean et al. (1981:85) note also that individual homes were quite scattered across the landscape in order to ensure privacy, to the extent that some "villages" covered up to five square miles. These cultural factors have important implications for archaeological interpretations of occupation sites.

Subsistence during winter months consisted mostly of reliance on stored foods (e.g., acorns, pinyon nuts, mesquite beans) and some fresh meats and greens. In the spring, agave, cacti, greens, and a mix of game provided the bulk of the food resources. Many fruits and seeds became available during the summer months, but perhaps the richest season was autumn, when major harvests of acorns, pinyon nuts, mesquite beans, and screwbeans occurred, and when communal rabbit hunts took place in the context of much feasting and ritual activity (Bean et al. 1981:86–87). In addition to occupation sites and food procurement sites, rock cairns ("offerings"

places along trails), cupule petroglyph sites, hot springs (sacred areas), sources of lithic materials suitable for the production of stone tools and other artifacts, and trails represent important land uses by the Serrano.

2.4 HISTORICAL SETTING

The Spanish occupation of Alta California and the founding of the San Diego de Alcalá mission in San Diego occurred in 1769, resulting in the availability of written records. The following historic context of California was taken primarily from Clark and Smallwood (2015). Exploration of the California coast in the sixteenth and seventeenth centuries was the basis for the Spanish claim to the region. In the eighteenth century, Spain recognized that to strengthen its claim, it would have to settle Alta California to preclude encroachment by the Russians and British traders. Therefore, in the latter half of the eighteenth century, Spain and the Franciscan Order founded a series of presidios, or military camps, and 21 missions along the California coast, beginning at San Diego in 1769. The Spanish also carried out exploratory expeditions into the interior regions, including the Mojave Desert, to identify travel routes to the coast and to establish interior agricultural settlements.

With the signing of the Treaty of Guadalupe-Hidalgo on February 2, 1848, California formally became an American territory, and two years later, on September 9, 1850, California became the thirty-first state in the Union. Between those two years came a large influx of eastern immigrants seeking their fortunes; the catalyst for this influx was James Marshall's 1848 discovery of gold at Sutter's Mill (Starr 2005). The population and wealth in the early statehood years were concentrated in the northern part of the state. Ranching was the main occupation in the southern counties, providing meat and supplies to the north. The floods and drought of the 1860s brought that era to a close, and the completion of the transcontinental railroad in 1869 opened California to agricultural settlement.

Southern California was promoted as an ideal agricultural area, with fertile soil and a mild climate. Contemporary reviews of California painted beautiful pictures that appealed to both Americans and Europeans alike. There were three land booms tied to railroad expansion: (1) after the transcontinental railroad was completed, enabling easy travel to California; (2) late 1870s after the Southern Pacific Railroad (SPRR) was completed; and (3) 1886–1888, when the Santa Fe transcontinental line was completed. Competition between these lines incited a rate war, and both tourists and potential settlers took advantage of the low fares to come to California (Lech 2004:222).

2.4.1 Local History

2.4.1.1 The San Gorgonio Pass (SGP)

The SGP is a gap on the rim of the Colorado Desert between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south created by the San Andreas Fault. The pass essentially covers the area between the mountain ranges to the north and south and from San Timoteo Canyon in the west to the town of Whitewater in the east. Today, it is the route that carries I-10 and the Union Pacific Railroad between the Los Angeles basin to the west and the Coachella Valley and beyond, to the east. The SGP region is the homeland of the Pass Cahuilla Indians and the Serrano people (Holmes 1912:174–217; Holtzclaw and San Gorgonio Pass

Historical Society 2006:7–8) Prior to European contact, there was a large Native population in the SGP, with numerous Cahuilla villages reported in the area (Holmes 1912:174–217; Holtzclaw and San Gorgonio Pass Historical Society 2006:7–8). By the 1860s, the local Native population was greatly reduced due to disease, forced removal, and relocation. The reservations were officially established beginning in the 1870s. Native Americans of the SGP are mostly affiliated with the Morongo Band of Mission Indian reservation, which is composed of both Cahuilla and Serrano people (Bean 1974).

With the intervention of Europeans in Southern California, trails and roads tied Spanish missions together for communication and as supply routes. The Spanish missions conducted reconnaissance into the desert interior of Southern California from 1769 to 1846 to obtain information on topography and Native American population densities. These explorations often followed Native American trails across the landscape (Forbes 1964:99; Warren and Roske 1981:ii). Although very little is known about historic developments in the SGP before 1820, what is documented is that in 1821, a party of Cocomaricopa Native Americans had traveled to the San Gabriel Mission and told the Spanish padres of a trail that only took six days to reach the Colorado River. The Spanish were very interested in this inland trail that could connect them with Mexico through the Southwest, and this route later would become the Bradshaw Trail. These Native trails were used so frequently by European explorers that the Yuma Indians forced the closure of the Yuma Trail between 1783 and 1824 (Forbes 1964:105; Warren and Roske 1981:2). In about 1824, the friars of the San Gabriel Mission established a mission outpost in the SGP named in honor of St. Gorgonious. The area was known as Rancho San Gorgonio, one of the 24 principal cattle ranches under the control of the San Gabriel Mission.

At the close of the Mexican American War in 1848, the southwest territories came under control of the United States. The gold rush started soon after, which brought thousands of new settlers and immigrants to California (Holmes 1912; Warren and Roske 1981:1). Non-Indian settlement in the SGP was slow to expand due to its remoteness and limited water sources. However, after gold was discovered in Arizona in the 1860s, travel through the pass increased as miners needed passage across the desert, and new wagon roads, like the Bradshaw Trail, were developed to carry people and the mail. In the 1870s and 1880s, settlement expanded in the SGP near the stations built by the new SPRR line (Holmes 1912; Warren and Roske 1981:1).

2.4.1.2 Cherry Valley

Cherry Valley is located in the SGP north of Beaumont and adjacent to the Project area to the east. It is one of the three main towns in the SGP. The second, Banning, was laid out during the second land boom in the 1870s, as a result of the construction of the SPRR. The third and last boom period saw the development of the third major city in the area, Beaumont, with nearby Cherry Valley.

George Egan, who owned a store in Banning, purchased land east of that town and founded another, named San Gorgonio, in 1883 (Lech 2004:260). The town grew slowly, with most settlers doing dryland farming because of lack of water for irrigation (Lech 2004:261). In 1886, the beginning of the third land boom, Egan sold his property to the Southern California Investment Company, founded by H. C. Sigler, “a new syndicate … looking for property that could be subdivided and put on the ever-expanding market of those boom times” (Lech 2004:262). Sigler changed the name of the town to Beaumont.

In 1885, Los Angeles investors had formed the Cherry Valley Land and Water Company, bought land north of San Gorgonio, and laid out Cherry Valley on 845 acres (Lech 2004:267). The first cherry tree orchards were planted in that year (Cherry Acres 2008). However, just one year later Sigler purchased this ultimately unsuccessful venture for $29,575 and merged it with his Beaumont lands (Lech 2004:269).

Even though prospective buyers were brought in by excursion train, ". . . .by 1889, the Southern California Investment Company, and Beaumont itself, were in dire straits" and "would languish for many years to come" (Lech 2004:263–264). Because there was no reliable water system, dry farming was the most viable farming method for those settlers that had purchased land around Beaumont and Cherry Valley (Lech 2004:264).

In 1907, C. B. Eyer and K. B. Smoot purchased Beaumont and surrounding lands; their first order of business was to develop a steady source of water for the area. Subsequently, more people came into the area to farm, planting orchards of cherries, apples, and other fruits. "The greater part of this new acreage lies in the valley north of Beaumont, toward the foothills, in Cherry and Apple valleys" (Holmes 1912:211). In 1909, a rural school was constructed in Cherry Valley, indicating that there was sufficient settlement in the area to need a school (Holmes 1912:208). The population of Beaumont grew to 1,100 in 1910 (Holmes 1912:211). In addition to agriculture, resorts contributed to the growth of the area. Highland Springs is in the eastern part of Cherry Valley; originally the home of an early settler, Isaac Smith, it became a resort in the 1880s (Lech 2005).

In 1930, Cherry Valley celebrated its namesake crop by hosting the first Japanese cherry blossom festival in the United States in Bogart Park, north of Cherry Valley. Approximately 32,000 people attended the festival (Holtzclaw and San Gorgonio Pass Historical Society 2006:65). A 1938 aerial photo of Cherry Valley lands depicts small parcels of orchards interspersed with larger fields of hay and grain fields. A 1949 aerial of the same area shows few changes from 1938.

During World War II, a shortage of workers led to the development of U-Pick-Your-Own-Cherries, which continues to the present (Cherry Acres 2008). Cherry Valley is now a census designated place within Riverside County, with a population of approximately 6,400 in 2010.

2.4.1.3 Calimesa

Like Cherry Valley, Calimesa began as a small, rural town with single-family housing and small-scale farms and ranches. The formalization of U.S. Route 70/99 through the Project area in the 1920s–1930s brought growth and a separate identity from its larger neighbor to the north, Yucaipa. In 1929, residents applied for a post office, choosing its name though a contest. The winner, Calimesa, was a combination of California and Mesa, and the town worked to create a separate sense of community. Toward this end, the residents formed the Calimesa Improvement Association in approximately 1939, and they constructed a community center through local fund-raising efforts. In 1962, this association became the Calimesa Chamber of Commerce. In 1990, the City of Calimesa was incorporated (San Gorgonio Pass Historical Society (SGPHS) 2020).

3
CULTURAL LITERATURE AND RECORDS SEARCH

On January 4, 2024, prior to the field survey of the Project area, Æ conducted a literature and records search at the Eastern Information Center (EIC) of the California Historical Resource Information System (CHRIS), housed at the University of California, Riverside. Because the records search limits extend into San Bernardino County, Æ also requested a literature and records search at the South Central Coastal Information Center of the CHRIS, housed at California State University, Fullerton. The objective of these records searches was to determine whether any precontact or historical cultural resources had been recorded previously within the Project area and a 0.5-mile search radius of the proposed Project.

3.1 CULTURAL LITERATURE AND RECORD SEARCH RESULTS

Results of the records search indicated 22 cultural resource studies have been conducted previously within the 0.5-mile search radius (Table 3-1). Six of the previous studies involved the Project area. As a result, 80 percent of the Project area has been investigated previously.

Table 3-1
Previous Cultural Resource Studies in the 0.5-Mile Search Radius

IC Report No.	Authors(s)	Date	Title
RI-02819[a]	Drover, Christopher E.	1990	*An Archaeological Assessment of Perisits Ranch Project, Riverside County, Calimesa, California*
RI-03196[a]	Keller, Jean	1991	*An Archaeological Assessment of Public Use Permit 718: 4.35 Acres of Land in Calimesa, Riverside County, California, USGS El Casco, California Quadrangle, 7.5' Series*
RI-03720	De Munck, Victor C., and Mark Swanson	1989	*An Archaeological Assessment of an 82 Acre Tract of Land Referred to as The Country Club Estates in The City of Calimesa, Riverside County, California*
RI-06263	Ahmet, Koral, and Evelyn Chandler	2005	*Cultural Resources Survey of A 10-Acre Parcel Located North of Sandalwood Drive On 7th Street in Calimesa, Riverside County, California*
RI-07585	Sanka, Jennifer M.	2006	*Phase I Cultural Resources Assessment and Paleontological Records Review, Mesa Verde Estates Access Road Project, Calimesa, Riverside County, California*
RI-07740	Hogan, Michael	2007	*Letter Report: Archaeological Monitoring Program Perisits Farms; Tentative Tract Nos. 26925, 30386, And 30387; City of Calimesa, Riverside County, California*
RI-09242[a]	Don C. Perez	2014	*California-line / Ensite #17468*
RI-09785	Kraft, Jennifer R., and Brian F. Smith	2015	*A Class III Historic Resource Study for the Mesa Verde Estates Project for Section 106 Compliance*

Table 3-1
Previous Cultural Resource Studies in the 0.5-Mile Search Radius

IC Report No.	Authors(s)	Date	Title
RI-09909[a]	Bonner, Wayne H., and Arabesque Said	2009	*Cultural Resource Records Search and Site Visit Results for Tower CO II, LLC Candidate CA2646 (Bryant), 1086 Calimesa Boulevard, Calimesa, Riverside County, California*
RI-10799[a]	George, Joan, Dicken Everson, and Andrew Walters	2019	*Archaeological Survey Report for the Interstate 10 Eastbound Truck Climbing Lane Improvement Project, City of Yucaipa, San Bernardino County and City of Calimesa, Riverside County, California*
RI-10815	George, Joan	2017	*Historic Property Survey Report*
SB-00576	Hearn, Joseph E.	1977	*Archaeological - Historical Resources Assessment of California Street, Avenue H To Wildwood Creek Road, Yucaipa Area*
SB-00577	Hearn, Joseph E.	1978	*Archaeological - Historical Resources Assessment of California Street, Avenue H To Avenue F, Yucaipa Area*
SB -01594	Swope, Karen K.	1986	*Environmental Impact Evaluation: An Archaeological Assessment of Tentative Tract 13438, Yucaipa Valley Area of San Bernardino County, California*
SB -02868	Scientific Resource Surveys, Inc.	1993	*Cultural Resource Assessment of The San Gorgonio Pass Water Agency Water Importation Project, Riverside and San Bernardino Counties, California*
SB-03613	Bonner, Wayne H.	1998	*Cultural Resource Record Search & Survey Report for a Pacific Bell Mobile Services Telecommunications Facility: CM 220-01, City of Yucaipa, CA.*
SB-04113	White, Laurie S.	2001	*Records Search Results for Sprint Pcs Facility Sb37xc910f (Arnett's Trucking), City of Yucaipa, San Bernardino County, Ca.*
SB-04117	Cotterman, Cary D., and Roger D. Mason	2001	*Cultural Resources Records Search & Literature Review for An American Tower Corporation Telecommunication Facility No. Bc-377-N1 Bryant, In the City of Yucaipa, San Bernardino County, Ca.*
SB-04456[a]	Becker, Kenneth M.	2004	*Archaeological Monitoring for Yucaipa Mini Storage Facility (APN: 0319-431-10, -11), Yucaipa San Bernardino County, California*
SB-05680	Martinez, Al	2005	*Cultural Resource Records Search Results for Cingular Telecommunications Facility Candidate LSANCA8041, 13456 Bryant Street, Yucaipa, San Bernardino County, California.*
SB-06075	Bonner, Wayne H.	2008	*Cultural Resource Records Search and Site Visit Results for American Tower Corporation Facility Candidate 41869 (Bryant St Baptist), 13456 Bryant Street, Yucaipa, San Bernardino County, California.*
SB-07677	Cotterman, Cary D., and Evelyn N. Chandler	2009	*Cultural Resources Inventory of Five Proposed Pole Replacements in Yucaipa, Calimesa and Cherry Valley, San Bernardino and Riverside Counties, California.*

a - Study overlaps with the Project area.

The records search resulted in the identification of four previously recorded cultural resources within the 0.5-mile search radius. The archaeological resources are historical: an electrical utility line and two amethyst bottle finishes. In addition, two built-environment resources were identified within the 0.5-mile search radius (Table 3-2). None of the previously recorded cultural resources are documented within the Project area.

Table 3-2
Previously Recorded Cultural Resources in the 0.5-Mile Search Radius

Primary No.	Trinomial	Description
Historic Resources		
33-015299	—	Two glass bottle fragments
33-015300	—	Electrical utility line
Built-Environment Resources		
33-016792	—	1929 Single-family residence
33-023900	—	1930 Storm Drain

3.2 HISTORICAL MAP REVIEW

A series of historic maps were consulted to assess land use and development in the study area. Several USGS topographic quadrangle maps were consulted: 1899 and 1901 Redlands 1:125,000, 1954 and 1967 Yucaipa 1:24,000, and 1967 San Bernardino 1:125,000.

The 1954 Yucaipa map west of the Project area displays County Line Road, agricultural land, and structures in alignment with modern-day 4th Street and County Line Road. Agricultural operations on the land appear to be active until 1968, while the structures remained visible until 1995. Aerial photographs taken between 1954 and 1968 provide documentation of the agricultural land, and photographs from 1954 to 1995 capture the presence of the structures, available online (historicaerials.com/viewer). It is important to note that the structures in the southwestern corner of the Project area are not visible in the 1995 imagery, indicating their likely demolition. No other buildings, structures, or features of interest are shown in the Project area on any historical maps or photographs examined.

4
NATIVE AMERICAN COMMUNICATIONS

Æ contacted the NAHC on January 16, 2024, for a review of their SLF to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity) are present within or adjacent to the Project area. The NAHC responded on March 6, 2024, stating the SLF search was completed with negative results. The NAHC requested Æ contact Native American individuals and organizations to elicit information regarding cultural resource issues related to the proposed Project.

Upon review of the Native American contact list and after removing redundancies, Æ narrowed the list to 14 individuals and organizations traditionally and culturally affiliated with the geographic region of the Project area. Æ sent out Project scoping letters via email and U.S. Postal Service on March 8, 2024, describing the Project and asking these individuals and organizations for their input. Copies of the letters, the list of contacts, and received responses are included in Appendix A. Æ sent follow-up email correspondence on March 22, 2024, to the organizations who had not responded to the initial request on March 8, 2024.

Individuals/organizations contacted include:

- Lacy Padilla, Tribal Historic Preservation Officer and Operations Manager for the Agua Caliente Band of Cahuilla Indians
- Amanda Augustine, Chairwoman of the Augustine Band of Cahuilla Indians
- Doug Welmas, Chairperson of the Cabazon Band of Mission Indians
- Erica Schenk, Chairwoman of the Cahuilla Band of Indians
- Andrew Salas, Chairperson of the Gabrieleno Band of Mission Indians—Kizh Nation
- Ray Chapparosa, Chairperson of the Los Coyotes Band of Cahuilla and Cupeño Indians
- Robert Martin, Chairperson of the Morongo Band of Mission Indians
- Jordan Joaquin, President of the Quechan Tribe of the Fort Yuma Reservation
- Danae Hamilton Vega, Chairwoman of the Ramona Band of Cahuilla
- Alexandra McCleary, Senior Manager of Cultural Resources Management for the San Manuel Band of Mission Indians
- Lovina Redner, Tribal Chair for the Santa Rosa Band of Cahuilla Indians
- March Cochrane and Wayne Walker, Co-Chairpersons for the Serrano Nation of Mission Indians

- Isaiah Vivanco, Chairperson of the Soboba Band of Luiseño Indians
- Doug Welmas, Chairperson of the Torres-Martinez Desert Cahuilla Indians

As of March 26, 2024, Æ has received three responses.

- The Agua Caliente Band of Cahuilla Indians stated that the Project is not located within the boundaries of the Agua Caliente Band of Cahuilla Indians' Reservation. However, the Project does fall within their Traditional Use Area. For this reason, the Tribe requests a copy of the records search, survey reports, site records from the EIC, copies of any cultural resource documentation generated from the current Project, and shapefiles of the Project area.
- The Cahuilla Band of Indians stated that they desire to consult on the Project. Their people inhabited this area and established villages, camps, food processing areas, resource areas, and other areas. They request to be advised of the Project's progress and any cultural findings. Subsurface cultural resources are always possible, and they would ask that their Native American monitors be present for the work.
- The San Manuel Band of Mission Indians stated that the Project area may be considered sensitive for subsurface cultural resources due to their proximity to previously recorded sites of a highly sensitive nature. As the area is of concern, the Tribe wishes to engage in government-to-government consultation pursuant to Assembly Bill 52 (AB 52) with the Lead Agency for the Project.

Complete responses from each Tribe are attached in Appendix A.

5
CULTURAL RESOURCE SURVEY METHODS AND RESULTS

This chapter details the methods and results of the intensive pedestrian survey of the Project area. The entire Project area was accessible during the survey which was completed by Æ archaeologist Andrew DeLeon on February 28, 2024.

5.1 SURVEY METHODS

DeLeon began surveying the western portion of the Project area and proceeded south. The survey was conducted in 15-meter transects oriented east–west, moving southward through the Project area. While surveying, DeLeon photographed the Project area at various locations to document its current condition. Any newly identified resources were to be photographed and mapped with an Arrow 100 Global Navigation Satellite System receiving unit and iPad.

5.2 SURVEY RESULTS

The unpaved portion of the Project area is heavily disturbed with evidence of tilling. DeLeon began the survey in the large open field on the west side of the Project area. Transects were oriented east to west, moving southward with 15-meter spacing. Ground visibility was generally poor, approximately 35 percent, due to extensive pinweed growth (Figure 5-1). Sparse patches of modern refuse were observed on the south side of the open field. The sediments appear to be a brown loam. Moving eastward, DeLeon covered a long stretch of County Line Road, which is entirely paved and developed (Figure 5-2). No cultural resources were encountered within the Project area during the survey.

Figure 5-1 Overview from the southwest corner of the Project area, facing east.

Figure 5-2 The northwest corner of 4th Street and County Line Road, facing southeast.

6
MANAGEMENT RECOMMENDATIONS

Æ did not encounter any cultural resources within the Project area during the intensive pedestrian survey. The entire Project area is highly disturbed, with evidence of tilling. Ground visibility was generally poor at approximately 35 percent due to extensive pinweed growth. Sparse patches of modern refuse were observed on the south side of the open field. As a result, there is a low likelihood that archaeological deposits or features will be found during construction and Æ recommends a finding of No Historic Properties Affected for the Project. Consequently, no further cultural resource management within the Project area is recommended.

It should be noted that the Agua Caliente Band of Cahuilla Indians stated that the Project is not located within the boundaries of the Agua Caliente Band of Cahuilla Indians' Reservation. However, the Project does fall within their Traditional Use Area. For this reason, the Tribe requests a copy of the records search, survey reports, site records from the EIC, copies of any cultural resource documentation generated from the current Project, and shapefiles of the Project area. The Cahuilla Band of Indians said they desire to consult on the Project. Their people inhabited this area and established villages, camps, food processing areas, resource areas, and other areas. They request to be advised of the Project's progress and any cultural findings. Subsurface cultural resources are always possible, and they would ask that their Native American monitors be present for the work. The San Manuel Band of Mission Indians stated that the Project area may be considered sensitive for subsurface cultural resources due to their proximity to previously recorded sites of a highly sensitive nature. As the area of concern, the Tribe wishes to engage in government-to-government consultation pursuant to AB 52 with the Lead Agency for the Project. No further comments were received from the tribes after follow-up communication.

Finally, if the Project area is expanded to include areas not covered by this survey or other recent cultural resource studies, additional cultural resource studies may be required.

7
REFERENCES

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APPENDIX A

Native American Communications

LIST OF NATIVE AMERICAN CONTACTS AND RECORD OF RESPONSES

Name	Date & Time of Calls	Responses
Lacy Padilla Tribal Historic Preservation Officer and Operations Manager Agua Caliente Band of Cahuilla Indians	March 8, 2024 March 20, 2024	Scoping letter sent via email. Æ received a response from Cultural Resource Analyst Xitlaly Madrigal on 3/25/2024. The Project is not located within the boundaries of the Agua Caliente Band of Cahuilla Indians' Reservation. However, the Project does fall within their Traditional Use Area. For this reason, the Tribe requests a copy of the records search, survey reports, site records from the EIC, copies of any cultural resource documentation generated from the current Project, and shapefiles of the Project area.
Amanda Augustine Chairwoman Augustine Band of Cahuilla Indians	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received
Doug Welmas Chairperson Cabazon Band of Mission Indians	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received.
Erica Schenk Chairwoman Cahuilla Band of Indians	March 8, 2024	Scoping letter sent via email. Æ received a response from Tribal Historic Preservation Officer Anthony Madrigal on 03/12/2024 stating the Cahuilla band of Indians desires to consult on the Project. Their people inhabited this area and established villages, camps, food processing areas, resource areas, and other areas. They request to be advised of the Project's progress and any cultural findings. There is always the possibility of subsurface cultural resources, and they would ask that their Native American monitors be present for the work.
Andrew Salas Chairperson Gabrieleno Band of Mission Indians - Kizh Nation	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received
Ray Chapparosa Chairperson Los Coyotes Band of Cahuilla and Cupeño Indians	March 8, 2024 March 20, 2024	Scoping letter sent via post. Follow-up phone call made to the contact number listed for Ray Chapparosa on the NAHC contact list. A voicemail was left briefly describing the Project and contact number, should the Tribe have any comments.

Name	Date & Time of Calls	Responses
Robert Martin Chairperson Morongo Band of Mission Indians	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received.
Jordan Joaquin President Quechan Tribe of the Fort Yuma Reservation	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received.
Danae Hamilton Vega Chairwoman Ramona Band of Cahuilla	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received
Alexandra McCleary Senior Manager of Cultural Resources Management San Manuel Band of Mission Indians	March 8, 2024	Scoping letter sent via email. Æ received a response from Cultural Resources Technician Raylene Borrego on 03/11/2024 stating that based on the San Manuel Band of Mission Indian's current knowledge, the proposed project area may be considered sensitive for subsurface cultural resources due to their proximity to previously recorded sites of a highly sensitive nature. As the area of concern, the Tribe wishes to engage in government-to-government consultation pursuant to AB 52 with the Lead Agency for the Project.
Lovina Redner Tribal Chair Santa Rosa Band of Cahuilla Indians	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received
March Cochrane and Wayne Walker Co-Chairpersons Serrano Nation of Mission Indians	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received
Isaiah Vivanco Chairperson Soboba Band of Luiseno Indians	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received
Doug Welmas Chairperson Torres-Martinez Desert Cahuilla Indians	March 8, 2024 March 20, 2024	Scoping letter sent via email. Follow-up sent via email. No response received

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

March 6, 2024

Andrew DeLeon
Applied EarthWorks Inc

Via Email to: ***adeleon@appliedearthworks.com***

Re: Webb County Line Recharge Project AE#4564 Project, Riverside and San Bernardino County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not 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: Murphy.Donahue@NAHC.ca.gov

Sincerely,

Murphy Donahue

Murphy Donahue
Cultural Resources Analyst

Attachment

Applied EARTHWORKS Inc.

3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020
www.appliedearthworks.com

March 8, 2024

Lacy Padilla
THPO Operations Manager
Agua Caliente Band of Cahuilla Indians
5401 Dinah Shore Drive
Palm Springs, CA, 92264

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Ms. Lacy Padilla:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

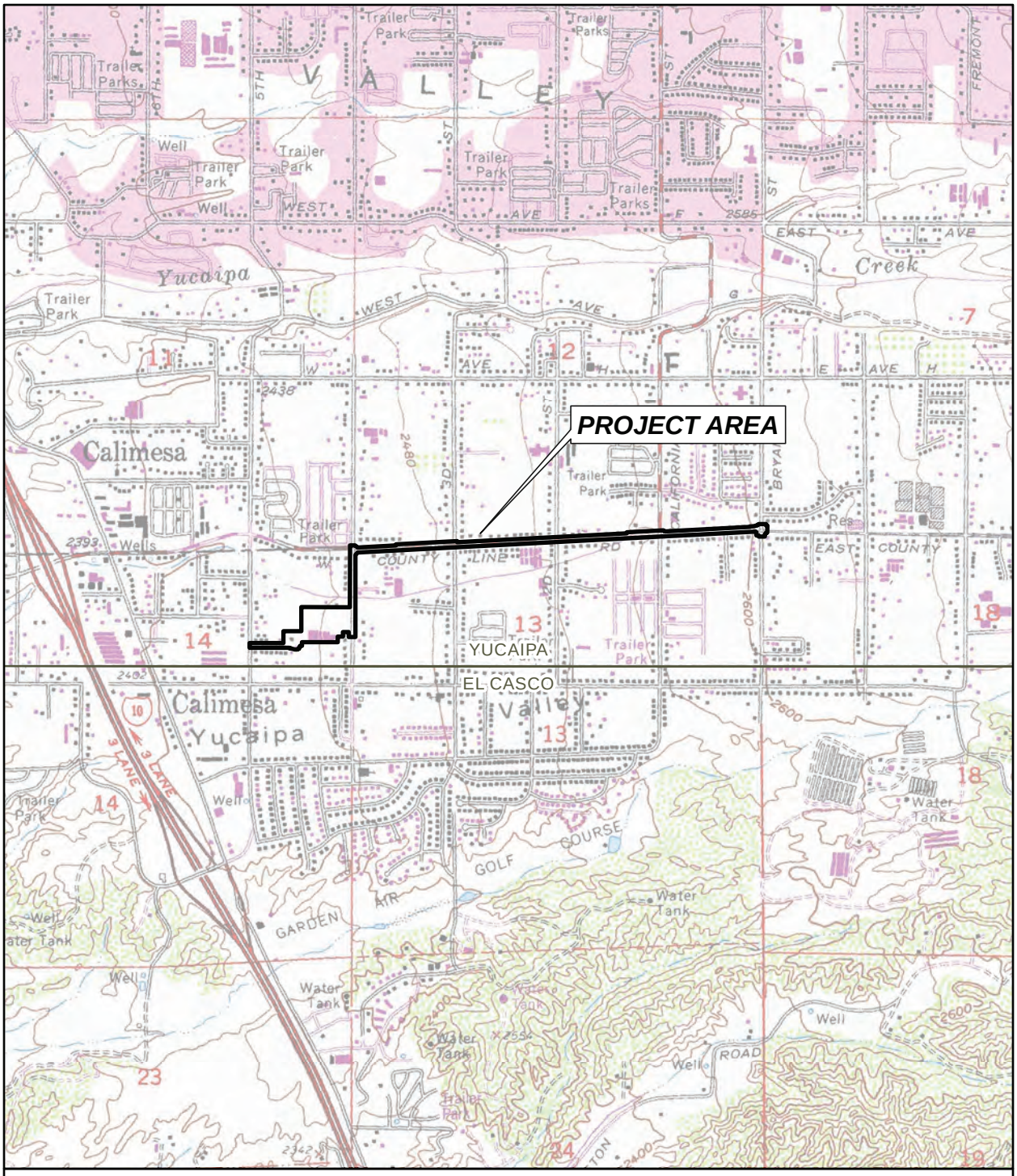
Æ conducted a literature and records search review with Eastern Information Center of the California Historical Resources Information System Record Search (EIC) and the South Coastal Information Center of the California Historical Resource Information System Record Search (SCIC). The results indicated four previously recorded cultural resources within the 0.5-mile search radius of the Project area, no cultural resources land within the Project area. Æ was contracted to perform an archaeological survey of the Project area, which was completed on February 28, 2024. The project area is highly disturbed, with fully developed and landscaped areas. No cultural resources were identified within the Project area.

As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on January 16, 2024. The NAHC responded on March 6, 2024, noting that *Sacred Lands File* search was completed with negative results. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also email me at jcochrane@appliedearthworks.com. If I do not hear from you within the next two weeks, I will contact you with a follow-up email or phone call.

Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.



Project location on USGS Yucaipa and El Casco 7.5-minute topographic quadrangles.

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March 8, 2024

Amanda Augustine
Chairwoman
Augustine Band of Cahuilla Indians
84-001 Avenue 54
Coachella, CA, 92236

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Ms. Amanda Augustine:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

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March 8, 2024

Doug Welmas
Chairperson
Cabazon Band of Mission Indians
84-245 Indio Springs Parkway
Indio, CA, 92203

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mr. Doug Welmas:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Staff Archaeologist
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March 8, 2024

Erica Schenk
Chairwoman
Cahuilla Band of Indians
52701 CA Highway 371
Anza, CA, 92539

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Ms. Erica Schenk:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

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March 8, 2024

Andrew Salas
Chairperson
Gabrieleno Band of Mission Indians - Kizh Nation
P.O. Box 393
Covina, CA, 91723

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mr. Andrew Salas:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Applied EarthWorks, Inc.

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March 8, 2024

Ray Chapparosa
Chairperson
Los Coyotes Band of Cahuilla and Cupeño Indians
P.O. Box 189
Warner Springs, CA, 92086-0189

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mr. Ray Chapparosa:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Respectfully yours,

Jessica Cochrane
Staff Archaeologist
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March 8, 2024

Robert Martin
Chairperson
Morongo Band of Mission Indians
12700 Pumarra Road
Banning, CA, 92220

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mr. Robert Martin:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

Applied EARTHWORKS Inc.

3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020
www.appliedearthworks.com

March 8, 2024

Jordan Joaquin
President
Quechan Tribe of the Fort Yuma Reservation
P.O.Box 1899
Yuma, AZ, 85366

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mr. Jordan Joaquin:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

Applied EARTHWORKS Inc.

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Hemet, CA 92544-4937
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www.appliedearthworks.com

March 8, 2024

Danae Hamilton Vega
Chairwoman
Ramona Band of Cahuilla
P.O. Box 391670
Anza, CA, 92539

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Ms. Danae Hamilton Vega:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

Applied EARTHWORKS Inc.

3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020
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March 8, 2024

Alexandra McCleary
Senior Manager of Cultural Resources Management
San Manuel Band of Mission Indians
26569 Community Center Drive
Highland, CA, 92346

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mr. Alexandra McCleary:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

Applied EARTHWORKS Inc.

3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020
www.appliedearthworks.com

March 8, 2024

Lovina Redner
Tribal Chair
Santa Rosa Band of Cahuilla Indians
P.O. Box 391820
Anza, CA, 92539

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Ms. Lovina Redner:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

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Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020
www.appliedearthworks.com

March 8, 2024

Mark Cochrane and Wayne Walker
Co-Chairperson's
Serrano Nation of Mission Indians
P. O. Box 343
Patton, CA, 92369

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mark Cochrane and Wayne Walker

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

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March 8, 2024

Isaiah Vivanco
Chairperson
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, CA, 92581

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mr. Isaiah Vivanco:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

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3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
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www.appliedearthworks.com

March 8, 2024

Thomas Tortez
Chairperson
Torres-Martinez Desert Cahuilla Indians
P.O. Box 1160
Thermal, CA, 92274

Re: Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

Dear Mr. Thomas Tortez:

On behalf of Albert A. Webb Associates., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed construction of a recharge basin, a new pipeline, and a turnout to connect the existing pipeline for the County Line Recharge Basin and Turnout Project (Project). The Project involves an approximate 6.9-acre development of the recharge basin, a new pipeline, and a turnout. The Project is subject to the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA). The San Gorgonio Pass Water Agency is the lead agency for compliance with CEQA and Section 106 of the NHPA. Sections 7, and 18 Township 2 South, Range 1 West, and Sections 11, 12, 13, and 14 Township 2 South, Range 2 West. Specifically, the Project area is located west of the intersection of County Line Road and 4th street.

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Respectfully yours,

Jessica Cochrane
Staff Archaeologist
Applied EarthWorks, Inc.

AGUA CALIENTE BAND OF CAHUILLA INDIANS
TRIBAL HISTORIC PRESERVATION

03-106-2024-001

March 25, 2024

[VIA EMAIL TO:jcochrane@appliedearthworks.com]
Applied Earthworks
Jessica Cochrane
3550 E. Florida Ave
Hemet, CA 92544

Re: County Line Recharge Basin and Turnout

Dear Jessica Cochrane,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the County Line Recharge Basin and Turnout project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the ACBCI THPO requests the following:

*Copies of any cultural resource documentation (report and site records) generated in connection with this project.

*A copy of the records search with associated survey reports and site records from the information center.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760) 423-3485. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Xitlaly Madrigal
Cultural Resources Analyst
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

Jessica Cochrane <jcochrane@appliedearthworks.com>

Cultural Resource Assessment for the County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

anthony madrigal <anthonymad2002@gmail.com> Tue, Mar 12, 2024 at 11:16 AM
To: Jessica Cochrane <jcochrane@appliedearthworks.com>, BobbyRay Esparza <besparza@cahuilla-nsn.gov>, Lgregory@cahuilla-nsn.gov

Thank you for the cultural information on the county line recharge basin in Calimesa. The Cahuilla band of Indians desires to consult on this project. Our people inhabited this area and established villages, camps, food processing areas, resource areas and other areas. Please keep us advised of the progress of th project and any cultural finds. There is always the possibility of subsurface cultural resources and we would request that our Native American monitors be present for the work.

Thank you

Anthony Madrigal
Cahuilla THPO
[Quoted text hidden]
--

Anthony Madrigal Sr.

Jessica Cochrane <jcochrane@appliedearthworks.com>

Response to Information Request: County Line Recharge Basin and Turnout Project, City of Calimesa, Riverside County, California

1 message

Raylene Borrego <Raylene.Borrego@sanmanuel-nsn.gov> Mon, Mar 11, 2024 at 9:31 AM
To: "jcochrane@appliedearthworks.com" <jcochrane@appliedearthworks.com>

Dear Jessica,

Thank you for contacting the San Manuel Band of Mission Indians concerning the proposed project area. San Manuel appreciates the opportunity to review the project documentation received by the Cultural Resources Management Department on March 8th, 2024. Based on our current knowledge, the proposed project area may be considered sensitive for subsurface cultural resources due to their proximity to previously recorded sites of a highly sensitive nature.

As the area is of concern, the Tribe will wish to engage in government-to-government consultation pursuant to AB 52 with the Lead Agency for the project.

Thank you again for your correspondence, if you have any additional questions or comments please reach out to me at your earliest convenience.

Regards,

Raylene Borrego
Cultural Resources Technician
Raylene.Borrego@sanmanuel-nsn.gov
O:(909) 864-8933 x 50-2035
M:(909) 737-3349
26569 Community Center Dr Highland, California 92346
SAN MANUEL
BAND OF MISSION INDIANS

APPENDIX D.2

Paleontological Resource Assessment

Paleontological Resource Assessment for the County Line Recharge Basin and Turnout Project City of Calimesa, Riverside and San Bernardino Counties California

Chris Shi and Michael George

Prepared By

Applied EarthWorks, Inc.
133 N. San Gabriel Boulevard, Suite 201
Pasadena, CA 91107

Prepared For
Albert A. Webb Associates
3788 McCray Street
Riverside, CA 92506

April 2024

MANAGEMENT SUMMARY

Applied EarthWorks, Inc. (Æ), at the request of Albert A. Webb Associates, assessed the potential for impacts to significant paleontological resources for the County Line Recharge Basin and Turnout project (Project) in the city of Calimesa, Riverside County, and in San Bernardino County, California. The Project involves construction of a recharge basin within Assessor's Parcel Number 411-150-027 (approximately 6.9 acres) south of County Line Road and west of 4th Street, plus an additional approximately 956 linear feet of new pipeline along 4th Street to connect the recharge basin to the existing pipeline within County Line Road. The Project also involves construction of a new turnout to connect the existing pipeline within County Line Road to the existing pipeline within Bryant Street (approximately 160 linear feet). Æ prepared this Paleontological Resource Assessment (PRA) in partial satisfaction of California Environmental Quality Act (CEQA) requirements. In addition, the Project may receive federal funding. The San Gorgonio Pass Water Agency is the lead agency for federal and CEQA compliance.

This PRA was completed from a combination of desktop studies and fieldwork. The desktop studies included a review of published and unpublished literature and maps, as well as museum records searches. The purpose of these studies was to identify the geologic units in the Project area and to determine whether previously recorded paleontological localities occur either within the Project area, or within the same geologic units nearby but outside the Project area. As a result of the desktop studies and fieldwork, Æ has determined that the Project area has High A Sensitivity based on Riverside County's sensitivity rankings.

Æ recommends preparation of a Paleontological Resource Impact Mitigation Program (PRIMP) by a qualified professional paleontologist (Paleontological Principal Investigator, Project Paleontologist) as defined by mitigation paleontology industry standards and/or the Society of Vertebrate Paleontology. The PRIMP will specify the steps to be taken to mitigate impacts to paleontological resources. For instance, Worker's Environmental Awareness Program training should be prepared prior to the start of Project-related ground disturbance and presented in person to all field personnel to describe the types of paleontological resources that may be found and the procedures to follow if any are encountered. The PRIMP also will include a monitoring plan that indicates where construction monitoring will be required and the frequency of required monitoring (i.e., full-time, spot-checks, etc.) to ensure adverse impacts to paleontological resources will be reduced to a less-than-significant level in accordance with CEQA.

CONTENTS

FIGURES AND TABLES

1
INTRODUCTION

Applied EarthWorks, Inc. (Æ), at the request of Albert A. Webb Associates, assessed the potential for impacts to significant paleontological resources for the County Line Recharge Basin and Turnout project (Project) in the city of Calimesa, Riverside, and San Bernardino counties, California. Æ prepared this Paleontological Resource Assessment (PRA) in partial satisfaction of California Environmental Quality Act (CEQA) requirements. In addition, the Project may receive federal funding. The San Gorgonio Pass Water Agency (SGPWA) is the lead agency for federal and CEQA compliance.

1.1 PROJECT DESCRIPTION

The Project is in the northern portion of the city of Calimesa, largely within Riverside County, with the northernmost extent within San Bernardino County (Figure 1-1). Specifically, the Project area begins at the western terminus southwest of County Line Road and 4th Street, extends north along 4th Street, then east along County Line Road until the eastern terminus at County Line Road and Bryant Street. The Project area is mapped within portions of Sections 7 and 18 of Township 2 South, Range 1 West; and Sections 11, 12, 13, and 14 of Township 2 South, Range 2 West, as shown on the U.S. Geological Survey (USGS) Yucaipa, California 7.5-minute topographic quadrangle map (Figure 1-2).

The Project involves construction of a recharge basin within Assessor's Parcel Number 411-150-027 (approximately 6.9 acres) at the western terminus, and approximately 956 linear feet of new pipeline along 4th Street to connect the recharge basin to the existing pipeline within County Line Road. The Project also involves construction of a new turnout to connect the existing pipeline within County Line Road to the existing pipeline within Bryant Street (approximately 160 linear feet). The maximum anticipated depth of excavation for the Project is approximately 25 feet below ground surface (bgs).

1.2 PURPOSE OF INVESTIGATION

This PRA is designed to accomplish several goals: (1) identify the geologic units within the Project area and assess their paleontological resource potential; (2) determine whether the Project has the potential to adversely impact scientifically significant paleontological resources; (3) provide Project-specific management recommendations for paleontological resources, as necessary; and (4) demonstrate compliance with state laws and local regulations. Section 1.4 describes the ways in which this PRA meets the stated goals.

Figure 1-1 Project vicinity in Riverside and San Bernardino counties, California.

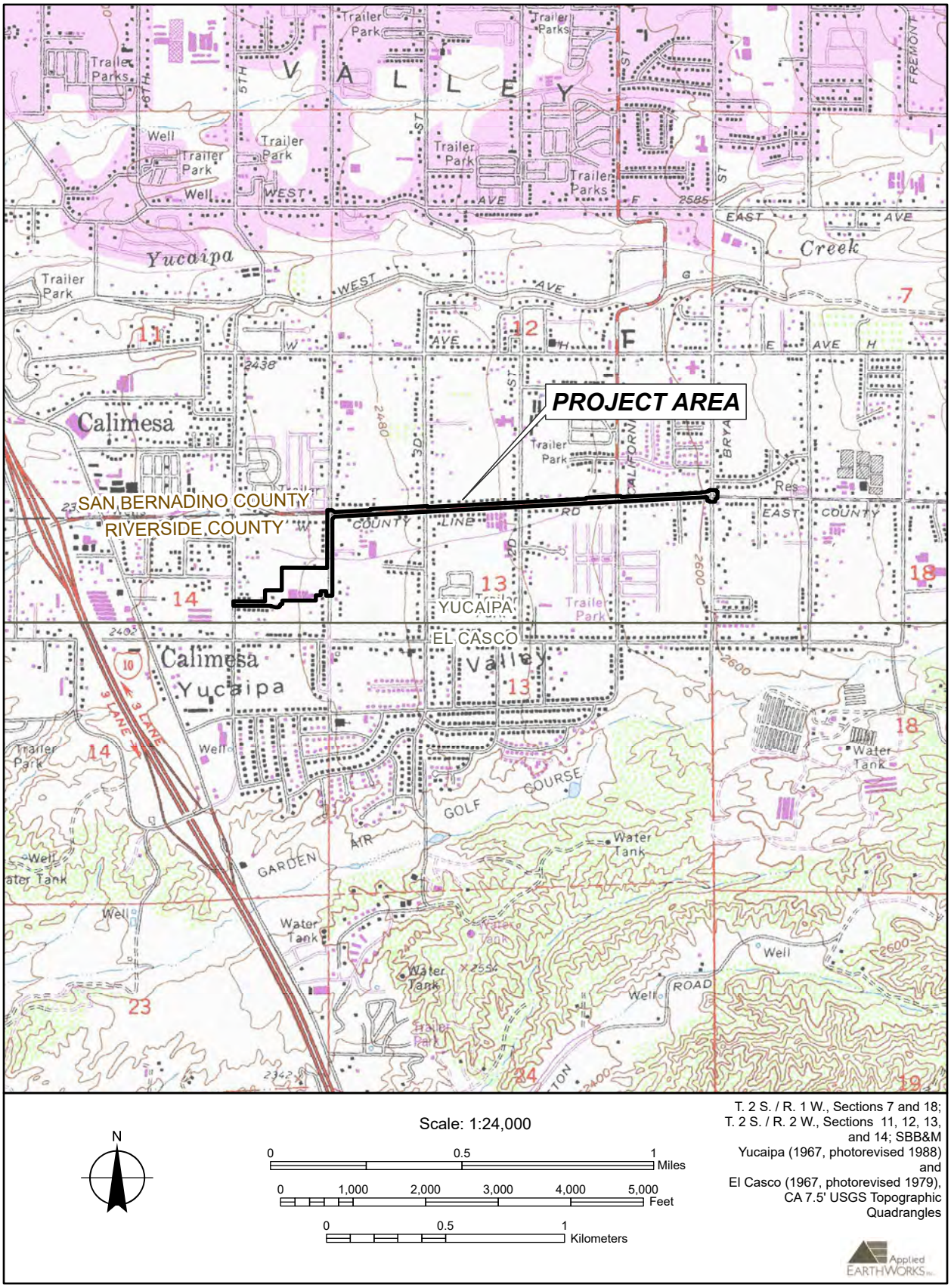

Figure 1-2 Project location on USGS Yucaipa 7.5-minute topographic quadrangle.

