

Initial Study/Mitigated Negative Declaration San Bernardino County Department of Public Works

**CSA 70J Reservoir 3A Expansion
San Bernardino County, California**

Lead Agency



San Bernardino County
Department of Public Works, Special Districts
222 W. Hospitality Lane
San Bernardino, CA 92415

Technical assistance provided by:



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

ECORP Consulting, Inc.
215 North 5th Street
Redlands, California 92374

March 2023

[This page intentionally left blank]

TABLE OF CONTENTS

TABLE OF CONTENTS.....	3
SECTION 1 – INTRODUCTION.....	5
SECTION 2 – REGULATORY FRAMEWORK.....	6
SECTION 3 – DETAILED PROJECT DESCRIPTION.....	8
SECTION 4 – ENVIRONMENTAL CHECKLIST FORM.....	13
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED.....	16
1. AESTHETICS.....	17
2. AGRICULTURE AND FORESTRY RESOURCES.....	19
3. AIR QUALITY.....	22
4. BIOLOGICAL RESOURCES.....	31
5. CULTURAL RESOURCES.....	40
6. ENERGY.....	43
7. GEOLOGY AND SOILS.....	47
8. GREENHOUSE GAS EMISSIONS.....	51
9. HAZARDS AND HAZARDOUS MATERIALS.....	55
10. HYDROLOGY AND WATER QUALITY.....	58
11. LAND USE AND PLANNING.....	61
12. MINERAL RESOURCES.....	62
13. NOISE.....	63
14. POPULATION AND HOUSING.....	71
15. PUBLIC SERVICES.....	72
16. RECREATION.....	74
17. TRANSPORTATION.....	75
18. TRIBAL CULTURAL RESOURCES.....	77
19. UTILITIES AND SERVICE SYSTEMS.....	80
20. WILDFIRE.....	82
21. MANDATORY FINDINGS OF SIGNIFICANCE.....	84
SECTION 5 – SUMMARY OF MITIGATION MEASURES.....	86
SECTION 6 – REFERENCES.....	90

TABLES

Table 4.3-1: Construction Related Emissions

Table 4.6-1: Non-Residential Electricity Consumption in San Bernardino County (2016-2020)

Table 4.6-2: Automotive Fuel Consumption San Bernardino County (2017-2021)

Table 4.6-3: Proposed Project Energy and Fuel Consumption

Table 4.8-1: Construction-Related Greenhouse Gas Emissions

Table 4.8-2: Operational-Related Greenhouse Gas Emissions

Table 4.13-1: Measured Noise Levels

Table 4.13-2: Construction Noise Summary

FIGURES

Fig. 1: Project Vicinity

Fig. 2: Project Location

Fig. 3: Site Plan

APPENDICES

A: CalEEMod Model Data Outputs

B: Biological Technical Report

C: Cultural Resource Inventory

D: Aquatic Resource Delineation

E: Greenhouse Gas Report

F: Noise Measurement Data

G: Geotechnical Report

H: Cultural Resource Memorandum

I: Paleontological Records Search

SECTION 1 – INTRODUCTION

The San Bernardino County Department of Public Works, Special Districts is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the County Service Area (CSA) 70J Reservoir 3A Expansion Project. This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 et seq.) and State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before acting on those Projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

Project Purpose and Need:

The purpose of the Project is to expand the CSA 70 J, Reservoir 3A facility to increase capacity and service to local residents.

SECTION 2 – REGULATORY FRAMEWORK

The San Bernardino County Department of Public Works, Special Districts has identified that the CSA 70J Reservoir 3A Expansion Project meets the California Environmental Quality Act (CEQA) Guidelines Section 15378 definition of a Project. CEQA Guidelines Section 15378 defines a Project as the following:

"Project" means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000-21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the construction, operation, and maintenance of the CSA 70J Reservoir 3A Expansion Project (hereinafter referred to as the "Project" or "Proposed Project"). In accordance with Section 15063 of the State *CEQA Guidelines*, this Initial Study is a preliminary analysis prepared by the San Bernardino County Department of Public Works as Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public of potential environmental impacts associated with the implementation of the Proposed Project.

Initial Study Organization

This Initial Study is organized as follows:

Introduction: Provides the regulatory context for the review along a brief summary of the CEQA process.

Project Information: Provides fundamental Project information, such as the Project description, Project location and figures.

Lead Agency Determination: Identifies environmental factors potentially affected by the Project and identifies the Lead Agency's determination based on the initial evaluation.

Mitigated Negative Declaration: Prepared when a determination can be made that no significant environmental effects will occur because revisions to the Project have been made or mitigation measures will be implemented which will reduce all potentially significant impacts to less than significant levels.

Evaluating Environmental Impacts: Provides the parameters the County uses when determining level of impact.

CEQA Checklist: Provides an environmental checklist and accompanying analysis for responding to checklist questions.

References: Include a list of references and various resources utilized in preparing the analysis.

SECTION 3 – DETAILED PROJECT DESCRIPTION

Project Location

The Proposed Project is located within the unincorporated community of Oak Hills, County Service Area (CSA) 70J, San Bernardino County, California (Figure 1). The Project Site includes a 1.62-acre parcel located at 6535 Oak Hill Road (APN 0357-621-65-000-0, northern portion) (Figure 2).

Project Characteristics

The Proposed Project would include the following improvements:

- Construction of a new 16-foot-wide asphalt access road and a retaining wall
- Construction of a new Stormwater/Overflow Detention Basin
- Addition of new pipelines and corresponding easements
- Addition of three power poles, electrical lines, and corresponding overhead easement
- Construction of a new 2-million-gallon (MG) reservoir (120 feet in diameter)

The Proposed Project includes grading for the installation and operation of an additional 2-MG 28-foot-tall steel reservoir (120-foot-diameter) and a 30-foot by 30-foot building. The 1.62-acre Project Site consists of fenced, vacant property located adjacent to existing water tanks and a booster station within an area characterized by rural residential uses. The proposed additional 2-MG reservoir would be painted with a neutral color scheme matching the facility's existing reservoirs to reduce visual intrusion from surrounding properties. The existing pumps on the property would not be upgraded or modified as part of this Project. The existing pumps are adequate to supply water to the proposed new storage tank.

During construction of the proposed new tank pad, the Project Site would be over excavated to a depth of approximately 3 feet below ground surface (bgs) to avoid settlement. The pad would then be constructed using fill material to a maximum depth of approximately 20 feet below the over-excavated pad surface. Project grading activities are expected to include 10,500 cubic yards of over excavation, 140 cubic yards of cut, and 9,200 cubic yards of fill. The Site Plan is included as Figure 3 of this Initial Study.

Equipment Staging Areas

Construction equipment and parking for construction workers will be staged in the existing County Tank Compound adjacent to the reservoir facility. No nighttime lighting would be required for the Project Site as all construction activities would occur during the day.

Project Timing

Construction is anticipated to begin in 2023 or 2024 and would last approximately 6 months.