1.3 KEY PERSONNEL

Qualifications for Æ's key paleontology personnel can be found in Appendix A. Æ Paleontology Program Manager Amy Ollendorf served as the Principal Investigator for the paleontological investigation. She oversaw each task required for this PRA, including quality control. Ollendorf qualifies as a principal investigator for paleontology per industry standards (Murphey et al., 2019). She has interdisciplinary doctor of philosophy and master of science degrees involving geology and a bachelor of science degree in geology and anthropology (double major), all of which focused on paleontological subject matter. Ollendorf is the principal investigator for paleontology on Æ's 2021–2024 California Statewide Paleontological Resource Use Permit (CA-21-06P) from the U.S. Bureau of Land Management (BLM). She is also a Registered Professional Archaeologist (RPA 12588) with over 40 years of experience.

Æ Senior Paleontologist Chris Shi wrote this PRA with desktop research contributions from Æ Paleontological Technician Michael George. Shi has the necessary qualifications to meet the Society of Vertebrate Paleontology (SVP; 2010) and industry standards (Murphey et al., 2019) for a qualified professional paleontologist and is an additional principal investigator for paleontology on Æ's BLM permit. He has a master's degree in geology with a focus on paleobotany, and additional graduate studies in invertebrate paleontology. Furthermore, he has 15 years of experience in the discipline, including the past 8 years in paleontological monitoring, recovery, and preparation of fossil remains, laboratory analysis, and report preparation. George has a bachelor's degree in geology with a focus on paleontology, with 10 years of experience in the discipline, including the past 5 years of experience in paleontological monitoring, recovery, and preparation of fossil remains. Æ Senior Paleontologist/Geographic Information System Analyst Melissa Macias prepared the figures for the report in coordination with Shi. Æ Paleontological Technician Victor Jiménez-González completed the paleontological field survey with remote supervision by Shi. Jiménez-González has a bachelor's degree in geology with a focus on paleontology, and 1 year of experience in paleontological surveys, recovery, and preparation of fossil remains.

1.4 REPORT ORGANIZATION

Chapter 1 has described the Project, defined the purpose of the investigation, and provided a description of Æ's key personnel for this PRA. Chapter 2 discusses the regulatory framework governing the Project. Chapter 3 presents the paleontological sensitivity criteria and resource guidelines used for this assessment. The methods employed are provided in Chapter 4, and Chapter 5 describes the geology and paleontology of the Project area. The results of the desktop studies, and paleontological sensitivity assessment are presented in Chapter 6. Management recommendations can be found in Chapter 7, and references cited are listed in Chapter 8. Appendix A provides qualifications of key personnel.

2
REGULATORY ENVIRONMENT

Paleontological resources (i.e., fossils) are considered nonrenewable because when they are destroyed, they cannot be replaced, and as a result, paleontological resources are afforded protection under various federal, state, and local laws. This Project may receive federal funding, although no federal laws concerning paleontological resources are pertinent in this case. Consequently, all resources are protected under state and local laws, as described in the following sections.

2.1 STATE

California is among the states that protect significant paleontological resources, and CEQA is the legal framework through which this protection is accomplished. Enacted in 1970, CEQA does not directly regulate land uses but instead requires state and local agencies within California to follow a protocol of analysis and public disclosure of unavoidable environmental impacts of proposed projects and to adopt all feasible measures to mitigate those impacts.

2.1.1 California Environmental Quality Act

This Project is subject to Section 15002(a)(3) of the Guidelines for Implementation of CEQA (California Code of Regulations, Title 14, Chapter 3), which states one of the basic purposes of CEQA is the intention to "prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible." Therefore, CEQA requires detailed studies that analyze the environmental effects of a proposed project.

If a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered. Specifically, Section VII(f) of Appendix G of the CEQA Guidelines, the Environmental Checklist Form, poses the question, "Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" If paleontological resources are identified as being within the proposed project area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

2.1.2 CEQA Implementation

Guidelines for implementation of CEQA are codified in 14 CCR 15000 et seq., which requires state and local public agencies to identify the environmental impacts of proposed discretionary activities or projects, determine if the impacts will be significant, and identify alternatives and mitigation measures that will substantially reduce or eliminate significant impacts to the environment. The various agencies within state government all have their own guidance documents to assist with CEQA compliance. The SGPWA is the government agency responsible for CEQA compliance for the Project.

2.2 LOCAL

In addition to state-level implementing regulations, policies, and guidance, various counties and municipalities throughout California also have developed environmental goals, policies, and guidance that pertain to paleontological resources. The following sections list all relevant goals, objectives, and policies.

2.2.1 County of Riverside

Several policies cover paleontological resources within the County of Riverside (County) *General Plan, Multipurpose Open Space (OS) Element* (Riverside County Planning Department, 2015:OS-51):

> **OS 19.6:** Whenever existing information indicates that a site proposed for development has high paleontological sensitivity as shown on Figure OS-8, a paleontological resource impact mitigation program (PRIMP) shall be filed with the Riverside County Geologist prior to site grading. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources.
>
> **OS 19.7:** Whenever existing information indicates that a site proposed for development has low paleontological sensitivity as shown on Figure OS-8, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the Riverside County Geologist shall be notified and a paleontologist shall be retained by the project proponent. The paleontologist shall document the extent and potential significance of the paleontological resources on the site and establish appropriate mitigation measures for further site development.
>
> **OS 19.8:** Whenever existing information indicates that a site proposed for development has undetermined paleontological sensitivity as shown on Figure OS-8, a report shall be filed with the Riverside County Geologist documenting the extent and potential significance of the paleontological resources on site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources prior to approval of that department.
>
> **OS 19.9:** Whenever paleontological resources are found, the County Geologist shall direct them to a facility within Riverside County for their curation, including the Western Science Center in the City of Hemet.

2.2.2 City of Calimesa

The City of Calimesa's *General Plan* addresses Goal RM-4 "Preserve the City's historical, cultural, archaeological, paleontological, and architectural resources" through the following action items under Policy RM-16 (General Plan Advisory Committee, 2014:6-13–6-14):

> **Policy RM-16:** Identify, protect, and preserve the historical and cultural resources of the city.
>
> **Action Item RM-16.3:** Review all proposed development for the possibility of cultural/archaeological/paleontological sensitivity. When existing information indicates that a site proposed for development may contain paleontological resources, a report

stating the extent and potential significance of the resources that may exist within the proposed development shall be prepared and include mitigation measures as appropriate.

Action Item RM-16.4: The City will work with the Native American community and others to adopt an appropriate process and procedure for the monitoring of excavation in cultural and paleontological sensitive areas and adopt a process for ensuring the appropriate curation of any cultural or paleontological resources discovered.

3
PALEONTOLOGICAL RESOURCE ASSESSMENT GUIDELINES

Protection of paleontological resources requires assessment of the potential for geologic units to yield significant paleontological resources that could be directly or indirectly impacted or destroyed during Project development. Successful protection also involves the formulation and implementation of appropriate management measures to mitigate impacts. Mitigation measures are proportional to the potential of individual areas to yield intact and significant paleontological resources.

3.1 DEFINITION OF PALEONTOLOGICAL RESOURCES AND SIGNIFICANCE CRITERIA

The SVP guidelines define paleontological resources as fossils and fossiliferous deposits (SVP, 2010). Fossils are the evidence of once-living organisms as preserved in the rock record. They include both the lithified remains of ancient plants and animals and the traces thereof (trackways, imprints, burrows, etc.). In general, the SVP considers fossils to be greater than 5,000 years old (older than middle Holocene[1]) and to typically be preserved in sedimentary rocks, although certain volcanic rocks and low-grade metamorphic rocks may be fossiliferous if formed under certain conditions.

Well-preserved and identifiable individual fossils are considered significant paleontological resources if they are a type specimen, rare, a complete specimen, or part of an important diverse fossil assemblage. Of particular importance are fossils found in situ, or in their primary geologic context. These fossils are important because they are used to examine evolutionary relationships, provide insight on the development of and interaction between biological communities, establish time scales for geologic studies, and for many other scientific purposes, including investigation into paleoenvironments and paleoclimates (Scott and Springer, 2003; SVP, 2010). Among the various types of fossils, intact and in situ vertebrate fossils are usually assigned a greater significance than other types as they are comparatively rare. Consequently, more attention tends to be placed on the recovery of vertebrate fossils than other types.

3.2 PROFESSIONAL STANDARDS AND CLASSIFICATION OF PALEONTOLOGICAL RESOURCE SENSITIVITY

Most professional paleontologists in California follow the guidelines set forth by the SVP (2010) and industrywide standards (Murphey et al., 2019) to determine the course of paleontological mitigation for a given project unless specific city, county, state, or federal guidelines are available. The City does not have its own paleontological sensitivity guidelines. However, the County of Riverside (County) has developed a system that establishes detailed protocols for the assessment of the paleontological sensitivity of a project area and outlines measures to follow in order to mitigate adverse impacts to known or unknown fossil resources during project

[1] Middle Holocene: the Holocene Epoch is subdivided into early (11,700 to 8,200 years ago), middle (8,200 to 4,200 years ago), and late (4,200 years ago to present) subepochs (Cohen et al., 2023). The Quaternary Period also includes the older Pleistocene Epoch, which is also subdivided into early (2.6 million to 1.8 million years ago), middle (1.8 million to 77,400 years ago), and late (77,400 to 11,700 years ago) subepochs (Cohen et al., 2023).

development (County of Riverside, 2015). Therefore, this PRA uses the County's ranking system and mitigation measures.

Following the County's established process, baseline information is used to assign the paleontological sensitivity of a geologic unit(s) (or members thereof) to one of four categories—Low, Undetermined, High A (Ha), and High B (Hb) (County of Riverside, 2015). Table 3-1 shows the criteria for the categories in comparison with those of the SVP as well as mitigation recommendations for each category.

Table 3-1
Paleontological Sensitivity Classifications

Sensitivity/Potential			
County of Riverside	**SVP**	**Criteria[a]**	**Mitigation Recommendations[b]**
High A High B	High	Rock units from which vertebrate or significant specimens of other fossil types have been recovered are considered to have a high potential. Rock units with high potential also may include rock units that are temporally or lithologically suitable for the preservation of fossils (e.g., Middle Holocene and older, argillaceous and carbonate-rich paleosols, fine-grained marine sandstones, etc.). Rock units with High B Sensitivity are considered to have high potential at depths greater than 4 feet bgs.	Retain a qualified paleontologist and typically complete a field survey, PRIMP, and on-site construction monitoring. Any significant specimens discovered during monitoring will need to be prepared, identified, and curated into a museum. A final report documenting the significance of the finds will also be required.
Undetermined	Undetermined	In some cases, available literature on a particular rock unit will be scarce and a determination of whether or not it is fossiliferous or potentially fossiliferous will be difficult to make. Under these circumstances, further study is needed to determine the unit's paleontological resource potential.	A field survey is required to further assess the unit's paleontological potential. The survey may provide data for development of a PRIMP prior to construction.
Low	Low	Rocks units from which few fossils have been recovered or generally unsuitable for preservation of fossils are considered to have a low potential. These units typically yield fossils only on rare occasions and under unusual circumstances (e.g., basalt flows, recent colluvium, etc.).	Mitigation is not typically required; however, if an unanticipated paleontological resource is encountered, a qualified professional paleontologist (Principal Investigator, Project Paleontologist) may need to evaluate the resource to consider mitigation.
N/A	No Potential	Rock units that have no potential for paleontological resources are those that are formed under or exposed to immense heat and pressure, such as high-grade metamorphic rocks and plutonic igneous rocks.	No mitigation required.

a - Criteria based on County of Riverside (2015) and SVP (2010).
b - Recommendations based on County of Riverside (2015).

4
METHODS

This PRA was completed through desktop studies and a field survey. The twofold purpose of the off- and on-site research was: (1) to identify the geologic units in the Project area and immediate vicinity to determine whether previously recorded paleontological localities occur either within the Project area or within the same geologic units nearby and (2) to determine the sensitivity of the geologic units in the Project area for their potential to yield paleontological resources.

4.1 LITERATURE REVIEWS AND MUSEUM RECORDS SEARCHES

In many areas, the near-surface layers of sediments and sedimentary rocks are broken down and converted to soil (pedogenesis) through chemical and physical weathering processes (Boggs, 2012). During pedogenesis, any fossils preserved within the near-surface layers often are destroyed or rendered unrecognizable. Therefore, intact and identifiable fossils are unlikely to be found in soil. Reviews of relevant geologic maps, regional geological publications, and unpublished reports are necessary to ascertain the geology and stratigraphy of a project area to determine the potential for significant subsurface paleontological resources.

To supplement the map and literature reviews, Æ requested searches of records of the invertebrate and vertebrate collections maintained by the Natural History Museum of Los Angeles County (NHMLAC) and the Western Science Center (WSC) in Hemet. Æ also completed online searches of two databases readily available to the public—the Paleobiology Database (PBDB) and the database maintained by the University of California Museum of Paleontology (UCMP). All records searches were completed to identify known fossil localities within or near the Project area. In addition to the museum records searches, Æ examined the geotechnical investigation reports for the Project (LOR Geotechnical Group, 2022, 2023).

4.2 FIELD SURVEY

Prior to the field survey, Shi examined recent aerial photographs of the entire Project area in Google Earth to determine possible locations of geologic outcrops and potential survey routes. Jiménez-González conducted the paleontological field survey for the Project on February 28, 2023, alongside Æ Senior Archaeologist Andrew DeLeon, who simultaneously conducted the cultural field survey. The purpose of the paleontological survey was to confirm the presence or absence of exposed fossils on the ground surface and to evaluate geologic exposures, if any, for their potential to yield significant subsurface paleontological resources.

Jiménez-González started his survey from the western terminus of the Project area where construction of the recharge basin is proposed, then proceeded north along 4th Street and east along County Line Road to the eastern terminus. He completed the survey with a combination of close visual inspection and spot-checking. Close visual inspection was conducted where the ground surface was visible and sediments were exposed, which was limited to a field in the western terminus. He spot-checked the remainder of the Project area along 4th Street and County Line Road where the ground surface was completely paved and developed. Jiménez-González used an iPad and a Global Navigation Satellite System to navigate the Project area, provided notes on his field form using the ArcGIS Survey123 application, and took photographs with the

iPad to document the survey. Any fossils encountered were to be field-documented and not collected.

5
GEOLOGY AND PALEONTOLOGY

The following sections provide the geological context of the Project area, descriptions of the geologic units mapped as surface exposures within the boundaries of the Project area, and units exposed nearby and thought to be present in the subsurface. The section also includes any paleontological information reported from the units.

5.1 REGIONAL GEOLOGY

The Project area is in the Peninsular Ranges geomorphic province[2], within the northwest portion of the San Gorgonio Pass (California Geological Survey, 2002). The San Gorgonio Pass forms a major geologic divide between the Transverse Ranges and the Peninsular Ranges geomorphic provinces. North of the San Gorgonio Pass, the Transverse Ranges are an east-west trending series of mountain ranges and valleys, which extend from the offshore San Miguel, Santa Rosa, and Santa Cruz islands in the west to the San Bernardino Mountains in the east (California Geological Survey, 2002). South of the San Gorgonio Pass, the Peninsular Ranges consist of several northwest-trending mountain ranges separated by valleys, extending from the offshore Santa Catalina, Santa Barbara, San Clemente, and San Nicolas islands in the west to the Salton Trough in the east (California Geological Survey, 2002). The San Gorgonio Pass represents the single largest discontinuity along the San Andreas Fault, resulting from a system of irregular and discontinuous right-lateral, reverse, thrust, and oblique-normal faults (Yule, 2009). Together, these faults contribute to uplifting the San Bernardino Mountains and overall movement between the North American plate and the Pacific plate (Spotila et al., 1998).

In the vicinity of the Project area, rocks of the Peninsular Ranges Assemblage date from the Paleozoic[3] to the present with most of the assemblage represented by the Mesozoic[4] Peninsular Ranges batholith and pre-batholithic metasedimentary and metavolcanic rocks (Jahns, 1954; Morton et al., 2006a, 2006b). Thick sequences of Cenozoic[5] sediments, mostly Quaternary in age, have accumulated above these in the valleys of the region.

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[2] A geomorphic province is a region of unique topography and geology that is readily distinguished from other regions based on its landforms and tectonic history (American Geological Institute, 1976).

[3] Paleozoic Era: Approximately 539 to 252 million years ago, subdivided into six periods—Cambrian (539–485 million years ago), Ordovician (485–444 million years ago), Silurian (444–419 million years ago), Devonian (419–359 million years ago), Carboniferous (359–299 million years ago), and Permian (299–252 million years ago) (Cohen et al., 2023).

[4] Mesozoic Era: Approximately 252 to 66 million years ago, subdivided into three periods—Triassic (252–201 million years ago), Jurassic (201–145 million years ago), and Cretaceous (145–66 million years ago) (Cohen et al., 2023).

[5] Cenozoic Era (formerly Tertiary): 66 million years ago to present, subdivided into three periods—Paleogene (66–23 million years ago), Neogene (23–2.6 million years ago), and Quaternary (2.6 million years ago to present). The Paleogene Period is subdivided into the Paleocene, Eocene, and Oligocene epochs; the Paleocene Epoch lasted from approximately 66 to 56 million years ago, the Eocene Epoch lasted from approximately 56 to 34 million years ago, and the Oligocene Epoch lasted from approximately 34 to 23 million years ago. The Neogene Period is subdivided into the Miocene and Pliocene epochs; the Miocene Epoch lasted from approximately 23 to 5.3 million

5.2 GEOLOGY AND PALEONTOLOGY OF THE PROJECT AREA

The Project area and vicinity are mapped at a scale of 1:100,000 (Morton et al., 2006a, 2006b). However, the El Casco Quadrangle south of the Yucaipa Quadrangle has also been mapped more recently at a scale of 1:24,000 (Matti et al., 2015). Figure 5-1 uses Morton et al. (2006b, 2006a) for the Yucaipa Quadrangle and Matti et al. (2015) for the El Casco Quadrangle.

According to Morton et al. (2006a, 2006b), the ground surface of the Project area is mapped entirely as middle to late Pleistocene old axial-channel deposits, Unit 1 (Qoa_1). Based on their nearly identical coverage in the El Casco Quadrangle, this unit is equivalent to the old alluvial-fan deposits, Unit 2 (Qof_2) as more recently labeled by Matti et al. (2015). Other surficial deposits also are mapped nearby, including Pleistocene sedimentary deposits of Live Oak Canyon (Qlo), middle Pleistocene very old alluvial-fan deposits ($Qvof_3$), and late Holocene young axial-channel deposits, Unit 5 (Qya_5) (Matti et al., 2015). The following subsections summarize the geologic units mapped in the Project area as well as those that may potentially be found in the subsurface. Unit Qya_5 is excluded below as it is younger than any of the units mapped within the Project area and would not be found in the subsurface. The subsections also provide relevant findings from the geotechnical investigations for the Project (LOR Geotechnical Group, 2022, 2023). Those investigations included a total of nine auger borings to depths of 16.5–51.5 feet bgs within the western terminus of the Project area.

5.2.1 Sedimentary Deposits of Live Oak Canyon (Qlo)

Sedimentary deposits of Live Oak Canyon (Qlo) are mapped approximately 1 mile south of the Project area. These deposits consist of unconsolidated and consolidated nonmarine gravelly conglomerates interbedded with sands and sandstones along with minor muddy sediments and mudrocks (Matti et al., 2015).

Due to the proximity of exposures, unit Qlo may be found at unknown depths in the Project area. Although the coarser grained conglomerate beds are not particularly conducive to fossil preservation, the finer sandy and muddy beds may preserve paleontological resources. Pleistocene sedimentary deposits are well-documented to have yielded a wide variety of megafauna as well as numerous invertebrate and plant taxa throughout inland valleys of Riverside and San Bernardino counties (Reynolds and Reynolds, 1991; Scott, 2007; Springer et al., 2009).

5.2.2 Very Old Alluvial-Fan Deposits, Unit 3 ($Qvof_3$)

Very old alluvial-fan deposits, Unit 3 ($Qvof_3$) is mapped approximately 0.8-mile south-southwest of the Project area. The broader very old alluvial-fan deposits consist of sand and gravel beds divided into subunits that can be distinguished from others on the basis of soil-profile

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years ago and the Pliocene Epoch lasted from approximately 5.3 to 2.6 million years ago. The Quaternary Period is subdivided into the Pleistocene and Holocene epochs; the Pleistocene Epoch, or last Ice Age, lasted from approximately 2.6 million to 11,700 years ago when the Holocene Epoch began; all dates according to Cohen et al. (2023).

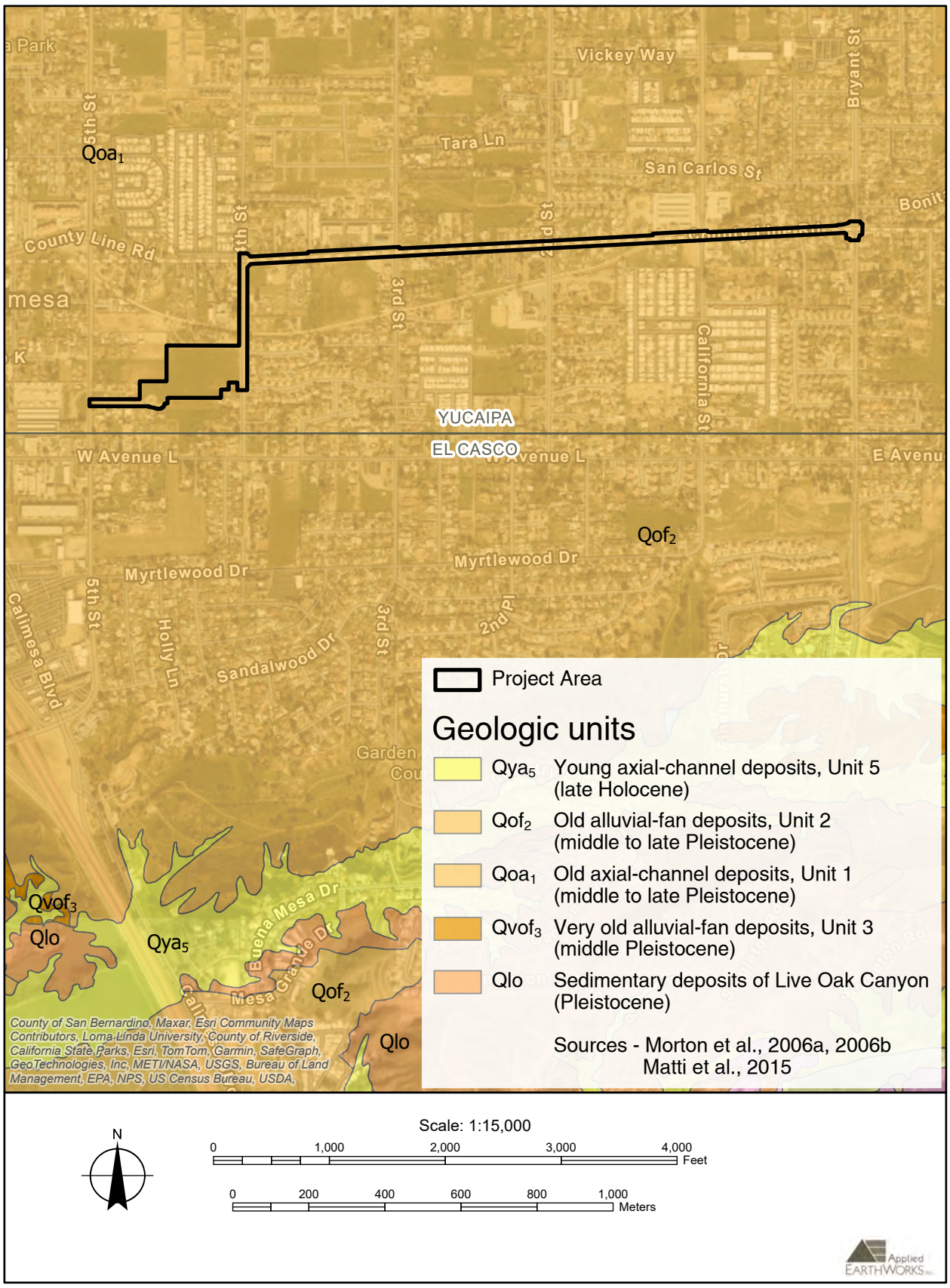

Figure 5-1 Geologic map for the Project area and vicinity.

development and their relative positions within the local succession (Matti et al., 2015). They are dated to the early to middle Pleistocene, with Unit 3 referring to one of the younger subunits from the middle Pleistocene. Unit $Qvof_3$ may be found at unknown depths in the Project area, and like Unit Qlo above, is potentially fossiliferous.

5.2.3 Old Axial-Channel Deposits, Unit 1 (Qoa_1) and Old Alluvial-Fan Deposits, Unit 2 (Qof_2)

Old axial-channel deposits, Unit 1 (Qoa_1) (Morton et al., 2006a, 2006b) is mapped throughout the entire Project area. These deposits are moderately dissected and consist of poorly sorted sands and pebble-cobble-boulder gravels, which were deposited by stream flows of Yucaipa and Oak Glen Creeks that converged southwest and flowed down ancestral Live Oak Canyon (Morton et al., 2006a, 2006b). The equivalent unit in the El Casco Quadrangle, old alluvial-fan deposits, Unit 2 (Qof_2), is described as sandy, gravelly, and silty sediments deposited by streams that formed alluvial fans within the region (Matti et al., 2015).

According to the geotechnical investigations, artificial fill—possibly consisting of redeposited local sediments—is present to a depth of 1–2 feet bgs within most of the western terminus of the Project area (LOR Geotechnical Group, 2022, 2023). Just below the fill, the boring logs show the presence of brown to reddish-brown alluvium consisting of alternating beds of silty sand and sandy silt to the maximum depths (LOR Geotechnical Group, 2022, 2023). The authors cited Matti et al. (2003), who showed the Project area mapped as middle to late Pleistocene old axial-valley deposits, Unit 1 (Qoa_1), synonymous with the old axial-channel deposits of Morton et al. (2006b). Although the alluvial sediments in the boring logs increase in density and generally alternate between silty sand and sandy silt, they do not show any other changes in composition throughout their extent to indicate a transition to other units such as Qlo or $Qvof_3$. However, subsurface data outside the western terminus of the Project area is unavailable. As with Qlo and $Qvof_3$, unit Qoa_1 and its equivalent, Qof_2, are potentially fossiliferous.

6
RESULTS AND ANALYSIS

This chapter reports on the results of the desktop studies and fieldwork completed for this Project. Paleontological sensitivity rankings also are assigned to the geologic units mapped at the ground surface as well as those likely present at unknown depths based on the available information.

6.1 GEOTECHNICAL REPORT

The geotechnical investigations for the Project included excavation of nine hollow-stem auger borings to depths of 16.5–51.5 feet bgs in the western terminus of the Project area. Borings B-1 and P-1–P-5 of LOR Geotechnical Group (2022) were conducted throughout the center of the agricultural field, whereas Borings B-1 through B-3 of LOR Geotechnical Group (2023) were conducted in the northeast corner of the field. The six borings from the earlier study found fill at 1–2 feet bgs, with alluvium being found at 1–50 feet bgs (LOR Geotechnical Group, 2022), while the three borings from the second study found only artificial fill at 0–51.5 feet bgs (LOR Geotechnical Group, 2023). No borings were completed for the remainder of the Project area along 4th Street or County Line Road. The alluvial sediments are consistent with mapping by Matti et al. (2003) as referenced by the authors of the geotechnical reports. No paleontological resources are reported in the geotechnical investigations.

6.2 RECORDS SEARCHES

Neither the WSC nor the NHMLAC collections include any localities from within the Project area. Furthermore, the WSC search results do not list any localities from Pleistocene geologic units within a 2-mile radius of the Project area. However, the NHMLAC results show five localities ranging from west to south of the Project area, with two of the southern localities within a 10-mile radius. All five localities are Pleistocene in age. The two closest localities are detailed below in Table 6-1, whereas the other three are omitted because of their greater distance from the Project area. The closest locality is LACM VP 1782, from the historic Wolfskill Ranch in the hills south of Beaumont, which yielded a specimen of the camel family. The second locality is LACM VP 4540, from the junction of Jackrabbit Trail and Gilman Springs Road southwest of Beaumont, which yielded a specimen of the horse family.

Table 6-1
Fossil Localities Reported near the Project Area

Locality No.	Geologic Unit (Date)	Taxa	Depth	Approximate Distance from Project Area
LACM[a] VP 1782	Unnamed formation (Pleistocene)	Camelidae (camel family)	Unknown	7 miles
LACM[a] VP 4540	Unnamed formation (Pleistocene)	Equidae (horse family)	Unknown	7.5 miles

a – NHMLAC collections.

The online databases of the UCMP and PBDB show numerous localities from Pleistocene deposits within Riverside County. However, they do not list any localities within a 10-mile radius of the Project area.

6.3 FIELD SURVEY RESULTS

Prevalent hardscaping, including roads, extensive vegetation, and the absence of geologic outcrops or road cuts in the Project area limited Æ's close field examinations of the surficial geology in the Project area. Specifically, the surficial geology was only visible in sparse patches between vegetation in the open field at the west terminus (Figure 6-1). The remainder of the Project area, including all of 4th Street and County Line Road, are paved and developed, with no geological exposures (Figures 6-2 and 6-3).

Jiménez-González observed exposed sediments within the agricultural field at the western terminus, which have been disturbed previously from cultivation. He recorded these sediments as poorly sorted, pale brown (10YR 6/3) silty clayey sands with angular gravels and pebbles and rare boulders throughout the field. Jiménez-González did not observe any notable changes in lithology and did not encounter any paleontological resources during the survey.

Figure 6-1 The field in the western terminus of the Project area, showing previous disturbance; facing northeast from the southwest corner.

Figure 6-2 County Line Road at the intersection with 4th Street; facing east-southeast.

Figure 6-3 The eastern terminus of the Project, from the intersection of County Line Road and Bryant Street; facing west.

6.4 DETERMINATION OF PALEONTOLOGICAL RESOURCE POTENTIAL WITHIN THE PROJECT AREA

Using information obtained from the desktop studies, *Æ* determined the paleontological resource potential of the Project area. The field survey did not yield much useful information that would affect this determination. *Æ*'s paleontological sensitivity rankings follow the County of Riverside's (2015) classification system. Based on the findings, *Æ* recommends the assignment of High A Sensitivity to the entire Project area (Figure 6-4).

Æ did not observe any exposures of unequivocally undisturbed alluvial deposits during the survey. Based on the presence of artificial fill in most of the boring logs and the extent of previous disturbance in the western terminus of the Project area, most of the sediments *Æ* observed during the survey may have been the locally derived artificial fill described in the geotechnical reports (LOR Geotechnical Group, 2022, 2023).

Æ also was unable to confirm the surficial geology throughout the remainder of the Project area, as the roads were paved and fully developed. However, *Æ*'s desktop studies indicate deposits of Qoa_1 have a high potential of preserving significant paleontological resources. The geotechnical reports described sediments matching the descriptions of Qoa_1 at 0–2 feet bgs within the western terminus. Although no subsurface data was available for the rest of the Project area, Qoa_1 deposits are mapped throughout the entire extent (Morton et al., 2006a, 2006b). Additional observations during construction monitoring for paleontological resources may result in findings that can help to further refine our understanding of the subsurface geology of the Project area.

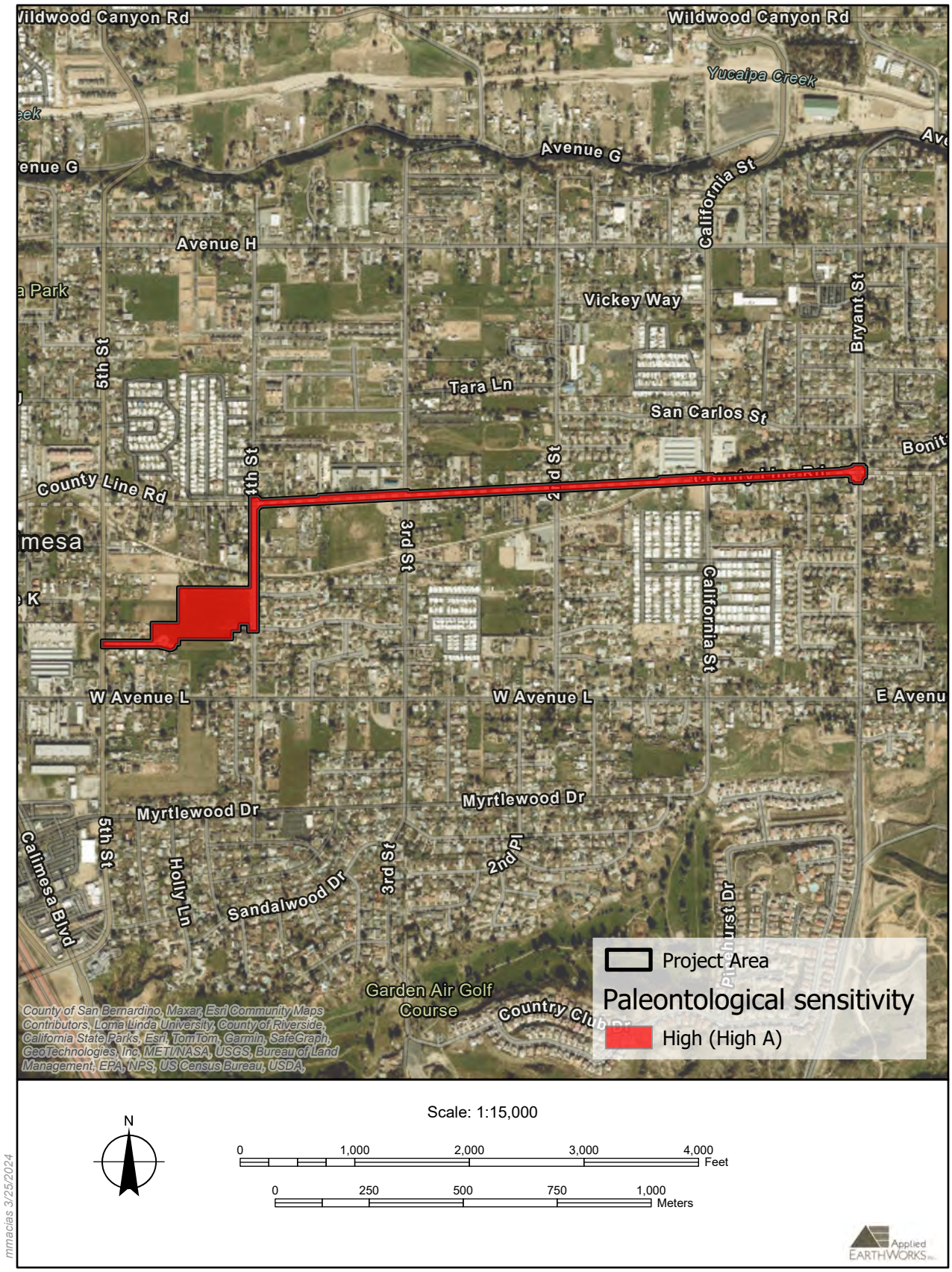

Figure 6-4 Paleontological sensitivity of the Project area.

7
RECOMMENDATIONS

Æ concludes that construction activities that extend below the depth of artificial fill and below road pavement may impact significant paleontological resources throughout the Project area. Æ's desktop studies indicate the Project area has High A Sensitivity for paleontological resources.

Prior to the issuance of grading permits and consistent with applicable policies (County of Riverside, 2015), Æ recommends a PRIMP be prepared by a qualified professional paleontologist (Paleontological Principal Investigator, Project Paleontologist) as defined by mitigation paleontology industry standards (Murphey et al., 2019) and/or the SVP (2010). The PRIMP will specify the steps to be taken to mitigate impacts to paleontological resources. For instance, Worker's Environmental Awareness Program training should be prepared prior to the start of Project-related ground disturbance and presented in person to all field personnel to describe the types of paleontological resources that may be found and the procedures to follow if any are encountered.

The Project-specific PRIMP also will include a monitoring plan that will indicate where construction monitoring should occur and the frequency of required monitoring (i.e., full-time, spot-checks, etc.). In addition to construction monitoring procedures, the monitoring plan also will provide details about fossil collection, analysis, and preparation for permanent curation at an approved repository, such as the WSC. Lastly, the monitoring plan will describe the different reporting standards to be used, such as monitoring with negative findings versus monitoring resulting in fossil discoveries.

8
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APPENDIX A

Qualifications of Key Personnel

AMY L. OLLENDORF

Vice President/Managing Principal/Paleontology Program Manager/Principal Investigator

Areas of Expertise

- Paleontology, mineralogy, and sedimentary geology
- CEQA/NEPA compliance
- Project management

Years of Experience

- 40

Education

Postdoctoral Research Associate, 2006–2007, World Heritage Studies, University of Minnesota

Ph.D., Ancient Studies,1993, University of Minnesota

M.S., Ancient Studies, 1986, University of Minnesota

B.S., Anthropology (with honors) and Geology, 1983, Beloit College

Registrations/Certifications

- Registered Professional Archaeologist #12588
- Licensed Professional Geologist, Minnesota #30084 (6/1998-6/2018, expired)
- Paleontologist Consultants List, Santa Cruz County (2022-present)
- Certified Paleontologist and Archaeologist, Orange County (2020-present)
- Paleontology and Cultural Consultant, Riverside County (2018-present)

Permits/Licenses

BLM - California Statewide Paleontological Resources Use Permit *CA-21-06P*, Principal Investigator.

BLM - Nevada Statewide Paleontological Resources Use Permit *N-090758*, Principal Investigator, Field Director.

Technical Qualifications

Dr. Ollendorf has 40 years of experience in paleontology, paleoecology, environmental compliance, and geoarchaeology at the global, national, tribal, state, and local levels. She meets industry standards for principal investigator in paleontology and she is also Æ's principal investigator on Æ's California and Nevada statewide Paleontological Resource Use Permits for paleontology from the US Bureau of Land Management (BLM).

Dr. Ollendorf has supervised and/or participated in paleontological services, tribal negotiations, and agency coordination throughout her career. She also has managed EISs and EAs. Her project experience includes work in 35 states, including California and other western states, and abroad on a wide range of client projects across many different industry sectors.

During her career, Dr. Ollendorf has written or overseen several hundreds of compliance reports in addition to having published multiple articles in peer-reviewed professional journals and presented to a wide variety of audiences, including professional peers.

CHRISTOPHER SHI

Senior Paleontologist/Project Manager

Areas of Expertise

- Paleontological resource technical and project management
- CEQA/NEPA compliance

Years of Experience

- 15

Education

Ph.D., Geology (studies), UCLA, 2012-2016

M.S., Geology, UCLA, 2011

B.S., Biology, University of Minnesota, Minneapolis, 2006

Registrations/Certifications

- Paleontologist Consultants List, Santa Cruz County (2022-present)
- Certified Paleontologist, Orange County (2020-present)
- Qualified Paleontologist, Riverside County (2019-present)

Permits

- Field Director, California BLM Statewide Paleontological Permit CA-21-06P

Classes/Training

- OSHA Excavation Competent Person Seminar, Mar. 11, 2019
- OSHA Hazardous Waste Operations Worker (HAZWOPER) Training, 40-Hour, January 20-23, 2020 and 8-Hour Refreshers, January 21, 2021, June 10, 2022, and June 20, 2023

Professional Experience

2020–	Senior Paleontologist/Project Manager, Applied EarthWorks, Inc., Pasadena, California.
2018–2020	Associate Paleontologist/Project Manager, Applied EarthWorks, Inc., Pasadena, California.
2016–2018	Paleontological Laboratory and Field Technician, Applied EarthWorks, Inc., Pasadena, California.
2017–2018	Lead Paleontology Monitor, Rincon Consultants, Los Angeles, California.

Technical Qualifications

Mr. Shi is a paleontologist and geologist with 15 years of experience in paleontology, evolutionary biology, mineralogy, and sedimentary geology, and meets the Society of Vertebrate Paleontology's (SVP) standards for a qualified professional paleontologist/project paleontologist/principal investigator. He has a background in plant and invertebrate taphonomy, and his master's thesis focused on the characterization of fossilized Eocene ferns using a novel three-dimensional imaging technique. Additionally, Mr. Shi spent several years working toward a Ph.D. in geology with research focused on the link between the trend in changing seawater chemistry and the evolution of the first animals to develop shells from calcium carbonate during the Cambrian explosion. He has completed several professional publications and presentations throughout his career.

Mr. Shi completes various tasks within the Paleontology Program of Applied EarthWorks. He coordinates and schedules paleontological monitors throughout Æ's 5 offices. In the field, Mr. Shi's responsibilities include stratigraphic analyses, geological and paleontological data collection, bulk-sediment sampling, collection paleontological resources, and documentation of fossil localities. In the lab, Mr. Shi picks microvertebrate fossils, identifies, analyzes, and prepares collected fossils for permanent curation, including jacketing of large vertebrate specimens. Mr. Shi also regularly completes paleontological desktop literature and map reviews and coordinates with various paleontology curators for museum records searches; authors paleontology monitoring plans, inventory and evaluation reports, resource impact management plans, and worker environmental awareness training materials. In the past, Mr. Shi served as Æ's lead monitor on construction monitoring projects for utility, transportation, and residential and commercial development projects.

MICHAEL GEORGE

Paleontological Field/Lab Technician

Areas of Expertise

- Paleontology, mammology, sedimentology, etc.

Years of Experience

- 10 (2014- Present)

Education

B.S., Geology, California State University, Stanislaus, 2018

A.S., Geology, Merced Junior College, 2014

Professional Affiliations

- San Joaquin Valley Paleontology Foundation

Certifications

- Æ Annual Training for Paleontology/Cross-Trained Field Technicians, 2020 through 2024

Professional Experience

2019–	Paleontological Field/Lab Technician, Applied EarthWorks, Inc., Fresno, California
2017–	Lead Paleontologist/Fossil Collections Manager, Fossil Discovery Center of Madera County, Chowchilla, California
2015–2017	Undergraduate Research Assistant to Dr. Julia Sankey (Paleontologist), Geology Department, CSU, Stanislaus, California
2015–2016	Fossil Preparation Assistant to Dr. Julia Sankey (Paleontologist), Geology Department, CSU, Stanislaus, California

Summary of Qualifications

Mr. George has been trained formally as a geologist who specializes in paleontology. To date, he has completed more than 100 hours of field and laboratory training in the Earth sciences and more than 100 hours of fossil preparation, including experience in fossil jacketing. He has experience measuring stratigraphic sections, describing sedimentary geologic units, creating geologic cross-sections, and writing field reports. He completed a geological field school at California State University (CSU), Stanislaus in 2018 which provided him with experience in field mapping and exposure to the geology of the Central Valley, Sierra Nevada Mountains, Mojave Desert, Peninsular Ranges, and Coast Ranges. Mr. George also has basic knowledge of GPS equipment, ArcGIS v.10.4, and AutoCAD v.16.2.

APPENDIX E

Energy Calculations

Table 1 – Total Construction-Related Fuel Consumption

County Line Road Recharge Basin and Turnout Project

Fuel	Consumption	
Diesel		
On-Road Construction Trips[1]	18,447	Gallons
Off-Road Construction Equipment[2]	33,338	Gallons
Diesel Total	**51,785**	**Gallons**
Gasoline		
On-Road Construction Trips[1]	3,106	Gallons
Off-Road Construction Equipment[3]	-	Gallons
Gasoline Total	**3,106**	**Gallons**

Notes:

1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod for construction in 2024 and fleet-average fuel consumption in gallons per mile from EMFAC2021 web based data for Riverside (South Coast). See Table 2 for calculation details.
2. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (HP)-hour, based on SCAQMD CEQA Air Quality Handbook, Table A9-3E.
3. All emissions from off-road construction equipment were assumed to be diesel.

Table 2 – On-Road Construction Trip Estimates

County Line Road Recharge Basin and Turnout Project

Trip Type	Trips	Trip length	Vehicle Miles Traveled (VMT)	Fuel Efficiency	Annual Fuel Usage[1]	
	(trips)	(miles)	(miles)	(mpg)	(Fuel)	(gallon)
Worker[2,3]	4,295	18.5	79,458	26.2	Gasoline	3,106
Vendor[4]	1,620	10.2	16,524	7.5	Diesel	2,276
Hauling[5]	8,976	11	98,736	6.1	Diesel	16,171

Notes:

1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod (See Air Quality/GHG Memo) for construction and fleet-average fuel consumption in gallons per mile from EMFAC2021 web based data for 2024 in Riverside (South Coast).
2. Worker trips were assumed to be 100% gasoline powered vehicles.
3. Per CalEEMod, worker Trips were assumed to be 25% LDA, 50% LDT1, and 25% LDT2.
4. Vendor trips were assumed to be 50% MHDT and 50% HHDT, split evenly between the MHDT and HHDT construction categories.
5. Per CalEEMod, hauling trips were assumed to be 100% HHDT. Trip Length is 11 miles to the nearest landfill.

APPENDIX F.1

Infiltration/Percolation Feasibility Investigation

LOR GEOTECHNICAL GROUP, INC.
Soil Engineering ▲ Geology ▲ Environmental

INFILTRATION/PERCOLATION FEASIBILITY INVESTIGATION PROPOSED RECHARGE BASIN APN 411-150-027 CALIMESA, CALIFORNIA

PROJECT NO. 33109.4
FEBRUARY 21, 2022

Prepared For:

Land Engineering Consultants, Inc.
P.O. Box 541
Calimesa, California 92320

Attention: Mr. Daniel J. Haskins

February 21, 2022

Land Engineering Consultants, Inc.
P.O. Box 541
Calimesa, California 92320

Project No. 33109.4

Attention: Mr. Daniel J. Haskins

Subject: Infiltration/Percolation Feasibility Investigation, Proposed Recharge Basin, APN 411-150-027, Calimesa, California.

Transmitted with this letter is our report entitled Infiltration/Percolation Feasibility Investigation, Proposed Recharge Basin, APN 411-150-027, Calimesa, California, prepared for Land Engineering Consultants, Inc., Project No. 33109.4. This report was based upon a scope of services generally outlined in our Work Authorization Agreement dated January 10, 2022.

The borings placed during this evaluation indicated that the subsurface materials within the currently proposed recharge basin location consist of older alluvial materials comprised predominantly of silty sand and sandy silt to the total depth explored of approximately 50 feet.

It is our understanding that the recharge basin is currently proposed with a bottom elevation that averages 35 to 40 in depth below the existing site elevations. At these depths, a clear water absorption rate of approximately 4.5 gallons per square foot per day (0.3 inches per hour) appears warranted based on the results of our testing. This application rate is a clear water rate. An appropriate factor of safety should be applied in accordance with the San Bernardino County Stormwater Program (CDM Smith Inc., 2013).

Detailed information regarding our testing and our findings are presented within this report.

LOR Geotechnical Group, Inc.

Table of Contents

INTRODUCTION

During February of 2022, LOR Geotechnical Group, Inc., investigated the infiltration/percolation characteristics of the earth materials underlying the location of the proposed San Gorgonio Pass Water Agency recharge basin to be located in the central western portion of APN 411-150-027 in the City of Calimesa, California. The purpose of this study was to establish the absorption characteristics of the earth materials present in that area at a depth of approximately 35 to 40 feet. The scope of our services included: 1) A subsurface field investigation; 2) Falling head percolation testing to assess the absorption properties of the earth materials with the currently proposed recharge basin location; 3) Development of an application rate; 4) Recommendations for design; and 5) Preparation of this report.

The findings of this evaluation, as well as our recommendations, are presented in the following sections of this report. The approximate location of the site is indicated on the accompanying Index Map, presented as Enclosure A-1 within Appendix A.

PROJECT CONSIDERATIONS

The proposed recharge basin is to be located within the west central portion of the currently vacant site. The recharge basin is proposed to be at a depth of approximately 35 to 40 feet below the existing ground elevations, depending upon location. This depth was predetermined as indicated on the attached Site Plan, Enclosure A-2 within Appendix A, and the locations for our testing were provided on the drawing provided for our use. The purpose of this investigation was to determine the infiltration/percolation characteristics of the soil materials at the approximate proposed basin bottom elevations.

FIELD INVESTIGATION

Our field exploration program was conducted on January 27th and 28th 2022 and consisted of drilling six exploratory borings with a track mounted Mobile B-61 drill rig equipped with 8-inch diameter hollow stem augers. Our first exploratory boring, B-1, was not used for testing and was drilled for the purposes of confirming that groundwater was not present at shallow depth below the basin bottom and to confirm continuity of the soil conditions below this elevation. The infiltration/percolation test borings (P-1 through P-5) were drilled to a depth of within approximately 2 feet of the basin bottom elevation and soil samples were obtained at the approximate proposed basin bottom elevation by driving a Standard Penetration Sampler 18 inches into these materials. Logs of our borings are presented as

Enclosures B-1 through B-6 within Appendix B and the approximate locations of our exploratory borings are presented on our Site Plan, Enclosure A-2 within Appendix A.

Logs of the subsurface conditions encountered in the exploratory borings were created by a geologist from this firm. The borings placed during this evaluation indicate that the subsurface materials within the currently proposed recharge basin location consist of a variable thickness but relatively thin layer of fill/topsoil overlying older alluvial materials comprised of silty sand and sandy silt. Groundwater was not encountered within our borings as advanced to a maximum depth of approximately 50 feet below the existing ground surface. Information previously provided by this firm during earlier preliminary geotechnical investigation of the property indicated that groundwater lies at a depth of 150 or more feet below the ground surface (LOR, 2014).

LABORATORY TESTING

Sieve analysis testing was conducted on three representative samples recovered from our Standard Penetration Test samples retrieved from the approximate proposed basin bottom elevation with these results presented graphically on Enclosure C-1 within Appendix C. Quantitative determination of the grain size distribution was performed on the samples in accordance with the Caltrans Standard CT 202 laboratory test procedure. The determination is performed by passing the soil through a series of sieves, and recording the weights of retained particles on each screen.

PERCOLATION TESTING PROGRAM

Following drilling of the test holes on January 27, 2022, a 3-inch diameter, perforated PCV pipe wrapped in filter fabric was placed within the holes and gravel was placed between the outside of the pipe and the hole wall. Percolation testing took place on the following day, January 28, 2022. The holes were filled using a 400-gallon water buffalo equipped with a 1-inch diameter hose. The bottom approximate 5 to 8 feet of the holes were tested to allow for an average wetted depth of approximately 6 feet. Test periods consisted of allowing the water to drop in 30 minute intervals. After each 30 minute reading, each hole was refilled as stated above. Testing was conducted for a total of 6 hours within each test hole.

Applying the Porchet method to convert the percolation rates obtained to an infiltration rate, clear water rates ranged from 0.15 to 0.52 inches per hour. The test results are provided on the attached Falling Head Percolation Test Results, Enclosures D-1 through D-5 in Appendix D.

SUMMARY OF FINDINGS

The borings placed during this evaluation indicate that the subsurface materials at the proposed recharge basin location and depth consist of relatively dense/stiff, fine-grained older alluvial materials within the general depth range for the proposed recharge basin bottom elevation.

The infiltration rate calculated by using the Porchet method to convert the percolation data obtained to an infiltration rate indicates an average clear water value of 0.3 inches per hour. This is a clear water rate and should incorporate an appropriate factor of safety for design.

Groundwater was not encountered within our borings as advanced to a maximum depth of approximately 50 feet below the existing ground surface. Information previously provided indicated that groundwater lies approximately 200 feet below the existing ground surface (LOR, 2014).

RECOMMENDATIONS

Based upon our field investigation and test data, for design of the recharge basin placed at a depth of 35 to 40 feet below the existing grades, an average infiltration rate of 0.3 inches per hour is suggested. This infiltration rate is a clear water rate and an appropriate factor of safety should be applied for design. This factor of safety should be applied as indicated by the San Bernardino County Stormwater Program, Technical Guidance Document for Water Quality Management Plans (WQMP). The design infiltration rate should be adjusted using a factor of safety determined using Worksheet H, with a minimum factor of safety applied of 2.0 (2013).

To ensure continued infiltration capability of the infiltration area, a program to maintain the facilities should be considered. This program should include periodic removal of accumulated materials, which can slow the infiltration and decrease the water quality. Materials to be removed from the catch basin areas typically consist of litter, dead plant matter, and soil fines (silts and clays). Proper maintenance of the system is critical. A maintenance program which meets or exceeds those developed by the local governing agency should be prepared and properly executed. At a minimum, the program should be as outlined in the San Bernardino County Stormwater Program, Technical Guidance Document for Water Quality Management Plans (WQMP).

The program should also incorporate the recommendations presented below and any other jurisdictional agency requirements.

Systems should be set back at least 10 feet from foundations or as required by the design engineer.

During site development, care should be taken to not disturb the area(s) proposed for infiltration as changes in the soil structure could occur resulting in a change of the soil infiltration characteristics.

CLOSURE

This report was prepared using generally accepted geotechnical engineering practices under the direction of a state licensed geotechnical engineer. No warranty, expressed or implied, is made as to conclusions and professional advice included in this report. Any person using this report for bidding or construction purposes should perform such independent investigations as deemed necessary to satisfy themselves as to the surface and subsurface conditions to be encountered and the procedures to be used in the performance of work on this project.

Should conditions be encountered during construction that appear to be different than indicated by this report, please contact this office immediately in order that we may evaluate their effect.

It has been our pleasure in assisting you with this project. We look forward to being of further assistance as construction begins. Should you have any questions regarding this report, please do not hesitate to contact this office at your convenience.

Respectfully submitted,
LOR Geotechnical Group, Inc.

John P. Leuer, GE 2030
President

RMM:JPL\ss

Distribution: Addressee (2) and via email dan@lecincorporated.com

REFERENCES

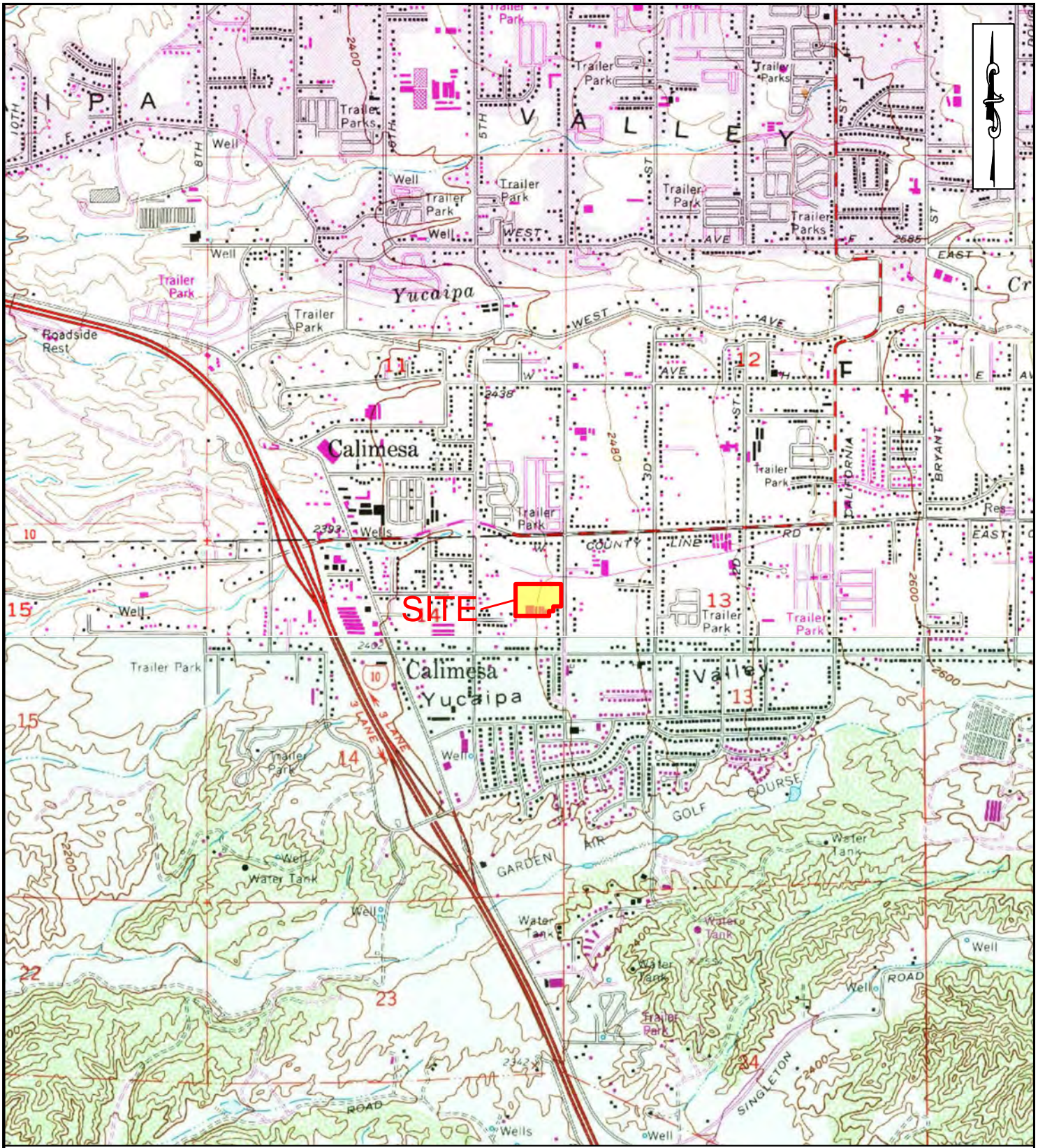
Land Engineering Consultants, Inc., Preliminary Site Development Plan, 30-scale, dated December 2021.

LOR Geotechnical Group, Inc., 2014, Preliminary Geotechnical Investigation and Infiltration Feasibility Investigation, APN's 411-150-012, 411-160-006, and a Portion of 411-160-032, SWC of 4th Street and Robertson Circle, Calimesa, California, Project No. 33109.1, dated September 23, 2014.

CDM Smith Inc., 2013, The County of San Bernardino Areawide Stormwater Program, NPDES No. CAS618036, ORDER No. R8-2010-0036, Technical Guidance Document for Water Quality Management Plans, Effective Date: September 19, 2013.

APPENDIX A

Index Map and Site Plan



INDEX MAP

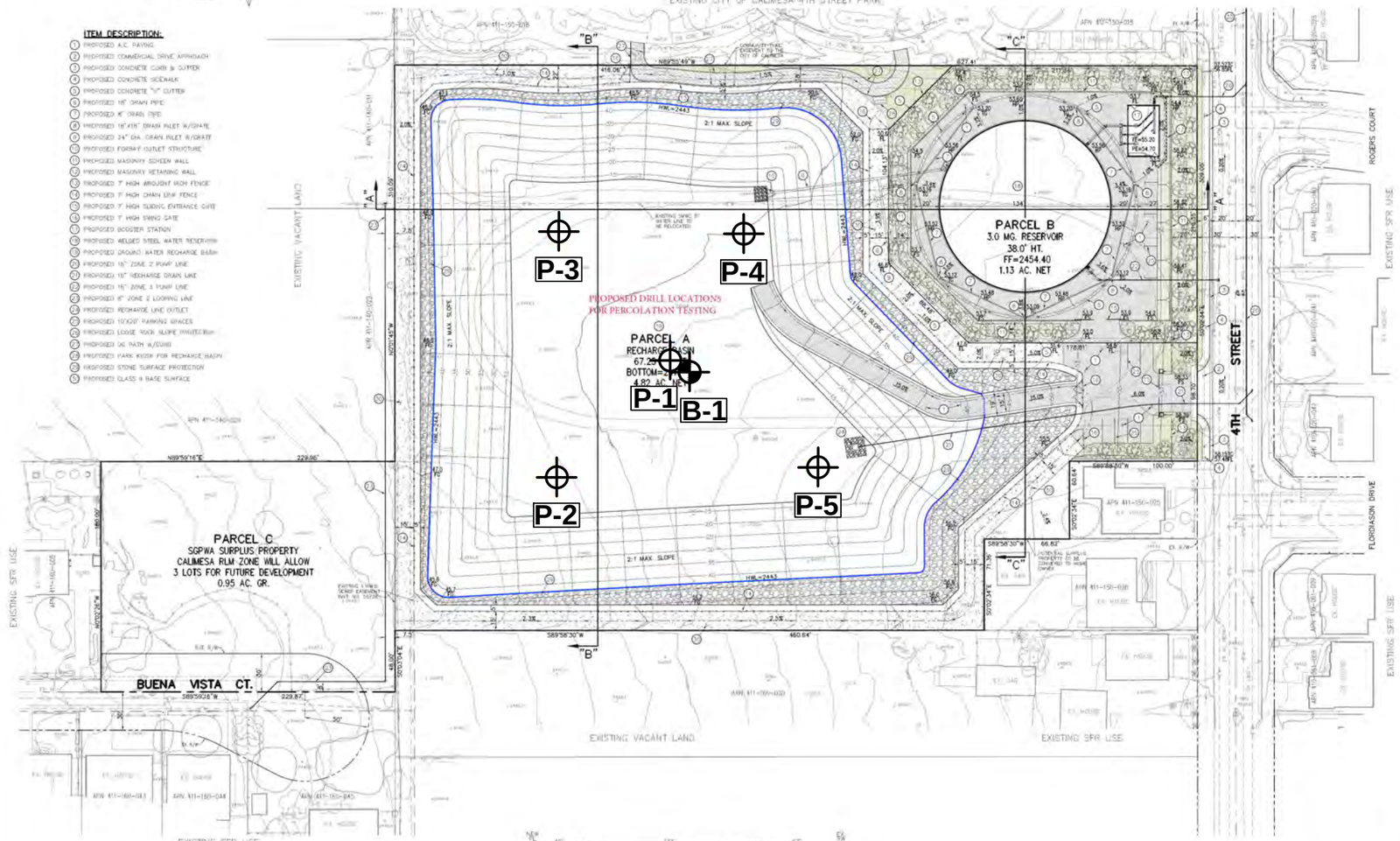
PROJECT:	San Gorgonio Pass Water Agency-Recharge Basin	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants, Inc.	**ENCLOSURE:**	A-1
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	February 2022
		SCALE:	1" ≈ 2,000'

IN THE CITY OF CALIMESA
PROPOSED MULTI-AGENCY BENEFICIAL USE PROJECT
SAN GORGONIO PASS WATER AGENCY - RECHARGE BASIN
SOUTH MESA WATER COMPANY - 3.0 MG RESERVOIR
CITY OF CALIMESA - WATER SUSTAINABILITY EDUCATION TRAIL
APN 411-150-027

Legend
(Locations Approximate)

Map Symbols

- **P-5** - Percolation Test
- **B-1** - Exploratory Boring



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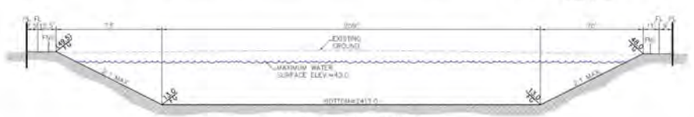


SECTION "B"–"B"
SCALE: 1"=30'

SECTION "C"–"C"
SCALE: 1"=30'

SITE DEVELOPMENT PLAN

BEING A DEVELOPMENT OF A PORTION OF BLOCKS 194, 210, AND 211 OF SUBDIVISION NO. 9 OF PART OF YUCAIPA VALLEY, IN THE CITY OF CALIMESA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 8, PAGE 3 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APPLICANT:
SAN GORGONIA PASS WATER AGENCY
1210 BEAUMONT AVE
BEAUMONT, CA 92223
PH: (951) 845-2577
LEON@47THOFINA.COM

APPLICANT:
SOUTH MESA WATER COMPANY
591 WEST AVENUE L
CALIMESA, CA 92320
PH: (909) 795-2401
CARMSTRONG@SOUTHMESAWATER.COM

ENGINEER/SURVEYOR:
LAND ENGINEERING CONSULTANTS, INC.
P.O. BOX 941, 650 AVENUE K
CALIMESA, CA 92320
PH: (909) 795-8882
STEVE@LECCORPORATE.COM

PROJECT DESCRIPTION:

1. PROPOSED 67.25 AC-FT RECHARGE BASIN FOR SAN GORGONIO PASS WATER AGENCY, PROPOSED 3.0 MG POTABLE WATER RESERVOIR FOR SOUTH MESA WATER COMPANY, PROPOSED WATER SUSTAINABILITY TRAIL FOR THE CITY OF CALIMESA, PROPOSED SURPLUS PROPERTY FOR FUTURE 3 SINGLE FAMILY PARCEL HOME DEVELOPMENT.
2. ASSESSOR'S PARCEL NUMBER: A.P.N. 411-150-027
3. PROPERTY DATA:
   8.90 ACRES NET TO BE DIVIDED INTO 3 PARCELS. THE RESERVOIR SITE IS 1.13 ACRES, THE RECHARGE BASIN SITE IS 4.82 ACRES AND THE RESIDENTIAL SURPLUS PROPERTY IS 0.95 ACRES.
4. GENERAL PLAN LAND USE:
   THIS PROPERTY AND THE SURROUNDING PROPERTIES TO THE WEST, SOUTH AND EAST ARE ALL ZONED RLM–RESIDENTIAL LOW MEDIUM (4–7 DU/AC) AND TO THE NORTH IS ZONED CC–COMMUNITY COMMERCIAL (FAR 00.11).
5. PROPOSED EARTHWORK:
   RAW CUT & EXPORT: ±120,000 C.Y.
6. THIS PROJECT PROPOSES WATER QUALITY DRAINAGE DEVICES TO COLLECT FLOWS FROM IMPERVIOUS AREAS WITH DRAINAGE INLETS CONTAINING WMP DEVICES THAT INCLUDE TRASH BASKETS TO CAPTURE FIRST FLUSH DEBRIS. THE ONSITE FLOWS ARE THEN CONVEYED TOWARD THE RECHARGE BASIN WITH A FOREBAY OUTLET STRUCTURE SIZED TO RETAIN THE REQUIRED SEDIMENT LOAD. THE REQUIRED DESIGN CAPTURE VOLUME FOR WATER QUALITY TREATMENT PURPOSES WILL INFILTRATE BACK INTO THE GROUND THROUGH THE RECHARGE BASIN. THE SIZE OF THE RECHARGE BASIN IS ADEQUATE TO RETAIN THE PEAK STORM FLOWS FROM LEAVING THE SITE.

BASIS OF BEARING:
THE BASIS OF BEARINGS FOR THIS MAP IS THE CENTERLINE OF AVENUE "L" BEING EAST PER RHPB 59/7–9.

BENCH MARK:
NGS DESIGNATION C 38 (PID DX3720)
DISK SET IN TOP OF CONCRETE POST STAMPED "C–38 1965" IN MEDIAN OF, 60.1' E OF THE CL OF THE NORTHBOUND LANES OF CALIMESA BLVD, 41.3' E OF THE E CURB OF THE BLVD, 22.0' S OF THE WESTBOUND CL OF MYRTLEWOOD, 28.1' N OF THE EASTBOUND CL OF MYRTLEWOOD, 3.9' W OF A PALM TREE. ELEVATION = 2467.83

LOCAL UTILITY COMPANIES:

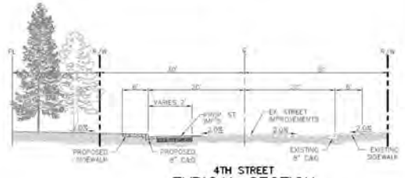
WATER:	POWER:	TELEPHONE:
SOUTH MESA WATER COMPANY 591 WEST AVENUE L CALIMESA, CA 92320 PH: (909) 795-2401	SOUTHERN CALIFORNIA EDISON 247 TENNESSEE STREET REDLANDS, CA 92373 PH: (909) 307-8746	FRONTIER COMMUNICATIONS 15 S. 4TH STREET REDLANDS, CA 92373 PH: (800) 274-0116
SEWER:	**GAS:**	**CABLE:**
YUCAIPA VALLEY WATER DISTRICT 12770 2ND STREET YUCAIPA, CA 92399 PH: (909) 790-3300	SOUTHERN CALIFORNIA GAS 1981 N. LUGONIA AVENUE REDLANDS, CA 92374 PH: (909) 335-7417	SPECTRUM COMMUNICATIONS 1737 CENTRAL AVENUE RIVERSIDE, CA 92504 PH: (909) 559-7341

LEGEND:

- PROPOSED FINISH CONTOUR ELEVATION
- EXISTING CONTOUR ELEVATION
- STREET CENTERLINE
- CURB AND GUTTER
- PROJECT PROPERTY LINE
- DRAINAGE FLOW LINE
- LANDSCAPED AREA
- ASPHALT PAVED AREA
- STONE SLOPE PROTECTION
- STONE SLOPE PROTECTION
- EX. CHAIN LINK FENCE
- EXISTING WATER MAIN
- EXISTING SEWER MAIN
- EXISTING GAS MAIN
- PROPOSED WATER MAIN

FH = FIRE HYDRANT
WM = WATER METER
PP = EXISTING POWER POLE
WVA = EXISTING IRRIGATION VENGES
M = EXISTING WATER METER
S = EXISTING SEWER MAIN
W = EXISTING WATER MAIN
G = EXISTING GAS MAIN
WV = EXISTING WATER VALVE
GV = EXISTING GAS VALVE
SL = EXISTING STREET LIGHT
MH = EXISTING MANHOLE
FG = FINISH GRADE
FS = FINISH SURFACE
FL = FLOW LINE
TC = TOP OF CURB
TG = TOP OF GRATE
INV = INVERT GRAIN
CO = SEWER CLEAN OUT
LT = LIGHTING
TW = TOP OF WALL

SOILS ENGINEER:
SOIL EXPLORATION COMPANY, INC.
7535 JURUPA AVENUE, UNIT C
RIVERSIDE, CA. 92504
PH: (951) 688-7200
SOILEXPLORATION@YAHOO.COM



4TH STREET
TYPICAL SECTION
NO SCALE

NO.	REVISIONS	APP'D	DATE

LEC LAND ENGINEERING CONSULTANTS, INC.
P.O. BOX 941, 650 AVENUE K
CALIMESA, CALIFORNIA 92320
TEL: 909-795- 8882 FAX: 909-795-8818
STEVEN H. RITCHEY, R.C.E. 51129, EXP. 9/30/23
12/14/21 DATE

SITE PLAN

PROJECT NO.:	33109.4
ENCLOSURE:	A-2
DATE:	February 2022
SCALE:	1" ≈ 100'

PROJECT: San Gorgonio Pass Water Agency-Recharge Basin

CLIENT: Land Engineering Consultants, Inc.

LOR GEOTECHNICAL GROUP, INC.

APPENDIX B

Field Investigation Program and Boring Logs

APPENDIX B
FIELD INVESTIGATION

Subsurface Exploration

The site was investigated on January 27, 2022 and consisted of the excavation and logging of 6 exploratory borings to depths ranging from approximately 37.5 to 50 feet below the existing ground surface. The approximate locations of the borings are shown on Enclosures A-2 within Appendix A.

The drilling exploration was conducted using a Mobile B-61 drill rig equipped with 8-inch diameter hollow stem augers. The soils were continuously logged by our geologist who inspected the site, created detailed logs of the borings, obtained soil samples for evaluation and testing, and classified the soils by visual examination in accordance with the Unified Soil Classification System.

Samples of the subsoils were obtained from the approximate recharge basin bottom elevation within each of our test borings. The samples were recovered by using a Standard Penetration Sampler (SPT) and placed in sealed containers for transport to our geotechnical laboratory. The samplers were driven by a 140 pound automatic trip hammer dropped from a height of 30 inches. The number of hammer blows required to drive the sampler into the ground the final 12 inches were recorded and further converted to an equivalent SPT N-value. Factors such as efficiency of the automatic trip hammer used during this investigation (80%), borehole diameter (8"), and rod length at the test depth were considered for further computing of equivalent SPT N-values corrected for field procedures (N60) which are included in the boring logs, Enclosures B-1 through B-6. A Boring Log Legend and Soil Classification Chart are presented on Enclosures B-i and B-ii, respectively.

CONSISTENCY OF SOIL

SANDS

SPT BLOWS	CONSISTENCY
0-4	Very Loose
4-10	Loose
10-30	Medium Dense
30-50	Dense
Over 50	Very Dense

COHESIVE SOILS

SPT BLOWS	CONSISTENCY
0-2	Very Soft
2-4	Soft
4-8	Medium
8-15	Stiff
15-30	Very Stiff
30-60	Hard
Over 60	Very Hard

SAMPLE KEY

Symbol	Description
	INDICATES CALIFORNIA SPLIT SPOON SOIL SAMPLE
	INDICATES BULK SAMPLE
	INDICATES SAND CONE OR NUCLEAR DENSITY TEST
	INDICATES STANDARD PENETRATION TEST (SPT) SOIL SAMPLE

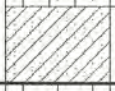
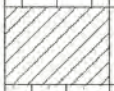
TYPES OF LABORATORY TESTS

1	Atterberg Limits
2	Consolidation
3	Direct Shear (undisturbed or remolded)
4	Expansion Index
5	Hydrometer
6	Organic Content
7	Proctor (4", 6", or Cal216)
8	R-value
9	Sand Equivalent
10	Sieve Analysis
11	Soluble Sulfate Content
12	Swell
13	Wash 200 Sieve

BORING LOG LEGEND

PROJECT:	San Gorgonio Pass Water Agency-Recharge Basin, Calimesa ,California	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants, Inc.	**ENCLOSURE:**	B-i
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	February 2022

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS — MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS — MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

PARTICLE SIZE LIMITS

BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	
12"	3"	3/4"	No . 4	No. 10	No. 40	200	

(U.S. STANDARD SIEVE SIZE)

SOIL CLASSIFICATION CHART

PROJECT:	San Gorgonio Pass Water Agency-Recharge Basin, Calimesa ,California	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants, Inc.	**ENCLOSURE:**	B-ii
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	February 2022

LOG OF BORING B-1

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
0								SM	@ 0 feet, FILL/TOPSOIL: **SILTY SAND, approximately 5% fine gravel with occasional fragments of man-made debris (asphalt, concrete), 5% coarse grained sand, 10% medium grained sand, 40% fine grained sand, 40% silty fines, brown, damp, loose.**
									@ 1 foot, OLDER ALLUVIUM: **SILTY SAND, approximately 5% mostly fine gravel, 10% coarse grained sand, 20% medium grained sand, 30% fine grained sand, 35% silty fines, brown, moist, medium dense.**
5									**below 7± feet, slightly finer grained.**
10									
15									**below 15± feet, sandier, includes occasional small gravels.**
20									**@ 20 to 30 feet, water added.**
25									
30								ML	**@ 30± feet, SANDY SILT, approximately 5% coarse grained sand, 15% medium grained sand, 25% fine grained sand, 55% silty fines, brown to reddish-brown, moist, dense.**
35								SM	**@ 35± feet, SILTY SAND, approximately 5% coarse grained sand, 20% medium grained sand, 30% fine grained sand, 45% silty fines, reddish-brown, damp, dense.**
									@ 38 feet, medium dense to dense, fine to medium grained SILTY SAND with trace of clay.
40									**from 40 to 50 feet, minor variations in silt content locally.**
45									**from 46 to 48 feet, trace to minor amounts of gravel.**
									below 48 feet, finer grained.
50									**END OF BORING @ 50'**
									Fill to 1'
									No groundwater
55									**No bedrock**

TEST DATA

PROJECT:	S.G.P.W.A. Recharge Basin	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants	**ELEVATION:**	--
		DATE DRILLED:	January 27, 2022
LOR GEOTECHNICAL GROUP, INC.		**EQUIPMENT:**	Mobile B-61
		HOLE DIA.: 8"	**ENCLOSURE:** B-1

LOG OF BORING P-1

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
0								SM	@ 0 feet, FILL/TOPSOIL: **SILTY SAND, approximately 5% fine gravel with occasional fragments of man-made debris (asphalt, concrete), 5% coarse grained sand, 10% medium grained sand, 40% fine grained sand, 40% silty fines, brown, damp, loose.**
5									@ 1 foot, OLDER ALLUVIUM: **SILTY SAND, approximately 5% mostly fine gravel, 10% coarse grained sand, 20% medium grained sand, 30% fine grained sand, 35% silty fines, brown, moist, medium dense.**
10									**below 7± feet, slightly finer grained.**
15									**below 15± feet, sandier, includes occasional small gravels.**
20									**@ 20 to 30 feet, water added.**
25									
30								ML	**@ 30± feet, SANDY SILT, approximately 5% coarse grained sand, 15% medium grained sand, 25% fine grained sand, 55% silty fines, brown to reddish-brown, moist, dense.**
35	44							SM	**@ 35± feet, SILTY SAND, approximately 5% coarse grained sand, 20% medium grained sand, 30% fine grained sand, 45% silty fines, reddish-brown, damp, dense.**
40									**@ 38 feet, medium dense to dense, fine to medium grained SILTY SAND with trace of clay.**
45									**END OF BORING @ 41.5'**

Fill to 1'
No groundwater
No bedrock

PROJECT:	S.G.P.W.A. Recharge Basin	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants	**ELEVATION:**	--
LOR **GEOTECHNICAL GROUP, INC.**		**DATE DRILLED:**	January 27, 2022
		EQUIPMENT:	Mobile B-61
		HOLE DIA.: 8"	**ENCLOSURE:** B-2

LOG OF BORING P-2

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
0								SM	@ 0 feet, FILL/TOPSOIL: **SILTY SAND, approximately 5% fine gravel with occasional fragments of man-made debris (asphalt, concrete), 5% coarse grained sand, 10% medium grained sand, 40% fine grained sand, 40% silty fines, brown, damp, loose.**
5									@ 1.5 feet, OLDER ALLUVIUM: **SILTY SAND, approximately 5% fine gravel, 15% coarse grained sand, 20% medium grained sand, 30% fine grained sand, 30% silty fines, brown, moist, loose to medium dense.**
10									**below 7± feet, slightly sandier.**
15									**below 12± feet, finer grained overall, slightly reddish-brown in color.**
20									**below 20 feet, trace of clay included.**
25								ML	**@ 23± feet, SANDY SILT, approximately 5% coarse grained sand, 10% medium grained sand, 30% fine grained sand, 55% silty fines, reddish-brown, damp, stiff.**
30								SM	**@ 30± feet, SILTY SAND, approximately 5% coarse grained sand, 15% medium grained sand, 35% fine grained sand, 45% silty fines, brown to reddish-brown, moist, dense, includes occasional thin SANDY SILT, layers.**
35	37 29								**@ 34.5 feet, sample displays fine to coarse grained SILTY SAND overall with variable silt content.** **@ 36 feet, finer grained, approximately 5% coarse grained sand, 15% medium grained sand, 35% fine grained sand, 45% silty fines.**
40									**END OF BORING @ 37.5'** **Fill to 1.5'** **No groundwater** **No bedrock**
45									

PROJECT:	S.G.P.W.A. Recharge Basin	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants	**ELEVATION:**	--
LOR GEOTECHNICAL GROUP, INC.		**DATE DRILLED:**	January 27, 2022
		EQUIPMENT:	Mobile B-61
		HOLE DIA.: 8"	**ENCLOSURE:** B-3

LOG OF BORING P-3

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
0								SM	@ 0 feet, FILL/TOPSOIL: **SILTY SAND, approximately 5% fine gravel with occasional fragments of man-made debris (asphalt, concrete), 5% coarse grained sand, 10% medium grained sand, 40% fine grained sand, 40% silty fines, brown, damp, loose.**
5									@ 1 foot, OLDER ALLUVIUM: **SILTY SAND, approximately 5% gravel, 15% coarse grained sand, 25% medium grained sand, 30% fine grained sand, 25% silty fines, brown, moist, loose to medium dense.**
10									
15									@ 15 feet, finer grained overall, approximately 5% fine gravel, 10% coarse grained sand, 20% medium grained sand, 35% fine grained sand, 30% silty fines, moist.
20									
25									from 25 to 30 feet, increase in coarse grained sand and fine gravel, less silt.
30									
35	48								@ 34 feet, fine to coarse grained sand with local variations of grain size and amount of silt.
	64							ML	@ 35 feet, SANDY SILT, approximately 5% coarse grained sand, 10% medium grained sand, 30% fine grained sand, 55% silty fines, brown, damp, stiff.
40									END OF BORING @ 37.5'
45									Fill to 1' No groundwater No bedrock

PROJECT:	S.G.P.W.A. Recharge Basin	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants	**ELEVATION:**	--
LOR GEOTECHNICAL GROUP, INC.		**DATE DRILLED:**	January 27, 2022
		EQUIPMENT:	Mobile B-61
		HOLE DIA.: 8"	**ENCLOSURE:** B-4

LOG OF BORING P-4

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
0								SM	@ 0 feet, FILL/TOPSOIL: **SILTY SAND, approximately 5% fine gravel with occasional fragments of man-made debris (asphalt, concrete), 5% coarse grained sand, 10% medium grained sand, 40% fine grained sand, 40% silty fines, brown, damp, loose.**
5									@ 1 foot, OLDER ALLUVIUM: **SILTY SAND, approximately 10% fine gravel and coarse grained sand, 20% medium grained sand, 30% fine grained sand, 40% silty fines, brown, moist, medium dense.**
10									**below 7 feet, includes trace to minor amounts of clay.**
15									**below 12 feet, much sandier, approximately 5% coarse grained sand, 35% medium grained sand, 45% fine grained sand, 15% silty fines, yellowish-brown.**
20									**below 18 feet, siltier, still mostly fine to medium grained.**
25								ML	@ 25 feet, **SANDY SILT, approximately 5% coarse grained sand,15% medium grained sand, 25% fine grained sand, 55% silty fines, yellowish-brown to reddish-brown, moist, stiff.**
30									**below 30 feet, darker (reddish-brown) in color.**
35								SM	@ 35 feet, **SILTY SAND, approximately 5% coarse grained sand, 15% medium grained sand, 35% fine grained sand, 45% silty fines, brown, moist, medium dense.**
	29								@ 38 feet, sample is of fine grained **SILTY SAND, approximately 10% medium grained sand, 45% fine grained sand, 45% silty fines, brown to reddish-brown, moist, medium dense.**
40									**END OF BORING @ 40'**
45									**Fill to 1'** **No groundwater** **No bedrock**

PROJECT:	S.G.P.W.A. Recharge Basin	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants	**ELEVATION:**	--
LOR **GEOTECHNICAL GROUP, INC.**		**DATE DRILLED:**	January 27, 2022
		EQUIPMENT:	Mobile B-61
		HOLE DIA.: 8"	**ENCLOSURE:** B-5

LOG OF BORING P-5

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
	TEST DATA								
0								SM	@ 0 feet, FILL/TOPSOIL: **SILTY SAND, approximately 5% fine gravel with occasional fragments of man-made debris (asphalt, concrete), 5% coarse grained sand, 10% medium grained sand, 40% fine grained sand, 40% silty fines, brown, damp, loose.**
5									@ 2 feet, OLDER ALLUVIUM: **SILTY SAND, approximately 5% fine gravel, 10% coarse grained sand, 20% medium grained sand, 35% fine grained sand, 30% silty fines, brown, moist, medium dense.**
10									@ 12 to 15 feet, includes minor amounts of mostly fine gravel.
15									
20									@ 20± feet, finer grained, includes trace to minor amounts of clay.
25								ML	@ 23± feet, SANDY SILT, approximately 10% medium grained sand, 35% fine grained sand, 55% silty fines, reddish-brown, moist, stiff.
30								ML SM	below 30± feet mostly fine to medium grained SILTY SAND with local fine gravels with occasional layers/lenses of fine grained SANDY SILT.
35									@ 35± feet, water added to aid drilling/flushing of cuttings.
40	41								@ 40 feet, sample consists of approximately 5% medium grained sand, 35% fine grained sand, 60% silt with clay.
45									END OF BORING @ 42' Fill to 2' No groundwater No bedrock

PROJECT:	S.G.P.W.A. Recharge Basin	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants	**ELEVATION:**	--
LOR GEOTECHNICAL GROUP, INC.		**DATE DRILLED:**	January 27, 2022
		EQUIPMENT:	Mobile B-61
		HOLE DIA.: 8"	**ENCLOSURE:** B-6

APPENDIX C

Laboratory Testing Program and Test Results

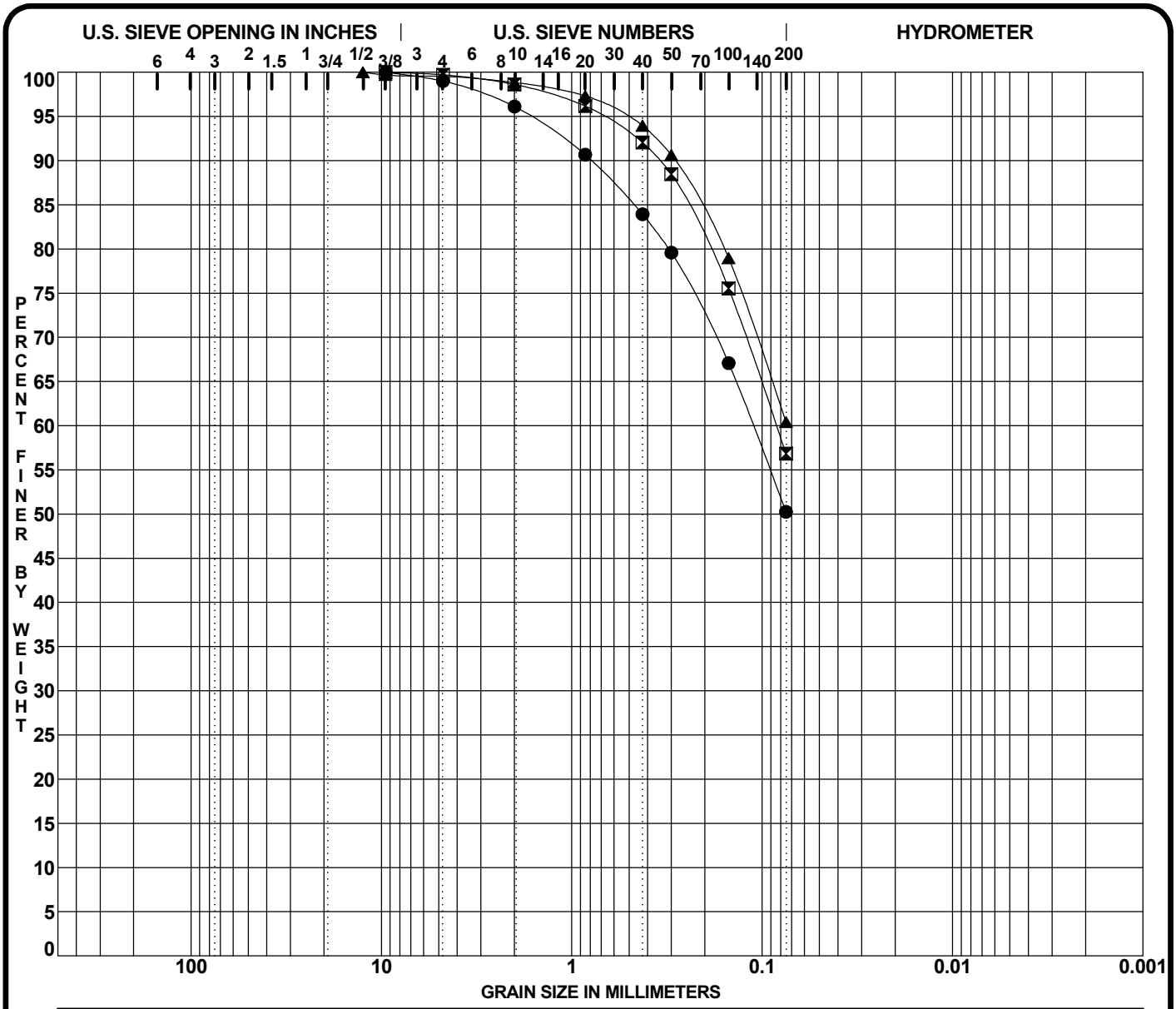
APPENDIX C
LABORATORY TESTING

Laboratory Testing Program - General

Selected soil samples obtained from our borings were tested in our geotechnical laboratory to evaluate the physical properties of the soils affecting the proposed basin. The laboratory testing program performed in conjunction with our investigation was limited to sieve analysis, as outlined below:

Sieve Analysis

A quantitative determination of the grain size distribution was performed for selected samples in accordance with the Caltrans Standard CT 202 laboratory test procedure. The determination is performed by passing the soil through a series of sieves, and recording the weights of retained particles on each screen. The results of the sieve analysis are presented graphically on Enclosure C-1.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Soil Classification	SE	RV	PL	PI	Cc	Cu
●	P-2	@ 36 ft.	(ML) Sandy Silt	--	--				
⊠	P-4	@ 38 ft.	(ML) Sandy Silt	--	--				
▲	P-5	@ 40 ft.	(ML) Sandy Silt	--	--				

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	P-2	@ 36 ft.	9.50	0.11			1.0	48.7	50.3	
⊠	P-4	@ 38 ft.	9.50	0.08			0.3	42.9	56.8	
▲	P-5	@ 40 ft.	12.50				0.5	39.1	60.4	

PROJECT:	S.G.P.W.A. Recharge Basin	**PROJECT NO.:**	33109.4
CLIENT:	Land Engineering Consultants	**DATE:**	February 2022

GRADATION CURVES

LOR GEOTECHNICAL GROUP, INC.