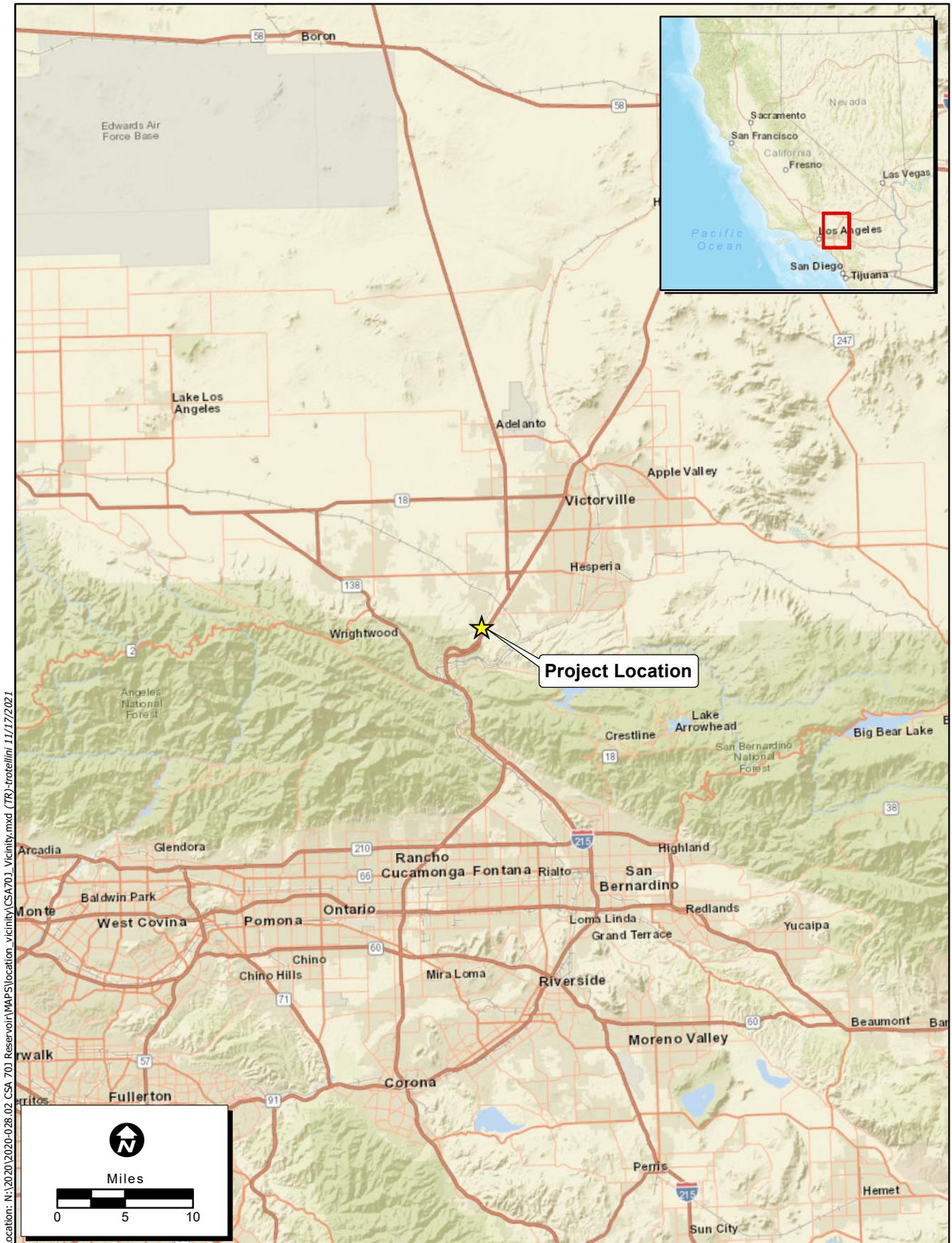
Operation and Maintenance

The Proposed Project's operation and maintenance would be added to the existing facility's maintenance schedule.

Project Design Features

The Proposed Project includes the construction of a reservoir (water tank) and water quality basin.

- Project work activities will be confined to a predetermined work area.
- To prevent inadvertent entrapment of wildlife during the construction phase of the Project, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered with plywood or similar materials at the close of each workday wherever possible. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. Similarly, wildlife are often attracted to burrow- or den-like structures, such as pipes, and may enter pipes or conduit stored on the Project site and become trapped or injured. To prevent wildlife use of these structures, all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater should be capped while being stored on the site.
- All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed, wildlife-proof containers and removed at least once a week from the Project Site.



Location: N:\2020\2020-028.02 CSA 70J Reservoir\MAPS\location_vicinity\CSA70J_Vicinity.mxd (TR) - broellini 11/17/2021

Map Date: 11/17/2021
 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Figure 1. Project Vicinity
 2020-028.02 CSA 70J Reservoir

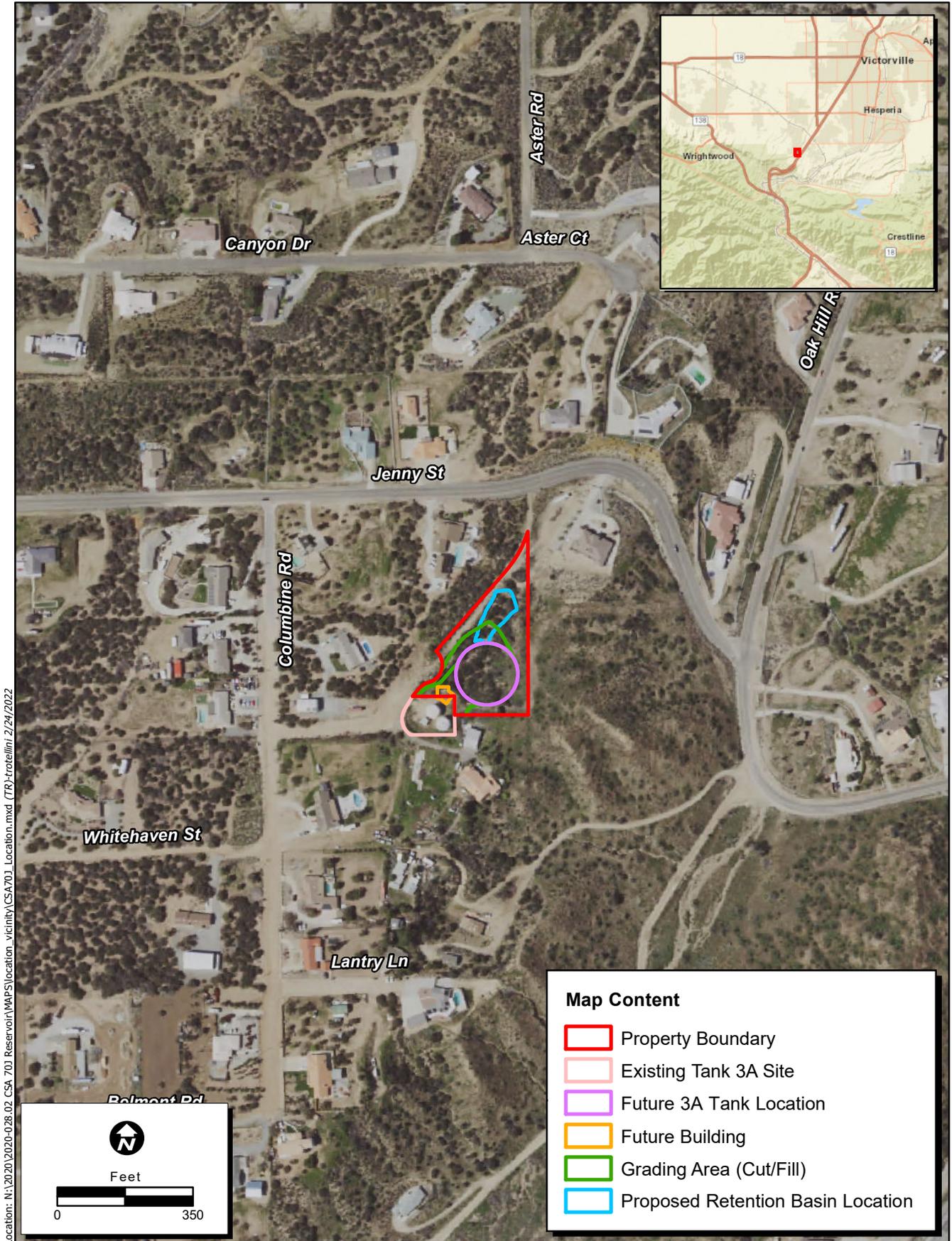
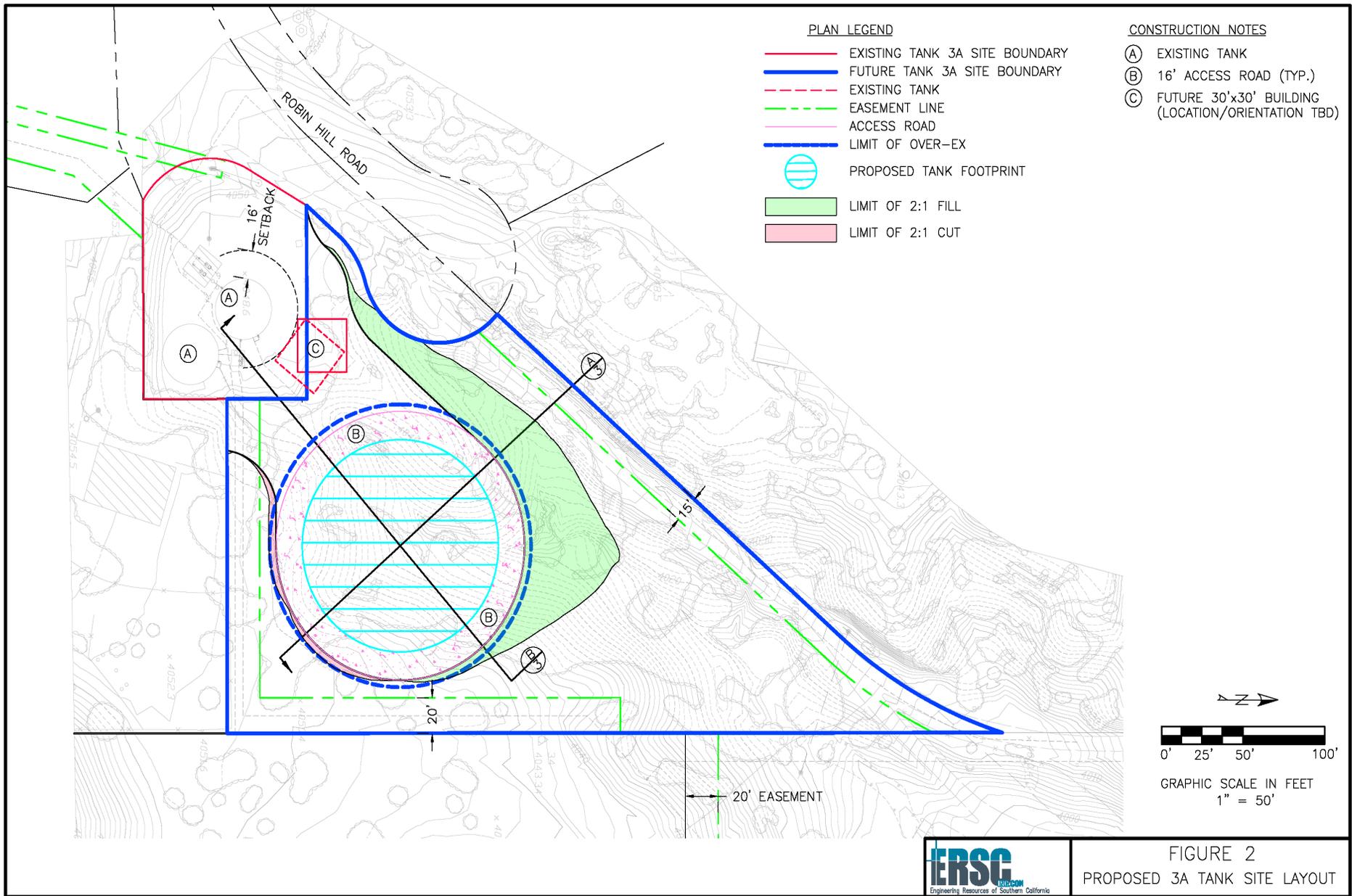


Figure 2. Project Location

2020-028.02 CSA 70J Reservoir



SECTION 4 – ENVIRONMENTAL CHECKLIST FORM

- 1. Project Title:** CSA 70J Reservoir 3A Expansion

- 2. Lead Agency Name:** San Bernardino County
Department of Public Works, Special Districts

Address: 222 W. Hospitality Lane
San Bernardino, California 92415

- 3. Contact Person:** Phil Krause, Senior Project Manager
phil.krause@sdd.sbcounty.gov
(909) 386-8800

- 4. Project Location:** Oak Hills Community, San Bernardino County
Topographic Quad Cajon Quadrangle
(USGS 7.5”):
Topographic Quad T.3N., R.5W., S.B.M.
Coordinates:
Latitude/Longitude 34.3703 / -117.4337
Site Access: Via: Oak Hills Ranch Road

- 5. Project Sponsor:** San Bernardino County Department of Public Works,
Special Districts

Name and Address: Mr. Phil Krause
222 W. Hospitality Lane
San Bernardino, California 92415

- 6. General Plan/Zoning Designation:** OH/RL (Oak Hills/Rural Living)

7. Project Description Summary:

The San Bernardino County Department of Public Works, Special Districts proposes the expansion of county water storage facilities with the construction of a new above ground reservoir. The Proposed Project includes the grading, installation, related plumbing and operation of an additional 2-MG reservoir (120 feet in diameter) and a 30-foot by 30-foot building. The 1.62-acre Project Site consists of fenced, vacant property located adjacent to existing water tanks and a booster station within an area characterized by rural residential uses.

(Details of the Project are further discussed in Section 3.)

8. Environmental/Existing Site Conditions:

The Project Site is generally located west of the City of Hesperia, within unincorporated San Bernardino County, California. The 1.62-acre Project Site consists of fenced, vacant property located adjacent to existing water tanks and a booster station within an area characterized by rural residential uses. The Proposed Project is located within the Oak Hills Community: Township 3 North, Range 5 West, Section 6 of the U.S. Geological Survey (USGS) 7.5-minute Cajon quadrangle map. Specifically, the Project Site is located east of Oak Hills Ranch Road, approximately 600 feet southeast of the intersection of Jenny Street and Columbine Road and is characterized as hilly with a southwesterly slope. Elevations range from approximately 4,022 feet to 4,060 feet above mean sea level. A topographic low point lies in the middle of the Project Site and extends from southwest to northeast. The Project Site is surrounded by rural development to the north, south, and west. Undeveloped land to the east appears to have burned in a previous fire season.

9. Surrounding land uses and setting:

The Proposed Project is generally located within an area characterized as rural residential uses. The Project Site is bordered on the northeast by a single-family residence (10545 Robin Hill Road), to the northwest by a single-family residence (10485 Jenny Street), on the east/southeast by vacant land, on the southwest by single-family residence to the south (6535 Oak Hill Ranch Road); the San Bernardino County 3A Tank Site-Reservoir and Booster Station and a single-family residence border the Project Site to the southwest (6525 Columbine Road); and single-family residence is located to the west (6575 Columbine Road).

As identified by the San Bernardino County Land Use Plan, land use zoning districts located immediately adjacent to the Project Site include Oak Hills/Rural Living (OH/RL); Oak Hills/Floodway (OH/FW).

10. Other public agencies whose approval is required:

The Proposed Project will be subject to county, state, and federal regulations as listed below.

Federal:

- Migratory Bird Treaty Act

State Agencies:

- State Water Resource Control Board National, Pollutant Discharge Elimination System, Stormwater Pollution Prevention Plan (SWPPP)

11. Have California Native American tribes traditionally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation?

San Bernardino County Department of Public Works has notified the following California Native American tribes traditionally and culturally affiliated with the geographic area of the Proposed Project: San Manuel Band of Mission Indians (SMBMI). The SMBMI have requested consultation pursuant to PRC Section 21080.3.1. Section 4.18 of this IS/MND provides a summary of the consultation process, including the determination of significance of impacts to Tribal Cultural Resources (TCRs).

12. Lead Agency Discretionary Actions:

- Adoption of the Mitigated Negative Declaration by the County Board of Supervisors

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact requiring mitigation to be reduced to a level that is less than significant as indicated in the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agricultural / Forest Resources	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input checked="" type="checkbox"/>	Geology / Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards / Hazardous Materials
<input type="checkbox"/>	Hydrology / Water Quality	<input type="checkbox"/>	Land Use / Planning	<input type="checkbox"/>	Mineral Resources
<input checked="" type="checkbox"/>	Noise	<input type="checkbox"/>	Population / Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation	<input checked="" type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities / Service Systems	<input type="checkbox"/>	Wildfire	<input checked="" type="checkbox"/>	Mandatory Findings of Significance

LEAD AGENCY DETERMINATION

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	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.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature 

3/17/2023

Date

1. AESTHETICS

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

(Check if project is located within a view-shed of any Scenic Route listed in the General Plan):

Environmental Setting

The Proposed Project is located in the Oak Hills Community within the City of Hesperia’s unincorporated Sphere of Influence (SOI), north of the San Gabriel Mountains, south of Victor Valley, and approximately 0.25-mile northwest of Interstate 15 (I-15). The nearest scenic highways are I-15 and State Route 138 (SR-138), approximately 2.8 miles south of the Project Site (City of Hesperia 2020). The Oak Hills community is comprised mostly of rural estates, which border the Project Site to the north, west, and south. Parcels east and southeast of the Project Site are zoned as open space/floodway and appears to have been burned in a previous fire. The City of Hesperia’s community character is drawn from the desert landscape and its surrounding scenic resources. Prominent topographic features include the Mojave River and its washes, two southerly mountain ranges, and the surrounding Victor Valley.

State Scenic Highways

The California Scenic Highway Program protects and enhances the scenic beauty of California’s highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view. SR-138 is located approximately 2.8 miles south of the Project Site and is an eligible County Scenic Route (City of Hesperia 2020). The only County Scenic Highway within the Oak Hills Community is I-15 (Oak Hills Community 2013). However, the topography of the Cajon Pass prevents a clear view of the Project Site from either route.