ENCLOSURE: C-1

APPENDIX D

Percolation Test Results

BOREHOLE METHOD PERCOLATION TEST RESULTS

Project:	SGPWA Recharge Basin	Test Date:	January 28, 2022
Project No.:	33109.4	Test Hole No.:	P-1
Soil Classificaiton:	see Log of Boring P-1	Hole Diameter:	8.0 in.
Depth of Test Hole:	40.8 ft.	Date Drilled:	January 27, 2022
Tested By:	Andrew L.		

READING	TIME START	TIME STOP	TIME INTERVAL		TOTAL TIME	INITIAL WATER LEVEL	FINAL WATER LEVEL	INITIAL HOLE DEPTH	FINAL HOLE DEPTH	CHANGE IN WATER LEVEL	AVERAGE WETTED DEPTH	PERCOLATION RATE
			min	hr.	hr.	in.	in.	in.	in.	in.	in.	(min/in)
1	9:26 AM	9:56 AM	30	0.50	0.50	402.00	421.00	489.60	489.00	19.00	77.80	1.6
2	9:56 AM	10:26 AM	30	0.50	1.00	394.00	411.00	489.00	489.00	17.00	86.50	1.8
3	10:26 AM	10:56 AM	30	0.50	1.50	372.00	391.00	489.00	489.00	19.00	107.50	1.6
4	10:56 AM	11:26 AM	30	0.50	2.00	384.00	401.00	489.00	489.00	17.00	96.50	1.8
5	11:26 AM	11:56 AM	30	0.50	2.50	386.00	402.00	489.00	489.00	16.00	95.00	1.9
6	11:56 AM	12:26 PM	30	0.50	3.00	388.00	404.00	489.00	489.00	16.00	93.00	1.9
7	12:26 PM	12:56 PM	30	0.50	3.50	384.00	398.00	489.00	489.00	14.00	98.00	2.1
8	12:56 PM	1:26 PM	30	0.50	4.00	387.00	401.00	489.00	489.00	14.00	95.00	2.1
9	1:26 PM	1:56 PM	30	0.50	4.50	386.00	399.00	489.00	489.00	13.00	96.50	2.3
10	1:56 PM	2:26 PM	30	0.50	5.00	385.00	397.00	489.00	489.00	12.00	98.00	2.5
11	2:26 PM	2:56 PM	30	0.50	5.50	389.00	400.00	489.00	489.00	11.00	94.50	2.7
12	2:56 PM	3:26 PM	30	0.50	6.00	384.00	397.00	489.00	489.00	13.00	98.50	2.3

PERCOLATION RATE TO INFILRATION RATE CONVERSION (Porchet Method):

H_O	105.00	
H_f	92.00	
ΔH	13.00	
H_{avg}	98.50	
I_t	**0.52**	in/hr (clear water rate)

BOREHOLE METHOD PERCOLATION TEST RESULTS

Project:	SGPWA Recharge Basin	Test Date:	January 28, 2022
Project No.:	33109.4	Test Hole No.:	P-2
Soil Classificaiton:	see Log of Boring P-2	Hole Diameter:	8.0 in.
Depth of Test Hole:	35.5 ft.	Date Drilled:	January 27, 2022
Tested By:	Andrew L.		

READING	TIME START	TIME STOP	TIME INTERVAL		TOTAL TIME	INITIAL WATER LEVEL	FINAL WATER LEVEL	INITIAL HOLE DEPTH	FINAL HOLE DEPTH	CHANGE IN WATER LEVEL	AVERAGE WETTED DEPTH	PERCOLATION RATE
			min	hr.	hr.	in.	in.	in.	in.	in.	in.	(min/in)
1	9:30 AM	10:00 AM	30	0.50	0.50	356.00	363.00	426.00	426.00	7.00	66.50	4.3
2	10:00 AM	10:30 AM	30	0.50	1.00	363.00	366.50	426.00	426.00	3.50	61.25	8.6
3	10:30 AM	11:00 AM	30	0.50	1.50	349.00	357.00	426.00	426.00	8.00	73.00	3.8
4	11:00 AM	11:30 AM	30	0.50	2.00	357.00	364.00	426.00	426.00	7.00	65.50	4.3
5	11:30 AM	12:00 PM	30	0.50	2.50	364.00	370.00	426.00	426.00	6.00	59.00	5.0
6	12:00 PM	12:30 PM	30	0.50	3.00	346.00	353.00	426.00	426.00	7.00	76.50	4.3
7	12:30 PM	1:00 PM	30	0.50	3.50	353.00	359.00	426.00	426.00	6.00	70.00	5.0
8	1:00 PM	1:30 PM	30	0.50	4.00	343.00	350.00	426.00	426.00	7.00	79.50	4.3
9	1:30 PM	2:00 PM	30	0.50	4.50	350.00	356.00	426.00	426.00	6.00	73.00	5.0
10	2:00 PM	2:30 PM	30	0.50	5.00	356.00	362.00	426.00	426.00	6.00	67.00	5.0
11	2:30 PM	3:00 PM	30	0.50	5.50	349.00	355.00	426.00	426.00	6.00	74.00	5.0
12	3:00 PM	3:30 PM	30	0.50	6.00	355.00	361.00	426.00	426.00	6.00	68.00	5.0

PERCOLATION RATE TO INFILRATION RATE CONVERSION (Porchet Method):

H_O	71.00	
H_f	65.00	
ΔH	6.00	
H_{avg}	68.00	
I_t	**0.34**	in/hr (clear water rate)

BOREHOLE METHOD PERCOLATION TEST RESULTS

Project:	SGPWA Recharge Basin	Test Date:	January 28, 2022
Project No.:	33109.4	Test Hole No.:	P-3
Soil Classificaiton:	see Log of Boring P-3	Hole Diameter:	8.0 in.
Depth of Test Hole:	37.4 ft.	Date Drilled:	January 27, 2022
Tested By:	Andrew L.		

READING	TIME START	TIME STOP	TIME INTERVAL		TOTAL TIME	INITIAL WATER LEVEL	FINAL WATER LEVEL	INITIAL HOLE DEPTH	FINAL HOLE DEPTH	CHANGE IN WATER LEVEL	AVERAGE WETTED DEPTH	PERCOLATION RATE
			min	hr.	hr.	in.	in.	in.	in.	in.	in.	(min/in)
1	9:34 AM	10:04 AM	30	0.50	0.50	384.00	388.50	448.80	449.00	4.50	62.65	6.7
2	10:04 AM	10:34 AM	30	0.50	1.00	380.00	383.00	449.00	449.00	3.00	67.50	10.0
3	10:34 AM	11:04 AM	30	0.50	1.50	383.00	388.00	449.00	449.00	5.00	63.50	6.0
4	11:04 AM	11:34 AM	30	0.50	2.00	390.00	395.00	449.00	449.00	5.00	56.50	6.0
5	11:34 AM	12:04 PM	30	0.50	2.50	395.00	399.00	449.00	449.00	4.00	52.00	7.5
6	12:04 PM	12:34 PM	30	0.50	3.00	382.00	388.00	449.00	449.00	6.00	64.00	5.0
7	12:34 PM	1:04 PM	30	0.50	3.50	388.00	393.00	449.00	449.00	5.00	58.50	6.0
8	1:04 PM	1:34 PM	30	0.50	4.00	378.00	385.00	449.00	449.00	7.00	67.50	4.3
9	1:34 PM	2:04 PM	30	0.50	4.50	385.00	391.00	449.00	449.00	6.00	61.00	5.0
10	2:04 PM	2:34 PM	30	0.50	5.00	377.00	384.00	449.00	449.00	7.00	68.50	4.3
11	2:34 PM	3:04 PM	30	0.50	5.50	384.00	390.00	449.00	449.00	6.00	62.00	5.0
12	3:04 PM	3:34 PM	30	0.50	6.00	390.00	395.00	449.00	449.00	5.00	56.50	6.0

PERCOLATION RATE TO INFILRATION RATE CONVERSION (Porchet Method):

H_O	59.00	
H_f	54.00	
ΔH	5.00	
H_{avg}	56.50	
I_t	**0.34**	in/hr (clear water rate)

BOREHOLE METHOD PERCOLATION TEST RESULTS

Project:	SGPWA Recharge Basin	Test Date:	January 28, 2022
Project No.:	33109.4	Test Hole No.:	P-4
Soil Classificaiton:	see Log of Boring P-4	Hole Diameter:	8.0 in.
Depth of Test Hole:	39.1 ft.	Date Drilled:	January 27, 2022
Tested By:	Andrew L.		

READING	TIME START	TIME STOP	TIME INTERVAL		TOTAL TIME	INITIAL WATER LEVEL	FINAL WATER LEVEL	INITIAL HOLE DEPTH	FINAL HOLE DEPTH	CHANGE IN WATER LEVEL	AVERAGE WETTED DEPTH	PERCOLATION RATE
			min	hr.	hr.	in.	in.	in.	in.	in.	in.	(min/in)
1	9:38 AM	10:08 AM	30	0.50	0.50	394.00	394.50	469.20	469.00	0.50	74.85	60.0
2	10:08 AM	10:38 AM	30	0.50	1.00	394.50	397.00	469.00	469.00	2.50	73.25	12.0
3	10:38 AM	11:08 AM	30	0.50	1.50	397.00	400.00	469.00	469.00	3.00	70.50	10.0
4	11:08 AM	11:38 AM	30	0.50	2.00	400.00	402.00	469.00	469.00	2.00	68.00	15.0
5	11:38 AM	12:08 PM	30	0.50	2.50	402.00	404.00	469.00	469.00	2.00	66.00	15.0
6	12:08 PM	12:38 PM	30	0.50	3.00	392.00	395.00	469.00	469.00	3.00	75.50	10.0
7	12:38 PM	1:08 PM	30	0.50	3.50	395.00	399.00	469.00	469.00	4.00	72.00	7.5
8	1:08 PM	1:38 PM	30	0.50	4.00	399.00	402.00	469.00	469.00	3.00	68.50	10.0
9	1:38 PM	2:08 PM	30	0.50	4.50	402.00	406.00	469.00	469.00	4.00	65.00	7.5
10	2:08 PM	2:38 PM	30	0.50	5.00	384.00	387.00	469.00	469.00	3.00	83.50	10.0
11	2:38 PM	3:08 PM	30	0.50	5.50	387.00	390.00	469.00	469.00	3.00	80.50	10.0
12	3:08 PM	3:38 PM	30	0.50	6.00	390.00	393.00	469.00	469.00	3.00	77.50	10.0

PERCOLATION RATE TO INFILRATION RATE CONVERSION (Porchet Method):

H_O	79.00	
H_f	76.00	
ΔH	3.00	
H_{avg}	77.50	
I_t	**0.15**	in/hr (clear water rate)

BOREHOLE METHOD PERCOLATION TEST RESULTS

Project:	SGPWA Recharge Basin	Test Date:	January 28, 2022
Project No.:	33109.4	Test Hole No.:	P-5
Soil Classificaiton:	see Log of Boring P-5	Hole Diameter:	8.0 in.
Depth of Test Hole:	42.1 ft.	Date Drilled:	January 27, 2022
Tested By:	Andrew L.		

READING	TIME START	TIME STOP	TIME INTERVAL		TOTAL TIME	INITIAL WATER LEVEL	FINAL WATER LEVEL	INITIAL HOLE DEPTH	FINAL HOLE DEPTH	CHANGE IN WATER LEVEL	AVERAGE WETTED DEPTH	PERCOLATION RATE
			min	hr.	hr.	in.	in.	in.	in.	in.	in.	(min/in)
1	9:42 AM	10:12 AM	30	0.50	0.50	435.00	441.00	505.20	505.00	6.00	67.10	5.0
2	10:12 AM	10:42 AM	30	0.50	1.00	434.00	439.00	505.00	505.00	5.00	68.50	6.0
3	10:42 AM	11:12 AM	30	0.50	1.50	432.00	438.00	505.00	505.00	6.00	70.00	5.0
4	11:12 AM	11:42 AM	30	0.50	2.00	430.00	437.00	505.00	505.00	7.00	71.50	4.3
5	11:42 AM	12:12 PM	30	0.50	2.50	435.00	439.00	505.00	505.00	4.00	68.00	7.5
6	12:12 PM	12:42 PM	30	0.50	3.00	434.00	438.00	505.00	505.00	4.00	69.00	7.5
7	12:42 PM	1:12 PM	30	0.50	3.50	435.00	439.00	505.00	505.00	4.00	68.00	7.5
8	1:12 PM	1:42 PM	30	0.50	4.00	433.00	437.00	505.00	505.00	4.00	70.00	7.5
9	1:42 PM	2:12 PM	30	0.50	4.50	432.00	438.00	505.00	505.00	6.00	70.00	5.0
10	2:12 PM	2:42 PM	30	0.50	5.00	434.00	439.00	505.00	505.00	5.00	68.50	6.0
11	2:42 PM	3:12 PM	30	0.50	5.50	432.00	438.00	505.00	505.00	6.00	70.00	5.0
12	3:12 PM	3:42 PM	30	0.50	6.00	433.00	438.00	505.00	505.00	5.00	69.50	6.0

PERCOLATION RATE TO INFILRATION RATE CONVERSION (Porchet Method):

H_O	72.00	
H_f	67.00	
ΔH	5.00	
H_{avg}	69.50	
I_t	**0.28**	in/hr (clear water rate)

APPENDIX F.2

Preliminary Geotechnical Investigation APN 411-015-027

LOR GEOTECHNICAL GROUP, INC.
Soil Engineering ▲ Geology ▲ Environmental

PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED RESERVOIR NO. 3A
APN 411-150-027, PARCEL B
CALIMESA, CALIFORNIA

PROJECT NO. 33109.13
JUNE 1, 2023

Prepared For:

Land Engineering Consultants, Inc.
P.O. Box 541
Calimesa, California 92320

Attention: Mr. Daniel J. Haskins

6121 Quail Valley Court ▲ Riverside, CA 92507 ▲ (951) 653-1760 ▲ (951) 653-1741 (Fax) ▲ www.lorgeo.com

June 1, 2023

Land Engineering Consultants, Inc.
P.O. Box 541
Calimesa, California 92320

Project No. 33109.13

Attention: Mr. Daniel J. Haskins

Subject: Preliminary Geotechnical Investigation, Proposed Reservoir No. 3A, APN 411-150-027, Parcel B, Calimesa, California.

LOR Geotechnical Group, Inc., is pleased to present this report summarizing our geotechnical investigation for the above referenced project. In summary, it is our opinion that the proposed development is feasible from a geotechnical perspective, provided the recommendations presented in the attached report are incorporated into design and construction.

To provide adequate support for the proposed structure, we recommend that a compacted fill mat be constructed beneath footings and slabs. The compacted fill mat will provide a dense, high-strength soil layer to uniformly distribute the anticipated foundation loads over the underlying soils. All undocumented fill material and any loose alluvial materials should be removed from structural areas and areas to receive engineered compacted fill. The data developed during this investigation indicates that removals on the order of approximately 2 to 5 feet will be required within the currently planned development areas. The given removal depths are preliminary. The actual depths of the removals should be determined during the grading operation by observation and in-place density testing.

Very low expansion potential, moderate corrosion to ferrous metals, and a negligible soluble sulfate content generally characterize the onsite soil materials tested.

LOR Geotechnical Group, Inc.

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INTRODUCTION

During May and June of 2023, a Preliminary Geotechnical Investigation was performed by LOR Geotechnical Group, Inc., for proposed Reservoir No. 3A, within APN 411-150-027, Parcel B, in Calimesa, California. The purpose of this investigation was to conduct a technical evaluation of the geologic setting of the site and to provide geotechnical design recommendations for the proposed improvements. The scope of our services included:

- Review of available geotechnical literature, reports, maps, and agency information pertinent to the study area;
- Interpretation of aerial photographs of the site and surrounding regions dated 1938 through 2023;
- Geologic field reconnaissance mapping to verify the areal distribution of earth units and significance of surficial features as compiled from documents, literature, and reports reviewed;
- A subsurface field investigation to determine the physical soil conditions pertinent to the proposed development;
- Laboratory testing of selected soil samples obtained during the field investigation;
- Development of geotechnical recommendations for site grading and foundation design; and
- Preparation of this report summarizing our findings, and providing conclusions and recommendations for site development.

The approximate location of the site is shown on the attached Index Map, Enclosure A-1, within Appendix A.

To orient our investigation at the site, a site plan prepared by you, and dated August 5, 2022, was provided for our use. This plan shows the existing site conditions as well as the proposed water tank and related improvements. The Site Plan was utilized as a base map for our field investigation and is presented as Enclosure A-2, within Appendix A.

PROJECT CONSIDERATIONS

Review of the Site Plan provided indicates that the proposed circular, 3.0 million gallon, welded steel water reservoir will have a diameter of approximately 134 feet and a height of 38 feet. Asphalt concrete paving is proposed around the reservoir and access areas and a booster station will be located just northeast of the reservoir. Screen walls and landscaping are also proposed.

EXISTING SITE CONDITIONS

The subject site consists of a roughly square, relatively flat, vacant area of land that is approximately 1.13 acres in size. At the time of our investigation, vegetation on the site had just been plowed and the upper approximately 0.5 feet tilled. Aside from an 8-inch waterline that traverses east-west across the central portion, the site is free of man-made improvements.

The City of Calimesa's 4th Street Park is located immediately to the north while vacant, tilled land similar to that at the site extends to the south and west. Across 4th Street, which bounds the site on the east, a tract of single-family homes is present.

PREVIOUS REPORTS

This firm conducted a Preliminary Geotechnical Investigation and Infiltration Feasibility Investigation for APN's 411-150-012, 411-160-006, and a portion of 411-160-032 approximately 9 years ago (LOR, 2014). This property included the subject site of this investigation, as well as areas to the south and west. At that time, residential development of the larger property was scheduled. Our work included geotechnical investigation of the property using backhoe equipment, laboratory testing of representative samples, and preparation of our report which included information pertaining to site geologic and geotechnical conditions as well as conclusions and recommendations pertaining to then proposed residential construction and development.

Last year, this firm conducted an Infiltration/Percolation Feasibility Investigation for proposed construction of a deep infiltration basin within the area just southwest of the site of this investigation (LOR, 2022). This work was conducted utilizing 8-inch diameter by 40 to 50-foot deep borings excavated using hollow-stem auger drilling equipment.

AERIAL PHOTOGRAPH ANALYSIS

The aerial photographs reviewed consisted of vertical aerial photographs of varying scales. We reviewed imagery available from Google Earth (2023) and from Historic Aerials (2023). For over 30 years, from a time period extending from sometime prior to 1938 through 1968, the site was part of a larger citrus grove. Subsequent to removal of the citrus trees in 1968, the site appears to have remained vacant. Our review of the aerial photographs did not reveal any adverse geologic conditions, such as possible faults or landslides, as being present at or within close proximity to the site.

FIELD EXPLORATION PROGRAM

Our subsurface field exploration program was conducted on May 17, 2023 and consisted of drilling 3 exploratory borings with a truck-mounted Mobile B-61 drill rig equipped with 8-inch diameter hollow stem augers. The borings were drilled to depths of approximately 16.5 to 51.5 feet below the existing ground surface. The approximate locations of our exploratory borings are presented on the attached Site Plan, Enclosure A-2 within Appendix A.

The subsurface conditions encountered in the exploratory borings were logged by a geologist from this firm. Relatively undisturbed and bulk samples were obtained at a maximum depth interval of 5 feet and returned to our geotechnical laboratory in sealed containers for further testing and evaluation. A detailed description of the field exploration program and the boring logs are presented in Appendix B.

LABORATORY TESTING PROGRAM

Selected soil samples obtained during the field investigation were subjected to laboratory testing to evaluate their physical and engineering properties. Laboratory testing included in-place moisture content and dry density, laboratory compaction characteristics, direct shear, expansion index, sieve analysis, and corrosion. A detailed description of the laboratory testing program and the test results are presented in Appendix C.

GEOLOGIC CONDITIONS

Regional Geologic Setting

The subject site is located along the junction of two major geomorphic provinces of southern California, or at the end of the Peninsular Ranges geomorphic province where it meets the Transverse Ranges geomorphic province. The Peninsular Ranges include a series of small northwestern trending mountains, separated by wide flat valleys, that extend from the Los Angeles region southeastward into Baja, California. The northern margin of this province butts up against a series of mountain ranges that lie in a transverse direction to the normal northwestern trend, or extend east and west. These mountains include the Santa Monica Mountains, the San Gabriel Mountains, and the San Bernardino Mountains that lie just north and east of the city of Calimesa. In the Calimesa locality, these two major provinces are termed the Peninsular Ranges Block to the south and the San Bernardino Mountains Block to the north and are separated by a series of complex faults

known collectively as the San Andreas Fault Zone. In this tectonically complex area, the Peninsular Ranges Block is generally sliding to the northwest, and partially thrusted underneath the San Bernardino Mountains Block. Therefore, the resulting faults end up with a complex mix of strike slip and thrust faults.

The San Andreas fault, which lies approximately 8 kilometers (5 miles) to the northeast, acts as the boundary between the Peninsular and Transverse Ranges provinces. The next largest active fault in the region, in terms of total movement and anticipated magnitudes, is the San Jacinto fault which lies approximately 9 kilometers (5.5 miles) to the southwest. This fault has similar motions to the San Andreas or right lateral strike slip.

While the trend of the San Andreas fault is predominately a relatively straight line across much of California, in the area just north of Indio, the San Andreas fault has an approximately 15-mile wide step-over zone, stepping to the west and cutting across the San Gorgonio Pass then up to the eastern end of the city of Yucaipa. Beyond this to the northwest, the trend of the fault once again resumes a northwesterly course. This twisting motion has results in a complex tectonic setting in the region between the San Andreas and the San Jacinto, which is not as yet completely understood. However, in general, the result of this geometry is that along the San Gorgonio pass and up into the Yucaipa region the motion changes from right lateral strike slip to thrusting. Within the Calimesa-Yucaipa region, this complex motion has resulted in several types of motions, extension with tectonic activity, including essentially all types of fault motions, from right lateral strike slip, or horizontal, to thrusting and normal, or tensional faulting along a numerous series of smaller fault splays.

One of the largest of these smaller splays is the Banning fault, lying along the base of the San Bernardino Mountains and situated approximately 1,600 feet to the southwest of the site. This fault appears to be the dominate thrust in the western end of the pass, joining the San Gorgonio Pass Fault Zone to the east with the motion changing to strike slip.

The topography of the land in this region has been drastically altered by differing tectonic forces, which have resulted in the uplifting of the region east of the site. The bedrock materials underlying the region of the small hills to the east of Calimesa are composed of a complex mix of metamorphic rocks of gneiss, schist, phyllite, and meta-igneous rocks of meta-diorite to meta-granotoid rocks. These rocks are very similar in composition to the basement rocks of the far southeastern end of the San Bernardino Mountains Block.

As noted above, the closest known potentially active fault in relation to the subject site is the Banning fault, located just under 0.5 kilometer (0.3 miles) to the southwest,

while the much larger, active San Andreas fault is located approximately 8 kilometers (5 miles) to the northeast. A complete listing of the distances to known active faults in relation to the site is given in the Faulting section of this report.

The regional geology as mapped by the U.S.G.S. (Matti et al, 2003) and partial legend is shown on Enclosure A-3, within Appendix A.

Site Geologic Conditions

The site is underlain by alluvial soils. These materials are locally disturbed within the upper 0.5 feet. The earth materials encountered during our investigation are described below and on the enclosed boring logs in Appendix B.

Alluvium: Alluvial materials consisting of sandy silt to silty sand and sand, well graded sand, and silty sand were found to underlie the site as explored to a depth of approximately 51.5 feet. These materials were noted to be brown to reddish-brown in color, damp to moist, and loose to medium dense in the upper 3 to 5 feet, generally showing increasing density with increasing depth. The near surface silty sand to sandy silt soils have a very low potential for expansion.

Groundwater Hydrology

Groundwater was not encountered in any of our exploratory borings, nor was any groundwater seepage observed during our site reconnaissance.

According to information available from the California Department of Water Resources, one groundwater well lies approximately 0.5 mile to the southwest of the site. The depth in groundwater this well (State well No. 02S02W0J002S) was approximately 155 feet during the time period from 1998 through 2010. Another well (State well No. 340108N1170527W001), located approximately 0.6 mile to the north, had recorded depths to groundwater between 206 and 323 feet during the time period from 1926 through 1998.

Historic groundwater information was obtained from the Minimum Depth to Ground Water, Upper Santa Ana River Valley, California, 1973 to 1979 map (Carson and Matti, 1985). This map shows groundwater lied at a depth of approximately 200 feet during that time period in the site area.

Based on the information provided above, groundwater is anticipated to be present at a depth of greater than 150 feet beneath the site.

Surface Runoff

Current surface runoff of precipitation waters across the site is generally as sheet flow to the west.

Mass Movement

Mass movement features such as landslides, rockfalls, or debris flows within the site vicinity are not known to exist and no evidence of mass movement was observed on the site or in the vicinity during our review of aerial photographs or reconnaissance.

Faulting

No active or potentially active faults are known to exist at the subject site. In addition, the subject site does not lie within a current State of California Earthquake Fault Zone (Hart and Bryant, 2010) nor County of Riverside earthquake fault zone (TLMA, 2021).

As previously mentioned, the closest known active fault is the San Andreas fault zone, located approximately 8 kilometers (5.0 miles) to the northeast. In addition, other relatively close active faults include the San Jacinto fault zone, located approximately 9 kilometers (5.5 miles) to the southwest.

The San Andreas fault is considered to be the major tectonic feature of California, separating the Pacific Plate and the North American Plate. While estimates vary, the San Andreas fault is generally thought to have an average slip rate on the order of 24mm/yr and capable of generating large magnitude events on the order of 7.5 or greater.

The San Jacinto fault zone is a sub-parallel branch of the San Andreas fault zone, extending from the northwestern San Bernardino area, southward into the El Centro region. This fault has been active in recent times with several large magnitude events. It is believed that the San Jacinto fault is capable of producing an earthquake magnitude on the order of 6.5 or greater.

Current standards of practice often include a discussion of all potential earthquake sources within a 100 kilometer (62 mile) radius. However, while there are other large earthquake faults within a 100 kilometer (62 mile) radius of the site, none of these are considered as relevant to the site due to their greater distance and/or smaller anticipated magnitudes.

Historical Seismicity

In order to obtain a general perspective of the historical seismicity of the site and surrounding region, a search was conducted for seismic events at and around the area within various radii. This search was conducted utilizing the historical seismic search website of the U.S.G.S. (2023). This website conducts a search of a user selected cataloged seismic events database, within a specified radius and selected magnitudes, and then plots the events onto a map. At the time of our search, the database contained data from January 1, 1932 through May 26, 2023.

In our first search, the general seismicity of the region was analyzed by selecting an epicenter map listing all events of magnitude 4.0 and greater, recorded since 1932, within a 100 kilometer (62 mile) radius of the site, in accordance with guidelines of the California Division of Mines and Geology. This map illustrates the regional seismic history of moderate to large events. As depicted on Enclosure A-4, within Appendix A, the site lies within a relatively active region of southern California.

In the second search, the micro seismicity of the area lying within a 10 kilometer (6.2 miles) radius of the site was examined by selecting an epicenter map listing events on the order of 1.0 and greater since 1978. In addition, only the “A” events, or most accurate events were selected. Caltech indicates the accuracy of the “A” events to be approximately 1 kilometer. The result of this search is a map that presents the seismic history around the area of the site with much greater detail, not permitted on the larger map. The reason for limiting the time period for the events on the detail map is to enhance the accuracy of the map. Events recorded prior to the mid to late1970's are generally considered to be less accurate due to advancements in technology. As depicted on Enclosure A-5, numerous small events have occurred recently in association with the San Andreas fault to the southeast and the Crafton Hills fault zone to the northwest.

In summary, the historical seismicity of the site entails numerous small to medium magnitude earthquake events occurring in the region around the subject site. Any future developments at the subject site should anticipate that moderate to large seismic events could occur very near the site.

Secondary Seismic Hazards

Other secondary seismic hazards generally associated with severe ground shaking during an earthquake include liquefaction, seiches and tsunamis, earthquake induced flooding, landsliding and rockfalls, and seismic-induced settlement.

Liquefaction: The potential for liquefaction generally occurs during strong ground shaking within loose granular sediments where the depth to groundwater is usually less than 50 feet. Groundwater is anticipated to be present at depths of greater than 200 feet and the alluvial soils at depth beneath the site are relatively dense. In addition, the near surface loose soils will be removed and replaced as engineered compacted fill during site grading. Therefore, the potential for liquefaction to occur at the site is considered to be nil.

Seiches/Tsunamis: The potential for the site to be affected by a seiche or tsunami (earthquake generated wave) is considered nil due to absence of any large bodies of water near the site.

Flooding (Water Storage Facility Failure): There are no large water storage facilities located on or near the site which could possibly rupture during an earthquake and affect the site by flooding.

Seismically-Induced Landsliding: Our research, site reconnaissance and review of aerial imagery of the site and vicinity indicates that there are no known or suspected landslides at the site or in close proximity to the site and, therefore, the potential for seismically-induced landslides occurring at the site is considered very low.

Rockfalls: No large, exposed, loose or unrooted boulders that could affect the integrity of the site are present above the site.

Seismically-Induced Settlement: Settlement generally occurs within areas of loose, granular soils with relatively low density. Since the site is underlain by medium dense to dense alluvial materials, and the site is considered non-liquefiable, the potential for settlement is considered to be very low. In addition, the earthwork operations recommended to be conducted during the development of the site will mitigate any near surface loose soil conditions.

SOILS AND SEISMIC DESIGN CRITERIA (California Building Code 2022)

Design requirements for structures can be found within Chapter 16 of the 2022 California Building Code (CBC) based on building type, use, and/or occupancy. The classification of use and occupancy of all proposed structures at the site, shall be the responsibility of the building official.

Site Classification

Chapter 20 of the ASCE 7-16 defines six possible site classes for earth materials that underlie any given site. Bedrock is assigned one of three of these six site classes and these are: A, B, or C. Soil is assigned as C, D, E, or F. Per ASCE 7-16, Site Class A and Site Class B shall be measured on-site or estimated by a geotechnical engineer, engineering geologist or seismologist for competent rock with moderate fracturing and weathering. Site Class A and Site Class B shall not be used if more than 10 feet of soil is between the rock surface and bottom of the spread footing or mat foundation. Site Class C can be used for very dense soil and soft rock with Ñ values greater than 50 blows per foot. Site Class D can be used for stiff soil with Ñ values ranging from 15 to 50 blows per foot. Site Class E is for soft clay soils with Ñ values less than 15 blows per foot. Our investigation, mapping by others, and our experience in the site region indicates that the materials beneath the site are considered Site Class D stiff soils.

CBC Earthquake Design Summary

Earthquake design criteria have been formulated in accordance with the 2022 CBC and ASCE 7-16 for the site based on the results of our investigation to determine the Site Class and an assumed Risk Category II. However, these values should be reviewed and the final design should be performed by a qualified structural engineer familiar with the region. In addition, the building official should confirm the Risk Category utilized in our design (Risk Category II). Our design values are provided below:

CBC 2022/ASCE 7-16 SEISMIC DESIGN SUMMARY* Site Location (USGS WGS84) 33.0018, -117.0524, Risk Category II	
Site Class Definition Chapter 20 ASCE 7	D
$\mathbf{S_s}$ Mapped Spectral Response Acceleration at 0.2s Period	2.336
$\mathbf{S_1}$ Mapped Spectral Response Acceleration at 1s Period	0.841
$\mathbf{S_{MS}}$ Adjusted Spectral Response Acceleration at 0.2s Period	1.869
$\mathbf{S_{M1}}$Adjusted Spectral Response Acceleration at 1s Period	1.689
$\mathbf{S_{DS}}$ Design Spectral Response Acceleration at 0.2s Period	1.246

CBC 2022/ASCE 7-16 SEISMIC DESIGN SUMMARY* Site Location (USGS WGS84) 33.0018, -117.0524, Risk Category II	
S_{D1} Design Spectral Response Acceleration at 1s Period	1.126
F_a Short Period Site Coefficient at 0.2s Period	1.0
F_v Long Period Site Coefficient at 1s Period	1.7
PGA_M Site Modified Peak Ground Acceleration	0.881
Seismic Design Category	E
*See Appendix E for detailed calculations	

CONCLUSIONS

General

This investigation provides a broad overview of the geotechnical and geologic factors which are expected to influence future site planning and development. On the basis of our field investigation and testing program, it is the opinion of LOR Geotechnical Group, Inc., that the proposed development is feasible from a geotechnical standpoint, provided the recommendations presented in this report are incorporated into design and implemented during grading and construction.

The subsurface conditions encountered in our exploratory borings are indicative of the locations explored. The subsurface conditions presented here are not to be construed as being present the same everywhere on the site. If conditions are encountered during the construction of the project which differ significantly from those presented in this report, this firm should be notified immediately so we may assess the impact to the recommendations provided.

Foundation Support

Based upon the field investigation and test data, it is our opinion that the existing, near surface fill soils and the underlying loose to medium dense alluvial soils will not, in their present condition, provide uniform and/or adequate support for the proposed improvements. Left as is, this condition could cause unacceptable differential and/or overall settlements upon application of the anticipated foundation loads.

To provide adequate support for the proposed structural improvements, we recommend that a compacted fill mat be constructed beneath footings and slabs. This compacted fill mat will provide a dense, high-strength soil layer to uniformly distribute the anticipated foundation loads over the underlying soils. In addition, the construction of this compacted fill mat will allow for the removal of any undocumented fill soils that are present within the proposed structural areas. Conventional foundation systems, using either individual spread footings and/or continuous wall footings, will provide adequate support for the anticipated downward and lateral loads when utilized in conjunction with the recommended fill mat.

Soil Expansiveness

Our laboratory testing found the soils tested to have a very low expansion potential. For very low expansive soils, no specialized construction procedures to resist expansive soil activity are necessary. Careful evaluation of on-site soils and any import fill for their expansion potential should be conducted during the grading operation.

Corrosion Screening

Select representative samples from our borings were taken to Project X Corrosion Engineering for full corrosion series testing. Results from soil corrosivity testing completed by Project X Corrosion Engineering are presented within Appendix C.

The corrosivity test results indicate that soluble sulfate concentrations in the samples was less than 0.10 percent by weight. These concentrations indicate an exposure class S0 for sulfate (ACI 318). No special mitigation methods are considered necessary.

The corrosivity test results indicate that chloride concentrations were below 500 ppm. This concentration indicates an exposure class C1 for chloride (ACI 318). Special mitigation measures are not considered necessary.

Soil pH for the samples was slightly acidic. Therefore, the need for specialized design is not anticipated.

Concentrations of ammonium and nitrate indicate the soil may be aggressive towards copper.

Resistivity results for the samples indicate the soil is moderately corrosive to ferrous metals.

LOR Geotechnical does not practice corrosion engineering. If further information concerning the corrosion characteristics, or interpretation of the results submitted herein, is required, then a competent corrosion engineer could be consulted.

Geologic Mitigations

No special geologic recommendation methods are deemed necessary at this time, other than the geotechnical recommendations provided in the following sections.

Seismicity

Seismic ground rupture is generally considered most likely to occur along pre-existing active faults. Since no known faults are known to exist at, or project into the site, the probability of ground surface rupture occurring at the site is considered nil.

Due to the site's close proximity to the faults described above, it is reasonable to expect a strong ground motion seismic event to occur during the lifetime of the proposed development on the site. Large earthquakes could occur on other faults in the general area, but because of their lesser anticipated magnitude and/or greater distance, they are considered less significant than the faults described above from a ground motion standpoint.

The effects of ground shaking anticipated at the subject site should be mitigated by the seismic design requirements and procedures outlined in Chapter 16 of the California Building Code. However, it should be noted that the current building code requires the minimum design to allow a structure to remain standing after a seismic event, in order to allow for safe evacuation. A structure built to code may still sustain damage which might ultimately result in the demolishing of the structure (Larson and Slosson, 1992).

RECOMMENDATIONS

Geologic Recommendations

No special geologic recommendation methods are deemed necessary at this time, other than the geotechnical recommendations provided in the following sections.

General Site Grading

It is imperative that no clearing and/or grading operations be performed without the presence of a qualified geotechnical engineer. An on-site, pre-job meeting with the owner, the developer, the contractor, and geotechnical engineer should occur prior to all grading related operations. Operations undertaken at the site without the geotechnical engineer present may result in exclusions of affected areas from the final compaction report for the project.

Grading of the subject site should be performed in accordance with the following recommendations as well as applicable portions of the California Building Code, and/or applicable local ordinances.

All areas to be graded should be stripped of significant vegetation and other deleterious materials.

It is our recommendation that any existing fills under any proposed flatwork and/or paved areas be removed and replaced with engineered compacted fill. If this is not done, premature structural distress (settlement) of the flatwork and pavement may occur. Any undocumented fills encountered during grading should be completely removed and cleaned of significant deleterious materials. These may then be reused as compacted fill.

While not anticipated based on the lack of previous development at the site, cavities created by removal of undocumented fill soils and/or subsurface obstructions should be thoroughly cleaned of loose soil, organic matter and other deleterious materials, shaped to provide access for construction equipment, and backfilled as recommended in the following Engineered Compacted Fill section of this report.

Initial Site Preparation

Any and all existing uncontrolled fills and any loose/soft native alluvial soils should be removed from structural areas and areas to receive structural fills. The data developed during this investigation indicates that removals on the order of 3 to 5 feet will be required to encounter competent alluvium. However, deeper removals may be required locally. Removals should extend horizontally at a distance equal to the depth of the removals plus proposed fill and at least a minimum of 5 feet. The given removal depths are preliminary. The actual depths of the removals should be determined during the grading operation by observation and in-place density testing. Removals should expose alluvial materials with an in-situ relative compaction of at least 85 percent (ASTM D 1557).

Preparation of Fill Areas

After the removals described above and prior to placing fill, the surfaces of all areas to receive fill should be scarified to a depth of at least 6 inches. The scarified soil should be brought to near optimum moisture content and compacted to a relative compaction of at least 90 percent (ASTM D 1557).

Engineered Compacted Fill

The on-site soils should provide adequate quality fill material, provided they are free from organic matter and other deleterious materials. Unless approved by the geotechnical engineer, rock or similar irreducible material with a maximum dimension greater than 6 inches should not be buried or placed in fills.

Import fill, if required, should be inorganic, non-expansive granular soils free from rocks or lumps greater than 6 inches in maximum dimension. Sources for import fill should be approved by the geotechnical engineer prior to their use.

Fill should be spread in maximum 8-inch uniform, loose lifts, with each lift brought to near optimum moisture content prior to, during and/or after placement, and compacted to a relative compaction of at least 90 percent in accordance with ASTM D 1557.

Based upon the relative compaction of the near surface soils determined during this investigation and the relative compaction anticipated for compacted fill soil, we estimate a compaction shrinkage factor of approximately 10 to 15 percent. Therefore, 1.10 to 1.15 cubic yards of in-place materials would be necessary to yield one cubic yard of properly compacted fill material. Subsidence is anticipated to be 0.10 feet. These values are for estimating purposes only, and are exclusive of losses due to stripping or the removal of subsurface obstructions. These values may vary due to differing conditions within the project boundaries and the limitations of this investigation. Shrinkage should be monitored during construction. If percentages vary, provisions should be made to revise final grades or adjust quantities of borrow or export.

Preparation of Foundation Areas

All footings should rest upon a minimum of 24 inches of properly compacted fill material placed over competent natural alluvial soils. In areas where the required fill thickness is not accomplished by the removal of unsuitable soils, the footing areas should be further subexcavated to a depth of at least 24 inches below the proposed footing base grade, with

the subexcavation extending at least 5 feet beyond the footing lines. The bottom of this excavation should then be scarified to a depth of at least 6 inches, brought to near optimum moisture content, and recompacted to at least 90 percent relative compaction (ASTM D 1557) prior to refilling the excavation to grade as properly compacted fill. Fill areas should not be constructed so as to place structures across any area where the maximum depth of fill to minimum depth of fill is greater than a 3:1 ratio.

To provide adequate support, concrete slabs-on-grade should bear on a minimum of 24 inches of compacted soil. The final pad surfaces should be rolled to provide smooth, dense surfaces upon which to place the concrete.

Short-Term Excavations

Following the California Occupational and Safety Health Act (CAL-OSHA) requirements, excavations 5 feet deep and greater should be sloped or shored. All excavations and shoring should conform to CAL-OSHA requirements.

Short-term excavations 5-feet deep and greater shall conform to Title 8 of the California Code of Regulations, Construction Safety Orders, Section 1504 and 1539 through 1547. Based on our exploratory borings, it appears that Type C soil is the predominant type of soil on the project and all short-term excavations should be based on this type of soil. Deviation from the standard short-term slopes are permitted using Option 4, Design by a Registered Professional Engineer (Section 1541.1).

Short-term slope construction and maintenance are the responsibility of the contractor, and should be a consideration of his methods of operation and the actual soil conditions encountered.

Slope Construction

Preliminary data indicates that cut and fill slopes should be constructed no steeper than two horizontal to one vertical. Fill slopes should be overfilled during construction and then cut back to expose fully compacted soil. A suitable alternative would be to compact the slopes during construction, then roll the final slopes to provide dense, erosion-resistant surfaces.

Slope Protection

Since the site soils are susceptible to erosion by running water, measures should be provided to prevent surface water from flowing over slope faces. Slopes at the project should be planted with a deep rooted ground cover as soon as possible after completion. The use of succulent ground covers such as iceplant or sedum is not recommended. If watering is necessary to sustain plant growth on slopes, the watering system should be monitored to assure proper operation and to prevent over watering.

Foundation Design

If the site is prepared as recommended, the proposed structures may be safely founded on conventional shallow foundations, either individual spread footings and/or continuous wall footings, bearing on a minimum of 24 inches of engineered compacted fill.

All foundations should have a minimum width of 12 inches and should be established a minimum of 12 inches below lowest adjacent grade.

For the minimum width and depth, spread foundations may be designed using an allowable bearing pressure of 2,000 psf. This bearing pressure may be increased by 200 psf for each additional foot of width, and by 500 psf for each additional foot of depth, up to a maximum of 4,000 psf.

The above values are net pressures; therefore, the weight of the foundations and the backfill over the foundations may be neglected when computing dead loads. The values apply to the maximum edge pressure for foundations subjected to eccentric loads or overturning. The recommended pressures apply for the total of dead plus frequently applied live loads, and incorporate a factor of safety of at least 3.0. The allowable bearing pressures may be increased by one-third for temporary wind or seismic loading. The resultant of the combined vertical and lateral seismic loads should act within the middle one-third of the footing width. The maximum calculated edge pressure under the toe of foundations subjected to eccentric loads or overturning should not exceed the increased allowable pressure. Buildings should be setback from slopes in accordance with the California Building Code.

Resistance to lateral loads will be provided by passive earth pressure and base friction. For footings bearing against compacted fill, passive earth pressure may be considered to be developed at a rate of 300 pounds per square foot per foot of depth. Base friction may be computed at 0.30 times the normal load. Base friction and passive earth pressure may be

combined without reduction. These values are for dead load plus live load and may be increased by one-third for wind or seismic loading.

Settlement

Total settlement of individual foundations will vary depending on the width of the foundation and the actual load supported. Maximum settlement of shallow foundations designed and constructed in accordance with the preceding recommendations are estimated to be on the order of 0.5 inch. Differential settlements between adjacent footings should be about one-half of the total settlement. Settlement of all foundations is expected to occur rapidly, primarily as a result of elastic compression of supporting soils as the loads are applied, and should be essentially completed shortly after initial application of the loads.

Building Area Slab-On-Grade

Concrete floor slabs should bear on a minimum of 24 inches of engineered compacted fill placed over competent native materials. The final pad surfaces should be rolled to provide smooth, dense surfaces upon which to place the concrete.

Slabs to receive moisture-sensitive coverings should be provided with a moisture vapor barrier. This barrier may consist of an impermeable membrane. Two inches of sand over the membrane will reduce punctures and aid in obtaining a satisfactory concrete cure. The sand should be moistened just prior to placing of concrete. The slabs should be protected from rapid and excessive moisture loss which could result in slab curling. Careful attention should be given to slab curing procedures, as the site area is subject to large temperature extremes, humidity, and strong winds.

Exterior Flatwork

To provide adequate support, exterior flatwork improvements should rest on a minimum of 12 inches of soil compacted to at least 90 percent (ASTM D 1557).

Flatwork surface should be sloped a minimum of 1 percent away from buildings and slopes, to approved drainage structures.