Visual Character of the Project Site

The Proposed Project is located within the residential community of Oak Hills, with three developed RL/OH properties to the north, west and south. The existing reservoir area contains two tanks, pumps, and a dirt road along the northwestern boundary. The parcel east of the Project Site appears to have burned in a previous fire season.

Impact Analysis

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

No Impact. The topography of the Cajon Pass does not allow for a visual of the Proposed Project from Scenic Highways or a publicly accessible viewshed. Proposed improvements are not anticipated to affect viewsheds or scenic vistas. No Impact would occur.

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

No Impact. The Proposed Project is not located within the viewshed of a state scenic highway (Caltrans 2018). As stated above, the topography of the Cajon Pass obscures the view of the Project Site from SR-138 and I-15. No Impact would occur.

c) *Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage 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. The proposed reservoir would be consistent with onsite existing land uses. The additional 2-MG reservoir would be constructed adjacent to an operational reservoir facility owned and operated by San Bernardino County in CSA 70J. The proposed reservoir would not exceed the height of existing tanks and would be painted with a light color scheme matching the existing reservoir adjacent to the Project Site. Although the Proposed Project's additional tank is larger in volume, the existing tanks would likely be more visible due to the Project Site's elevation difference. Therefore, impacts to the existing visual character or quality of a publicly accessible vantage point would be less than significant.

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

No Impact. The Proposed Project does not include lighting nor the use of materials that would generate substantial glare. No impact would occur.

Mitigation Measures:

None required.

Aesthetics Impact Conclusions:

No potentially significant adverse impacts are identified or anticipated, and no mitigation measures are required.

2. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment 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?				X

(Check if project is located in the Important Farmlands Overlay):

Environmental Setting

“Forest land” as defined by Public Resources Code Section 12220(g) is “...land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.”

“Timberland” as defined by Public Resources Code Section 4526 means “...land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.”

“Timberland zoned Timberland Production” is defined by Public Resources Code Section 51104(g) as “...an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision h.”

According to the California Department of Conservation (DOC) Important Farmland Finder, the Project Site is classified as Other Land. The Project is not located on or near Prime Farmland, nor is it under a Williamson Act Contract (DOC 2018).

Impact Analysis

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

No Impact. The Proposed Project does not include prime, unique, or other farmland of statewide or local importance as identified on the by the California Department of Conservation (DOC 2018). Therefore, no impact would occur.

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

No Impact. The Project Site and surrounding areas are not zoned for agricultural use (Oak Hills Community 2013). Therefore, the Project would not conflict with any agricultural land use or Williamson Act land conservation contract. No impact would occur.

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

No Impact. The Project Site is zoned for rural living (RL) and does not contain forest land. The Proposed Project would not result in the rezoning of forest land, timberland, or timberland zoned for Timberland Production. Therefore, no impact would occur.

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

No Impact. As stated above, the Project Site does not contain forest land and would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact would occur.

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

No Impact. The land surrounding the Proposed Project is classified as Oak Hills/Rural Living (OH/RL). Most of the land surrounding the Project Site is developed with Single Family Residential (SFR) structures zoned for rural living. There would be no other changes that, due to their location or nature, could result in the conversion of farmland to non-agricultural uses or forest land to non-forest use. There are no agricultural uses or forest land currently in the vicinity of the Project. No impact would occur.

Mitigation Measures:

None required.

Agriculture and Forestry Services Impact Conclusions:

No potentially significant adverse impacts are identified or anticipated, and no mitigation measures are required.

3. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

An Air Quality Report was prepared in November of 2018 by Dudek Construction Engineering Company. The Air Quality Report is included as Appendix A of this IS/MND and provides information for the following section.

Environmental Setting

The Project Site is located within the unincorporated community of Oak Hills in San Bernardino County CSA 70J, California. The California Air Resource Board (CARB) has divided California into regional air basins according to topographic features. San Bernardino County is located in a region identified as the Mojave Desert Air Basin (MDAB). The MDAB is comprised of four air districts, the Kern County Air Pollution Control District (APCD), the Antelope Valley Air Quality Management District (AQMD), the Mojave Desert Air Quality Management District (MDAQMD), and the eastern portion of the South Coast AQMD (SCAQMD). The Kern County APCD consists of the eastern portion of Kern County; the Antelope Valley AQMD consists of the northeastern portion of Los Angeles County; the MDAQMD includes the desert portions of San Bernardino County and the most eastern portion of Riverside County; and the portion of the SCAQMD includes the eastern part of Riverside County.

Both the US Environmental Protection Agency (USEPA) and CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called “criteria” pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O₃), carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO₂), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The portion of San Bernardino County encompassing the Project Site is designated as a nonattainment area for O₃ and coarse particulate matter (PM₁₀) for federal standards and designated as a nonattainment area for O₃ state standards (CARB 2019).

The local air quality regulating authority in the San Bernardino portion of the MDAB is the MDAQMD. The MDAQMD’s primary responsibility is ensuring that the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are attained and maintained in San Bernardino County. The MDAQMD is the agency primarily responsible for ensuring that federal and state ambient air quality standards are not exceeded and that air quality conditions are maintained. Responsibilities of the MDAQMD include but

are not limited to adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the federal Clean Air Act and Clean Air Act Amendments. Provisions applicable to the Proposed Project are summarized as follows:

- **Rule 201 – Permits to Construct** applies to the construction of air emissions sources that are not otherwise exempt under Rule 219.
- **Rule 203 – Permit to Operate** requires air emissions sources that are not exempted by Rule 219 to obtain operating permit.
- **Rule 204 – Requirements** contains rule language describing New Source Review including Best Available Control Technology (BACT) and emissions offset requirements for stationary sources.
- **Rule 219 – Equipment Not Requiring a Permit** describes the type of equipment that does not require a permit pursuant to District Rules 201 and 203.
- **Rule 401 – Visible Emissions** limits visibility of fugitive dust to less than No. 1 on the Ringlemann Chart (i.e., 20 percent opacity).
- **Rule 402 – Nuisance** applies when complaints from the public are received by the district.
- **Rule 403 – Fugitive Dust** prohibits visible dust beyond the property line of the emission source, requires “every reasonable precaution” to minimize fugitive dust emissions and prevent trackout of materials onto public roadways, and prohibits greater than 100 $\mu\text{g}/\text{m}^3$ difference between upwind and downwind particulate concentrations.
- **Rule 404 – Particulate Matter Concentration** sets concentration limits based on the flow rate of the discharge. The concentration limits would apply to discharge from a stack (e.g., baghouse).
- **Rule 405 – Solid Particulate Matter Weight** limits emissions based on the weight of material processed.
- **Rule 431 – Sulfur Content of Liquid Fuels** limits the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of SO_x and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the MDAQMD. The rule also affects diesel fuel supplied for mobile sources.
- **Rule 900 – New Source Performance Standards** incorporates federal regulation (40 CFR 60) that affects the construction of emissions units. Requirements may or may not apply depending on the size, construction, and manufacture date of equipment that will be used. Specifically, NSPS OOO (40 CFR 60.670) applies to equipment in nonmetallic mineral processing plants.
- **Regulation XIII – New Source Review** contains a number of rules that are applied to new and modified sources.
- **Rule 1520 – Control of Toxic Air Contaminants from Existing Sources** implements AB 2588 Air Toxics Hot Spots requirements.

- **Rule 2002 – General Federal Actions Conformity** requires federal actions to conform to the applicable implementation plan.

Impact Analysis

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

Less Than Significant. A project is non-conforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable MDAQMD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to comply with the applicable air quality plan (Dudek 2018a).

The Project would comply with all applicable MDAQMD rules and regulations, such as Rule 401 (Visible Emissions) and Rule 403 (Fugitive Dust). The Project would not conflict with or propose to change existing land use designations or result in population growth. In addition, the Project would not result in a long-term increase in the number of trips or increase the overall vehicle miles traveled in the area. Haul truck, vendor truck, and worker vehicle trips would be generated during the proposed construction activities but would cease after construction is completed. In regard to long-term operations, the Project would have routine inspection and maintenance, however this would be performed concurrently with actions for the existing facilities and would not result in an increase in emissions. As such construction and operation emissions would not exceed any significance threshold, as shown in Table 4.3-1, or violate any MDAQMD rule or regulation. Based on these considerations, the Project would result in a less than significant impact.

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?

Less Than Significant. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulatively considerable.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and dust) and off-site sources (i.e., on-road trucks and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions. Therefore, an increment of day-to-day variability exists.

Implementation of the Project would generate criteria air pollutant emissions from off-road equipment, vehicle travel, and material handling. Internal combustion engines used by construction equipment, trucks, and worker vehicles would result in emissions of VOCs, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. PM₁₀ and PM_{2.5} emissions would also be generated by material handling for truck loading/unloading activity, on-road vehicles traveling on paved

roads, and from brake and tire wear. The Project would be required to comply with MDAQMD Rule 403 to control fugitive dust emissions generated during grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include:

- Short-term dust control by a water truck and/or available water source for stabilization of disturbed surface area to minimize visible fugitive dust emissions
- Minimize and cleanup track-out onto paved roads
- Cover haul trucks
- Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than thirty days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate Visible Fugitive Dust emissions
- Rapid cleanup of project-related track-out or spills on paved roads
- Reduce non-essential Earth-Moving Activity under High Wind conditions

The Project Site is relatively small, approximately 1.6-acres and represents an expansion of an existing facility. Construction-generated emissions associated the Proposed Project were calculated using the CARB-approved the California Emissions Estimator Model (CalEEMod) version 2016.3.2 with model defaults used for San Bernardino County and construction equipment used provided by the Dudek Construction Engineering Company (see Appendix A for modeling assumptions). In addition, PM₁₀ and PM_{2.5} emissions from sandblasting operations to prepare the storage tank for painting were estimated based on EPA AP-42 emission factors and controls based on Western Regional Air Partnership Fugitive Dust Handbook, Chapter 12, Abrasive Blasting (Dudek 2018a)(see Appendix A). Construction assumptions were developed based on the current best available Project information. Construction details were identified on a monthly basis. Although not all of the activities identified in the same month would occur simultaneously, for the purposes of estimating emissions, it was conservatively assumed that all construction activities (i.e., equipment operation, truck trips, worker trips, and material handling) identified within a given month would occur within the same 8-hour day (with equipment operating for a maximum of 8 hours per day). This overall approach to the construction scenario assumptions would result in maximum daily emissions that reflect a level of intensity that is not anticipated to occur. In addition to inherent limitations during any construction process associated with equipment and personnel availability and site constraints, concurrent maximum construction at each active site within each month is not anticipated. Nonetheless, because the level of intensity on any given day is speculative, this analysis assumes the worst-case day for each area within each month.

Predicted maximum daily construction-generated emissions for the Proposed Project from all on-site and off-site emission sources are summarized in Table 4.3-1. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the MDAQMD's thresholds of significance.

Table 4.3-1. Construction-Related Emissions (Regional Significance Analysis)						
Construction Scenario	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Annual (Maximum Tons per Year)						
Construction (CalEEMod)	0.34	1.27	1.04	0.00	0.09	0.07
Sandblasting (AP-42)	-	-	-	-	0.20	0.02
<i>MDAQMD Annual Significance Threshold</i>	25	25	100	25	15	12
Exceed MDAQMD Annual Threshold?	No	No	No	No	No	No
Daily (Maximum Pounds per Year)						
Construction (CalEEMod)	39.30	28.04	23.80	0.05	1.93	1.48
Sandblasting (AP-42)	-	-	-	-	79.04	7.90
<i>MDAQMD Annual Significance Threshold</i>	137	137	548	137	82	65
Exceed MDAQMD Annual Threshold?	No	No	No	No	No	No

Source: Dudek Construction Engineering Company (2018). Refer to Appendix A for Model Data Outputs and assumptions used in this analysis (construction phasing, construction timing, emission reduction/credits, equipment, etc.)

Notes: PM₁₀ and PM_{2.5} represent total particulate matter, which includes exhaust, brake wear, tire wear, paved road dust, and fugitive dust from earth moving and material handling and sandblasting. Emissions from operation of sandblasting support equipment included in CalEEMod construction estimates.

As shown in Table 4.3-1, daily and annual construction emissions would not exceed the MDAQMD’s annual or daily thresholds of significance. Therefore, construction impacts of the Project would be less than significant.

Operational Emissions

The Proposed Project would not include the provision of new permanent stationary or mobile sources of criteria air pollutant emissions, and therefore, by its very nature, would not generate quantifiable criteria emissions from Project operations. Following the completion of construction activities, the Proposed Project would generate pollutant emissions from energy use from additional site lighting. Once the tank is filled with water initially during the construction phase of the Project, gravity provides the conveyance into the water distribution system. The Project results in increased storage capacity and no increase in water consumption. Therefore, once the water is pumped into the tank, the water use (consumption) remains the same as the status quo and there is no net increase in energy consumption from pumping and as such no net increase in emissions during operation other than additional facility lighting. As such, operational impacts would be less than significant.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant. The MDAQMD considers residences, schools, daycare centers, playgrounds and medical facilities to be sensitive receptor land uses (MDAQMD 2016). There are no schools, daycare centers, playgrounds or medical facilities within 1,000 feet of the Proposed Project. There are nearby residences to the north, south, and west of the Project Site within 1,000 feet.

Construction-Generated Air Contaminant

Construction-related activities would result in temporary, short-term Project-generated emissions of diesel particulate matter (DPM), ROG, NO_x, CO, and PM₁₀ from the exhaust of off-road, heavy-duty diesel equipment for site preparation/excavation (e.g., clearing, excavating, material moving); truck traffic; paving; and other miscellaneous activities. The MDAB portion of San Bernardino County encompassing the Project Site is designated as a nonattainment area for O₃ and PM₁₀ federal standards and designated as a nonattainment area for O₃ state standards (CARB 2019). Thus, existing O₃ and PM₁₀ levels in the San Bernardino County portion of the MDAB are at unhealthy levels during certain periods. However, as shown in Table 4.3-1, the Project would not exceed the MDAQMD regional significance thresholds for emissions.

The health effects associated with O₃ are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O₃ precursor emissions (ROG or NO_x) in excess of the MDAQMD thresholds, the Project is not anticipated to substantially contribute to regional O₃ concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the MDAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM₁₀ and PM_{2.5}) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the toxic air contaminant (TAC) of concern. The potential cancer risk from the inhalation of DPM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. PM₁₀ exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM. Sandblasting of the tank is required to prepare the surface for coating / painting and is not performed for the removal of existing hazardous materials (paint). Based on the emission modeling conducted, sandblasting results in the largest portion of the maximum estimated daily PM₁₀ and PM_{2.5} emissions at 95 percent and 72 percent, respectively (see Appendix A). However, sandblasting is planned for only two weeks of the six month construction schedule and will use wet blasting or grit/shot abrasive or equivalent controls to minimize emissions. In addition, sandblasting operations will adhere to the California Code of Regulations, Title 17, Section 92530 for abrasive blasting done outside of a permanent building. Sandblasting materials will be selected from the Executive Order G-18-091 list of CARB certified abrasives. The Project would not generate emissions of PM that would exceed significance thresholds. Accordingly, the Project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, the Project would not result in a potentially significant contribution to local or regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. A less than significant impact would occur.

Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Proposed Project. The Proposed Project would not attract heavy-duty trucks, a substantial source of DPM emissions that spend long periods queuing and idling at the site. Therefore, the Proposed Project would not be a significant source of TACs during operations. A less than significant impact would occur.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SVAB is designated as in attainment. Detailed modeling of Project-specific CO “hot spots” is not necessary and thus this potential impact is addressed qualitatively.

A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the South Coast Air Quality Management District’s (SCAQMD’s) 1992 Federal Attainment Plan for Carbon Monoxide in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD is the air pollution control officer for much of southern California. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). In order to establish a more accurate record of baseline CO concentrations affecting the Los Angeles, a CO “hot spot” analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District, the air pollution control officer for the San Francisco Bay Area, concludes that under existing and future vehicle emission rates, a given project would

have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix in order to generate a significant CO impact.

The Project is not anticipated to generate any additional trips beyond the routine maintenance that currently occurs on the Project Site. Thus, the Proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the Project traffic exceeding CO values. Impacts would be less than significant.

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

Less Than Significant. Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Construction

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the Project Site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, under CEQA, construction odors would result in a less than significant impact related to odor emissions.

Operations

Land uses and industrial operations typically associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project results in additional storage of potable water. Therefore, Project operations would result in an odor impact that would be less than significant.

Mitigation Measures:

None required.