Wall Pressures

The design of footings for retaining structures should be performed in accordance with the recommendations described earlier under Preparation of Foundation Areas and

Foundation Design. For design of retaining wall footings, the resultant of the applied loads should act in the middle one-third of the footing, and the maximum edge pressure should not exceed the basic allowable value without increase.

For design of retaining walls unrestrained against movement at the top, we recommend an equivalent fluid density of 50 pounds per cubic foot (pcf) be used. This assumes level backfill consisting of recompacted, non-expansive, native soils placed against the structures and with the backcut slope extending upward from the base of the stem at 35 degrees from the vertical or flatter.

To avoid overstressing or excessive tilting during placement of backfill behind walls, heavy compaction equipment should not be allowed within the zone delineated by a 45 degree line extending from the base of the wall to the fill surface.

The backfill directly behind the walls should be compacted using light equipment such as hand operated vibrating plates and rollers. No material larger than 3-inches in diameter should be placed in direct contact with the wall.

Wall pressures should be verified prior to construction, when the actual backfill materials and conditions have been determined. Recommended pressures are applicable only to level, non-expansive, properly drained backfill (with no additional surcharge loadings). If inclined backfills are proposed, this firm should be contacted to develop appropriate active earth pressure parameters. Toe bearing pressure for non-structural walls on soils, not prepared as described earlier under Preparation of Foundation Areas, should not exceed California Building Code values.

Corrosion Protection

Based on the test results, this soil is classified as mildly to moderately corrosive to ferrous metals and potentially aggressive towards copper. The laboratory data above should be reviewed and corrosion design should be completed by a qualified corrosion engineer.

In lieu of corrosion design for metal piping, ABS/PVC may be used. Soil corrosion is not considered a factor with ABS/PVC materials. ABS/PVC is considered suitable for use due to the corrosion potential of the on-site soils with respect to metals.

LOR Geotechnical does not practice corrosion engineering. If further information concerning the corrosion characteristics, or interpretation of the results submitted herein, is required, then a competent corrosion engineer could be consulted.

Preliminary Pavement Design

Testing and design for preliminary on-site pavement was conducted in accordance with the California Highway Design Manual the ACI Guide for Design and Construction of Concrete Parking Lots. Based upon our preliminary sampling and testing and upon assumed Traffic Indices, it appears that the structural sections tabulated below should provide satisfactory pavements for the subject pavement improvements:

AREA	T.I.	DESIGN R-VALUE	PRELIMINARY SECTION
On site vehicular parking with occasional truck traffic (ADTT=10)	5.0	30	0.25' AC / 0.45' AB or 5.0" PCC / 4.0" AB

AC - Asphalt Concrete
AB - Class 2 Aggregate Base
CAB - Crushed Aggregate Base
PCC - Portland Cement Concrete with MR $\geq$ 550 psi

The above structural sections are predicated upon 90 percent relative compaction (ASTM D 1557) of all utility trench backfills and 95 percent relative compaction (ASTM D 1557) of the upper 12 inches of pavement subgrade soils and of any aggregate base utilized. In addition, on-site aggregate base should meet Caltrans specifications for Class 2 Aggregate Base and off-site aggregate base should meet specifications for Crushed Aggregate Base.

The recommended concrete pavement sections should have a minimum modulus of rupture (MR) of 550 pounds per square inch (psi). Transverse joints should be sawcut in the pavement at approximately 12 foot or less intervals within 4 to 6 hours of concrete placement, or preferably sooner. Sawcut depth should be equal to approximately one quarter of slab thickness. Construction joints should be constructed such that adjacent sections butt directly against each other and are keyed into each other. Parallel pavement sections should also be keyed into each other.

It should be noted that all of the above pavement design was based upon the results of preliminary sampling and testing conducted during both this investigation and during our previous geotechnical investigation (LOR, 2014), and should be verified by additional sampling and testing during construction when the actual subgrade soils are exposed.

Construction Monitoring

Post investigative services are an important and necessary continuation of this investigation. Project plans and specifications should be reviewed by the project geotechnical consultant prior to construction to confirm that the intent of the recommendations presented herein have been incorporated into the design. Additional expansion index, R-value, and/or soluble sulfate testing may be required after the site is rough graded.

During construction, sufficient and timely geotechnical observation and testing should be provided to correlate the findings of this investigation with the actual subsurface conditions exposed during construction. Items requiring observation and testing include, but are not necessarily limited to, the following:

1. Site preparation-stripping and removals.

2. Excavations, including approval of the bottom of excavation prior to the processing and preparation of the bottom areas for fill placement.

3. Scarifying and compacting prior to fill placement.

4. Subgrade preparation for pavements and slabs-on-grade.

5. Placement of engineered compacted fill and backfill, including approval of fill materials and the performance of sufficient density tests to evaluate the degree of compaction being achieved.

6. Foundation excavations.

LIMITATIONS

This report contains geotechnical conclusions and recommendations developed solely for use by Land Engineering Consultants, Inc., and their design consultants, for the purposes described earlier. It may not contain sufficient information for other uses or the purposes of other parties. The contents should not be extrapolated to other areas or used for other facilities without consulting LOR Geotechnical Group, Inc.

The recommendations are based on interpretations of the subsurface conditions concluded from information gained from subsurface explorations and a surficial site reconnaissance. The interpretations may differ from actual subsurface conditions, which can vary horizontally and vertically across the site. If conditions are encountered during the construction of the project which differ significantly from those presented in this report, this firm should be notified immediately in order that we may assess the impact to the recommendations provided. Due to possible subsurface variations, all aspects of field construction addressed in this report should be observed and tested by the project geotechnical consultant.

If parties other than LOR Geotechnical Group, Inc., provide construction monitoring services, they must be notified that they will be required to assume responsibility for the geotechnical phase of the project being completed by concurring with the recommendations provided in this report or by providing alternative recommendations.

The report was prepared using generally accepted geotechnical engineering practices under the direction of a state licensed geotechnical engineer. No warranty, expressed or implied, is made as to conclusions and professional advice included in this report. Any persons using this report for bidding or construction purposes should perform such independent investigations as deemed necessary to satisfy themselves as to the surface and subsurface conditions to be encountered and the procedures to be used in the performance of work on this project.

TIME LIMITATIONS

The findings of this report are valid as of this date. Changes in the condition of a property can, however, occur with the passage of time, whether they be due to natural processes or the work of man on this or adjacent properties. In addition, changes in the Standards-of-Practice and/or Governmental Codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by changes beyond our control. Therefore, this report should not be relied upon after a significant amount of time without a review by LOR Geotechnical Group, Inc. verifying the suitability of the conclusions and recommendations.

CLOSURE

It has been a pleasure to assist you with this project. We look forward to being of further assistance to you as construction begins. Should conditions be encountered during construction that appear to be different than indicated by this report, please contact this office immediately in order that we might evaluate their effect.

Should you have any questions regarding this report, please do not hesitate to contact our office at your convenience.

Respectfully submitted,
LOR Geotechnical Group, Inc.

Robert M. Markoff, CEG
Engineering Geologist

John P. Leuer, GE 2030
President

RMM:JPL:ss

Distribution: Addressee (2) and PDF via email dan@lecincorporated.com

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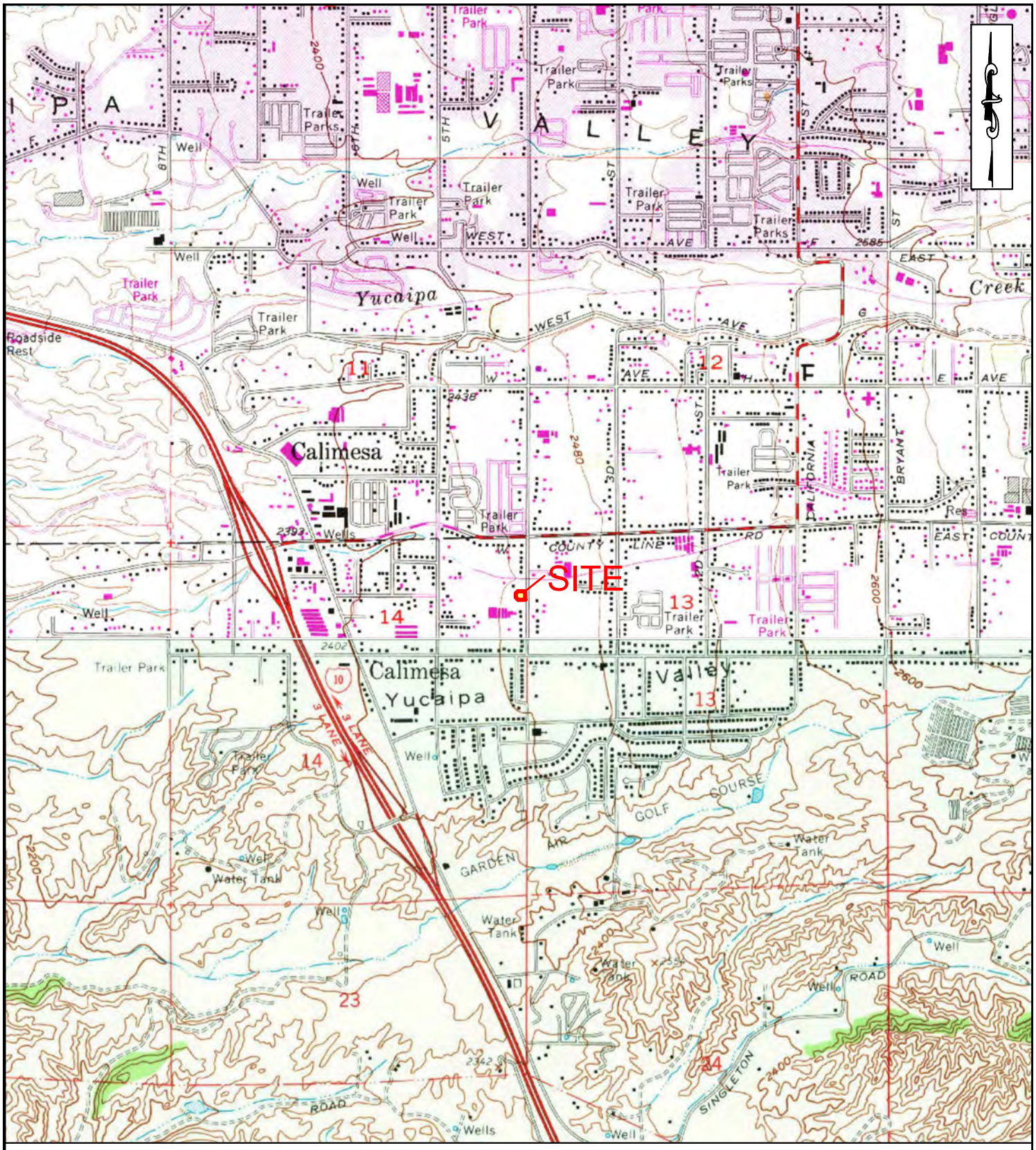
APPENDIX A

Index Map, Site Plan, Regional Geologic Map, and Historical Seismicity Maps



INDEX MAP

PROJECT:	Reservoir No. 3A, Calimesa, California	**PROJECT NO.:**	33109.13
CLIENT:	Land Engineering Consultants, Inc.	**ENCLOSURE:**	A-1
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	June 2023
		SCALE:	1" ≈ 2,000'

IN THE CITY OF CALIMESA

CONDITIONAL USE PERMIT / DEVELOPMENT PLAN REVIEW - S

SOUTH MESA WATER COMPANY - RESERVOIR NO. 3A

APN 411-150-027; PARCEL B

Legend

(Locations Approximate)

Map Symbols

B-3 - Exploratory Boring

SCALE: 1"=30'

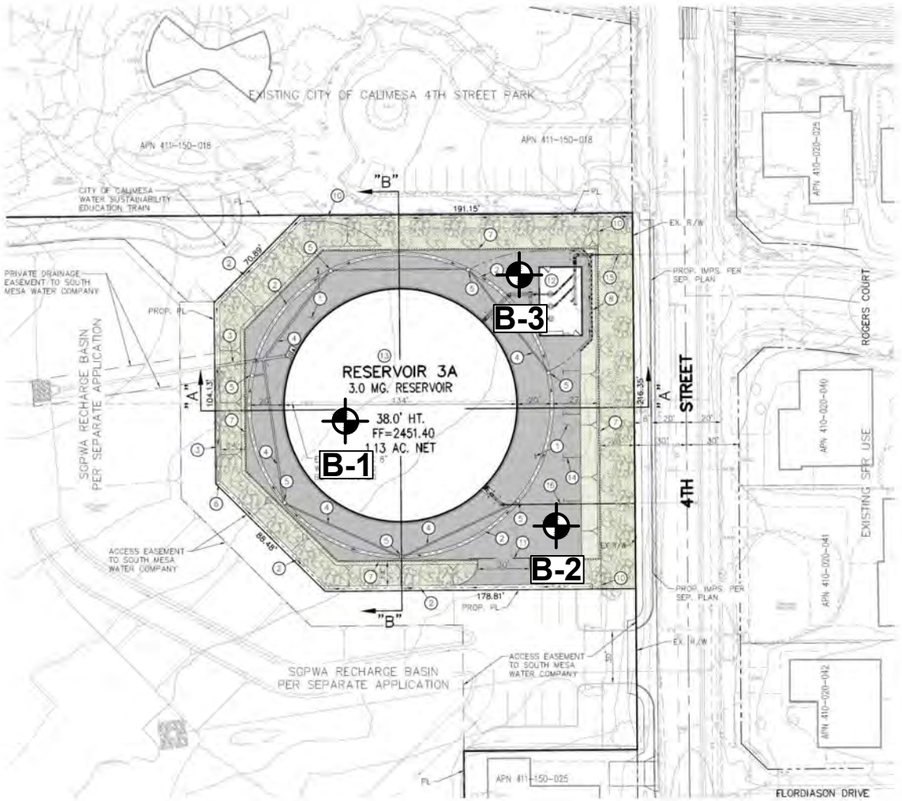
LEGEND:

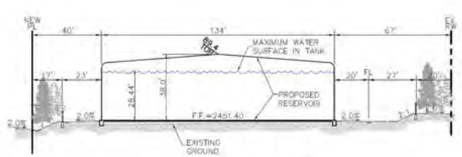
- EXISTING CONTOUR ELEVATION
- STREET CENTERLINE
- CURB AND GUTTER
- PROJECT PROPERTY LINE
- PROPOSED WATER MAIN
- DRAINAGE FLOW LINE
- FENCE LINE
- SCREEN WALL
- RETAINING WALL
- PROPOSED SLOPE
- LANDSCAPED AREA
- ASPHALT PAVED AREA
- EX. CHAIN LINK FENCE
- EXISTING BUILDING LINE
- EXISTING WATER MAIN
- EXISTING SEWER MAIN
- EXISTING GAS MAIN

HWL – HIGH WATER LINE
FH – FIRE HYDRANT
WM – WATER METER
PP – EXISTING POWER POLE
IRR – EXISTING IRRIGATION DEVICES
M – EXISTING WATER METER
MH – EXISTING MANHOLE
WV – EXISTING WATER VALVE
GV – EXISTING GAS VALVE
SL – EXISTING STREET LIGHT

ITEM DESCRIPTION:

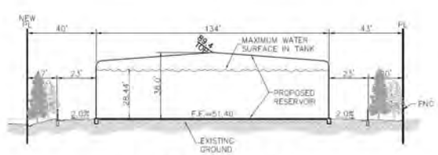
1. PROPOSED A.C. PAVING
2. PROPOSED CONCRETE "V" GUTTER
3. PROPOSED 18" DRAIN PIPE
4. PROPOSED 8" DRAIN PIPE
5. PROPOSED 18"X18" DRAIN INLET W/GRATE
6. PROPOSED 24" DIA. DRAIN INLET W/GRATE
7. PROPOSED MASONRY SCREEN WALL
8. PROPOSED MASONRY RETAINING WALL
9. PROPOSED 7' HIGH WROUGHT IRON FENCE
10. PROPOSED 7' HIGH SLIDING ENTRANCE GATE
11. PROPOSED BOOSTER STATION
12. PROPOSED WELDED STEEL WATER RESERVOIR
13. PROPOSED 10'X20' PARKING SPACES
14. PROPOSED 16" ZONE 2 PUMP LINE
15. PROPOSED 16" ZONE 3 PUMP LINE





SECTION "A"–"A"

SCALE: 1"=30'



SECTION "B"–"B"

SCALE: 1"=30'

NO.	BY	REVISIONS	APPR.	DATE

LEC LAND ENGINEERING CONSULTANTS, INC.

P.O. BOX 541, 650 AVENUE K
CALIMESA, CALIFORNIA 92320
TEL: 909-795- 8882 FAX: 909-795-8818

STEVEN H. RITCHEY — DATE

R.C.E. 51129, EXP. 9/30/23

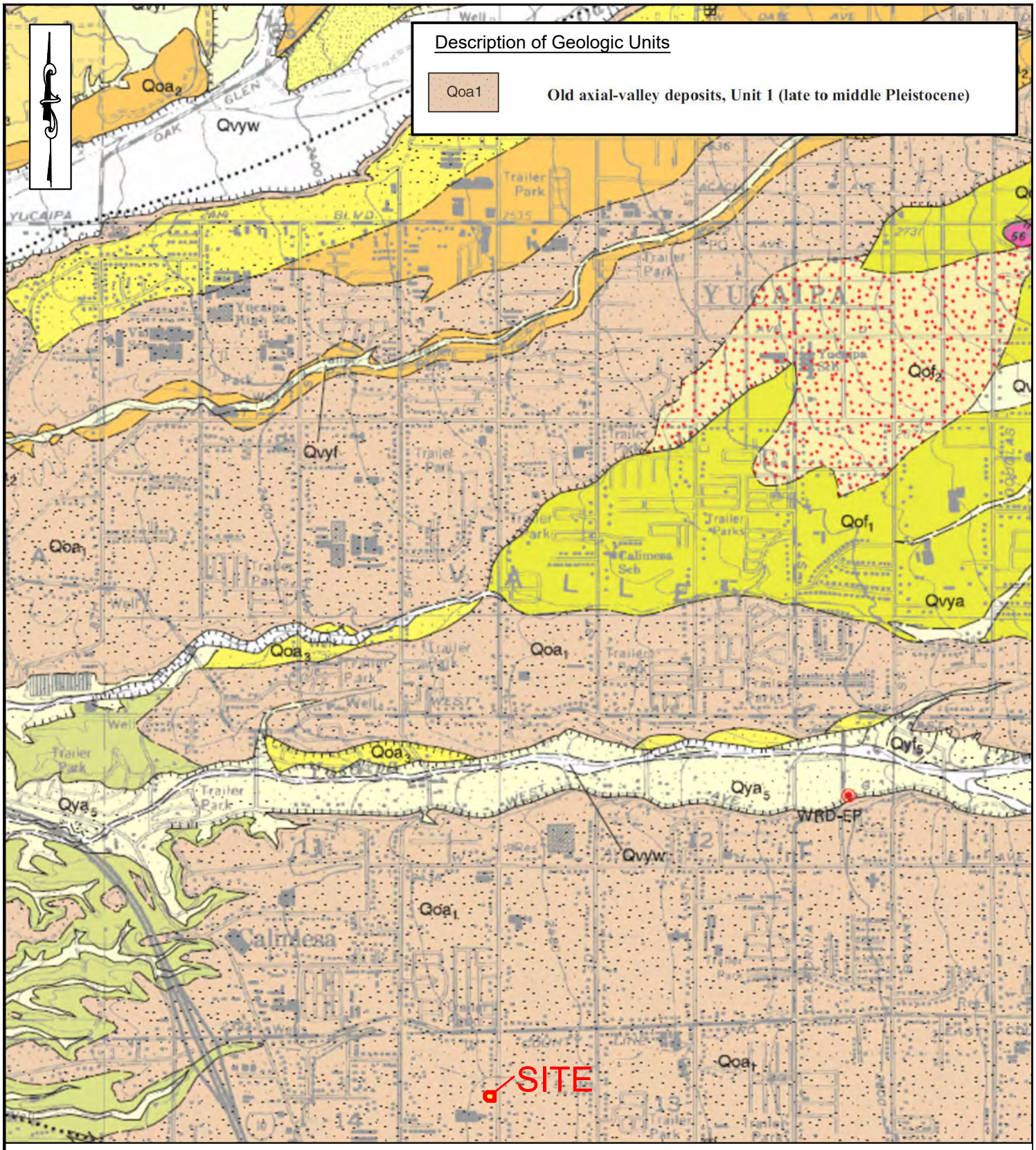
SITE PLAN

PROJECT NO.:	33109.13
ENCLOSURE:	A-2
DATE:	June 2023
SCALE:	1" ≈ 85'

PROJECT: Reservoir No. 3A, Calimesa, California

CLIENT: Land Engineering Consultants, Inc.

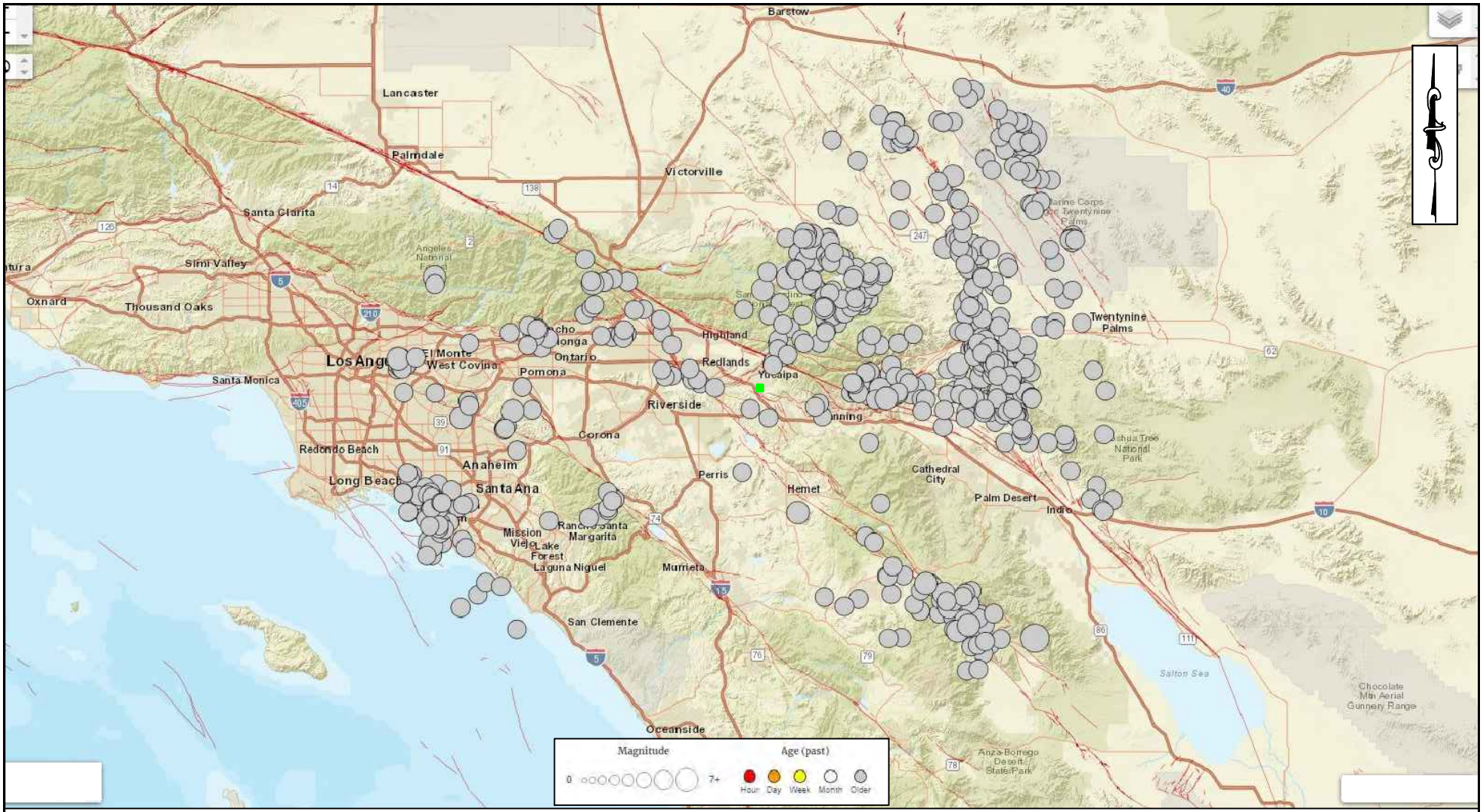
LOR GEOTECHNICAL GROUP, INC.



REGIONAL GEOLOGIC MAP

(Matti, Morton, Cox, Carson, and Yetter, 2003)

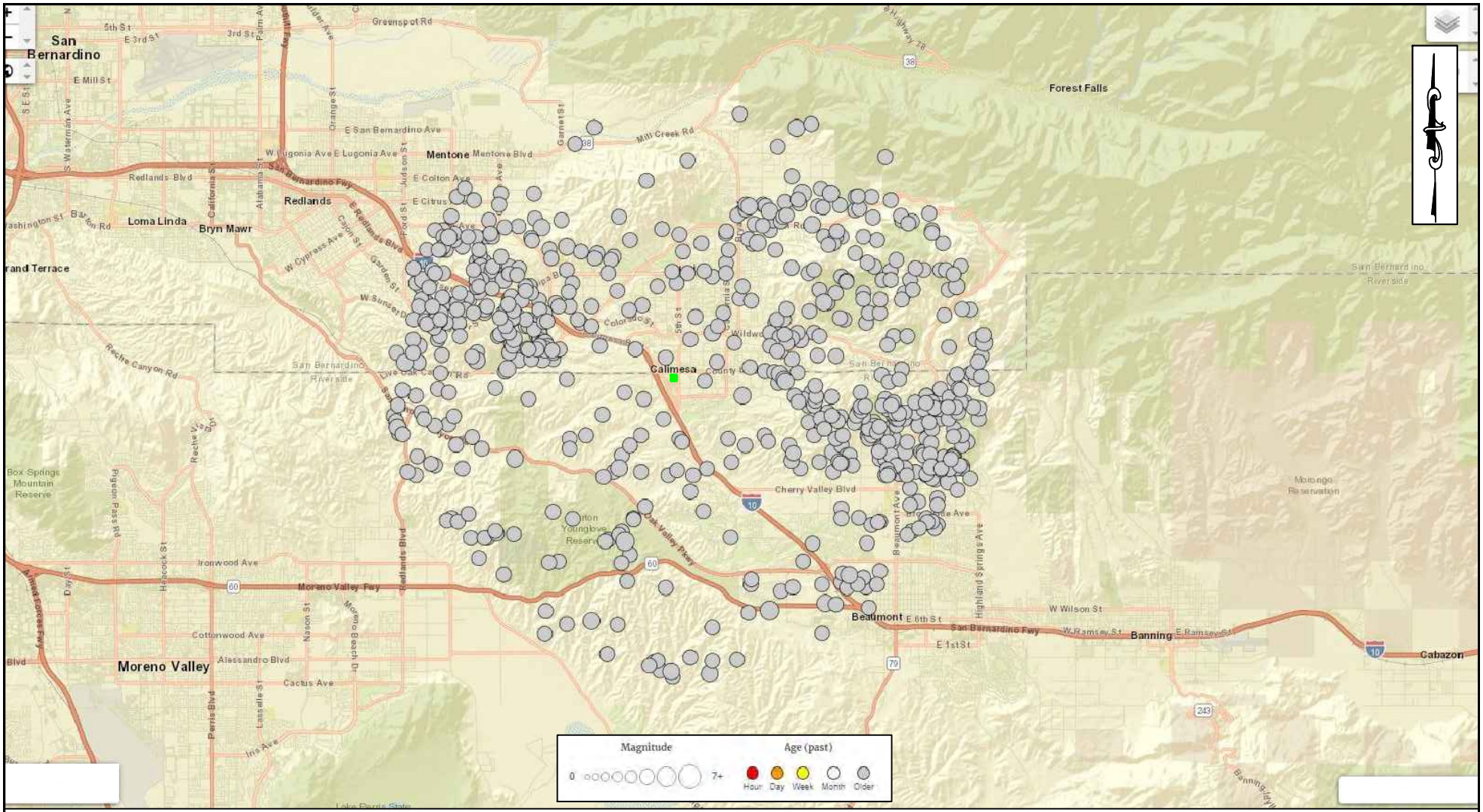
PROJECT:	Reservoir No. 3A, Calimesa, California	**PROJECT NO.:**	33109.13
CLIENT:	Land Engineering Consultants, Inc.	**ENCLOSURE:**	A-3
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	June 2023
		SCALE:	1" ≈ 2,000'



U.S. Geologic Survey (2023) real-time earthquake epicenter map. Plotted are 572 epicenters of instrument-recorded events from 01/01/32 to present (05/30/23) of local magnitude 4+ within a radius of ~62 miles (100 kilometers) of the site. Location accuracy varies. The site is indicated by the green square (■). The selected magnitude corresponds to a threshold intensity value where very light damage potential begins. These events are also generally widely felt by persons. Red lines mark the surface traces of known Quaternary-age faults.

HISTORICAL SEISMICITY MAP - 100km Radius

PROJECT:	Reservoir No. 3A, Calimesa, California	**PROJECT NO.:**	33109.13
CLIENT:	Land Engineering Consultants, Inc.	**ENCLOSURE:**	A-4
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	June 2023
		SCALE:	1" ≈ 40km



U.S. Geologic Survey (2023) real-time earthquake epicenter map. Plotted are 698 epicenters of instrument-recorded events from 01/01/78 to present (05/30/23) of local magnitude 2+ within a radius of ~6.2 miles (10 kilometers) of the site. Location accuracy varies. The site is indicated by the green square (■). The selected magnitude corresponds to a threshold intensity value where very light damage potential begins. These events are also generally widely felt by persons. Red lines mark the surface traces of known Quaternary-age faults.

HISTORICAL SEISMICITY MAP - 10km Radius

PROJECT:	Reservoir No. 3A, Calimesa, California	**PROJECT NO.:**	33109.13
CLIENT:	Land Engineering Consultants, Inc.	**ENCLOSURE:**	A-5
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	June 2023
		SCALE:	1" ≈ 10km

APPENDIX B

Field Investigation Program and Boring Logs

APPENDIX B
FIELD INVESTIGATION

Subsurface Exploration

The site was investigated on May 17, 2023 and consisted of advancing 3 exploratory borings to depths between 16.5 feet and 51.5 feet below the existing ground surface. The approximate locations of the borings are shown on Enclosure A-2, within Appendix A.

The drilling exploration was conducted using a truck-mounted Mobile B-61 drill rig equipped with 8-inch diameter hollow stem augers. The soils were continuously logged by our geologist who inspected the site, created detailed logs of the borings, obtained undisturbed, as well as disturbed, soil samples for evaluation and testing, and classified the soils by visual examination in accordance with the Unified Soil Classification System.

Relatively undisturbed samples of the subsoils were obtained at a maximum interval of 5 feet. The samples were recovered by using a California split barrel sampler of 2.50 inch inside diameter and 3.25 inch outside diameter from the ground surface to the total depth explored. The samplers were driven by a 140 pound automatic trip hammer dropped from a height of 30 inches. The number of hammer blows required to drive the sampler into the ground the final 12 inches were recorded and further converted to an equivalent SPT N-value. Factors such as efficiency of the automatic trip hammer used during this investigation (80%), borehole diameter (8"), and rod length at the test depth were considered for further computing of equivalent SPT N-values corrected for field procedures (N60) which are included in the boring logs, Enclosures B-1 through B-3.

The undisturbed soil samples were retained in brass sample rings of 2.42 inches in diameter and 1.00 inch in height, and placed in sealed containers. Disturbed soil samples were obtained at selected levels within the borings and placed in sealed containers for transport to the laboratory.

All samples obtained were taken to our geotechnical laboratory for storage and testing. Detailed logs of the borings are presented on the enclosed Boring Logs, Enclosures B-1 through B-3. A Boring Log Legend and Soil Classification Chart are presented on Enclosures B-i and B-ii, respectively.

CONSISTENCY OF SOIL

SANDS

SPT BLOWS	CONSISTENCY
0-4	Very Loose
4-10	Loose
10-30	Medium Dense
30-50	Dense
Over 50	Very Dense

COHESIVE SOILS

SPT BLOWS	CONSISTENCY
0-2	Very Soft
2-4	Soft
4-8	Medium
8-15	Stiff
15-30	Very Stiff
30-60	Hard
Over 60	Very Hard

SAMPLE KEY

Symbol	Description
	INDICATES CALIFORNIA SPLIT SPOON SOIL SAMPLE INDICATES BULK SAMPLE INDICATES SAND CONE OR NUCLEAR DENSITY TEST INDICATES STANDARD PENETRATION TEST (SPT) SOIL SAMPLE

TYPES OF LABORATORY TESTS

1	Atterberg Limits
2	Consolidation
3	Direct Shear (undisturbed or remolded)
4	Expansion Index
5	Hydrometer
6	Organic Content
7	Proctor (4", 6", or Cal216)
8	R-value
9	Sand Equivalent
10	Sieve Analysis
11	Soluble Sulfate Content
12	Swell
13	Wash 200 Sieve

BORING LOG LEGEND

PROJECT:	Proposed Reservoir No. 3A,Calimesa, California	**PROJECT NO.:**	33109.13
CLIENT:.	Land Engineering Consultants, Inc.	**ENCLOSURE:**	B-i
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	May 2023

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO.200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

PARTICLE SIZE LIMITS

BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	
12"	3"	3/4"	No . 4	No. 10	No. 40	200	

(U.S. STANDARD SIEVE SIZE)

SOIL CLASSIFICATION CHART

PROJECT:	Proposed Reservoir No. 3A,Calimesa, California	**PROJECT NO.:**	33109.13
CLIENT:	Land Engineering Consultants, Inc.	**ENCLOSURE:**	B-ii
LOR GEOTECHNICAL GROUP, INC.		**DATE:**	May 2023

LOG OF BORING B-1

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
0	13	3, 4, 7, 10	10.0		118.2			ML SM	@ 0 feet, ALUVIUM: SILTY SAND to SANDY SILT, approximately 10% coarse grained sand, 40% fine grained sand, 50% silty fines, brown, moist, loose to medium dense.
5	19		14.6		115.5				below 5 feet, increase in medium to coarse grained sand, less fine grained sand, moist.
10	23		12.9		116.2				@ 10 feet, less medium to coarse grained sand, increase in fine grained sand content.
15	33		7.3		123.1			SM	@ 14± feet, SILTY SAND, approximately 10% coarse grained sand, 20% medium grained sand, 25% fine grained sand, 45% silty fines, reddish-brown, moist, medium dense.
20	37		8.3		110.1				@ 20 feet, approximately 70% fine grained sand, 30% silty fines.
25	43		7.6		120.0			SW	@ 24± feet, WELL GRADED SAND, approximately 15% fine gravel, 20% coarse grained sand, 25% medium grained sand, 35% fine grained sand, 5% silty fines, brown, damp, dense.
30	81 for 11"		5.9		118.9			SM	@ 29 feet, SILTY SAND, approximately 5% coarse grained sand, 20% medium grained sand, 40% fine grained sand, 35% silty fines, brown, damp, dense.
35	51		6.7						@ 35 feet, finer grained.
40	107		4.0						@ 40 feet, approximately 5% medium grained sand, 50% fine grained sand, 45% silty fines.
45	51		11.7						
50	51		13.4					ML	@ 48 feet, SANDY SILT, approximately 5% medium grained sand, 25% fine grained sand, 70% silt and clay, brown, moist, hard.
55									END OF BORING @ 51.5' No groundwater No bedrock

TEST DATA

PROJECT:	Proposed Reservoir No. 3A	**PROJECT NO.:**	33109.13	
CLIENT:	Land Engineering Consultants, Inc.	**ELEVATION:**	--	
LOR GEOTECHNICAL GROUP, INC.		**DATE DRILLED:**	May 17, 2023	
		EQUIPMENT:	Mobile B-61	
		HOLE DIA.: 8"	**ENCLOSURE:**	B-1

LOG OF BORING B-2

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
									TEST DATA
0	20		7.6		117.8			ML SM	@ 0 feet, ALLUVIUM: SILTY SAND to SANDY SILT, approximately 10% medium to coarse grained sand, 40% fine grained sand, 50% silty fines, brown, moist, loosE to medium dense.
5	18		14.0		114.2				below 4 feet, slightly coarser grained.
10	20		13.3		110.5			SM	@ 8 feet, SILTY SAND, approximately 10% coarse grained sand, 20% medium grained sand, 40% fine grained sand, 30% silty fines, brown, damp to moist, medium dense.
15	39		4.6		124.7				@ 15 feet, sandier and coarser grained.
20									END OF BORING @ 16.5' No groundwater No bedrock

PROJECT:	Proposed Reservoir No. 3A	**PROJECT NO.:**	33109.13
CLIENT:	Land Engineering Consultants, Inc.	**ELEVATION:**	--
LOR GEOTECHNICAL GROUP, INC.		**DATE DRILLED:**	May 17, 2023
		EQUIPMENT:	Mobile B-61
		HOLE DIA.: 8"	**ENCLOSURE:** B-2

LOG OF BORING B-3

DEPTH IN FEET	SPT BLOW COUNTS	LABORATORY TESTS	MOISTURE CONTENT (%)		DRY DENSITY (PCF)	SAMPLE TYPE	LITHOLOGY	U.S.C.S.	DESCRIPTION
0	12		10.6		117.0			ML SM	@ 0 feet, ALLUVIUM: SILTY SAND to SANDY SILT, approximately 10% medium grained sand, 40% fine grained sand, 50% silty fines, brown, moist, loose to medium dense.
5	20		11.5		122.5				@ 5 feet, slightly coarser grained, moist.
10	26		10.7		122.0			SM	@ 9± feet, SILTY SAND, approximately 5% coarse grained sand, 25% medium grained sand, 35% fine grained sand, 35% silty fines, brown, moist, medium dense.
15	34		8.0		125.8				@ 15 feet, slightly coarser grained.
20	30		9.0		103.7				@ 20 feet, much finer grained, approximately 70% fine grained sand, 30% silty fines.
									END OF BORING @ 21.5' No groundwater No bedrock

PROJECT:	Proposed Reservoir No. 3A	**PROJECT NO.:**	33109.13
CLIENT:	Land Engineering Consultants, Inc.	**ELEVATION:**	--
LOR GEOTECHNICAL GROUP, INC.		**DATE DRILLED:**	May 17, 2023
		EQUIPMENT:	Mobile B-61
		HOLE DIA.: 8"	**ENCLOSURE:** B-3

APPENDIX C

Laboratory Testing Program and Test Results

APPENDIX C
LABORATORY TESTING

General

Selected soil samples obtained from our borings were tested in our geotechnical laboratory to evaluate the physical properties of the soils affecting foundation design and construction procedures. The laboratory testing program performed in conjunction with our investigation included in-place moisture content and dry density, laboratory compaction characteristics, direct shear, expansion index, sieve analysis, and corrosion. Descriptions of the laboratory tests are presented in the following paragraphs:

Moisture Density Tests

The moisture content and dry density information provides an indirect measure of soil consistency for each stratum, and can also provide a correlation between soils on this site. The dry unit weight and field moisture content were determined for selected undisturbed samples, in accordance with ASTM D 2922 and ASTM D 2216, respectively, and the results are shown on the Boring Logs, Enclosures B-1 through B-3 for convenient correlation with the soil profile.

Laboratory Compaction

Selected soil samples were tested in the laboratory to determine compaction characteristics using the ASTM D 1557 compaction test method. The results are presented in the following table:

LABORATORY COMPACTION				
Boring Number	**Sample Depth (feet)**	**Soil Description (U.S.G.S.)**	**Maximum Dry Density (pcf)**	**Optimum Moisture Content (percent)**
B-1	1-4	(SM/ML) Silty Sand to Sandy Silt	132.0	9.0

Direct Shear Tests

Shear tests are performed with a direct shear machine in general accordance with ASTM D 3080 at a constant rate-of-strain (usually 0.04 inches/minute). The machine is designed to test a sample partially extruded from a sample ring in single shear. Samples are tested at varying normal loads in order to evaluate the shear strength parameters, angle of internal friction and cohesion. Samples are tested in a remolded condition (90 percent relative compaction per ASTM D 1557) and soaked, to represented the worse case conditions expected in the field.

The results of the shear tests are presented in the following table:

DIRECT SHEAR TESTS				
Boring Number	**Sample Depth (feet)**	**Soil Description (U.S.G.S.)**	**Angle of Internal Friction (degrees)**	**Apparent Cohesion (psf)**
B-1	1-4	(SM/ML) Silty Sand to Sandy Silt	28	150

Expansion Index Tests

Remolded samples are tested to determine their expansion potential in accordance with the Expansion Index (EI) test. The test is performed in accordance with the Uniform Building Code Standard 18-2. The test results are presented in the following table:

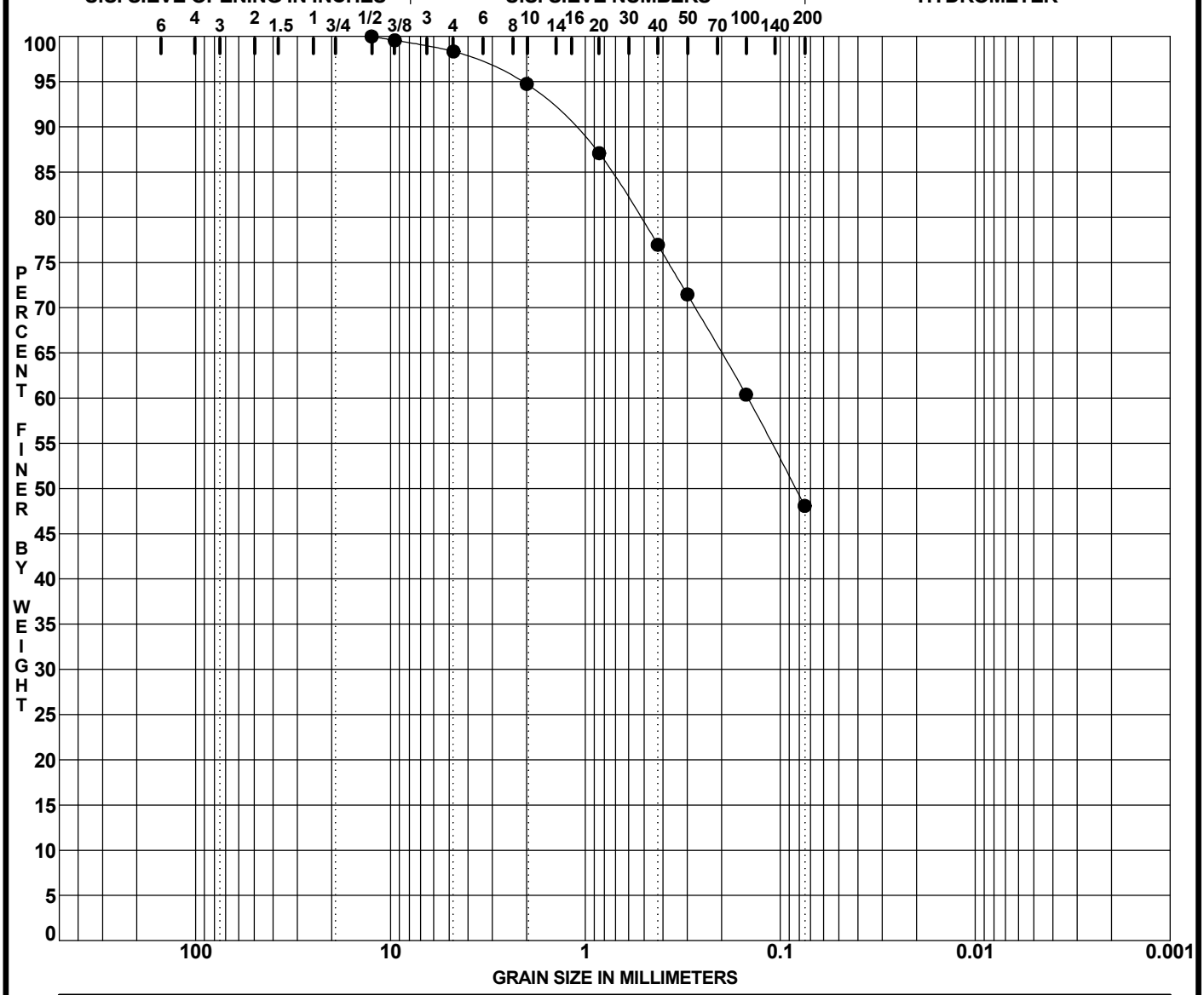
EXPANSION INDEX TESTS				
Boring Number	**Sample Depth (feet)**	**Soil Description (U.S.C.S.)**	**Expansion Index (EI)**	**Expansion Potential**
B-1	1-4	(SM/ML) Silty Sand to Sandy Silt	4	Very Low
Expansion Index:	0-20 Very low	21-50 Low	51-90 Medium	91-130 High

Sieve Analysis

A quantitative determination of the grain size distribution was performed for selected samples in accordance with the ASTM D 422 laboratory test procedure. The determination is performed by passing the soil through a series of sieves, and recording the weights of retained particles on each screen. The results of the sieve analyses are presented graphically on Enclosure C-1.

Corrosion

Corrosion testing was conducted by our subconsultant, Project X Corrosion Engineering. Test results are enclosed.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Soil Classification	SE	RV	PL	PI	Cc	Cu
● B-1	@ 1-4'	(SM) Silty Sand	--	--				

Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-1	@ 1-4'	12.50	0.15			1.7	50.3	48.1	

PROJECT:	Proposed Reservoir No. 3A	**PROJECT NO.:**	33109.13
CLIENT:	Land Engineering Consultants, Inc.	**DATE:**	May 2023

GRADATION CURVES

LOR GEOTECHNICAL GROUP, INC.

ENCLOSURE: C-1

Results Only Soil Testing for Reservoir No. 3A

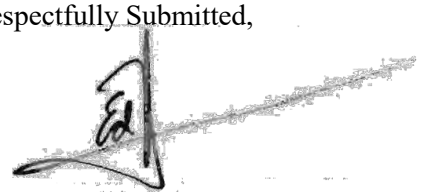
May 24, 2023

Prepared for:

Robb Markoff
LOR Geotechnical
6121 Quail Valley Ct
Riverside, CA
rmarkoff@lorgeo.com

Project X Job#: S230522D
Client Job or PO#: 33109.13

Respectfully Submitted,



Eduardo Hernandez, M.Sc., P.E.
Sr. Corrosion Consultant
NACE Corrosion Technologist #16592
Professional Engineer
California No. M37102
ehernandez@projectxcorrosion.com

Soil Analysis Lab Results

Client: LOR Geotechnical
Job Name: Reservoir No. 3A
Client Job Number: 33109.13
Project X Job Number: S230522D
May 24, 2023

	Method	ASTM D4327		ASTM D4327		ASTM G187		ASTM G51	ASTM G200	SM 4500-D	ASTM D4327	ASTM D6919	ASTM D6919	ASTM D6919	ASTM D6919	ASTM D6919	ASTM D4327	ASTM D4327
Bore# / Description	**Depth**	**Sulfates** SO_4^{2-}		**Chlorides** Cl^-		**Resistivity** As Rec'd | Minimum		**pH**	**Redox**	**Sulfide** S^{2-}	**Nitrate** NO_3^-	**Ammonium** NH_4^+	**Lithium** Li^+	**Sodium** Na^+	**Potassium** K^+	**Magnesium** Mg^{2+}	**Calcium** Ca^{2+}	**Fluoride** F_2^{--}	**Phosphate** PO_4^{3-}
	(ft)	(mg/kg)	(wt%)	(mg/kg)	(wt%)	(Ohm-cm)	(Ohm-cm)		(mV)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BB-1 B-1 (ML) Sandy silt	1-4	29.0	0.0029	22.9	0.0023	28,810	9,380	6.2	107	2.3	10.6	26.7	ND	39.1	10.4	38.2	126.1	3.8	15.1

Cations and Anions, except Sulfide and Bicarbonate, tested with Ion Chromatography
mg/kg = milligrams per kilogram (parts per million) of dry soil weight
ND = 0 = Not Detected | NT = Not Tested | Unk = Unknown
Chemical Analysis performed on 1:3 Soil-To-Water extract
PPM = mg/kg (soil) = mg/L (Liquid)

Note: Sometimes a bad sulfate hit is a contaminated spot. Typical fertilizers are Potassium chloride, ammonium sulfate or ammonium sulfate nitrate (ASN). So this is another reason why testing full corrosion series is good because we then have the data to see if those other ingredients are present meaning the soil sample is just fertilizer-contaminated soil. This can happen often when the soil samples collected are simply surface scoops which is why it's best to dig in a foot, throw away the top and test the deeper stuff. Dairy farms are also notorious for these items.

Project X
Corrosion Engineering
Corrosion Control · Soil, Water, and Metallurgy Lab

Lab Request Sheet Chain of Custody
Phone (213) 928-7213 · Fax (951) 226-1720 · www.projectxcorrosion.com

Ship Samples To: 29990 Technology Dr, Suite 13, Murrieta, CA 92563

Project X Job Number: S230522D LOR 33109.13 Reservoir No. 3A (Full)

IMPORTANT: Please complete Project and Sample Identification Data as you would like it to appear in report & include this form with samples.

Company Name:	LOR Geotechnical Group, Inc.	**Contact Name:**	ROBERT MARKOFF	**Phone No:**	951-653-1760
Mailing Address:	6121 Quail Valley Court	**Contact Email:**	RMARKOFF@LORGEO.COM		
Accounting Contact:	John Leuer	**Invoice Email:**	ATTORNIE@LORGEO.COM		
Client Project No:	33109.13	**Project Name:**	RESERVOIR NO. 3A		
P.O. #:	--				

(Business Days) Turn Around Time:	3-5 Day Standard	3 Day Guarantee (50% mark-up)	24 Hr RUSH (100% mark up)
	✓		

Results By: ☐ Phone ☐ Fax ☐ Email

Date & Received by :

Special Instructions:

ANALYSIS REQUESTED (Please circle)

*Req: Min. 3 Samples, site map, and groundwater info

#	SAMPLE ID - BORE #	DESCRIPTION	DEPTH (ft)	DATE COLLECTED	Soil Resistivity (Geo Quad; Caltrans CTM643 / AASHTO T2888 / ASTM G187)	pH (Geo Quad; Caltrans CTM643 / AASHTO T 289 / ASTM G 51)	Sulfate (Geo Quad; Caltrans CTM417 / AASHTO T 290 / ASTM D4327)	Chloride (Geo Quad; Caltrans CTM422 / AASHTO T 291 / ASTM D4327)	Redox Potential (SM 2580B / ASTM G200)	Sulfide (SM 4500-S2)	Ammonia (SM 4500-NH3 / ASTM D6919)	Nitrate (SM 4500-NO3 / ASTM D4327)	Flouride (ASTM D4327)	Phosphate (ASTM D4327)	Lithium (ASTM D6919)	Sodium (ASTM D6919)	Potassium (ASTM D6919)	Magnesium (ASTM D6919)	Calcium (ASTM D6919)	BiCarbonate (SM 2320B)	Full Corrosion Series	Soil Corrosivity Evaluation Report (Reports)	Water Corrosivity Mini Report (Reports)	Moisture Content (ASTM D2216)	Total Alkalinity (SM 2520B)	Thermal Resistivity	Metallurgical Analysis	Langelier Index	Puckorius Index	XRF Elemental Analysis	Water Hardness
266 1	BB-1 B-1	(ML) SANDY SILT	1-4'	5-17-23																	X										
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															
13																															
14																															
15																															

APPENDIX D

Seismic Design Spectra

SITE-SPECIFIC GROUND MOTION ANALYSIS
(ASCE 7-16)

ALL values on this page were used for determination of ASCE 7-16 Section 21.3 General Spectrum and are NOT intended to be used for design

Project: Reservoir No. 3A
Project Number: 33109.13
Client: Land Engineering Consultants, Inc.
Site Lat/Long: 34.0018/-117.0524
Controlling Seismic Source: San Andreas

REFERENCE	NOTATION	VALUE
Site Class	C, D, D default, or E	D measured
Site Class D - Table 11.4-1	F_a	1.0
Site Class D - 21.3(ii)	F_v	2.5
$0.2*(S_{D1}/S_{DS})$	T_0	0.180
S_{D1}/S_{DS}	T_S	0.900
Fundamental Period (12.8.2)	T	Period
Seismic Design Maps or Fig 22-14	T_L	8
Equation 11.4-4 - $2/3*S_{M1}$	S_{D1}	1.4017
Equation 11.4-2 - F_V*S_1 [1]	S_{M1}	2.1025

[1] - F_V as determined by Section 21.3

REFERENCE	NOTATION	VALUE
Fv (Table 11.4-2)[Used for General Spectrum]	F_v	1.7
Design Maps	S_s	2.336
Design Maps	S_1	0.841
Equation 11.4-1 - F_A*S_S	S_{MS}	2.336
Equation 11.4-3 - $2/3*S_{MS}$	S_{DS}	1.557
Design Maps	PGA	1.001
Table 11.8-1	F_{PGA}	1.1
Equation 11.8-1 - $F_{PGA}*PGA$	PGA_M	1.101
Section 21.5.3	80% of PGA_M	0.881
Design Maps	C_{RS}	0.917
Design Maps	C_{R1}	0.892

REFERENCE	NOTATION	VALUE
$0.2*(S_{D1}/S_{DS})$	T_0	0.122
S_{D1}/S_{DS}	T_S	0.612
Equation 11.4-4 - $2/3*S_{M1}$	S_{D1}	0.953
Equation 11.4-2 - F_V*S_1	S_{M1}	1.430

RISK COEFFICIENT

Cr - At Perods <=0.2, Cr=C_{RS}	C_{RS}	0.917
Cr - At Periods >=1.0, Cr=C_{R1}	C_{R1}	0.892

Cr - At Periods between 0.2 and 1.0
use trendline formula to complete

Period	Cr
0.200	0.917
0.300	0.914
0.400	0.911
0.500	0.908
0.600	0.905
0.680	0.902
1.000	0.892

Mapped values from https://hazards.atcouncil.org/

PROBABILISTIC SPECTRA[1]
2% in 50 year Exceedence

Project No: 33109.13

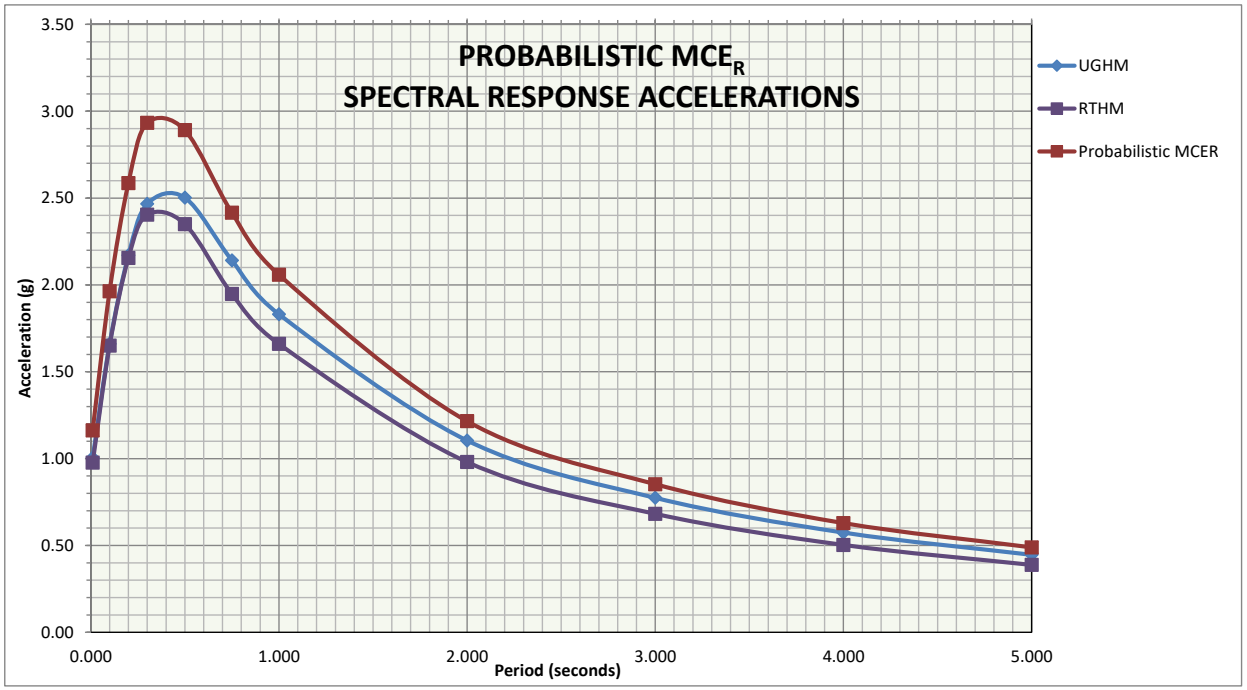
Period	UGHM	RTGM	Max Directional Scale Factor[2]	Probabilistic MCE
0.010	1.004	0.977	1.19	1.163
0.100	1.660	1.650	1.19	1.964
0.200	2.170	2.155	1.20	2.586
0.300	2.466	2.404	1.22	2.933
0.500	2.502	2.350	1.23	2.891
0.750	2.141	1.948	1.24	2.416
1.000	1.831	1.660	1.24	2.058
2.000	1.104	0.980	1.24	1.215
3.000	0.774	0.682	1.25	0.853
4.000	0.574	0.503	1.25	0.629
5.000	0.446	0.388	1.26	0.489

Probabilistic PGA: 1.004

Is Probabilistic $Sa_{(max)}$<1.2F_a? NO

[1] Data Sources:
https://earthquake.usgs.gov/hazards/interactive/
https://earthquake.usgs.gov/designmaps/rtgm/

[2] Shahi-Baker RotD100/RotD50 Factors (2014)



DETERMINISTIC SPECTRUM

Largest Amplitudes of Ground Motions Considering All Sources Calculated using Weighted Mean of Attenuation Equations[1]

Controlling Source: San Andreas

Is Probabilistic $Sa_{(max)}$<1.2Fa? NO

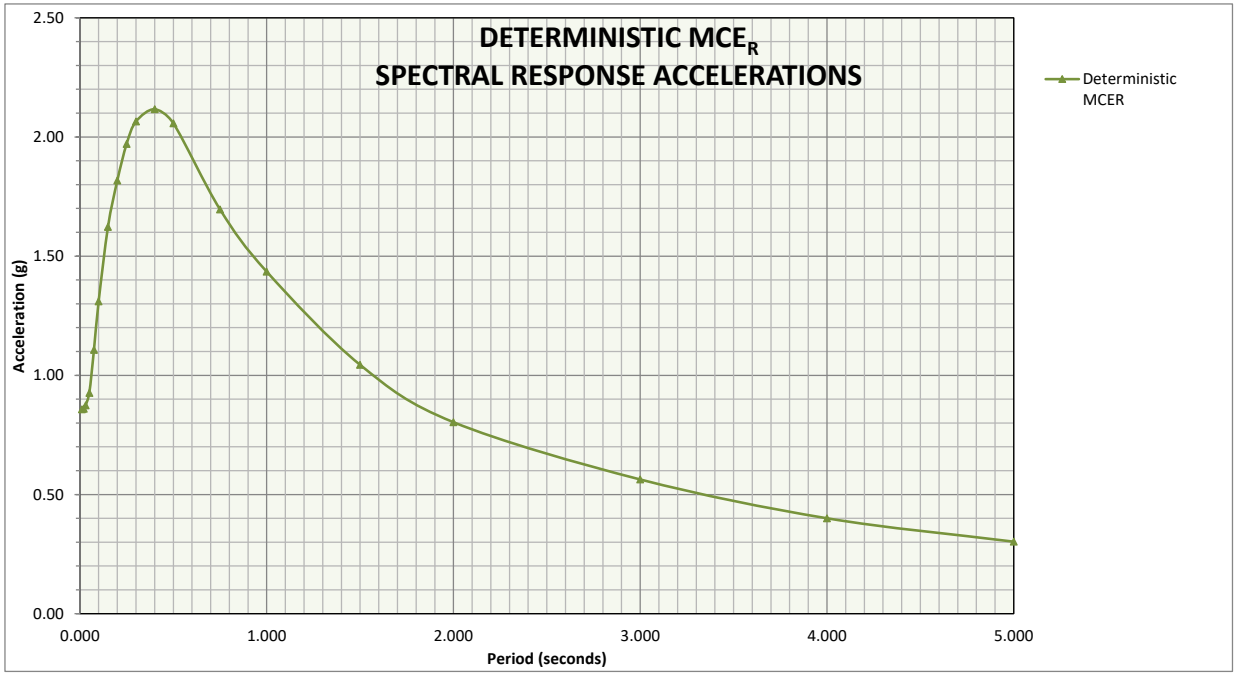
Period	Deterministic PSa Median + 1.σ for 5% Damping	Max Directional Scale Factor[2]	Deterministic MCE	Section 21.2.2 Scaling Factor Applied
0.010	0.720	1.19	0.857	0.857
0.020	0.723	1.19	0.860	0.860
0.030	0.734	1.19	0.874	0.874
0.050	0.779	1.19	0.926	0.926
0.075	0.930	1.19	1.107	1.107
0.100	1.101	1.19	1.310	1.310
0.150	1.352	1.20	1.623	1.623
0.200	1.514	1.20	1.817	1.817
0.250	1.629	1.21	1.971	1.971
0.300	1.693	1.22	2.065	2.065
0.400	1.721	1.23	2.117	2.117
0.500	1.673	1.23	2.057	2.057
0.750	1.368	1.24	1.696	1.696
1.000	1.157	1.24	1.435	1.435
1.500	0.842	1.24	1.044	1.044
2.000	0.648	1.24	0.803	0.803
3.000	0.450	1.25	0.563	0.563
4.000	0.320	1.25	0.400	0.400
5.000	0.240	1.26	0.302	0.302

Project No: 33109.13

Is Determinstic $Sa_{(max)}$<1.5*Fa?	NO
Section 21.2.2 Scaling Factor:	N/A
Deterministic PGA:	0.720
Is Deterministic PGA >=F_{PGA}*0.5?	YES

[1] NGAWest 2 GMPE worksheet and Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3) - Time Dependent Model

[2] Shahi-Baker RotD100/RotD50 Factors (2014)



SITE SPECIFIC SPECTRA

Period	Probabilistic MCE	Deterministic MCE	Site-Specific MCE	Design Response Spectrum (Sa)
0.010	1.163	0.857	0.857	0.571
0.100	1.964	1.310	1.310	0.914
0.200	2.586	1.817	1.817	1.246
0.300	2.933	2.065	2.065	1.377
0.500	2.891	2.057	2.057	1.372
0.750	2.416	1.696	1.696	1.246
1.000	2.058	1.435	1.435	1.121
2.000	1.215	0.803	0.803	0.561
3.000	0.853	0.563	0.563	0.375
4.000	0.629	0.400	0.400	0.280
5.000	0.489	0.302	0.302	0.224

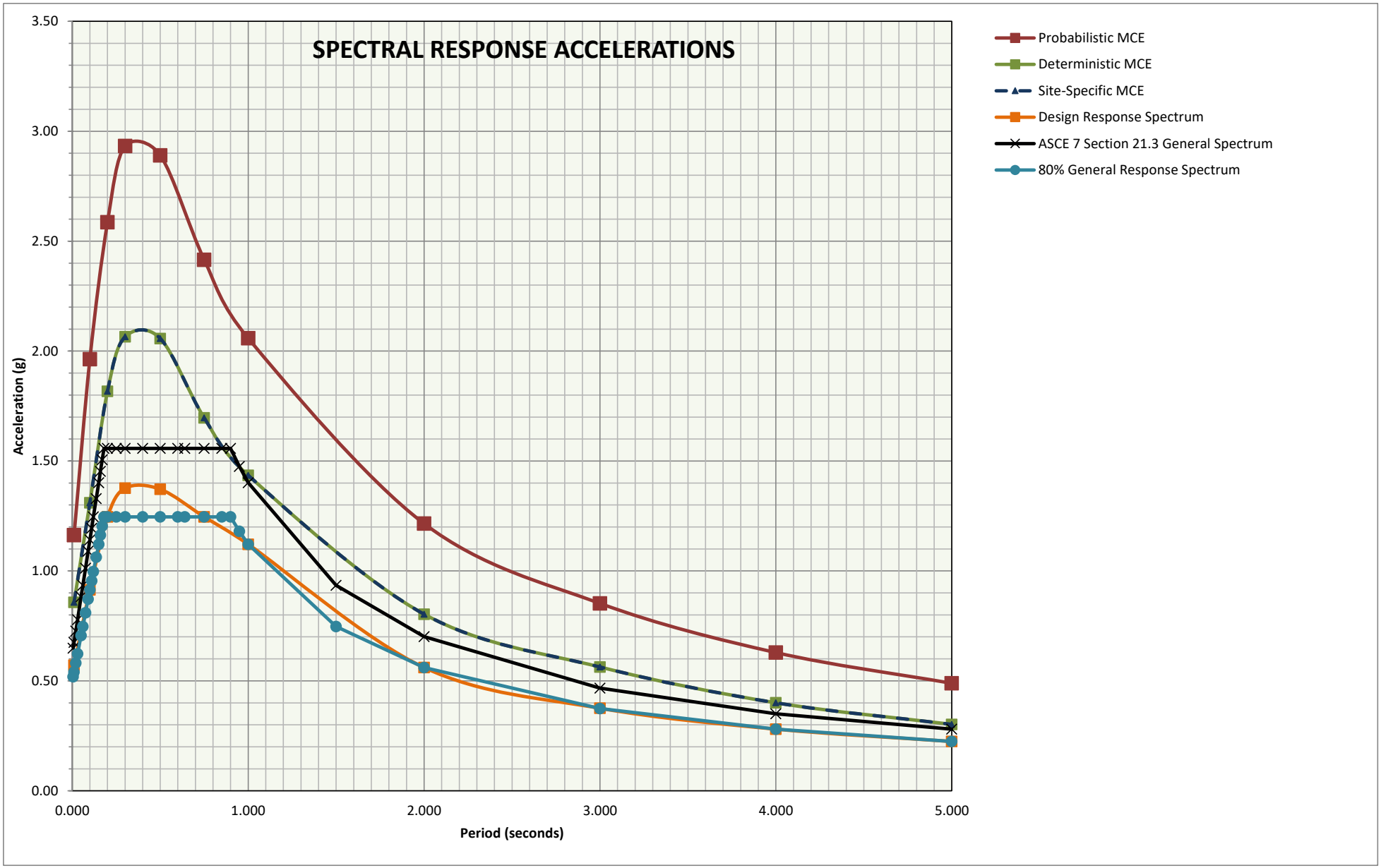
ASCE 7-16: Section 21.4
Site Specific

	Calculated Value	Design Value
SDS:	~~1.239~~	1.246
SD1:	1.126	1.126
SMS:	~~1.858~~	1.869
SM1:	1.689	1.689
Site Specific PGAm:	~~0.720~~	0.881
Site Class:	D measured	

Seismic Design Category - Short* E
Seismic Design Category - 1s* E
* Risk Categories I, II, or III

Period	ASCE 7 SECTION 21.3 General Spectrum	80% General Response Spectrum
0.005	0.649	0.519
0.010	0.675	0.540
0.020	0.727	0.581
0.030	0.779	0.623
0.050	0.882	0.706
0.060	0.934	0.748
0.075	1.012	0.810
0.090	1.090	0.872
0.100	1.142	0.914
0.110	1.194	0.955
0.120	1.246	0.997
0.136	1.329	1.063
0.150	1.402	1.121
0.160	1.453	1.163
0.170	1.505	1.204
0.180	1.557	1.246
0.200	1.557	1.246
0.250	1.557	1.246
0.300	1.557	1.246
0.400	1.557	1.246
0.500	1.557	1.246
0.600	1.557	1.246
0.640	1.557	1.246
0.750	1.557	1.246
0.850	1.557	1.246
0.900	1.557	1.246
0.950	1.475	1.180
1.000	1.402	1.121
1.500	0.934	0.748
2.000	0.701	0.561
3.000	0.467	0.374
4.000	0.350	0.280
5.000	0.280	0.224

Project No: 33109.13



Project No: 33109.13

APPENDIX G

County Line Transportation Corridor Addendum

City of Calimesa

COUNTY LINE TRANSPORTATION CORRIDOR PROJECT

ADDENDUM TO INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

August 2022

Prepared in conjunction with:
City of Yucaipa
California Water Resources Control Board

SCH# 2019109030

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This environmental document is an Addendum to the Cities of Yucaipa and Calimesa's (Cities) County Line Transportation Corridor Initial Study/Mitigated Negative Declaration (IS/MND), State Clearinghouse No. 2019109030, adopted on December 10, 2019 by the Cities of Calimesa and Yucaipa. The City of Calimesa is the lead agency under CEQA for the County Line Transportation Corridor (CLTC) IS/MND.

This Addendum addresses refinements to the project plans that add a waterline replacement and well relocation associated with the Transportation Corridor, to be installed by the South Mesa Water Company (SMWC). As demonstrated in this Addendum, the 2019 IS/MND continues to serve as the appropriate document addressing the environmental impacts of these improvements pursuant to California Environmental Quality Act (CEQA). The City of Calimesa also is the CEQA lead agency for the project because it requires a Development Permit for relocating the well. No other discretionary permits are required by Calimesa, Yucaipa, or other state or regional agencies for SMWC's project.

1.2 COUNTY LINE TRANSPORTATION CORRIDOR (CLTC) BACKGROUND

The CLTC IS/MND was prepared to address construction and operational impacts of the proposed roadway corridor, drainage, and related improvements on County Line Road from Park Avenue to Bryant Street. The project includes the improvement of approximately 4,942 linear feet (LF) along County Line Road and 2,142 LF on the cross streets for a total length of 7,084 LF. The roadway is the boundary between the Counties of Riverside (to the south) and San Bernardino (to the north).

The CLTC project is a multi-modal surface transportation enhancement project, which addresses traffic congestion and safety coupled with facilitation of growth and non-motorized transportation systems. The existing County Line Road corridor does not have sufficient capacity to serve the current traffic volumes and utilizes multi-way stop control at every intersection. The CLTC project proposes to construct four single-lane and one multi-lane roundabouts, together with street, pedestrian, drainage (catch basins at each roundabout) and bicycle improvements, to improve safety and efficiency throughout the corridor. The use of roundabouts, in lieu of signalized intersections, provides adequate capacity and LOS for County Line Road to remain a two-lane street, thus significantly reducing right-of-way (ROW) and construction costs to construct a four-lane corridor. Roundabouts will be constructed at the intersections of 5th Street, 3rd Street, 2nd Street, California Street, and Bryant Street. In

addition, street improvements are proposed to be implemented between Park Avenue and 5th Street, 5th Street East (Mid-Block) to 3rd Street, and California Street to Bryant Street. Figure 1 shows the project improvements along County Line Road, including the roundabouts, as well as the proposed water line and well relocation improvements.

The IS/MND evaluated potential environmental effects of the project. All impacts identified in the IS/MND were either less than significant (with design and construction features that were built into the project) or have been mitigated to below a level of significance through implementation of mitigation measures identified in the IS/MND and subsequently incorporated into the project. Specifically, the IS/MND included design measures for air quality, hazards, hydrology and water quality, and transportation/circulation. It also identified City of Calimesa and Yucaipa General Plan plans, policies, and programs that would reduce other impacts, including biological resources, to a less-than-significant level. Finally, in addition to avoidance and plans/policies, the IS/MND identified mitigation measures to reduce residual cultural resources, paleontological resources, hydrology, noise, and transportation impacts to less-than-significant levels.

The CLTC project was initially scheduled for construction in 2020, but has been re-scheduled to start construction in 2022. Another intersection improvement project and County Line Road and Calimesa Blvd. (Jerry Lewis intersection) was analyzed by the City of Calimesa under a separate IS/MND, and was approved by the City on May 16, 2022.

1.3 PURPOSE OF AN ADDENDUM TO THE IS/MND

When a proposed project is changed, there are changes in environmental setting, or additional analysis is required, a determination must be made by the Lead Agency as to whether an Addendum or Subsequent MND is prepared. CEQA Guidelines Sections 15162 and 15164 set forth criteria to assess which environmental document is appropriate. The criteria for determining whether an Addendum or Subsequent MND is prepared are outlined below. If the criteria below are true, then an Addendum is the appropriate document:

- No new significant impacts will result from the project or from new mitigation measures.
- No substantial increase in the severity of environmental impact will occur.
- No new feasible alternatives or mitigation measures that would reduce impacts previously found not to be feasible have, in fact, been found to be feasible.

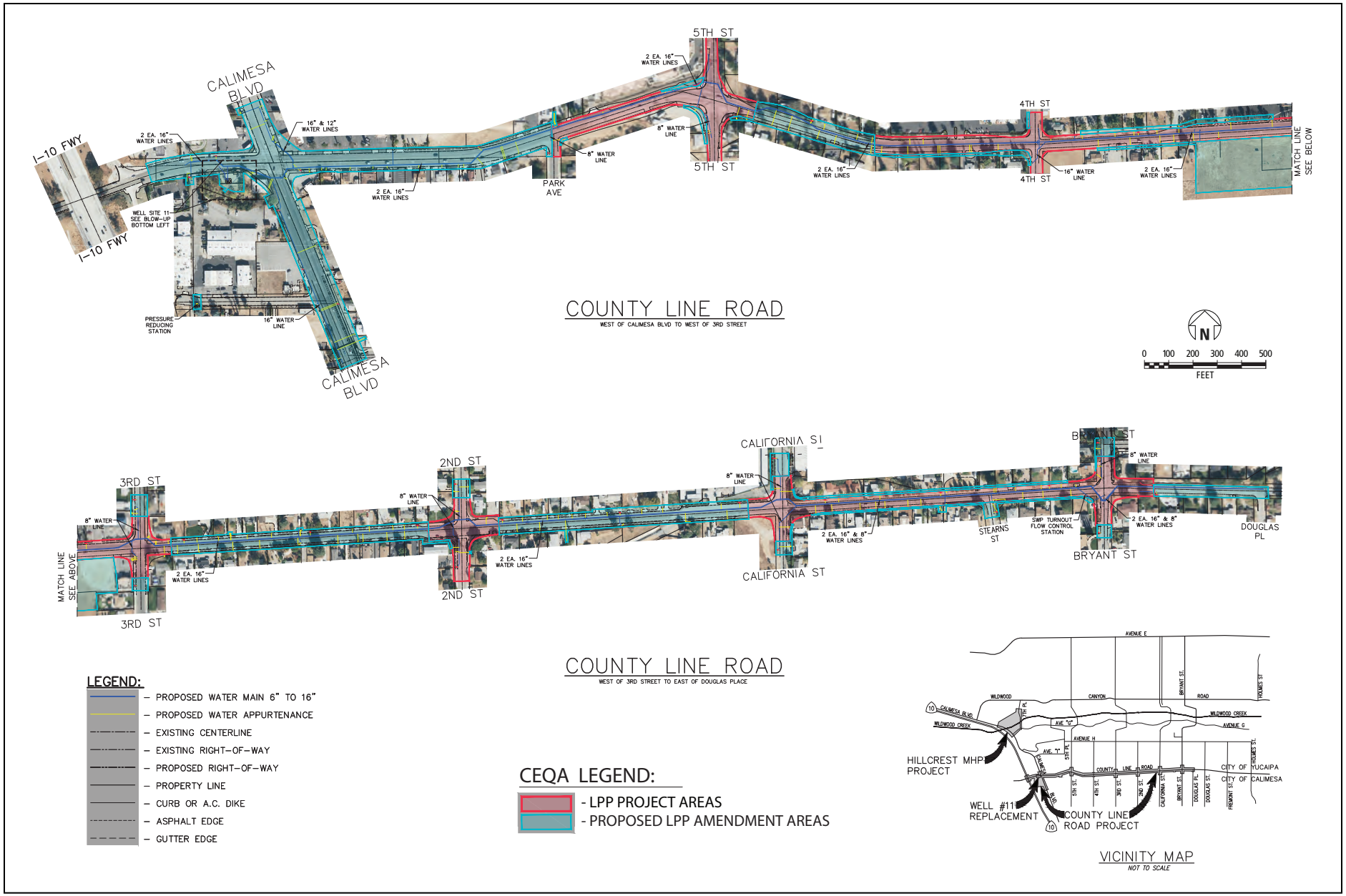


Figure 1

Approved CLTC Roadway Improvements and Proposed Pipeline and Well Relocation Areas

Source: Land Engineering Consultants, Inc.

Based upon the information provided in Section 3.0 of this document, below, the changes to the approved project will not result in new significant impacts or substantially increase the severity of impacts previously identified in the IS/MND, and there are no previously infeasible alternatives that are now feasible. None of the other factors set forth in Section 15162(a)(3) are present. Therefore, an Addendum is appropriate.

2.0 PROJECT DESCRIPTION

2.1 Relationship of Proposed Pipeline Replacement and Well Relocation to CLTC Project

The original project addressed in the 2019 County Line transportation Corridor IS/MND included discontinuous roadway and drainage improvements along County Line Road and intersecting roadways from Park Avenue to Bryant Street. The proposed project addressed in this Addendum would add replacement of existing water lines for that entire alignment length and extending both east and west of the previously proposed transportation corridor, and also extending short distances north and south at the Calimesa Blvd./County Line Road intersection. A SMWC water supply well at that intersection also requires replacement and is addressed herein. Although the previously approved project was discontinuous along the roadway alignment, with gaps between California Street and Second Street, and a small gap just east of 5th Street, the technical analyses in the IS/MND addressed the entire alignment from Park Avenue to Bryant Street (See Figure 1).

South Mesa Water Company (SMWC) serves an area that includes two cities and two counties, with the City of Yucaipa (San Bernardino County) to the north and the City of Calimesa (Riverside County) to the south. The centerline of County Line Road lies on the city/county boundary line for much of its length through SMWC's service area. As described above, the Cities of Yucaipa and Calimesa (Cities) have proposed street and storm drain improvement plans within County Line Road, some of which were evaluated in the 2019 CLTC IS/MND. The Cities' projects include street and right-of-way widening, new and upsized storm drain facilities, and proposed roundabouts at the primary intersections. The Cities' projects also include new streets, sidewalks, roundabouts, and storm drains that will interfere with SMWC's ability to repair their water system that lie within these streets.

The Cities' roadway improvement project for Calimesa Blvd and Countyline Road would interfere with one of SMWC's existing water-producing wells. This well, known as Well No. 11, is located near the southwest corner of the intersection of County Line Road and Calimesa Boulevard and historical records indicate that it was drilled in 1920. The proposed roadway widening improvements conflict with the location of the well, and the Cities have indicated that they cannot work around its location due to the limited space available on both sides of the roadway. Therefore, SMWC and the Cities concur the well must be relocated.

2.2 Proposed Project Revisions

The 2019 CLTC project did not include the water pipeline replacement or well relocation. Subsequent to issuance of that document, the City and the SMWC determined that the Cities' CLTC and Calimesa Blvd and County Line Road Improvement project (also referred to as the "Jerry Lewis" Intersection) would conflict with SMWC's existing water system due to the horizontal and vertical design of the proposed street and storm drain facilities and required well relocation. These conflicts necessitate that SMWC replace various parts of their water system to maintain service and comply with the Waterworks Main Separation standards. The Cities' project's also pose potential conflicts with SMWC's water system in the near-term, due to the installation of new asphalt, new concrete, and roundabouts over the top of the aged facilities, resulting in potentially high costs and difficulties associated with the maintenance of SMWC's existing facilities. In order to eliminate these conflicts, SMWC has opted to replace all of their existing pipelines that are within the Cities' proposed project areas and beyond their useful lifetime.

In addition, in order to provide space for the Cities' proposed street widening, SMWC proposes to drill a new well on the existing SMWC Well No. 11 site property that provides sufficient clearance from the Cities' proposed street and storm drain improvements. The replacement well would be located on the SMWC property approximately 50 feet the south and to the west of the existing well location. SMWC's pipeline and well replacement plans and activities are summarized below.

The replacement pipelines would be sized to accommodate planned growth in the SMWC service area as provided for in the applicable City and County General Plans, and provide adequate fire flows. As such, the pipelines would not be growth inducing. The proposed well would have an increased yield compared to the existing well, as necessary to meet current maximum day demand + fire flow + planned growth in the area.

Pipeline Replacement

SMWC and the Cities are coordinating some aspects of their projects, which provides cost saving and efficiency benefits. The timing of the Cities' and SMWC projects will allow SMWC to trench through existing pavement, rather than cutting into new pavement and concrete to install its water systems at a later time. Additionally, the Cities have agreed to acquire right-of-way and clear the roadway and intersections prior to SMWC's water line installations. Based on pre-construction planning meetings, it is anticipated that the Cities will perform relocations, obstruction removal and concrete work, then SMWC will install their pipelines and temporary

resurfacing, then the Cities' storm drains will be installed, and lastly the roadway will be re-paved.

The proposed water line would replace and upgrade the "main veins" of SMWC's water system that lie within the community's major arterial streets of County Line Road and Calimesa Boulevard, and route them around the proposed roundabouts, storm drains and other proposed facilities to avoid construction conflicts. The proposed pipeline replacement project includes the installation of approximately 24,533 linear feet (LF) of mainline pipes and 25,696 LF of appurtenance and service pipes consisting of:

- 20,480 LF 16" PVC pipe
- 152 LF 12" PVC pipe
- 2,962 LF 8" PVC pipe
- 101 LF 6" PVC pipe
- 591 LF 16" CML&C pipe
- 205 LF 8" CML&C pipe
- 42 LF 8" D.I.P. in an 18" steel casing
- 3 pressure reducing valves
- 36 fire hydrant assemblies
- 15 blow-off assemblies
- 18 air & vacuum assemblies
- 127 water service reconnections
- New valves and fittings for all new pipelines

The main water lines within County Line Road include two 16-inch pipes installed side-by-side within the same trench due to space limitations in the streets. The main lines will be reconnected to all existing SMWC intersecting lines. These reconnection water lines are proposed in a single trench, are 8-inch minimum pipe size, and typically extend to reconnect near the limits of the Cities' proposed street projects. In summary, the SMWC pipeline replacement project proposes several trench designs that result in various trench widths and depths throughout the project. Each trench design is listed in Table 1, with its respective standard trench dimensions and total length quantity. Trench dimension details also are available for review in the County Line Road Water Improvement Project Plan set, at SMWC's offices.

The main lines are proposed to be installed on the north side of the city/county line (within Yucaipa) for the majority of the lengths east of Park Avenue, and beginning approximately 300 feet west of Park Avenue the main lines are proposed to be installed on the south side of the city/county line (within Calimesa). However, appurtenance installations, water service installations and relocations, and main line reconnections will cross the city/county line to both

Cities throughout the entire length of the pipeline replacement project. It is estimated that approximately 80% of the proposed main line installations will occur within Yucaipa and the remaining 20% will occur within Calimesa.

TABLE 1: Standard Trench Dimensions

Trench Type	Trench Width	Trench Depth (1)	Total Trench Length (2)	Trench Length Within Pavement
Two 16” side-by-side	60”	64”	8,471’	8,188’
Two 16” stacked	42”	91”	601’	592’
16” & 12” side-by-side	58”	64”	152’	179’
Two 16” side-by-side & 8” stacked	60”	79”	1,236’	379’
Single pipe 16”	30”	64”	1,549’	1,389’
Single pipe 4” to 8” (3)	24”	55”	5,124’	1,892’
Water service or air-vac (<4”)	18”	51”	19,737’	2,067
Total excavation (haul off): +/-17,800 cubic yards				

(1) Standard depth (42” cover) is assumed; however, alternate depths are required in various locations where the pipeline must be routed around other existing and proposed facilities.

(2) Total trench lengths are estimated per the construction plans, dated April 7, 2021.

(3) All pipelines between 4” and 8”, including mains, fire hydrant lines, and blow-off lines.

Additional Pipeline Improvements

Beyond the replacement of existing pipelines, SMWC has included three stubbed connections from existing pipelines to the proposed right of way in the proposed construction project to accommodate near-future plans for state water project recharge basins. It is important that these lines are stubbed prior to the Cities’ street improvement project to avoid trenching through the proposed roundabouts and streets shortly after their completion. These connections include two stubs (one near the Bryant Street intersection and one east of the Fourth Street intersection) from an existing 14-inch SMWC main line that is proposed to be converted for use as a drain line, and one stub (at the Bryant Street intersection) from the existing 54-inch state water project line. These lines will be extended to and capped at the proposed right of way and combine for a total of 168 linear feet of 16-inch pipeline (included in the overall totals).

Laydown/Staging Areas

While all of the installations would occur within the limits of the proposed and/or existing roadway, additional areas would be utilized by the construction contractor to stage and store equipment and materials. Available properties that can be utilized for this purpose would be determined and negotiated at a later time by the installing contractor that is awarded the contract. However, SMWC has pre-determined a centralized location that consists of vacant land that may be an ideal choice for the contractor. This property is located along the south side of County Line Road between Third Street and Fourth Street. Additional areas adjacent to the roadway may be utilized as temporary laydown areas and are included in the pipeline and well replacement project study area.

Other Underground Utilities

SMWC has done their due diligence to locate the existing utilities that lie within the roadway by performing field surveys, contacting all utility purveyors to request and obtain utility plans, and reviewing record information that has been made available. All known existing underground utilities have been located based on this information and are identified on the construction plans. However, the accuracy of this information is unknown and assumptions have been made in many cases to estimate the horizontal and vertical location based on the construction standards for that specific utility at its estimated time of installation. The construction plans have been designed to avoid all of the expected utility conflicts, but additional conflicts and relocations will certainly be necessary as the open trenches unveil what actually lies beneath the roadway. Utility relocations will be performed as necessary throughout the length of the pipeline replacement project. It is anticipated that the private utility purveyors, public utility agencies, and Cities will all work together with SMWC to assist in clearing the way as the construction moves forward.

The pipeline replacement project is not proposed to be phased, but the construction contractor will likely be working within one or two blocks at any given time. The construction will begin on the east end of the project near Douglas Place and continue working westward. Trench work will move approximately 100 feet ahead of the installation work to allow sufficient time to identify and find a solution to unknown underground conflicts. It is speculated that the project will move at a pace of approximately 100 linear feet per day given the typical delays that may occur. The construction crews will then return to the various waterline intersection locations to make the appropriate reconnections and install/reconnect all water services.

Well Relocation

Well No. 11 is currently located within SMWC-owned property that contains area to the south and to the west of the existing well location. In order to provide space for the Cities' proposed

street widening, SMWC proposes to drill a new well on the existing well site that provides sufficient clearance from the Cities' proposed street and storm drain improvements. Figure 2 shows the well site and preliminary location for the proposed well relative to the city and SMWC's proposed improvements.

The site would be graded to provide a pad at a minimum 1.5 feet above the high-water line of the nearby FEMA flood zone for the Calimesa Creek. The well would be drilled using the reverse circulation rotary drilling method. The first 50 feet (depth from surface) would consist of a 40-inch diameter borehole with a 30-inch steel casing. The remaining drill depth to the bedrock beneath the aquifer (approximately 900 to 100 feet) would consist of a 26-inch diameter borehole with a 16-inch steel casing. The voids between the borehole and casing would be filled with a gravel filter pack from the bottom to 100 feet below surface, and the upper 100 feet would be filled with a cement seal. The drilling is expected to produce approximately 145 cubic yards of excavated soil. The well is anticipated to reach groundwater at approximately 250 feet of depth and, upon completion, is estimated to yield approximately 1500 gallons per minute.

Upon well completion, an approximately 160 square foot well/pumphouse building would be constructed around the new well, a well pump would be installed and connected the new well to SMWC's water system, and an 8-inch drain line would be connected downstream to the Cities' storm drain system. A 6-foot concrete-block wall would be constructed at depth, 4'2" inland from the top of bank of the creek channel to protect the well facilities from potential long-term creek erosion as well as to prevent access to the facility. The wall would extend about 10 feet below grade into the earth to provide erosion protection for the well site should the creek scour its existing banks towards the well location. No construction would occur in or immediately adjacent the Calimesa Creek channel and no riparian vegetation would be removed or disturbed.

Lastly, following completion of the new well, the existing well would be destroyed in accordance to California State Water Resources Control Board's requirements. This process would consist of excavation to a depth of 5 feet and removal of the well casing to this depth, filling the well completely, sealing and capping the upper 20 feet, and demolition of the existing structure and aboveground water facilities.

Construction Equipment and Workers

Various equipment will be required during the construction of this project, including tractors, loaders, backhoes, dump trucks, haul trucks, rollers, and generators. The pipeline installation is estimated to consist of two construction crews for a total of approximately 16 workers, and the well replacement is estimated to consist of a single crew of approximately six workers (See Table 2).

The pipeline replacement is estimated to be constructed over a 39-week period beginning in the Spring 2023. The well replacement is estimated to be constructed over a 20-week period following completion of SMWC's pipeline replacement and the Cities' storm drain and Calimesa Creek projects.