Air Quality Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

4. BIOLOGICAL RESOURCES

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

Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database

Environmental Setting

In March 2022 ECORP Consulting, Inc. completed a biological technical report (ECORP 2022a), included as Appendix B. The updated biological reconnaissance survey was generally consistent with results of the 2018 survey performed by Dudek. The property remains mostly undisturbed except for a few disturbances that include minor amounts of trash, an area of unauthorized trash dumping, and remnants of old asphalt from the former Robin Hill Road. There is evidence of a previous fire on the eastern portion of the property and surrounding area to the east. Heavy equipment tracks are present along the southern and eastern boundaries and are not associated with an established roadway; however, the tracks could have been associated with an emergency access route when the area burned previously. Although fire is a naturally occurring phenomenon in chaparral vegetation communities, it is considered a disturbance to wildlife because it limits foraging, degrades the quality of burrows, and limits shrub cover that wildlife use for protection sites. The boundary at the southwest corner of the property is made up of a fence line for an existing water tank facility. A water pipe was observed originating from the northeast corner of the adjacent water tank facility and crosses onto the southwest corner of the

property. The previous fire and the water pipe are the only two of these disturbances included in the 2018 Dudek report.

Vegetation Communities

The vegetation communities present on and adjacent to the property are consistent with the 2018 Dudek biological report. Tucker oak-chaparral shrubland alliance-chamise association was observed as the primary vegetation community on the property with a small portion of the property's eastern edge consisting of disturbed Tucker oak chaparral-chamise. The areas surrounding the property consist of chamise chaparral alliance and land cover types include developed and disturbed land.

Plants

Twenty-one plant species were observed during the 2021 biological survey, many of which were also seen during the 2018 Dudek survey including deerweed (*Acmispon glaber*), chamise (*Adenostoma fasciculatum*), annual bursage (*Ambrosia acanthicarpa*), and Tucker oak (*Quercus john-tuckeri*). Appendix B, Attachment D includes a complete list of plant species observed during the biological survey.

Wildlife

Similar to the 2018 Dudek survey, the wildlife observed during the 2021 biological survey are typical of the habitat observed on the property. Wildlife species observed during the 2021 biological survey include grasshopper (*Acrididae sp.*), common raven (*Corvus corax*), California scrub-jay (*Aphelocoma californica*), white-crowned sparrow (*Zonotrichia leucophrys*), coyote (*Canis latrans*), and domestic dog (*Canis lupus familiaris*).

Aquatic Resources

A formal aquatic resources delineation was performed by ECORP in February 2022 to determine the jurisdictional status of the four drainages that were observed within the property boundaries during the biological survey, two of these drainages were documented in the Dudek report (ECORP 2022b). The National Wetland Inventory and USGS mapping for the property identified no features (blue line streams) present. There are four mapped features within the property (Features 1 through 4), all of which are fairly small and narrow. There are no suspected wetlands present. Features 1, 2, and 3 are considered to be ephemeral drainages while Feature 4 is considered to be a roadside ditch. All of the mapped features flow together and exit the property along the northeast boundary (ECORP 2022b; Appendix D).

Potential Waters of the U.S.

A total of 0.022 acre and 361.7 linear feet of ephemeral drainage and roadside ditch have been mapped within the property within the four mapped features (Appendix D). Of these, none are within the Project impact area.

Wetlands

There are no suspected wetlands found within the property (Appendix D).

Ephemeral Drainages

Ephemeral drainages are linear features that exhibit a bed and bank and an ordinary high water mark (OHWM). These features typically convey runoff for short periods of time, during and immediately following rain events, and are not influenced by groundwater sources at any time during the year. Three mapped jurisdictional features (Features 1, 2, and 3) are categorized as ephemeral drainages and are present within the property: Features 1 and 2 are present along the northern boundary of the property and Feature 3 is present along the eastern

boundary. A total of 0.007 acre of ephemeral drainages measuring 138.5 feet in length was mapped within the property across the three features.

Soils within the ephemeral drainages consisted of sandy loam with variable amounts of sand, gravel and small cobbles with some amount of organic matter as well. The soils observed in the field were consistent with those mapped by the NRCS for the area. None of the ephemeral features appeared, based on surface soil characteristics, to support any wetland characteristics. Wetland hydrology indicators observed within the ephemeral drainages included sediment deposits (B2) (riverine). Wetland hydrology indicators were not observed in the upland areas adjacent to the drainage features. The boundaries of the ephemeral drainages were mapped at the OHWM defined by bed and bank.

Roadside Ditch

Roadside ditches are linear features associated with the hard-packed surface of a roadway and are caused by headward erosion that creates a small erosional gully over time. Although these types of features can exhibit a bed and bank and an OHWM, they are not typically considered to be jurisdictional unless associated with a relocated natural stream course. The flows within this ditch (Feature 4) originated from a compacted area adjacent to the existing reservoir. A total of 0.015 acre of roadside ditch measuring 223.2 feet in length was mapped within the property.

Potential CDFW Jurisdiction

A total of 0.026 acre of potential CDFW jurisdiction has been mapped within the property (Appendix D) including Features 1 through 4, all of which are considered to be unvegetated streambeds. No riparian vegetation was present within the property. Vegetation within the upland habitats on the property is mainly dominated by Tucker oak (*Quercus john-tuckeri*) and with additional native shrubs present including rabbitbrush (*Ericameria nauseosa*) and goldenbush (*Isocoma* sp.). The mapped limits of CDFW jurisdiction were assessed to be equivalent to those mapped as Waters of the U.S., except that they also include the roadside ditch.

Special-Status Wildlife

One special-status plant species was observed during the biological survey, western Joshua tree. Three Joshua tree sprouts are present in one location along the western property boundary but outside of the Proposed Project impact area. One dead and several live Joshua trees are present in the surrounding areas outside of the property. Although Dudek did not observe any special-status species during their 2018 survey, the western Joshua tree had not yet been listed as a candidate for listing under the California ESA at the time the Dudek report was prepared; the candidate listing status for Joshua tree was made official in late 2020.

The property contains marginally suitable burrowing owl (*Athene cunicularia*) habitat. Although loose, friable soils suitable for burrowing are present on the property, the vegetation present within the Proposed Project impact area is fairly dense, which reduces the suitability of the habitat for burrowing owl. Some openings in the dense vegetation could be suitable for the species, as documented in the Dudek report, and some small mammal burrows are present on the property; however, none were of appropriate size and shape for burrowing owl use at the time of the 2021 survey. Two concrete aggregate piles are present on the western portion of the property; however, their location was on slopes too steep to provide quality burrowing owl habitat and these piles likely do not provide suitable burrow habitat. The vegetative cover on the property could be used by migratory individuals as temporary shelter or refuge from predators or poor weather; however, it is likely that migrating burrowing owls would be attracted to nearby areas that contain less dense vegetation with more suitable burrow structures present, such as the nearby lower elevation areas.

The 2018 report prepared by Dudek identified several burrows that provided marginally suitable burrow habitat for desert tortoise (*Gopherus agassizii*). During the 2021 biological survey, no burrows were observed on or

immediately adjacent to the property that were suitable for desert tortoise use. Although several cactuses are present on the property and within the Proposed Project impact area, as documented during the 2021 survey, the property generally lacks sufficient available foraging habitat for desert tortoise due to the lack of annual vegetation growth, including evidence of annual vegetation growth leftover from the previous spring and summer. Although one historic record of the species was observed approximately two miles northeast of the property in 2000 (Occurrence # 66; CDFW 2021), the property lacks suitable Mojave desert scrub or creosote bush habitat that which the desert tortoise is typically associated. The habitat present on the property was found to no longer provide suitable desert tortoise habitat during the 2021 survey.

Wildlife Movement Corridors

Although the property is undeveloped, it is surrounded by residential development and paved roads and also is isolated from large, contiguous blocks of native habitat. I-15 is less than one mile southeast from the property and provides a general barrier to wildlife movement.

Representative site photos from the biological survey are provided in Appendix B; Attachment E.

Impact Analysis

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

Less Than Significant With Mitigation Incorporated.

Special Status Plants.

The literature review and database searches identified 46 special-status plant species that occur near the property. Based on the results of the 2018 Dudek report and 2021 survey, most of the special-status species are presumed absent from the property due to the lack of suitable habitat and disturbances present on the property, including those from the residential development surrounding the property. As previously mentioned, one special-status plant species, western Joshua tree, was present during the biological survey. Three Joshua tree sprouts were observed growing along the property's western boundary in one location; however, this location is outside of the Proposed Project impact area. Numerous additional Joshua trees were present in the areas adjacent to the property, well outside the Proposed Project impact area. As a state candidate for listing, the Joshua tree is afforded all of the protections under the California ESA that a fully listed species would receive. There is currently a lack of formal guidance from the CDFW pertaining to the required survey methods, protection, and mitigation requirements for Joshua tree. The Proposed Project would avoid Joshua trees and seed bank by incorporating a non-disturbance buffer extended around the canopy of any Joshua trees present adjacent to the Proposed Project impact area. Additionally, it may become necessary to adjust or remove non-disturbance buffers around Joshua trees adjacent to the Proposed Project impact area if the species' listing status changes prior to the initiation of Project construction activities.