TABLE 2: Anticipated Construction Equipment

Equipment Type	Replacement Pipeline			Well No. 11 Replacement		
	Pipeline Trenching and Installation (180 days)	Water Services and Connection (90 days)	Paving and Surface Restoration (180 days)	Site Preparation and Grading (15 days)	Well Drilling and Completion (75 days)	Structure, Pipe Connections and Restoration (60 days)
Tractors, loaders and backhoes (4 hrs/day)	2	2	-	1	-	1
Skid Steer Loaders (4 hrs/day)	-	-	1	-	-	-
Off-Highway Trucks (6 hrs/day)	-	-	-	-	-	-
Excavators (6 hrs/day)	1	-	-	-	-	1
Rollers (4 hrs/day)	-	-	2	-	-	-
Plate compactors (4 hrs/day)	1	1	2	-	-	1
Saws (4 hrs/day)	1	1	2	-	-	1
Generators (4 hrs/day)	1	-	2	-	1	-
Drill rig (4 hrs/day	-	-	-	-	1 (40 days)	-
Crane (4 hrs/day	-	-	-	-	1 (20 days)	-
Welders (2 hrs/day)	1	1	-	-	1	-

Source: Land Engineering Consultants, Inc. March 2022

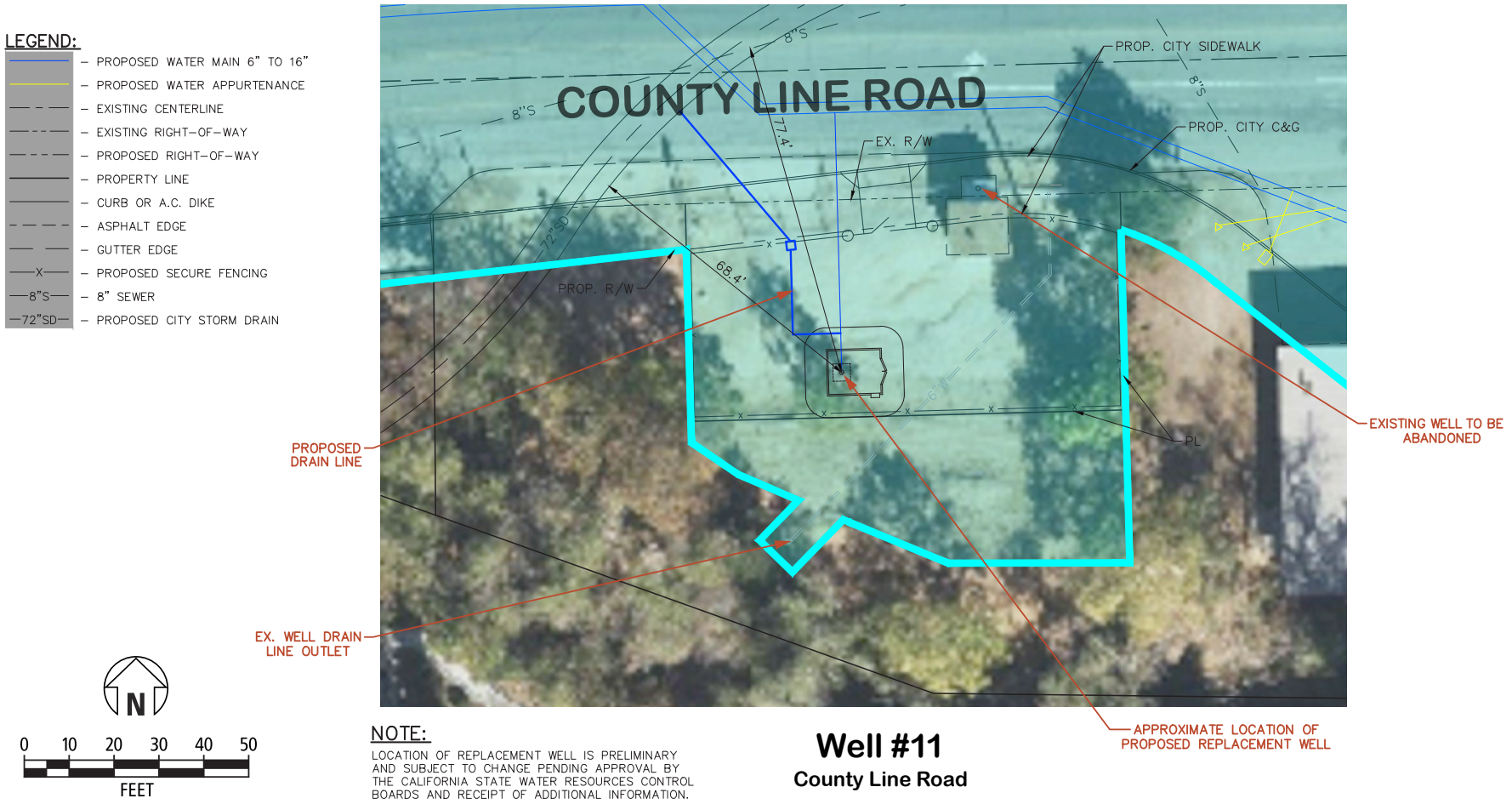


Figure 2
Proposed Well Relocation Plan

Source: Grassetti Environmental and Land Engineering Consultants, Inc.

3.0 ENVIRONMENTAL ANALYSIS

As explained in Section 1.0, this Addendum has been undertaken pursuant to the provisions of CEQA Sections 15162 and 15164 to provide the City with the factual basis for determining whether any changes in the project, any changes in circumstances, or any new information since the IS/MND was adopted require additional environmental review or preparation of a Supplemental or Subsequent MND.

The proposed project would involve additional construction along the CLTC and short distances to the north and south on Calimesa Blvd. For the most part, the areas and resources potentially affected by the water line upgrades and well relocation were already assessed in the 2019 IS/MND. The types (i.e. pavement cutting, grading, and trenching) and location of construction are the same as, or very similar to, those proposed for the CLTC project. However, because the water lines and well relocation will extend beyond the previously analyzed areas, additional analyses have been conducted for cultural/tribal resources, biological resources, hydrology, geology and soils, noise, traffic, and air quality/greenhouse gas emissions. Because of the overlap in both location and construction activities of the original project and the proposed addition of the pipelines and well relocation, the environmental analysis provided in the IS/MND remains current and applicable to the proposed project in all other areas, and no additional analyses are required.

The unchanged resource topics include aesthetics; agricultural resources; energy; hazards/hazardous materials; land us and planning; mineral resources; public services; parks/recreation; utilities; and wildfire hazards. As the area to be affected is substantially similar to that addressed in the IS/MND, the mitigation measures identified by the tribes in the original consultation with the Cities would apply to water pipelines and well relocation as well. All of the project design features, City of Calimesa and Yucaipa policy compliance, and mitigation measures included in those sections of the IS/MND and adopted as part of the CLTC project also would be applicable to the water pipeline and well relocation. The SMWC has committed to implementing those measures as part of project construction. These measures are included in the relevant impact discussions below.

The resources areas where the proposed project changes could result in changes to impacts are addressed in the following section of this Addendum.

Air Quality

IS/MND Findings:

The 2019 IS/MND (pp. 32-39) included a detailed air quality modeling assessment that found no potential violations of air quality standards from the replacement of 7,048 linear feet of roadway and sidewalks, construction of roundabouts, and other CLTC construction activities. In

addition, no significant odor or toxic air contaminant/fine particulate health risks were identified for the CLTC project. With conformance to City policies, no mitigation measures were required.

Proposed Revised Project Effects:

Regional Air Quality Impacts/Conformance with Air Quality Management Plan

The Air Quality Management Plan (AQMP) for the South Coast Air Basin (Basin) sets forth a comprehensive program that will lead the Basin into compliance with all federal and state air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from regional land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections.

The proposed revised project would add replacement of exiting water distribution lines and provide a new well to the previously approved roadway project. Since the project revisions would consist of infrastructure improvements that would not result in any changes to the existing land use patterns locally or throughout the Basin, it would not conflict with or obstruct implementation of the AQMP. No mitigation measures are required.

The portion of the Basin containing the project site is designated as a nonattainment area for particulate matter less than 10 microns in diameter (PM_{10}) under state standards, and for ozone and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) under both state and federal standards. The South Coast Air Quality Management District (SCAQMD) has set significance thresholds for CEQA analysis and regards those thresholds as applicable to project-specific and cumulative air quality impacts. Therefore, projects that exceed project-specific significance thresholds are considered by SCAQMD to contribute considerably to cumulative air quality problems.

The short-term construction emissions of criteria pollutants from the proposed water system improvements were modeled using CalEEMod (Version 2020.4.0) methodology as specified in the model's User's Guide. The off-road construction equipment to be used for each phase/sub-phase was provided by the water system project engineer. The estimated construction period for the proposed water system improvements is about a year, beginning no sooner than spring 2023. The results of this analysis are summarized in Table 3 below and compared to the SCAQMD daily emission thresholds. This table also includes roadway construction emissions from the Countyline Road IS/MND. Combined emissions would be well below threshold levels.

TABLE 3: County Line Road Water Line and Well Replacement and 2019 Roadway Improvement Project - Construction Emissions (lbs./day)						
Construction Phase	**ROG**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
REPLACEMENT PIPELINE						
Pipeline Trenching & Installation	0.72	6.38	9.13	0.02	0.28	0.27
Water Services & Connections	0.41	3.32	4.61	0.01	0.16	0.15
Paving & Surface Restoration	0.89	8.11	10.35	0.02	0.37	0.36
WELL NO. 11 REPLACEMENT						
Site Preparation & Grading	0.08	0.77	1.12	0.00	0.04	0.04
Well Drilling & Completion	0.32	2.78	3.06	0.01	0.12	0.11
Structure, Pipe Connections, & Restoration	0.41	3.36	5.52	0.01	0.17	0.16
Maximum Daily Water System Improvements Emissions	**1.60**	**14.49**	**19.48**	**0.04**	**0.66**	**0.64**
2019 IS/MND Maximum Roadway Improvements Emissions	**4.74**	**47.06**	**31.67**	**0.06**	**5.33**	**3.54**
SCAQMD Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Significant Impact of Combined Emissions?	**No**	**No**	**No**	**No**	**No**	**No**
Project construction emissions were estimated using project-specific equipment type/number/hourly use and then applying equipment-specific pollutant emission rates as specified in CalEEMod Appendix D. Maximum daily project emissions occur during the coincidence of the Pipeline Trenching/Installation and the Paving/Surface Restoration phases (see Table 2).						

The proposed revised project also would be required to comply with SCAQMD Rule 403 for the reduction of fugitive dust emissions. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent, stabilizing ground cover on finished sites. Air quality modeling data is included as Appendix A to this Addendum.

As shown in the table above, the emissions from construction of the project, including both the roadway improvements and water lines/well, are below the SCAQMD daily construction thresholds for all criteria pollutants. Net new operational emissions would be negligible and as such would have a less than significant effect on air quality. In addition, because the Project does not exceed the SCAQMD's established thresholds of significance, the Project would not have cumulatively considerable net increases in criteria pollutant emissions for which the Project

region is non-attainment and thus cumulative impacts are less than significant. No mitigation measures are required.

Localized Air Quality Impacts

The SCAQMD has developed localized significance threshold (LST) methodology to determine whether or not a project would generate sufficient pollutant emissions to produce significant adverse localized air quality impacts (both short- and long-term). LSTs represent the minimum emissions from a project that would cause or contribute to an exceedance of ambient air quality standards. They have been determined for each of the Basin source receptor areas (SRAs) – the proposed revised project is located in SRA 28 (the City of Calimesa) and SRA 35 (the City of Yucaipa). The most conservative LST was used for each pollutant. In accordance with the LST methodology, only on-site construction emissions were included in the analysis. The emissions included under the LST methodology are NO_2, CO, PM_{10}, and $PM_{2.5.}$ SCAQMD has provided LST lookup tables to determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. Based on SCAQMD guidance, it is assumed that the Project installation of water pipeline would proceed in a linear mode and disturb 1.5 or less acres per day.

The closest potential sensitive receptors are the scattered residences adjacent to the proposed pipeline routes that follow local roadway segments. According to LST methodology, projects with boundaries closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, the receptor distance of 25 meters (85 feet) was used. The results are summarized Table 4 along with results for the previously analyzed roadway improvements. As shown in Table 4, combined emissions would all be below significance thresholds.

Odors

The water line improvements and previously considered roadway improvements would not produce other air emissions adversely affecting a substantial number of people. The potential for objectionable odors comes from the diesel exhaust generated during construction along the pipeline route or near the new well site. Due to the linear nature of proposed pipeline construction and its short-term duration in the vicinity of any particular sensitive receptor along the route that potential would be low. Also, the California Air Resources Board (CARB) *Air Quality and Land Use Handbook* identification of the most common sources of odor complaints (i.e., sewage treatment plants, landfills, recycling facilities, petroleum refineries, etc.) does not include water pipelines or wells. Thus, the Project, including both the roadway improvements and water lines/well, would have a less-than-significant impact relating to objectionable odors. The water line improvements would not occur concurrent with the roadway work, so there would

not be combined odors. Receptor distances for the pipeline and well construction would be greater than previously considered for the roadway replacement portions of the project, and equipment proposed for the pipeline and well would be similar to that used to construct the previously approved roadway improvements, therefore no new or more severe odor impacts would occur than addressed in the adopted IS/MND. No mitigation measures are required.

TABLE 4: On-Site Project Construction Equipment Emissions (lbs./day)				
Construction Phase	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
REPLACEMENT PIPELINE				
Pipeline Trenching & Installation	6.02	9.06	0.28	0.27
Water Services & Connections	3.31	4.58	0.16	0.15
Paving & Surface Restoration	7.77	10.27	0.37	0.36
WELL NO. 11 REPLACEMENT				
Site Preparation & Grading	0.77	1.12	0.04	0.03
Well Drilling & Completion	2.77	3.04	0.12	0.11
Structure, Pipe Connections, & Restoration	3.35	5.49	0.16	0.16
Maximum Daily Water Improvements Emissions	**13.80**	**19.33**	**0.65**	**0.63**
Maximum Daily Roadway Improvement Emissions (from 2019 IS)	**46.47**	**29.99**	**4.91**	**3.43**
SCAQMD LST Thresholds	**144**	**925**	**6**	**4**
Significant Impact?	**No**	**No**	**No**	**No**
Project construction emissions were estimated using project-specific equipment type/number/hourly use and then applying equipment-specific pollutant emission rates as specified in CalEEMod Appendix D. Maximum daily project emissions occur during the coincidence of the Pipeline Trenching/Installation and the Paving/Surface Restoration phases.				

Applicable Mitigation Measures:

No mitigation measures are required beyond compliance with City policies.

Biological Resources

IS/MND Findings:

Biological resources are addressed on pp. 40-46 of the CLTC IS/MND. Portions of the Project site are located within the western Riverside Multiple Species Habitat Conservation Plan (MSHCP) of which the City of Calimesa is a permittee; the City of Yucaipa is not part of any habitat conservation plan or natural community plan in the County of San Bernardino. The

CLTC Project site is not located within an MSHCP Criteria Area Cell, Group, or Linkage Area, therefore, conservation of the CLTC Project site is not required pursuant to the MSHCP.

Additionally, the proposed CLTC Project would avoid the Calimesa Channel and Calimesa Creek, and will be within previously disturbed right-of-way, vacant land, and portions of existing developed parcels. The CLTC project would not interfere substantially with the movement of wildlife or impede the use of a native wildlife nursery site. Therefore, no impacts are anticipated and no mitigation measures are required.

Construction of the CLTC Project includes potential removal of trees at multiple locations within the Project area. The potential candidate trees for removal are not covered under the City of Calimesa's tree preservation ordinance per Chapter 18.80 of the Municipal Code, which details requirements for removal and replacement of oak trees, or the City of Yucaipa's oak tree conservation policy contained in Chapter 5, Oak Tree Conservation, in the Municipal Code.

Proposed Revised Project Effects:

A biological resources assessment was conducted for the entire pipeline replacement and well relocation project area (Bargas Environmental Consulting, February 17, 2022), attached as Appendix B. That study included a literature review and a field survey (conducted on December 21, 2021). The study found that plant diversity was low in both project areas in the biological study area (BSA) (Bargas 2022, p. 3). Most of the plants in the BSA are within residential and commercial landscaping settings. Eucalyptus species and Tree of Heaven are abundant. Vacant lots are primarily mowed or tilled making plant identification difficult, but ripgut brome, Russian thistle, shortpod mustard, and common sunflower were identifiable and abundant. Riparian areas in Calimesa Creek were dominated by Fremont cottonwood, coast live oak, eucalyptus, and Tree of Heaven. Sensitive riparian communities were identified near the proposed revised project area within the jurisdictional boundaries of Calimesa Creek. Though these plant communities are considered sensitive, the level of disturbance in these riparian areas is still high. No special status plants were observed within the survey area and are unlikely to occur given the level disturbance and isolation due to surrounding development.

Wildlife diversity was low in the proposed revised project area, with species that are typical of urbanized areas. A total of seventeen bird species and two mammal species were detected within 2021 survey area: house finch, California scrub-jay, American crow, rock pigeon, Eurasian collared-dove, European starling, black phoebe, red-tailed hawk, Anna's hummingbird, white-crowned sparrow, California towhee, northern mockingbird, yellow-rumped warbler, Say's phoebe, house sparrow, American robin, Cooper's hawk, California ground squirrel, and desert cottontail. No raptor nests were observed in the study area. no amphibian or reptile species were observed. (Bargas 2022, p. 3.)

No special status wildlife species were observed during the field survey and none are expected to occur. The majority of the proposed revised project area is developed and or disturbed providing poor quality habitat for many of the of the special status species identified during the desktop review. Vacant lots that could provide grassland habitats to support some sensitive species are discontinuous and regularly mowed or tilled which does not allow for the development of quality habitat and viable populations. No sign of bat night roosting activity (urea stains, guano, etc.) was observed at overpasses or bridges around the identified drainages. (Bargas 2022, p. 3.)

The riparian areas and streambeds, though they are sensitive communities themselves, still remain highly disturbed and isolated, and provide poor habitat for the amphibian and fish special status species. Though most or all of the natural habitat within the BSA remains of poor quality, the potential for nesting by native bird species (generally protected by the Migratory Bird Treaty Act and California Fish and Game Code) remains high as the abundance of trees and large shrubs, both native and introduced, within the survey area can provide viable nesting habitat. (Bargas 2022, p. 3.)

A single Tree of Heaven would be removed for the well relocation. This is a common, non-native tree. This tree is not protected by the City of Calimesa's tree preservation ordinance per Chapter 18.80 of the Municipal Code, which details requirements for removal and replacement of oak trees, or the City of Yucaipa's oak tree conservation policy contained in Chapter 5, Oak Tree Conservation, in the Municipal Code.

The Bargas biological resources assessment concluded that implementation of the pipeline replacement and well relocation would not be expected to significantly impact biological resources, as follows (Bargas 2022, p. 4.):

- Riparian areas: riparian areas are expected to be avoided by the proposed revised project. Riparian habitats – while present in the overall biological resources survey area – do not occur within the footprint of the proposed pipeline and well construction areas. The water system improvements should remain consistent with County Line Transportation Corridor Project IS/MND, specifically Section 3.4(b) which found less-than-significant adverse effects 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 US Fish and Wildlife Service. The IS/MND identified the following Plans, Policies, and Procedures that would reduce impacts related to biological resources:
    - PPP 3.4-1 City of Calimesa Policy RM-10: Local drainage courses should be retained in their natural condition to the extent feasible.

- o PPP 3.4-2 City of Calimesa Policy OSPR-2.1: Implement the Western Riverside County Multiple Species Habitat Conservation Plan.
- o PPP 3.4-3 City of Yucaipa Policy PR-5.1 – Resource Protection: Protect and conserve Yucaipa's biological resources, with a special focus on sensitive, rare, or endangered plant and wildlife species in accordance with state and federal resource agency requirements.

• Nesting birds: nesting birds protected by the Migratory Bird Treaty Act and other regulations have the potential to occur within close enough proximity to proposed revised project activities and to be impacted by those activities if work were to occur during the nesting bird season, generally considered to be February 1 to August 31.

- o Work in the County Line Road Project area should remain consistent with County Line Transportation Corridor Project IS/MND, specifically Section 3.4(d) which found no impact to native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites. The IS/MND identified the following Plans, Policies, and Procedures apply to the project and would reduce impacts related to biological resources:
- § PPP 3.4-1 City of Calimesa Policy RM-10: Local drainage courses should be retained in their natural condition to the extent feasible.
- § PPP 3.4-2 City of Calimesa Policy OSPR-2.1: Implement the Western Riverside County Multiple Species Habitat Conservation Plan.
- § PPP 3.4-3 City of Yucaipa Policy PR-5.1 – Resource Protection: Protect and conserve Yucaipa's biological resources, with a special focus on sensitive, rare, or endangered plant and wildlife species in accordance with state and federal resource agency requirements.

The portion of the revised project site that is within the City of Calimesa is located within the western Riverside Multiple Species Habitat Conservation Plan (MSHCP) of which the City of Calimesa is permittee; the City of Yucaipa is not part of any habitat conservation plan or natural community plan in the County of San Bernardino. As with the approved CLTC project, the proposed revised project is located within the Pass Plan Area Plan of the MSHCP. The proposed revised site is not located within an MSHCP Criteria Area Cell, Group, or Linkage Area; therefore, conservation of the Project site is not required pursuant to the MSHCP [1]. As with the approved CLTC project, the revised project would be consistent with the MSHCP.

Although the proposed well facilities are close to a creek, they would be located on graded land with no vegetation. A 6-foot concrete-block wall would be constructed at depth, 4'2" inland

[1] https://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=a73e69d2a64d41c29ebd3acd67467abd

from the top of bank of the creek channel to protect the well facilities from potential long-term creek erosion as well as to prevent access to the facility, however no construction would occur in the channel and no riparian vegetation would be removed. Therefore CDFW 1602 authorization and Federal Clean Water Act section 404, 401, or MSHCP DBESP permits would not be required by the proposed project.

Applicable Mitigation Measures:

No mitigation measures are required beyond compliance with City policies.

Cultural Resources

IS/MND Findings:

Cultural resources are addressed on pp. 47-51 of the CLTC IS/MND. CRM Tech conducted the search within one mile of the CLTC project area, which included the proposed water pipeline replacement and well relocation sites, on May 2, 2019 and May 9, 2019, respectively. According to their search and additional information gathered from historical resource files, 13 historical/ archeological cultural resources within a one-mile radius of the CLTC alignment were documented, 12 of which were formally documented. Among the 13 known cultural resources, five of the sites were of prehistoric—i.e., Native American —origin. All of these sites were concentrated in a cluster near Interstate 10, roughly 3/4 mile to the northwest of the westernmost portion of the CLTC project site.

The more notable sites among these included two possible habitation areas and the former location of a “mineralized skeleton” that was collected by the University of California, Riverside, but subsequently lost during the World War II era. The other eight sites date to the historic period, and consist of various buildings, infrastructure features, and refuse items. None of these known cultural resources was found in the immediate vicinity of the CLTC project site, the nearest being Site 33-023900, recorded approximately a quarter-mile to the west of the western end of the CLTC project site.

Subsequent to the initial cultural investigation, two existing residential structures on 295 West County Line Road and 907 South California Street in the City of Calimesa (APNs 410-040-001 and 410-111-001, respectively) were reviewed to determine if they are historical resources since they were built more than 50 years ago. These structures were evaluated as potential historical resources since they are on two of the four parcels that are listed in the Project Description as potential acquisitions for the CLTC project. The other two parcels listed as potential acquisitions that have existing structures are within the City of Yucaipa and were constructed less than 50 years ago, therefore a historical evaluation was not required for APNs 0319-253-13-000 and

0319-271-58-000. A Historic-Period Building Evaluation Report was prepared in September 2019 by CRM Tech. neither building was determined to qualify as an "historic resource".

Proposed Revised Project Effects:

Although the 2019 IS/MND's Cultural Resources Report covered the proposed pipeline and well relocation areas, an additional cultural resources assessment was conducted for those sites in 2022 (Bargas Environmental Consulting, January 12, 2022, p. ii). For the purpose of this study, Bargas reviewed reports from recent cultural resource investigations that overlapped the current Project area. The results of that review determined that 52 previous investigations have been conducted within 1 mile of the proposed water system improvements area of potential impact (API). In addition, one historic-age culvert (P-33-023900), six historic-era structures (625 W. County Line Road, 613 W. County Line Road, 905 Calimesa Boulevard, 13711 Calimesa Boulevard, 13715 Calimesa Boulevard, and 13721 Calimesa Boulevard) and two road segments of Calimesa Boulevard and County Line Road have been previously recorded within the Project API. All nine of these resources have been evaluated and determined not eligible for inclusion in the NRHP or CRHR. (Bargas 2022, p. ii.)

On December 21, 2021, a Bargas archaeologist conducted a pedestrian survey of the water system improvement API. The Project area consists of primarily built environment, including paved streets, sidewalks, bridges and inaccessible creeks, residential and commercial properties. No new prehistoric or historic-era cultural resources were observed during the pedestrian survey. The nine previously recorded resources were field checked, and no significant changes were observed that would alter the previous eligibility findings of non-eligibility for the NRHP or CRHR for any of these resources. Based on the results of this investigation, there are no historical resources as defined under CEQA (i.e., CRHR-eligible resources) within the Project API, and there would be no impact to historical resources from the proposed Project. (Bargas 2022, p. ii.)

Applicable Mitigation Measures:

The following mitigation measures included in the 2019 CLTC IS/MND also would be applicable to the water pipeline and well relocation:

- **MM CR 1** If buried materials of historical, cultural, or archaeological significance are accidentally discovered during any earth-moving operations associated with the proposed Project, all work in the immediate vicinity (within a 60-foot buffer) shall cease until a qualified archaeologist meeting Secretary of Interior standards can evaluate the nature and significance of the finds. If the find is determined to be an historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State CEQA Guidelines), avoidance or other appropriate measures shall be implemented. Additionally, the MBMI and San Manuel Band of Mission Indians shall be contacted, as detailed within MM TCR 1, if any such

find occurs and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. If significant Native American cultural resources, as defined by CEQA, are discovered and cannot be avoided, a Monitoring and Treatment Plan shall be developed by the qualified Project archaeologist and provided to the Tribes for review and comment, as detailed within MM TCR 1. The qualified Project archaeologist shall monitor and implement the Monitoring and Treatment Plan accordingly.

- **MM CR 2.** Per State Health and Safety Code 7050.5, if human remains are encountered during construction, no further disturbance shall occur in the immediate vicinity (within a 100-foot buffer) until the San Bernardino County Coroner or Riverside County, depending on where remains were encountered, has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The San Bernardino County Coroner or Riverside County Coroner must be notified within 24 hours. If the County Coroner determines that the remains are not historic, but prehistoric, the Native American Heritage Commission (NAHC) must be contacted to determine the most likely descendent for this area. Once the most likely descendent is determined, treatment of the Native American human remains will proceed pursuant to Public Resources Code Section 5097.98.

Tribal Cultural Resources

IS/MND Findings:

As detailed in the 2019 CLTC IS/MND (pp 105-111), the City of Calimesa, acting as lead agency for the CLTC project, conducted tribal outreach per AB 52 requirements. Additionally, the City of Yucaipa also conducted tribal outreach for the CLTC Project. Two tribes responded: Morongo Band of Mission Indians (MBMI) and the San Manuel Band of Mission Indians (SMBMI). As a result of that consultation, mitigation measures were included in the IS/MND (see Applicable Mitigation Measures, below).

Proposed Revised Project Effects:

Because the proposed additions of the water pipeline replacement and well relocation to the CLTC project would be in the area covered by the 2019 IS/MND AB 52 tribal consultation, no additional consultation was conducted. The mitigation measures identified in the 2019 IS/MND also would apply to the pipeline replacement and well relocation activities.

Applicable Mitigation Measures:

- **MM- TCR-1.** The MBMI and the San Manuel Band of Mission Indians shall be contacted, as detailed in MM CR 1, of any Native American cultural resources discovered during any earthmoving operations associated with the proposed Project, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the MBMI and the San Manuel Band of Mission Indians, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents MBMI and the San Manuel Band of Mission Indians for the remainder of the Project, should MBMI and/or the San Manuel Band of Mission Indians elect to place a monitor on-site. As outlined in MM TCR-2, MBMI will monitor the entire Project site regardless if any Native America Cultural resources is discovered. Any and all archaeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the appropriate County for dissemination to MBMI and the San Manuel Band of Mission Indians. The appropriate County shall, in good faith, consult with MBMI and the San Manuel Band of Mission Indians throughout the life of the Project.

- **MM- TCR-2**. Tribal Monitoring: Prior to the issuance of a grading permit, the applicant shall contact the Morongo Band of Mission Indians and the San Manuel Band of Mission Indians. The applicant shall coordinate with MBMI to develop a Tribal Monitoring Agreement. Should the Morongo Band of Mission Indians be unable to provide a

Tribal monitor for any portion of the project, the applicant shall contact the San Manuel Band of Mission Indians to retain the services of a tribal monitor. A copy of the Tribal Monitoring Agreement/proof of hire shall be provided to the City of Calimesa Planning Department prior to the issuance of a grading permit.

- **MM- TCR-3.** Archaeological Monitoring: At least 30-days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities on the site take place, the Project Applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

- **MM- TCR-4.** The Project Archaeologist, in consultation with consulting Tribes and the City, shall develop an Archaeological Monitoring and Treatment Plan that outlines the process for monitoring, as well as the process for dealing with the inadvertent discovery of cultural resources. The Plan shall include:

  a) The project grading and development schedule;

  b) A monitoring schedule that includes the presence of an archaeologist and Tribal Monitor at each location of ground disturbing activity that will occur on site;

  c) The safety requirements, duties, scope of work, and authority of the Tribal monitor and archaeologist to stop and redirect grading activities; and

  d) The protocols and stipulations that the City, Tribes, and Project archaeologist will follow in the event of inadvertent cultural resource discoveries, assessment and evaluation of the discoveries, and treatment/disposition of discoveries.

- **MM- TCR-5.** Treatment and Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently discovered during the course of grading for this Project, the following procedures will be carried out as follows:

  a) Discovery and Assessment of Non-Funerary Cultural Resources: In the case of inadvertent discoveries of non-funerary artifacts, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and the project Archaeologist, in tandem with the project Tribal monitor, shall assess the find.

  Additionally, all points of contact representing the consulting Tribes, the

Morongo Band of Mission Indians and the San Manuel Band of Mission Indians, will be contacted to discuss the nature and significance of the resource, as well as the culturally appropriate treatment and final disposition of the resource. Work on the other portions of the project outside of the buffered area may continue during this assessment period with the presence of an archaeological monitor and Tribal monitor.

b) Treatment and Final Disposition: Should a resource be discovered during project implementation and be recommended significant, the resource shall be assessed as a candidate for avoidance. Should avoidance not be feasible, the resource shall be subject to data recovery and be temporarily curated in a secure location onsite or at the offices of the project archaeologist. The removal of any cultural material from the project site shall be thoroughly inventoried with Tribal monitor oversite of the process. Final disposition of the material shall be conducted as follows:

i. The applicant shall accommodate the process for onsite reburial of the discovered items, as outlined by the consulting Tribes, and enter into a reburial agreement with the Tribes, which shall include measures and provisions to protect the reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed.

ii. Should reburial not be feasible, the landowner(s) shall relinquish ownership of all cultural resources and enter into a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79. The collections and associated records shall be transferred, including title, and accompanied by payment of the fees necessary for permanent curation.

iii. If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Riverside Metropolitan Museum by default. Proof of final disposition, whether reburial or curation, shall be submitted to the City of Calimesa Planning Department.

iv. At the completion of grading, excavation, and ground disturbing activities on the site, a Phase IV Monitoring Report shall be submitted

to the City documenting monitoring activities conducted by the project Archaeologist and Tribal monitor(s) within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Calimesa, Eastern Information Center, and consulting Tribes.

- **MM- TCR-6.** If human remains are encountered, a 100-ft buffer shall be created around the discovery and, pursuant to California Health and Safety Code Section 7050.5, no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Work on the other portions of the project outside of the buffered area may continue during this assessment period with the presence of an archaeological monitor and Tribal monitor.

  If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately identify the "most likely descendants(s)" for purposes of receiving notification of discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Greenhouse Gases

IS/MND Findings:

Greenhouse gas impacts are addressed on pp. 64-67 of the CLTC IS/MND. Neither the City of Calimesa nor the City of Yucaipa have adopted thresholds of significance for GHG emissions. The City of Yucaipa adopted a Climate Action Plan (CAP) on September 14, 2015. The CAP included a number of measures to be implemented by the City of Yucaipa to meet its reduction requirements, which includes performance standards for new development.

For CEQA purposes, the Lead Agency has discretion to select an appropriate significance criterion, based on substantial evidence. The SCAQMD's recommended draft numerical threshold of 3,000 metric tons carbon dioxide equivalent (MT CO_2e) per year for non-industrial projects was selected as the significance criterion.

The 2019 IS/MND included a detailed GHG emission inventory that found no exceedance of the chosen GHG significance threshold from CLTC construction activities. With conformance to City policies, no mitigation measures were required.

Proposed Revised Project Effects:

The water system improvements that are the subject of this addendum would replace an existing water delivery pipeline and supply well serving existing development in both cities. Thus, it would not be in conflict with the City of Yucaipa's CAP.

The estimated total amount of GHG emissions from construction of the proposed water system improvements is 369.7 MT CO_2e, as estimated by CalEEMod (see Appendix A). Operational GHG emissions would be negligible, mostly resulting from the operational emissions from maintenance activity/vehicles. The 2019 CLTC IS/MND estimated 295.4 MT CO_2e for the roadway improvements, for a total of 665.1 MT CO_2e. Therefore, the proposed construction of both the roadway and water system improvements would not generate of GHG emissions above the SCAQMD draft 3000 MT CO_2e threshold.

Since the Project's GHG emissions are below the SCAQMD draft threshold, and the overall project is consistent with the City of Yucaipa CAP, the overall project would not conflict with any plan, policy or regulation adopted for the purpose of reducing GHG emissions, and its impacts are considered less than significant. No mitigation measures are required.

Geology and Soils

IS/MND Findings:

The 2019 IS/MND (pp. 57-63) concluded that because the proposed CLTC Project includes only roadway and drainage improvements to a partially paved road that is currently in use, the potential for impacts that would expose people or structures to substantial adverse effects associated with the seismic shaking or rupture of a known earthquake fault is less than significant. No mitigation measures are required.

According to the Department of Conservation, the City of Calimesa General Plan, and the City of Yucaipa General Plan, the Project site is not identified as having high liquefaction susceptibility (CGP, p.8-4; YGP, p. 7-6). As such, the potential for impacts that would expose people or structures to substantial adverse effects associated with seismic related ground failure including liquefaction is less than significant. No mitigation measures are required.

The CLTC Project site has been previously excavated, filled, graded, and leveled and due to its flat gradient and the absence of known landslides within or immediately adjacent to the site, the potential for land-sliding at the site is low. As such the potential for impacts associated with landslides are considered less than significant. No mitigation measures are required.

The CLTC Project would include road and sidewalk improvements and associated drainage, and would be constructed on existing roadway and along small portions of parcels that are proposed to be acquired, and which are either previously disturbed, portions of vacant lots, or portions of developed parcels. The Project roads are currently being used and are presently travelled upon; therefore, its remaining dirt-surfaced portions are heavily compacted. The CLTC Project would not involve extensive excavation, grading, and or fill. Ultimately, CLTC Project implementation would reduce the potential for soil erosion as a result of the proposed on-site drainage improvements. Additionally, for compliance with the California General Permit for Stormwater Discharges Associated with Construction Activities, Project construction will be mandated to incorporate a Storm Water Pollution Prevention Plan (SWPPP) to manage soil disturbance, non-storm water discharges, construction materials, and construction waste during its construction phase. Project–related construction could involve cut and fill during the grading phase; however, a substantial loss of topsoil is not anticipated given the short duration of construction time (approximately four months). Thus, the construction phase of the Project would not be exposed to extensive rain during the rainy season. Therefore, impacts related to substantial soil erosion or the loss of topsoil, are considered less than significant. No mitigation measures are required.

The soils that occur within the CLTC Project site are not considered to be expansive soils and the installation of the road base would eliminate any potential for such soils to adversely impact the roadway (CGP EIR, p. 5.6-8, YGP EIR, p. 3.6-9). Therefore, potential impacts related to being located on expansive soils that would create substantial risks to life or property, are considered less than significant. No mitigation measures are required.

The proposed Project involves the construction of roadway and drainage improvements to a partially paved road that is currently being used and is presently travelled upon. Only the western part of the City of Calimesa has a high potential to produce significant paleontological resources, which is outside of the CLTC Project site. However, the City of Yucaipa identifies the southern area of Yucaipa as a paleontological resources sensitive area. Therefore, to ensure that that potential impacts to paleontological resources are avoided or reduced to a less than significant level, implementation of mitigation measure, MM GEO-1, would reduce impacts to a less-than-significant level.

Proposed Revised Project Effects:

The proposed pipeline replacement and well relocation would be in the same general areas and involve the same types of construction as the CLTC project. Therefore, no changes in impact

type or severity are anticipated. MM GEO-1 also would apply to the pipeline replacement and well relocation.

Applicable Mitigation Measures:

- **MM GEO 1.** If any paleontological resources are exposed during ground excavation disturbance, ground disturbance activities in the vicinity of the discovery will be terminated immediately and a qualified paleontological resources specialist will be retained to evaluate the resources. If the find is determined to be significant, avoidance or other appropriate measures as identified by the paleontologist shall be implemented. Appropriate measures would include that a qualified paleontologist be permitted to recover, evaluate and curate the find(s) in accordance with current standards and guidelines.

Hydrology

IS/MND Findings:

The hydrology and water quality section of the 2019 CLTC IS/MND (pp. 74-82) concluded that construction of the proposed CLTC Project may result in the discharge of sediment and other construction-related pollutants to surface waters and groundwater. The proposed CLTC Project will disturb more than one acre of land, therefore, a Storm Water Pollution Prevention Plan (SWPPP) is required from the project proponent to comply with the statewide Construction General Permit (CGP) (Order 2009- 0009-DWQ). The SWPPP must be developed by a Qualified SWPPP Developer (QSD) and implemented onsite for the duration of the Project by a Qualified SWPPP Practitioner (QSP). The focus of a construction SWPPP is to minimize soil disturbance, non-stormwater discharges, construction materials, and construction wastes during the construction phase of the Project to prevent discharge of polluted runoff from the construction site. Coverage under the CGP requires submittal of a Notice of Intent (NOI) and payment of fees and annual reporting to the State Water Resources Control Board (SWRCB). Staff from the Santa Ana Regional Water Quality Control Board (RWQCB) may inspect the construction site periodically to ensure compliance with the SWPPP.

The proposed CLTC Project lies partly within the City of Calimesa and partly within the City of Yucaipa, split between the counties of Riverside and San Bernardino, respectively. The City of Calimesa is a co-permittee of the Riverside County Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit issued by the RWQCB, and are bound to comply with all aspects of the permit requirements. Likewise, the City of Yucaipa is a co-permittee of the San Bernardino County MS4 NPDES permit. Both MS4 permits provide “Transportation Project Guidance” (TPG) documents to ensure an analysis is conducted for transportation projects that is functionally equivalent to a Water Quality Management Plan (WQMP). Certain transportation projects are required to prepare a TPG to

guide the application of Low Impact Development (LID) Best Management Practices (BMPs) to the Maximum Extent Practicable (MEP) to reduce the discharge of pollutants to receiving waters. However, this Project does not meet the criteria to prepare a TPG and is considered exempt.

Existing surface drainage features are located close to the Project footprint (e.g., the open v-ditch at the intersection of Bryant Street and County Line Road) The Project would avoid these features. However, in the event avoidance becomes infeasible, a jurisdictional delineation will be conducted and regulatory permits obtained by the Project proponent pursuant to mitigation measure MM HYDRO 1.

As such, impacts are considered to be less than significant. Based on the analysis above, with implementation of PPP 3.10-1 through PPP 3.10-3, PDF 3.10-1, and MM HYDRO-1, impacts to water quality will be less than significant with mitigation incorporated.

Proposed Revised Project Effects:

The proposed pipeline replacement and well relocation would be in the same general areas and involve the same types of construction as the CLTC project. The relocated well would be in or near the mapped 100-year floodplain of the nearby creek, however the structure would be located above the maximum flood elevation and the nearby creek channel is scheduled for flood control improvements prior to installation of the well and pump-house. Construction on the well relocation site would involve installing a concrete block wall that would extend about 10 feet below grade and 6 feet above grade, about 4 feet from the top of bank of Calimesa Creek. With standard erosion control BMPs, which are included in the project, erosion and sedimentation impacts would be less than significant. Therefore, no changes in impact type or severity from those evaluated in the IS/MND are anticipated.

Applicable Mitigation Measures:

Because the pipeline replacement and well relocation would avoid all impacts to surface drainages, MM HYDRO-01 would not apply to these elements.

Noise

IS/MND Findings:

The 2019 CLTC IS/MND (pp. 87-90) found that, while the proposed CLTC Project would improve existing roadways by constructing roundabouts at five intersections, bicycle lanes, sidewalks, and associated drainage, it would not increase the number of motor vehicle travel lanes, and so would not promote increased traffic volumes and increase their consequent traffic noise level increases to adjacent noise-sensitive receptors.

Construction noise generation would vary as the type of construction activities vary and as the locus of this activity moves along the CLTC Project alignment. Many existing sensitive receptors (primarily residential) are located adjacent to the roadways where construction activities would take place. Attenuation of construction noise would be provided to interior receptors by the structural elements (i.e., walls, doors, closed windows) of the building in which they reside. Typical building construction provides a minimum 12 dBA interior noise reduction with windows open and a minimum 20 dBA interior noise reduction with windows closed (FHWA). Also, (as specified by IS/MND MM NOISE 4) should it be necessary, the construction contractor would be required to implement additional measures (e.g., portable sound attenuation walls, quieter equipment, etc.) to further reduce noise levels.

Implementation of mitigation measures MM NOISE-1 through MM NOISE-4 will ensure that construction equipment is located as far as is practicable from sensitive receivers, that construction activities are limited to the daytime hours (7:00 a.m. to 7:00 p.m. Monday-Friday), that mandated noise control features (e.g., mufflers) are in place on noise-generating equipment, and that procedures in place to assure that the City of Calimesa or the City of Yucaipa receive noise complaints related to CLTC Project construction. Thus, CLTC Project's potential impacts related to an increase in ambient noise above existing levels are considered less than significant with mitigation incorporated.

Proposed Revised Project Effects:

Construction equipment and noise-generating activities associated with the pipeline replacement and well relocation would be similar to those associated with the roadway improvements addressed in the 2019 IS/MND. However, additional noise-sensitive receptors would be exposed to construction noise because of the longer construction corridor required for the pipeline. These impacts would be reduced to less-than-significant levels with the implementation of MM-NOISE 1 through MM NOISE 4 carried over from the 2019 IS/MND.

As with the 2019 IS/MND roadway improvements, the water pipeline replacement and well relocation would not generate new operational noise. The new pump associated with the relocated well would be located inside a building, which would minimize exterior noise from pump operations; it would be farther away from noise receptors than the existing, unenclosed pump, so would reduce operational noise compared to existing conditions.

Thus, the CLTC Project with the proposed water supply improvements' potential impacts related to an increase in ambient noise above existing levels are considered less than significant with mitigation incorporated.

Applicable Mitigation Measures:

- **MM NOISE 1.** During Project construction, stockpiling, stationary noise-generating equipment and vehicle staging areas shall be located as far as is practicable from any existing structure designed for human occupancy.

- **MM NOISE 2.** Construction activities shall be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Construction during other periods, including Sundays and holidays, shall be limited to emergencies and activities determined to be in the interest of the general public.

- **MM NOISE 3.** All construction equipment shall be operated with mandated noise control equipment (i.e., mufflers or silencers).

- **MM NOISE 4.** The City of Calimesa and the City of Yucaipa shall respond to any noise complaints received for this Project by measuring noise levels at the affected receptor site. If the monitored noise level exceeds the City of Calimesa noise standards, in accordance with Chapter 8.15 Noise Abatement and Control, or with the City of Yucaipa noise standards, in accordance to Chapter 9, 87.0905 Noise, the construction contractor shall implement adequate measures (which may include portable sound attenuation walls, use of quieter equipment, shift of construction schedule to avoid the presence of sensitive receptors, etc.) to reduce noise levels to the greatest extent feasible. Any monitoring shall be conducted by a qualified acoustical firm under contract with the construction contractor and responsible to the City of Calimesa and the City of Yucaipa.

Traffic

IS/MND Findings:

Implementation of the CLTC Project would include roadway, sidewalk, and associated drainage improvements in an area that has been previously disturbed, in portions of vacant lots, or portions of developed parcels. The 2019 CLTC IS/MND (pp. 99-104) concluded that implementation of that project would result in safer conditions then what currently exists, and the CLTC project would be built to meet City of Calimesa and the City of Yucaipa design standards that are deemed to be sufficient so as not to create traffic flow hazards. Per the US Department Transportation, roundabouts, as the types proposed, improve safety for all users including pedestrian and bicycles. Further, the roundabouts reduce the types of crashes where people are seriously hurt or killed when compared to conventional stop-controlled and signalized intersections. The CLTC project would also meet City of Calimesa and City of Yucaipa design standards based on their General Plan Circulation Elements. Based upon the proposed design, the CLTC project is not anticipated to pose any significant hazards to pedestrians, bicyclists or

motor vehicles once completed. Therefore, potential impacts that could substantially increase hazards due to a design feature or incompatible use are less than significant. No mitigation measures are required.