Dudek determined that two special-status plant species have a potential to occur on the property, short-joint beavertail (*Opuntia basilaris* var. *brachyclada*; CNPS California Rare Plant Rank (CRPR) 1B.2) and Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*; CNPS CRPR 1B.2). The results of the 2021 survey conducted on the property resulted in the same determination. Short-joint beavertail has potential to occur on the property due to the recent records within 5 miles of the property, suitable sandy loam and gravelly loam soils, and suitable chaparral habitat present on the property. There are 34 records of short-joint beavertail documented within 5 miles of the property with the closest one recorded in 2017 and located approximately 1 mile south of the property (Occurrence #64; CDFW 2021). Two new records of short-joint beavertail have been recorded within 5 miles of

the property since the 2018 Dudek report: both were recorded in 2019 and located approximately 4 miles south of the property (Occurrence # 73 and 77; CDFW 2021). Beavertail cactus (*Opuntia basilaris*) was identified within the Proposed Project impact area during the 2021 biological survey and Dudek also observed *Opuntia* species during their 2018 biological survey. Similar to Dudek's finding, the variety of beavertail cactus could not be properly identified in the field during the survey because none of the cactuses were in bloom during the 2018, 2021, or 2022 surveys. Palmer's mariposa lily can occur in chaparral habitat and commonly occurs in mesic soils, often in meadows and vernal moist places. The property does not contain mesic soils or vernal moist habitat but does contain chaparral habitat. Two records from 2017 of Palmer's mariposa lily have been documented less than 4 miles south of the property (Occurrence # 50 and 108; CDFW 2021). This species was not observed during the 2021 survey and Dudek also did not observe Palmer's mariposa lily during their 2018 biological survey; however, both surveys were conducted outside the typical blooming period for the species. If present, direct impacts to the short-joint beavertail and the Palmer's mariposa lily could occur in the form of mortality by vegetation removal and ground-disturbing activities. Indirect impacts to these species could occur in the form of increased dust and habitat degradation, which could limit reproduction and seed dispersal. Due to the species' CRPR listing status of 1B.2 (plants rare, threatened, or endangered in California and elsewhere; moderately threatened in California), impacts to these species may be considered significant under CEQA. In order to reduce the impacts to special-status plant species resulting from Project activities to a less than significant level, **Mitigation Measures BIO-1** and **BIO-2** shall be implemented.

Special Status Wildlife.

The updated literature review and database searches conducted in 2021 identified 39 special-status wildlife species that occur near the property; however, with the San Gabriel Mountains to the south and the San Bernardino Mountains to the east, many of the species that appeared in the literature review are presumed absent because they only occur in forest or montane habitats and at higher elevations. Three special-status wildlife species were found to have a potential to occur on the property: coast horned lizard (previously called Blainville's horned lizard; *Phrynosoma blainvillii*), CDFW Species of Special Concern (SSC); burrowing owl, CDFW SSC; and loggerhead shrike (*Lanius ludovicianus*), CDFW SSC. The Dudek report identified four special-status wildlife species that have potential to occur on the property: Mojave desert tortoise, federally and state-listed threatened; coast horned lizard; loggerhead shrike; and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), CDFW SSC. Mojave desert tortoise is presumed absent based on the results of the 2021 survey due to the lack of suitable vegetative cover on the property, the absence of suitable burrows or desert tortoise sign on the property, and because the property is surrounded by rural residential development and associated disturbances. San Diego black-tailed jackrabbit was determined to not have a potential to occur based on the results of the 2021 survey because the property is located outside of the species' current known geographic range, which is limited to the coastal areas of southern California.

Coast horned lizard has potential to occur on the property based on suitable chaparral habitat present in the Tucker-oak chamise communities, available shrubs to provide cover, the property being within the range of the species, and the presence of loose soils to facilitate burial behavior exhibited by the horned lizard. Loggerhead shrike has potential to occur because the property is within the range of the species and suitable chaparral habitat with the presence of fairly dense and large shrubs on the property for nesting. The property provides only marginally suitable habitat for migratory burrowing owls; the dense vegetation present throughout most of the property reduces the overall suitability of the habitat for the species but may be used as cover or refuge for migratory individuals. Small mammal burrows were observed on the property during the 2021 biological survey; however, none were of suitable size and shape for burrowing owl. Although the property only provides marginal quality habitat for the burrowing owl, it is important to note that this species is mobile and can fly over or migrate through the property at any time and could be using the property prior to the start of Project construction activities. Impacts to the coast horned lizard, loggerhead shrike, and burrowing owl may occur in the form of injury or

mortality during ground-disturbing or vegetation removal activities, and indirect impacts may occur in the form of increased human and vehicular activity, noise, dust, and degradation of habitat in adjacent areas. These impacts may be considered significant under CEQA. In order to reduce these impacts to a less-than-significant level, **Measures BIO-2, BIO-3, and BIO-4** shall be implemented.

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

Less Than Significant With Mitigation Incorporated. The shrubs on and immediately adjacent to the property as well as the utility poles and trees adjacent to the property could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code, including special-status bird species with potential to occur on the property (i.e., burrowing owl and loggerhead shrike). If construction of the Proposed Project occurs during the bird breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of vegetation on the property and indirectly through increased noise, vibrations, and increased human activity. The proposed mitigation measure in Dudek's report for a preconstruction nesting bird survey is sufficient to reduce these potential impacts to nesting birds to a less than significant level; Impacts would be less than significant with the implementation of **Mitigation Measure BIO-4**. Implementation of **Mitigation Measure BIO-2** will also reduce impacts to a less than significant level.

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

No Impact. The four mapped features within the property are located outside of Proposed Project impact area. No impact is anticipated to regulated aquatic resources.

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?*

No Impact. As the property is located within residential development less than one mile adjacent to I-15, it is not considered a linkage or corridor between conserved natural habitat areas. Therefore, no impact is anticipated.

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

Less Than Significant With Mitigation Incorporated. All species of the family Agavaceae are considered regulated desert native plants under the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01; San Bernardino County 2009). The code states that a Tree or Plant Removal Permit is required on public or private land to remove regulated desert native plants or any part of them except the fruit. Three species observed during the 2021 survey are considered members of the Agavaceae family: chaparral yucca (*Hesperoyucca whipplei*), Joshua tree, and Mojave yucca (*Yucca schidigera*). Note that protection of the western Joshua tree under its candidate for state listing status takes precedence over this County ordinance; however, if Joshua tree does not become formally listed under the California ESA, the protections required by the County ordinance would still be in effect for Joshua tree. Several live chaparral yucca and Mojave yucca were observed during the 2021 survey in the surrounding areas outside of the Proposed Project impact area. Although chaparral yucca and Mojave yucca do not have a CNPS designation or listing status, if the Project will result in the removal of either of these two species, approval must be obtained from the County via a Tree or Plant Removal Permit prior to the start of ground-disturbing activities. During the permit review process, the County may require certification from an appropriate arborist, registered professional

forester, or a Desert Native Plant Expert that any proposed plant removal activities are appropriate, supportive of a healthy environment, and in compliance with Chapter 88.01 of the Development Code, which may require a health assessment of the affected plant(s). There should be a detailed plan that includes protecting, preserving, or relocating the plants that may be affected by the Proposed Project. If members of the Agavaceae family, protected under San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01), are present within the Proposed Project impact area, direct impacts to these species may occur in the form of vegetation removal. Implementation of **Mitigation Measure BIO-1** will reduce the impacts to a less than significant level.

A Tree or Plant Removal Permit may also be required per the Development Code for the removal of oak woodlands if they have a significant effect on the environment and are composed of oak trees greater or equal to 5 inches in diameter at breast height (DBH) above natural grade. Tucker oak, which is the species present on the property, typically grows as a shrub, reaching between approximately 7 and 17 feet in height, but sometimes becomes treelike, exceeding 20 feet in height (CNPS 2021b). The Tucker oaks observed during the 2021 survey were representative of typical Tucker oaks, ranging from approximately 7 feet to 17 feet in height and both growing as a shrub and treelike. In order to determine whether a Tree or Plant Removal Permit will be required, a preconstruction plant survey shall be conducted to determine the DBH of the Tucker oaks within the property boundaries so that a decision on obtaining a Tree or Plant Removal Permit may be made. Implementation of **Mitigation Measure BIO-1** will reduce impacts to a less than significant level.