Once completed, the CLTC project would supplement emergency access to the area by providing improved travel routes for emergency response vehicles. However, during construction, adequate emergency access and control must be accomplished by implementing a traffic management plan that can ensure safe, albeit, slower traffic flow on the adjacent streets. The following mitigation measures will be implemented to address this potentially significant impact. The CLTC IS/MND concluded that, with the implementation of MM TRANS-1, potential impacts related inadequate emergency access are considered less than significant with mitigation incorporated.

Proposed Revised Project Effects:

The pipeline replacement and well relocation, once operational, would not affect traffic or transportation. Construction of the pipelines would require trenching in the roadway, which would affect traffic operations. Mitigation Measure MM TRANS-1 in the 2019 CLTC IS/MND would reduce this impact to a less-than-significant level.

The revised project would not affect VMT because the pipelines and well would replace existing similar features and no additional maintenance vehicle travel would occur.

Applicable Mitigation Measures:

- **MM TRANS 1.** The construction contractor shall provide adequate traffic management resources, as determined by the City of Calimesa and the City of Yucaipa, to ensure adequate access to all occupied properties on a daily basis, including emergency access. A construction traffic management plan shall be prepared and approved by the City of Calimesa and the City of Yucaipa, for their appropriate jurisdiction, prior to initiation of construction within the project. The plan can include the following components: protective devices, flag person(s) or police assistance for traffic control, to maintain safe traffic flow on local streets affected by construction at all times.

3.1 CONCLUSIONS

Based on the information provided above, the newly evaluated impacts of the proposed water line replacements and well relocation would not substantially alter impacts previously identified in the adopted 2019 IS/MND for the CLTC project. Mitigation measures included in the adopted IS/MND also would apply to the water line and well relocation as identified in this Addendum, and would reduce any additional impacts associated with the water line replacement and well relocation to a less-than-significant level. Therefore, the conclusions of this Addendum remain consistent with those made in the IS/MND. No new significant impacts have been identified, nor

is the severity of newly identified impacts substantially greater than the conclusions of the IS/MND. No additional CEQA review is required.

4.0. REPORT PREPARERS

Northgate Environmental Management, Inc.

Nancy Hendrickson, Principal

Richard Grassetti, Principal Environmental Planner

Geoffrey Hornek, Nosie and Air Quality Specialist

5.0 REFERENCES

Bargas Environmental Consulting. *Cultural Resources Survey Report, South Mesa Water Company Water System Improvement Project*. January 12, 2022.

Bargas Environmental Consulting. *Results of a Biological Resources Survey for the Proposed Water System Improvements by the South Mesa Water Company*. February 17, 2022.

Federal Highway Administration, Roadway Construction Noise Model (RCNM). https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/index.cfm

APPENDIX A: AIR QUALITY CALCULATIONS

APPENDIX B: BIOLOGICAL RESOURCES STUDY

II. Responses to Comment Letters

The San Gorgonio Pass Water Agency (SGPWA) as Lead Agency circulated for public review and comment an Initial Study/Mitigated Negative Declaration (IS/MND) for the County Line Road Recharge Basin and Turnout Project ("Project"), pursuant to State CEQA Guidelines Section 15072. The purpose of circulating the IS/MND was to receive input on SGPWA's determination that with imposition of mitigation measures, the Project will not have a significant effect on the environment.

The IS/MND was circulated for a 30-day period from August 7, 2024 to September 5, 2024 to interested parties, Responsible Agencies, Trustee Agencies, Riverside County Clerk and San Bernardino County Clerk for review and comment, pursuant to Section 15073 of the State CEQA Guidelines. The IS/MND was also submitted to the State Clearinghouse for a 30-day review period from August 7, 2024 to September 5, 2024. Additionally, the Notice of Intent to Adopt the IS/MND was published in *The Press Enterprise* newspaper on August 7, 2024 and in the *Record Gazette* on August 9, 2024. Copies of the comments received during the public comment period and responses to those comments from the SGPWA are included herein.

Based on review of the comments received, no new, unavoidable significant environmental effects were identified and therefore, pursuant to Section 15073.5 of the State *CEQA Guidelines*, recirculation of the environmental documents for this Project is not required.

Section 15074 of the State *CEQA Guidelines* requires the SGPWA Board of Directors to consider the proposed IS/MND together with any comments received during the public review process. There is no requirement for a formal response to each of the comments received (unlike the requirement for a Final Environmental Impact Report). However, in order to provide the SGPWA Board of Directors with additional information upon which to base their decision to adopt the IS/MND, the following Responses to Comments have been prepared. Copies of each comment letter received and SGPWA's responses are enclosed. Each comment letter is labeled alphabetically, and each individual comment identified by a number.

Table of Contents

1. COMMENTS RECEIVED

The following comment letters were received regarding the IS/MND:

Letter	Date of Letter	Commenter, Agency
A	August 7, 2024	Lorrie Gregory, Cultural Resource Coordinator Cahuilla Band of Indians
B	August 8, 2024	BobbyRay Esparza, Cultural Director Cahuilla Band of Indians
C	August 29, 2024	Amy McNeill, Engineering Project Manager Riverside County Flood Control and Water Conservation District
D	September 5, 2024	Lori Schmitz, Environmental Scientist Division of Financial Assistance, Special Project Review Unit State Water Resources Control Board
End of Public Review Period: September 5, 2024		
E	September 17, 2024	Bernadette Ann Brierty, Tribal Historic Preservation Officer Morongo Band of Mission Indians

2. COMMENT LETTERS AND RESPONSES

Comment Letter A – Cahuilla Band of Indians

Comment Letter A

From: Lorrie Gregory <LGregory@cahuilla-nsn.gov>
Sent: Wednesday, August 7, 2024 12:08:04 PM
To: Emmett Campbell <ecampbell@sgpwa.com>
Cc: BobbyRay Esparza <besparza@cahuilla-nsn.gov>
Subject: County Line Road Recharge Basin and Turnout Facility Project

Good morning,

Thank you for reaching out to the Cahuilla Band regarding the following project. We unaware of cultural resources at/or near the project area. However, since the project is within Cahuilla traditional land use we ask that you provide the following:

*A cultural resources inventory of the project area by a qualified archaeologist prior to any development activities in this area.
*A copy of the records search with associated survey reports and site records from the information center.
*Copies of any cultural resource documentation (report and site records) generated in connection with this project. #

A-1

We would like to provide monitoring if included in mitigation, in order to preserve and protect potential unearthed cultural resources. Thank you again for reaching out, hope to hear from you soon.

A-2

Respectfully,

Lorrie Gregory
Cultural Resource Coordinator
Cahuilla Band of Indians
Phone: 1 (951) 782-0481
Email: lgregory@cahuilla-nsn.gov

Response to Comment Letter A – Cahuilla Band of Indians

Response to Comment A-1

The Cahuilla Band of Indians requests information about the Project's cultural resource inventory, records search, and reports. In response to this letter, SGPWA emailed the items requested by the Cahuilla Band of Indians on August 8, 2024 to the letter's author. The materials provide to the Cahuilla Band of Indians on August 8, 2024 included: a link to download the Phase 1 Cultural Resources Investigation prepared for the project; a Zip file containing SHP files of the Project boundaries; and, a link to the results of the cultural records searches. These documents were already included in the analysis of the MND which determined that no significant archaeological or tribal cultural resources were identified within the Project. This comment does not change any of the significance determinations made in the MND.

Response to Comment A-2

This comment requests monitoring during construction. As outlined in the MND circulated for public review (pp. 42-43) three mitigation measures (MM CR-1, MM CR-2, and TCR-1) include monitoring during construction. This comment does not change any of the significance determinations made in the MND.

Comment Letter B – Cahuilla Band of Indians

Comment Letter B

From: BobbyRay Esparza
To: Emmett Campbell; Lorrie Gregory
Cc: Autumn DeWoody
Subject: Re: County Line Road Recharge Basin and Turnout Facility Project
Date: Thursday, August 08, 2024 2:43:40 PM
Attachments: image002.png
image003.png
Outlook-rjztdbfh.png

Good afternoon,

I appreciate you sending over the cultural report phase I for review as Lorrie expressed, I did not receive the cultural report or the link for the project after looking through my emails as well not sure what happened there. However, we will review and get back to you if we have any comments or concerns. Thank you have great day! B-1

Respectfully,

BobbyRay Esparza
Cultural Director
Cahuilla Band of Indians
Office: 951-763-5549
Cell: 760-423-2773
Fax: 951-763-2808
Email: besparza@cahuilla-nsn.gov

Response to Comment Letter B – Cahuilla Band of Indians

Response to Comment B-1

Comment noted. SGPWA received this confirmation from the Cultural Director of Cahuilla Band of Indians that the requested materials mentioned in Comment Letter A were received by his office. This comment does not change any of the significance determinations in the MND.

Comment Letter C – Riverside County Flood Control and Water Conservation District

Comment Letter C

JASON E. UHLEY
General Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
951.788.9965 FAX
www.rcflood.org

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

258106

August 29, 2024

San Gorgonio Pass Water Agency
1210 Beaumont Avenue
Beaumont, CA 92223

Attention: Emmett Campbell

Re: County Line Road Recharge Basin and Turnout Facility Project, APN 411-150-027

The District does not normally recommend conditions for land divisions or other land use cases in incorporated cities. The District also does not plan check City land use cases, or provide State Division of Real Estate letters or other flood hazard reports for such cases. District comments/recommendations for such cases are normally limited to items of specific interest to the District including District Master Drainage Plan facilities, other regional flood control and drainage facilities which could be considered a logical component or extension of a master plan system, and District Area Drainage Plan fees (development mitigation fees). In addition, information of a general nature is provided.

The District's review is based on the above-referenced project transmittal, received August 6, 2024. The District **has not** reviewed the proposed project in detail, and the following comments do not in any way constitute or imply District approval or endorsement of the proposed project with respect to flood hazard, public health and safety, or any other such issue:

☐ This project would not be impacted by District Master Drainage Plan facilities, nor are other facilities of regional interest proposed.

☐ This project involves District proposed Master Drainage Plan facilities, namely, _____. The District will accept ownership of such facilities on written request by the City. The Project Applicant shall enter into a cooperative agreement establishing the terms and conditions of inspection, operation, and maintenance with the District and any other maintenance partners. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection, and administrative fees will be required. All regulatory permits (and all documents pertaining thereto, e.g., Habitat Mitigation and Monitoring Plans, Conservation Plans/Easements) that are to be secured by the Applicant for both facility construction and maintenance shall be submitted to the District for review. The regulatory permits' terms and conditions shall be approved by the District prior to improvement plan approval, map recordation, or finalization of the regulatory permits. There shall be no unreasonable constraint upon the District's ability to operate and maintain the flood control facility(ies) to protect public health and safety.

☐ If this project proposes channels, storm drains larger than 36 inches in diameter, or other facilities that could be considered regional in nature and/or a logical extension a District's facility, the District would consider accepting ownership of such facilities on written request by the City. The Project Applicant shall enter into a cooperative agreement establishing the terms and conditions of inspection, operation, and maintenance with the District and any other maintenance partners. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection, and administrative fees will be required. The regulatory permits' terms and conditions shall be approved by the District prior to improvement plan approval, map recordation, or finalization of the regulatory permits. There shall be no unreasonable constraint upon the District's ability to operate and maintain the flood control facility(ies) to protect public health and safety.

C-1

San Gorgonio Pass Water Agency - 2 - August 29, 2024
Re: County Line Road Recharge Basin and
Turnout Facility Project, APN 411-150-027 258106

☑ An encroachment permit shall be obtained for any construction related activities occurring within District right of way or facilities, namely, Calimesa Channel. If a proposed storm drain connection exceeds the hydraulic performance of the existing drainage facilities, mitigation will be required. For further information, contact the District's Encroachment Permit Section at 951.955.1266.

☐ The District's previous comments are still valid.

C-1 cont.

GENERAL INFORMATION

This project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Clearance for grading, recordation, or other final approval should not be given until the Agency has determined that the project has been granted a permit or is shown to be exempt.

The project proponent shall bear the responsibility for complying with all applicable mitigation measures defined in the California Environmental Quality Act (CEQA) document (i.e., Negative Declaration, Mitigated Negative Declaration, Environmental Impact Report) and/or Mitigation Monitoring and Reporting Program, if a CEQA document was prepared for the project. The project proponent shall also bear the responsibility for complying with all other federal, state, and local environmental rules and regulations that may apply.

If a natural watercourse or mapped floodplain is impacted by this project, the Agency shall obtain a Section 1602 Agreement from the California Department of Fish and Wildlife and a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers, or written correspondence from these agencies indicating the project is exempt from these requirements. A Clean Water Act Section 401 Water Quality Certification may be required from the local California Regional Water Quality Control Board prior to issuance of the Corps 404 permit.

C-2

Very truly yours,

Amy McNeill

AMY MCNEILL
Engineering Project Manager

EM:blj:mm

Response to Comment Letter C – Riverside County Flood Control and Water Conservation District

Response to Comment C-1

This comment letter outlines the Riverside County Flood Control and Water Conservation District (District) standard commenting procedures on projects that it reviews. Specifically, the letter only has one item identified that applies to this Project, which indicates an encroachment permit from the District is required for any construction related activities within District facilities or right-of-way related to Calimesa Channel. As identified in the MND circulated for public review (p. 8), the Project will install a water pipeline within the public road right-of-way of 4th Street, underneath the conduit that Calimesa Creek Channel passes through underneath 4th Street. The Project does not propose a storm drain connection to Calimesa Channel. Prior to the start of construction, SGPWA will confirm with the District the extent to which an encroachment permit is necessary, and obtain one based on conditions that may apply. This comment does not change any of the significance determinations in the MND.

Response to Comment C-2

This comment includes general information about what the Project might need in terms of the National Pollutant Discharge Elimination System (NPDES), the need for CEQA compliance, and also indicates that the Project may require regulatory permits for impacts to watercourses. As outlined in Section 10 beginning on page 57 of the MND circulated for public review, the Project's applicability and compliance with NPDES was outlined, and the SGPWA has complied with CEQA by preparing the MND. No regulatory waters are to be impacted by the Project; however, as stated on page 34 of the MND circulated for public review, notification to California Department of Fish and Wildlife is anticipated for installing a pipeline underneath Calimesa Creek Channel even though it is concrete lined. No other regulatory notifications/permits are anticipated. This comment does not change any of the significance determinations in the MND.

Comment Letter D – State Water Resources Control Board, Division of Financial Assistance

Comment Letter D

Water Boards

State Water Resources Control Board

September 5, 2024

Emmett Campbell
San Gorgonio Pass Water Agency
1210 Beaumont Avenue
Beaumont, Riverside CA 92223

Dear Emmett Campbell:

INITIAL STUDY MITIGATED NEGATIVE DECLARATION (IS/MND) FOR SAN GORGONIO PASS WATER AGENCY (AGENCY); COUNTY LINE ROAD RECHARGE BASIN AND TURNOUT PROJECT (PROJECT); TULARE COUNTY; STATE CLEARINGHOUSE NO. 2024080294

We understand that the Water System may be pursuing Drinking Water State Revolving Fund (DWSRF) financing for this Project. As a funding agency and a state agency with jurisdiction by law to preserve, enhance, and restore the quality of California's water resources, the State Water Board is providing the following water quality related comments on the IS/MND.

The State Water Board, Division of Financial Assistance, is responsible for administering the DWSRF Program (Program). The primary purpose for the Program is to implement the Safe Drinking Water Act and various state laws by providing financial assistance for drinking facilities improvements to provide clean potable drinking water, and thereby protect and promote health, safety and welfare of the inhabitants of the state.

All applicants seeking DWSRF funding must comply with the California Environmental Quality Act (CEQA) and provide appropriate environmental documents to the State Water Board so that it can fulfill its CEQA responsibilities, see CEQA Requirements. In addition, because the Program is partially funded by the United States Environmental Protection Agency additional federal environmental documentation (cross-cutters) may be required. For additional Program information, the complete environmental application package and instructions, please visit:
Drinking Water State Revolving Fund Forms and Instructions.

Following are specific comments on the Agency's draft IS/MND:

- Under section "10 Other Public Agencies Whose Approval is Required" "California Department of Drinking Water" is listed for an Encroachment Permit

D-1

D-2

for access to the East Branch Extension and turnout approval. Please indicate if this should state "Department of Water Resources" or further clarify who the "California Department of Drinking Water" is.

- The IS/MND mentions that the Calimesa Creek channel is potentially jurisdictional. Please explain if the Calimesa Creek Channel is considered a navigable Water of the United States. [Please note: "For purposes of the Rivers and Harbors Act, Section 10 permit, a tunnel or other structure or work under or over a navigable water of the United States is considered to have an impact on the navigable capacity of the waterbody." (Corps of Engineers, Department of the Army, 33 Code of Federal Regulations § 322.3).]
- The IS/MND covers the impacts of constructing water system infrastructure to recharge the State Water Project water into the Yucaipa Groundwater Subbasin. However, the document does not go into the specifics of what State Water Project water will be recharged and when or the direct and indirect impacts to possible Waters of the United States and Waters of the State.
    - Will the future environmental documents consider each contracted diversion, the amount of the diversion, the water rights involved, and the impacts the diversions would have based on where the State Water Project water is coming from?
        - If not, please discuss the water rights involved. Please also discuss the potential impacts to: Waters of the State and Waters of the United States; and potential impacts to fish, aquatic species, wetland and riparian habitats that depend on the surface water body or bodies that the State Water Project water will be diverted from.

Thank you for the opportunity to review the Agency's draft IS/MND. If you have any questions or concerns, please feel free to contact me at (916) 449-5285, or by email at Lori.Schmitz@waterboards.ca.gov or contact Mrs. Bridget Binning at (916) 449-5641, or by email at Bridget.Binning@waterboards.ca.gov.

Sincerely,

Lori Schmitz

Digitally signed by Lori Schmitz
Date: 2024.09.05 10:49:55 -07'00'

Lori Schmitz
Environmental Scientist
Division of Financial Assistance
Special Project Review Unit
1001 I Street, 16th floor
Sacramento, CA 95814

cc: State Clearinghouse

D-2 Cont.

D-3

D-4

Response to Comment Letter D – State Water Resources Control Board, Division of Financial Assistance

Response to Comment D-1

This comment describes the understanding of the State Water Resources Control Board (SWRCB) that the proposed Project may be pursuing Drinking Water State Revolving Fund (DWSRF) financing. As stated on pages 18 and 89 of the MND circulated for public review, the Project will receive funding from the County of Riverside's American Rescue Plan Act (ARPA) funding source and will not pursue DWSRF funding. This comment does not change any of the significance determinations in the MND and it does not raise a new environmental issue.

Response to Comment D-2

This comment points out an inadvertent error in section 10 (Other public agencies whose approval is required) located on page 18 of the MND circulated for public review. The final IS will be revised to replace "California Department of Drinking Water" with "California Department of Water Resources." This comment does not change any of the significance determinations in the MND and it does not raise a new environmental issue.

Response to Comment D-3

This comment asks whether Calimesa Creek Channel is considered a Navigable Water of the U.S. and references 33 CFR 322.3, which states, "For purposes of the Rivers and Harbors Act, Section 10 permit, a tunnel or other structure or work under or over a navigable water of the United States is considered to have an impact on the navigable capacity of the waterbody." As indicated on page 34 of the MND circulated for public review, Calimesa Creek Channel is a concrete-lined, trapezoidal flood control channel that only flows when it rains (meaning, it is ephemeral). Since the U.S. Supreme Court's decision in the *Sackett v. U.S. Environmental Protection Agency* case in 2023, ephemeral creeks are no longer considered potential Waters of the U.S. Two photographs of the channel are provided in Appendix A (Photo Log) as Photograph Nos. 8 and 9. As shown in these photos, the channel is clearly not navigable. Also, page 103 of the MND indicates the Project is not located in or near navigable Waters of the United States. Furthermore, as stated on page 8 of the MND circulated for public review, the Project will install the proposed pipeline underneath the concrete-lined channel using a trenchless method to avoid impacts. Therefore, the Project is not going to affect a navigable Water of the United States. This comment does not change any of the significance determinations in the MND and it does not raise a new environmental issue.

Response to Comment D-4

This comment asks for specific information about the water to be conveyed and recharged into the groundwater basin by the Project. The water to be conveyed and recharged into the groundwater basin by the Project will come from SGPWA's water supply sources including SGPWA's existing allocation of State Water Project water. Other sources for SGPWA include

some long-term water leases of State Water Project water with the City of Ventura through Ventura County Water Protection District, and a 20-year lease for non-State Water Project water with Antelope Valley-East Kern Water Agency (AVEK). San Bernardino Valley Municipal Water District (SBVMWD) will also have the ability to recharge water from their water supply sources, which include the State Water Project, into the proposed Basin. SGPWA has a Water Supply Contract with the Department of Water Resources (DWR) where DWR supplies a contractual amount of water to SGPWA's service area annually.[1] SGPWA is not involved with the diversion of water into the State Water Project infrastructure. Moving water into the State Water Project is the responsibility of DWR. As stated on page 2 of the MND circulated for public review, recharge will occur in the proposed basin when the water is available from SGPWA's supply sources including the State Water Project contractual allocation. Therefore, an exact delivery schedule cannot be predicted.

This comment also asks if future environmental documents associated with the Project will consider the amounts, water rights, and impacts based on where the State Water Project water is coming from. SGPWA is not contemplating any future environmental documents associated with the Project. State Water Project water comes from the Sacramento-San Joaquin Delta in Northern California. Documenting the direct and indirect impacts of conveying Delta water (and non-Delta water) to Southern California by DWR in the State Water Project facilities are far beyond the scope of this analysis. Furthermore, the water rights of State Water Contractors are established in each contract with DWR and in each water supplier's principal act. Regardless of where the molecules of water being recharged in the proposed basin came from, SGPWA's implementation of this Project is fully within the rights of SGPWA's principal act[2] and water delivery contract with DWR and other suppliers.

As noted in Response to Comment D-3, the Project will not impact Waters of the U.S. Because the pipeline installation under concrete-lined Calimesa Creek Channel will use trenchless methods, the Project would not impact Waters of the State. Therefore, no additional analysis related to water rights, impacts to Waters of the State/United States, and the State Water Project is warranted. This comment does not change any of the significance determinations in the MND and it does not raise a new environmental issue.

[1] Water Supply Contract between the State of California Department of Water Resources and San Gorgonio Pass Water Agency: https://www.sgpwa.com/wp-content/uploads/2021/01/Click-here-to-view-EBX-Contract.pdf
[2] San Gorgonio Pass Water Agency Act: https://www.sgpwa.com/wp-content/uploads/2021/07/1-1961-SGPWA-LAW.pdf

Comment Letter E – Morongo Band of Mission Indians

Comment Letter E

TRIBAL HISTORIC PRESERVATION OFFICE

VIA ELECTRONIC MAIL

ecampbell@sgpwa.com

MORONGO BAND OF MISSION INDIANS

A SOVEREIGN NATION

Emmett Campbell, Sr. Water Resources Planner
San Gorgonio Pass Water Agency
1210 Beaumont Avenue
CA 92223

September 17, 2024

Re: San Gorgonio Pass Water Agency Notice of Intent to Adopt a Mitigated Negative Declaration for the County Line Road Recharge Project, San Bernardino County, CA

The Morongo Band of Mission Indians (Tribe/MBMI) Tribal Historic Preservation Office (THPO) has reviewed the Mitigated Negative Declaration (MND) that San Gorgonio Pass Water Agency (Agency) has made available for the County Line Road Recharge Project (Project). MBMI THPO has reviewed mitigation measures included in the Project MND. At this time, Tribe has no further comments upon the Project.

As the lead agency, the Agency is responsible for ensuring that the Mitigation Measures agreed upon are carried out by the Project Proponent. As Tribal Monitoring is one of those Mitigation Measures, a Tribal Monitoring Services Agreement (TMSA) must be established with MBMI in advance of the beginning of any ground-disturbing activity at the Project site. E-1

Moreover, MBMI reserves the right, under AB 52, to continue Government-to-Government Consultation until the Project is complete and/or if circumstances make further communication and consultation necessary. This ensures that should cultural resources or tribal cultural resources be found at any stage of the Project, consultation mechanisms and policies will already be in place.

MBMI looks forward to continuing to work with the Agency until the above Project is completed. Please notify Tribe when the Project is scheduled to begin so that Consultation can prepare appropriate Service Agreement Documents for the Project Proponent.

If you have any questions or concerns, please contact Bernadette Ann Brierty, Tribal Historic Preservation Officer (THPO): ABrierty@morongo-nsn.gov, THPO@morongo-nsn.gov or (951) 663-2842.

Bernadette Ann Brierty

Bernadette Ann Brierty

Tribal Historic Preservation Officer

Morongo Band of Mission Indians

CC: Morongo THPO

12700 Pumarra Road – Banning, CA 92220 – (951) 755-5259 – Fax (951) 572-6004 – THPO@morongo-nsn.gov

Response to Comment Letter E – Morongo Band of Mission Indians

Response to Comment E-1

This comment letter was received after the end of the duly noted public review period as identified in the Notice of Intent to Adopt a Mitigated Negative Declaration, which was received by the Morongo Band of Mission Indians (MBMI) on August 6, 2024. Nonetheless, responses to this late comment letter are provided.

This comment letter states the Tribe has reviewed the publicly circulated MND including the mitigation measures and has no further comments on the Project. The letter also reminds SGPWA of its responsibility for implementing the mitigation measures including a tribal monitoring agreement in mitigation measure MM TCR-1 (MND, p. 80). These comments are noted.

The letter also states that MBMI reserves the right pursuant to AB 52 to continue Government-to-Government consultation until the project is completed or as needed. The process for Native American Consultation per AB 52 is set forth in Public Resources Code (PRC) § 21080.3.1. This process includes specific timeframes by which any Native American Tribe interested in consultation must respond to a Lead Agency's request, consultation commences, and when consultation is concluded. As documented on page 19 of the MND circulated for public review, MBMI requested AB 52 consultation with SGPWA and copies of project documents on March 27, 2024. SGPWA provided project documents on March 28, 2024 and May 10, 2024. MBMI provided suggested mitigation measures to SGPWA on July 9, 2024 and in response, SGPWA revised the project's cultural and tribal cultural mitigation measures for consistency with the suggested mitigation measures. SGPWA then provided MBMI the revised mitigation measures on July 25, 2024 for another opportunity to review and comment prior to the public review period. No response from MBMI was subsequently received. Because the mitigation suggested by MBMI was incorporated into MM CR-1, MM CR-2, MM CR-3, and MM TCR-1, SGPWA determined consultation was concluded prior to circulation of the MND for public review. That the mitigation measures as set forth in the MND are acceptable to the MBMI is evidenced by the MBMI's agreement with the mitigation measures as stated in this comment letter. Therefore, SGPWA has appropriately concluded consultation. This comment does not change any of the significance determinations in the MND and it does not raise a new environmental issue.

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III. Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

for

County Line Road Recharge Basin and Turnout Project

SCH#: 2024080294

Lead Agency:
San Gorgonio Pass Water Agency
1210 Beaumont Avenue
Beaumont, CA 92223
(951) 845-2577

Prepared by:
Albert A. Webb Associates
3788 McCray Street
Riverside, CA 92506
(951) 686-1070
W.O. 2023-0136

October 7, 2024

Project Description

The Project is a collaborative effort between the San Gorgonio Pass Water Agency (SGPWA) and San Bernardino Valley Municipal Water District (San Bernardino Valley), both of which are State Water Contractors to provide imported water to communities located within the Cities of Calimesa and Yucaipa, and the communities served by South Mesa Water Company. The Project consists of new water conveyance pipelines, a new groundwater recharge basin to benefit the Calimesa Management Area of the Yucaipa Groundwater Subbasin using State Water Project water, and a new connection on the East Branch Extension pipeline of the State Water Project. The Project includes repurposing a pipeline, which has previously been evaluated in the County Line Transportation Corridor (CLTC) Addendum to IS/MND, adopted in August 2022, included as Appendix G of this IS/MND.

The Project is consistent with and supported by the Yucaipa Sustainable Groundwater Management Agency (Yucaipa SGMA) and its Yucaipa Subbasin Groundwater Sustainability Plan (GSP), which was approved by DWR as of January 18, 2024. The purpose of the GSP is to prevent undesirable results and increase groundwater replenishment to the Yucaipa Subbasin. This Project will help prevent a net decline of groundwater levels by facilitating recharge of imported State Water Project water supplies when they are available to an area that previously did not have access to such supply. As a result of this Project, San Bernardino Valley and SGPWA as member agencies of the Yucaipa SGMA, will have infrastructure to store water and provide a reliable source of water during drought emergencies, leaving the communities of Calimesa and Yucaipa less vulnerable to drought restrictions and the groundwater basin at less risk of future groundwater level declines as climate change progresses.

The Project components include the turnout facility, conversion/construction/replacement of potable and non-potable pipelines, recharge basin, elevation control basin, monitoring well, and street improvements. Components of the Project will be located within the City of Calimesa, Riverside County.

The Project components will be constructed over a period of approximately one year. Overall, the Project will include repaving approximately 16,495 square feet of existing paved surfaces, and new impervious areas totaling 29,530 square feet; 18,230 square feet will occur onsite (within recharge basin property), and 11,300 square feet will occur offsite (within Buena Vista Court and 4th Street). Operation and maintenance (O&M) activities of the proposed facilities are included in this analysis. They will vary depending on the Project component.

Mitigation Monitoring and Reporting Program

The enclosed Mitigation Monitoring and Reporting Program (MMRP) has been compiled to verify implementation of adopted mitigation measures. The following table provides a summary format based on the written report, including all mitigation measures, the timing of mitigation implementation, identification of the responsible monitoring party, and verification of implementation of each mitigation measure.

The following clarifies the meaning of each column in the following table:

Impact Category:	Identifies potentially affected resource/ environmental condition.
Mitigation Measure:	Those measures that will be implemented to minimize possible significant environmental impacts.
Implementing Timing:	The phase of the project in which implementation and compliance will be monitored.
Responsible Monitoring Party:	Entity responsible for monitoring implementation of the mitigation measure.
Monitoring/Reporting Method:	Identifies mechanism by which implementation will be verified.
Compliance Verification:	To be signed and dated by San Gorgonio Pass Water Agency upon receipt of written verification of each mitigation measure.

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
Biological Resources	**MM BIO-1: Nesting Bird Survey.** A preconstruction survey for nesting birds shall be conducted no more than 72 hours prior to commencement of project activities, including project staging. The survey shall be conducted by a qualified biologist with prior experience conducting nesting bird surveys for construction projects. The study area should include the affected area and suitable habitat within a 500-foot buffer, or a buffer size determined by the qualified biologist based on level of proposed disturbance and access. Results of the survey shall be provided to SGPWA. If no active nests are found, no additional measures are required. If active nests are found, then the biologist will map the location and document the species and nesting stage for SGPWA. A no-work buffer will be established around the active nest as determined by the qualified biologist and based on the species sensitivity to disturbance and the type and duration of the disturbance. No construction activities shall occur within the no-work buffer until the biologist has determined the nest is no longer active.	Within 72 hours (3 days) of commencement of project activities, including staging.	Qualified biologist	Survey report provided to SGPWA	

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
Cultural Resources	**MM CR-1: Monitoring and Treatment Plan.** Prior to the pre-grade/kickoff meeting, the San Gorgonio Pass Water Agency shall retain a qualified project archaeologist that meets the Secretary of the Interior Standards. A Monitoring and Treatment Plan that is reflective of the project mitigation measures ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the Project archaeologist and submitted to the San Gorgonio Pass Water Agency for dissemination to the Consulting Tribes (Morongo Band of Mission Indians (MBMI), and Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known as San Manuel Band of Mission Indians)). Once all parties review and approve the plan, it shall be adopted by San Gorgonio Pass Water Agency – the plan must be adopted prior to the start of ground disturbing activities for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan. This Plan shall allow for monitors to be present that represent the Consulting Tribes for the remainder of the project construction, should the Tribe(s) elect to place a monitor on-site.	Prior to pre-grade/kickoff meeting.	Qualified archaeologist and Consulting Tribes identified in this measure (if they elect to place a monitor on site; if tribes are non-responsive, then SGPWA can proceed)	Monitoring reports provided to SGPWA and Consulting Tribes, then the Eastern Information Center	

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
	The final report(s) created as a part of the project (e.g., monitoring and treatment plan, isolate records, site records, survey reports, testing reports, etc.) shall be submitted to the San Gorgonio Pass Water Agency and the Consulting Tribes for review and comment. After approval of all parties, the final reports are to be submitted to the Eastern Information Center, and the Consulting Tribes.				
Cultural Resources	**MM CR-2: Archaeological Monitoring.** Due to the heightened cultural sensitivity of the undisturbed native soil in the proposed project area, the Project archaeologist or designated archaeological monitor with at least 3 years of regional experience in archaeology that is retained by San Gorgonio Pass Water Agency to conduct a Cultural Resource Sensitivity Training at the pre-grade/kick-off meeting. The purpose of the training is to explain and coordinate the requirements of the monitoring plan (see MM CR-1). The archaeologist shall also be present for all ground disturbing activities that occur within the proposed project area of undisturbed native soil (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading,	Training to be held at pre-grade/kickoff meeting. Present at all ground disturbing activities	Qualified archaeologist	Sign-in sheet of attendees provided to SGPWA Monitoring report provided to SGPWA and Consulting Tribes.	

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
	excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.				
Cultural Resources	**MM CR-3: Inadvertent Discovery of Human Remains.** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted immediately pursuant to State Health and Safety Code Section 7050.5 and that code enforced for the duration of the project. No photographs are to be taken by anyone other than the coroner, except with written approval by the Consulting Tribes. The area shall be protected; project personnel/observers will be restricted. The County Coroner has 48 hours to make	Upon discovery.	SGPWA and Contractor	If human remains are found, Contractor shall stop work, notify SGPWA and SGPWA shall report to County Coroner.	

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
	his/her determination pursuant to State Health and Safety Code Section 7050.5. If the County Coroner contacts the Native American Heritage Commission pursuant to Health and Safety Code section 7050.5(c), then the procedures in Public Resources Code (PRC) Section 5097.98 for the discovery of human remains shall be implemented.				
Geology and Soils	**MM PALEO-1: Paleontological Resource Impact Mitigation Program (PRIMP).** Construction activities that extend below the depth of artificial fill and below road pavement may impact significant paleontological resources throughout the Project area. Therefore, prior to the issuance of grading permits and consistent with Riverside County General Plan policies (i.e., Open Space Element Policy 19.6), a Paleontological Resource Impact Mitigation Program (PRIMP) shall be prepared by a qualified professional paleontologist as defined by mitigation paleontology industry standards (Murphey et al., 2019) and/or the Society of Vertebrate Paleontology (SVP, 2010). The PRIMP will include a Worker's Environmental Awareness Program training prepared prior to the start of Project-related	No grading permits expected; prior to ground disturbance.	Qualified paleontologist	Paleontological Resource Impact Mitigation Program (PRIMP)	

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
	ground disturbance and presented in person to all field personnel to describe the types of paleontological resources that may be found and the procedures to follow if any are encountered; the PRIMP will indicate where construction monitoring should occur and the frequency of required monitoring (e.g., full-time, spot-checks, etc.); the PRIMP will also provide details about fossil collection, analysis, and preparation for permanent curation at an approved repository; and lastly, the PRIMP will describe the different reporting standards to be used, such as monitoring with negative findings versus monitoring resulting in fossil discoveries.				
Noise	**MM NOISE-1: Proper Mufflers.** During all Project-related construction, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturer's standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.	During construction	SGPWA's Contractor	Equipment reporting to SGPWA	

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
Tribal Cultural Resources	**MM TCR-1: Treatment of Cultural Resources During Project Implementation.** San Gorgonio Pass Water Agency shall enter into a Tribal Monitoring Agreement with the Morongo Band of Mission Indians (MBMI) prior to the start of ground disturbance activities. The agreement shall include MBMI attendance at the Cultural Resource Sensitivity Training to occur at the pre-grade/kick-off meeting. If a pre-contact cultural resource (i.e., those that predate Native American contact with Europeans) is discovered during project construction, then ground-disturbing activities shall be suspended for a distance of 60 feet around the resource(s), and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The Project Archaeologist that is retained by San Gorgonio Pass Water Agency per MM CR-1 will evaluate the resource. Representatives from the Consulting Tribes (Morongo Band of Mission Indians [MBMI] and Yuhaaviatam of San Manuel Nation [YSMN]), the Project Archaeologist, and the San Gorgonio Pass Water Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all	Prior to the start of ground disturbing activities.	SGPWA and qualified archaeologist	All records and reports provided to SGPWA, Consulting Tribes, and local CHRIS center.	

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
	parties shall confer regarding the resource's archaeological significance, its potential as a Tribal Cultural Resource (TCR), and avoidance (or other appropriate treatment) of the discovered resource. Removal of any cultural resource(s) shall be conducted with the presence of Tribal monitor(s) representing the Consulting Tribes (unless a Consulting Tribe opts otherwise). All plans for analysis shall be reviewed and approved by the San Gorgonio Pass Water Agency and the Consulting Tribes prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of MBMI that significant cultural resources are fully avoided and if full avoidance is not feasible, then preservation in-place. It is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by the Consulting Tribes and the San Gorgonio Pass Water Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have				

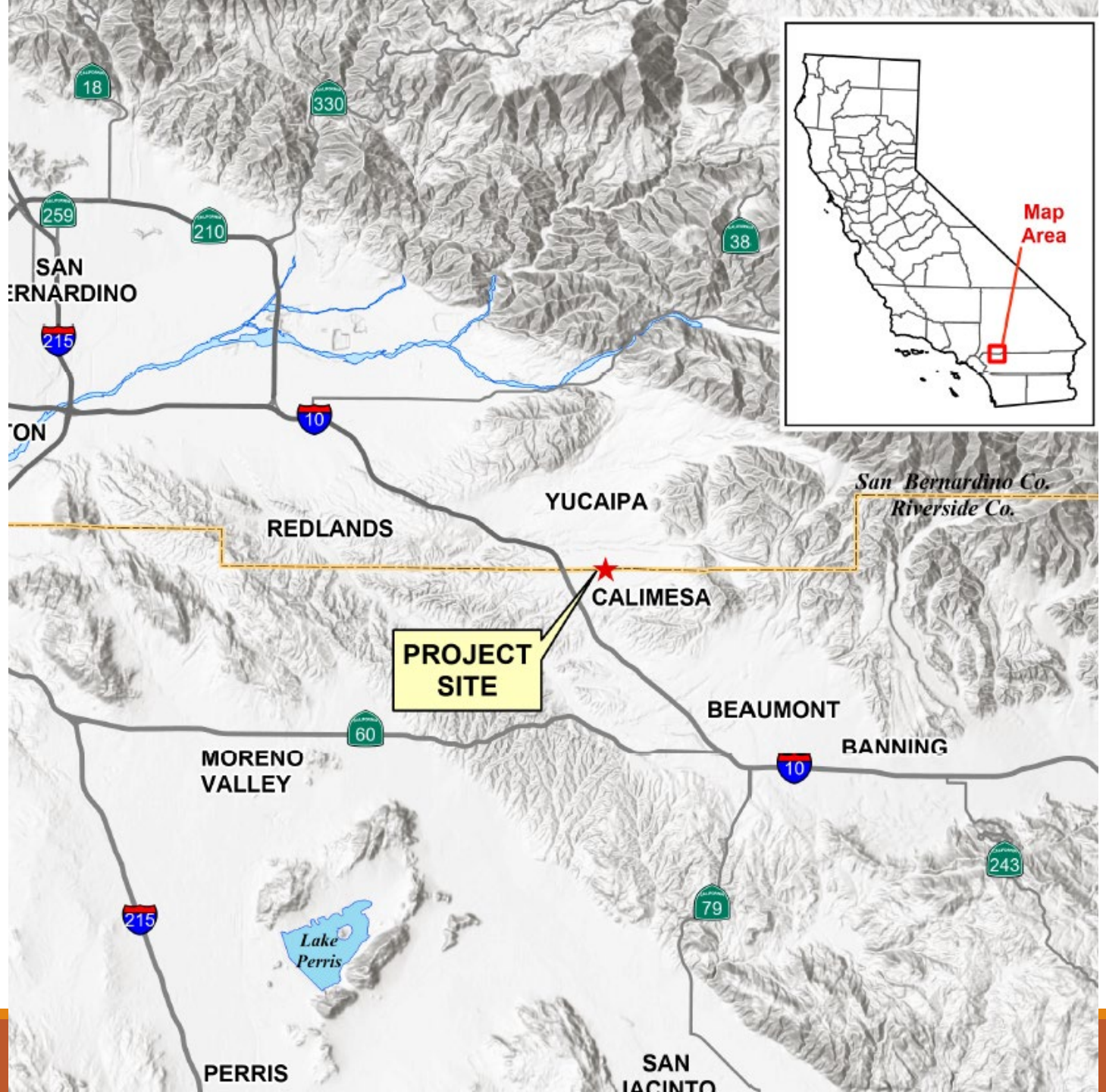
Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
	been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to San Gorgonio Pass Water Agency, California Historical Resource Information System (CHRIS) Center, and the Consulting Tribes. All reburials are subject to a reburial agreement that shall be developed between the San Gorgonio Pass Water Agency and the Consulting Tribes outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts. Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the San Gorgonio Pass Water Agency shall relinquish all ownership and rights to this material and confer with the Consulting Tribes to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines and Federal Curation Standards (CFR 79.1). A curation agreement with an appropriately qualified repository shall be developed between the				

Impact Category	Mitigation Measure	Implementation Timing	Responsible Monitoring Party	Monitoring/ Reporting Method	Compliance Verification
	San Gorgonio Pass Water Agency and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees. All draft records and reports containing the significance and treatment findings and data recovery results shall be prepared by the Project Archaeologist and submitted to San Gorgonio Pass Water Agency and the Consulting Tribes for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Center, the San Gorgonio Pass Water Agency, and the Consulting Tribes.				

Adoption of the Initial Study and Mitigated Negative Declaration for the County Line Road Recharge Basin and Turnout Project and Approval of the Project

BOARD OF DIRECTORS

OCTOBER 7, 2024


18
330
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SAN
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YUCAIPA
San Bernardino Co.
Riverside Co.
REDLANDS
CALIMESA
PROJECT
SITE
BEAUMONT
60
MORENO
VALLEY
BANNING
10
243
79
215
Lake
Perris
PERRIS
SAN
JACINTO
Map
Area

The major project components include…

Albert A. Webb Associates assisted with the preparation of the Initial Study and Mitigated Negative Declaration

- The technical studies that were incorporated include:
  - Air Quality and Greenhouse Gas Analysis
  - Biological Assessment Report
  - Cultural Resources Investigation
  - Paleontological Resource Assessment
  - Energy Calculations
  - Infiltration/Percolation Feasibility Investigation
  - Preliminary Geotechnical Investigation APN 411-150-027
- SGPWA consulted with two tribes as a part of this process

Mitigation measures were identified that would bring the environmental impact to a less than significant level

- MM Bio-1: Nesting bird survey to comply with the Migratory Bird Treaty Act
- MM CR-1: Monitoring and Treatment Plan to be developed for cultural resources
- MM CR-2: Archaeological monitoring shall be conducted during ground disturbing activities
- MM CR-3: A process outlined in the event there's an inadvertent discovery of human remains
- MM Paleo-1: A Paleontological Resource Impact Mitigation Program will be prepared
- MM Noise-1: Construction contractors will use mufflers on construction equipment
- MM TCR-1: SGPWA will enter into a Tribal Monitoring Agreement with the MBMI

The public review period ran from August 7 to September 5; 4 comments were received during the public review period and 2 comments were received after the public review period

- Two comments were received from the Cahuilla Band of Indians
- One comment was received from Riverside County Flood Control and Water Conservation District
- One comment was received from the SWRCB Division of Financial Assistance
- One comment from the Morongo Band of Mission Indians was received after the public review period
- One comment from the Agua Caliente Band of Cahuilla Indians (ACBCI) was received after the public review period on October 2, 2024 – as this comment was received near the publication of the Agenda, the response was not included in the "Response to Comments." The comment requested that SGPWA include the ACBCI in the AB52 and SB18 notification list moving forward. ACBCI is also requesting to receive a copy of the Treatment Plan outlined in MM CR-1. The Agency will oblige once the treatment plan is available. The letter does not change any of the significance determinations in the MND and it does not raise a new environmental issue.
- Based on the review of the comments received, no new, unavoidable significant environmental effects were identified and therefore, pursuant to Section 15073.5 of the State CEQA Guidelines, recirculation of the environmental documents for this Project is not required.

Recommendation

Approve Resolution 2024-11, which includes the following:

1. Adoption of the Initial Study/Mitigated Negative Declaration and Approval of the County Line Road Recharge Basin and Turnout Project; and

2. Adoption of the Mitigation Monitoring and Reporting Program; and

3. Authorize Agency staff to file a Notice of Determination with the Riverside County Clerk-Recorder, San Bernardino County Clerk, and the State Clearinghouse