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?*

Less Than Significant With Mitigation Incorporated. Please see response e) above. With implementation of **Mitigation Measure BIO-1** impacts would be reduced to a less than significant level.

Mitigation Measures

BIO-1: Preconstruction Plant Surveys. Preconstruction surveys for special-status plants, including western Joshua tree, and plant species protected under the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01), including members of the *Agavaceae* family, shall be completed within the property boundaries prior to the start of ground-disturbing Project activities. One preconstruction survey shall be conducted during the blooming period for short-joint beavertail and Palmer’s mariposa lily (April through June) prior to ground disturbance and vegetation removal activities by a qualified botanist or biologist specializing in special-status plant identification. The survey shall be performed according to the CNPS Botanical Survey Guidelines (CNPS 2001). If special-status plants are found within the Proposed Project impact area and Project-related impacts to the individuals are unavoidable, then coordination with CDFW may need to occur to identify additional protection or mitigation measures. Additional protection or mitigation measures may include additional biological monitoring, transplanting, seed salvage, and non-disturbance buffers established around plant locations.

Another preconstruction plant survey shall be conducted between 60 days and eight months prior to the start of ground disturbing activities to inventory individuals of the *Agavaceae* family present on the property, including western Joshua tree, chaparral yucca, and Mojave yucca. The survey shall be performed by a botanist or qualified biologist with experience identifying and inventorying plants in the *Agavaceae* family. The locations of the yuccas, including Joshua tree, shall be recorded with

a submeter GPS unit. During the survey, the biologist will also determine whether any of the Tucker oaks present within the Proposed Project impact area have a DBH of 5 inches or greater above natural grade. If Joshua tree is found within the Proposed Project impact area and unavoidable Project-related impacts to Joshua tree will occur, then an ITP from CDFW under Section 2081 of the California ESA will be required as long as Joshua tree remains a candidate or listed species under the California ESA. Additional measures to reduce Project-related impacts to Joshua trees will likely be included within the approved ITP and these may include additional biological monitoring, transplanting, acquisition of mitigation land, or payment to an in-lieu mitigation fee program. If any members of the *Agavaceae* family or Tucker oaks with a DBH of 5 or more inches are found within the Proposed Project impact area, a San Bernardino County Tree or Plant Removal Permit will be required in accordance with Chapter 88.01 of the San Bernardino County Development Code. The requirements for the Tree or Plant Removal Permit are explained in detail in Chapter 88.01 of the Plant Protection and Management section of the San Bernardino County Development Code. During the Tree or Plant Removal Permit review process, the County may require certification from an appropriate arborist, registered professional forester, or a Desert Native Plant Expert; a detailed plan showing the protection, preservation or relocation of the plants affected by the Project; and a health assessment of the affected plant(s).

BIO-2: Biological Monitoring. A biologist experienced with identification of the sensitive and common biological resources in the region shall be present to monitor all initial ground disturbing and vegetation clearing activities regardless of the time of year such activities are scheduled to begin (biological monitor). The biological monitor shall perform biological clearance sweeps at the start of each workday that ground disturbing activities take place. The biological monitor shall be present on a full-time basis during the initial ground-disturbing and vegetation-clearing activities to ensure the activities do not affect sensitive biological resources and to move or redirect wildlife out of harm's way as necessary. The monitor will be responsible for communicating regularly with the Project Proponent and onsite contractor on non-compliance issues and ways to ensure that impacts to sensitive biological resources will be avoided to the fullest extent possible in accordance with the appropriate Project agreements and permits, as applicable. Biological monitoring shall take place until the Proposed Project impact area has been completely cleared of any vegetation. The biological monitor shall keep a record of monitoring activities in a log that contains representative photographs of the work activities monitored and any sensitive biological resources incidentally encountered during Project activities.

BIO-3: Preconstruction Burrowing Owl and Special-Status Wildlife Surveys. Preconstruction surveys for burrowing owl and coast horned lizard (Blainville's horned lizard) shall be completed within the property boundaries prior to the start of initial ground-disturbing activities. The surveys shall be performed on the property and within a 500-foot buffer, where accessible, in accordance with the take avoidance survey methods identified in the California Department of Fish and Game (CDFG) *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The first survey shall be conducted between 14 and 30 days prior to the start of initial ground-disturbing activities and a second survey shall be conducted no more than 24 hours prior to the start of initial ground-disturbing activities (including vegetation removal). If survey results are negative for both species, Project activities may occur and no additional protection measures are required. If coast horned lizard is found to be present in the work area during the 24-hour preconstruction survey, biologists will redirect the individuals outside of the work area. If burrowing owl or occupied burrowing owl burrow(s) (e.g., whitewash, feathers,

pellets, bones of prey items) is/are observed on or immediately adjacent to the Proposed Project impact area, additional mitigation measures will need to be implemented to offset impacts to burrowing owl. These measures shall be developed in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) and may include additional biological monitoring, seasonal work restrictions, establishing a non-disturbance buffer around each burrow location, or passive relocation. Coordination with CDFW may need to occur to perform passive relocation of burrowing owls and/or to devise a specific mitigation methodology for the Project Site if one is found to be necessary.

BIO-4: Preconstruction Survey for Nesting Birds. Wherever feasible, any ground-disturbing activities shall be conducted during the nonbreeding season for birds (approximately September 1 through January 31) in order to avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds, including special-status bird species (e.g., burrowing owl and loggerhead shrike), are scheduled to occur during the bird breeding season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys no more than 3 days prior to the start of construction activities. The nesting bird survey shall include the Proposed Project impact area and adjacent areas where Project activities have the potential to cause nest failure. If no nesting birds are observed during the survey, site preparation and construction activities may begin. If nesting birds (including nesting raptors) are found to be present, avoidance or minimization measures shall be proposed by the Project biologist and implemented to avoid potential Project-related impacts to active nests. Measures may include additional biological monitoring, seasonal work restrictions, or establishment of a non-disturbance buffer until nesting has been completed as determined through periodic nest monitoring by the biologist. The size of the non-disturbance buffer will be determined by the Project biologist. Typically, this is 300 feet from the nest site in all directions (500 feet is typically recommended by CDFW for raptors) until the juveniles have fledged and there has been no evidence of a second attempt at nesting, as determined by the Project biologist.

Biological Resources Impact Conclusions:

Through implementation of the above mitigation measures, Project related impacts would be reduced to a less than significant level.

5. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

(Check if project is located in the Cultural overlays or cite results of cultural resource review)

Environmental Setting

As part of a Phase I Cultural Resource Inventory as prepared by Dudek, a California Historical Resource Information System (CHRIS) records search at the Southern Central Coastal Information Center (SCCIC) was conducted on August 29, 2018 for the Project Site and surrounding one mile radius (Dudek 2018b; Appendix C). This search included the SCCIC’s collection of mapped prehistoric, historical, and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional resources consulted included the National Register of Historic Places (NRHP), California Inventory of Historical Resources/CRHR and listed Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information (Dudek 2018b). Subsequent to the 2018 Cultural Resource Inventory, ECORP conducted an updated CHRIS records search at the SCCIC and Sacred Lands File Search from the Native American Heritage Commission (NAHC) for the Project Site (ECORP 2022c; Appendix H). The 2022 records search results indicated that 100 percent of the Project Area has been previously surveyed for cultural resources. The CHRIS records search indicates that no previously recorded resources either partially overlaps or is entirely within the Project Area (ECORP 2022c). The results of the Sacred Lands File search from NAHC was negative (ECORP 2022c).

Impact Analysis

a) *Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

No impact. SCCIC records indicate that 29 previous cultural resource investigations have been performed within one mile of the Project Site; one concerned the Project Site. Gerald Smith conducted one study within the Project Site boundaries in 1973 titled: *Archaeological, Historical and Paleontological Site Survey for County Service Area No. 70 Improvement Zone "J", Assessment of Impact And Recommendations*. No archaeological or paleontological resources were found in the project area during the study (Dudek 2018b).

The updated 2022 SCCIC records search generally concurs with the 2018 Cultural Resource Inventory prepared by Dudek and indicates a total of 31 cultural resource investigations have been performed within one mile of the project site; one of which includes the project area (Dudek 2018b; ECORP 2022c).

Both cultural resources inventories of the Project Site suggest there is low potential for the inadvertent discovery of cultural resources during proposed groundbreaking activities. SCCIC records indicate that no cultural resources been recorded within the Project Site, and no resources were discovered during the pedestrian survey

within the Project Site (Dudek 2018b). Therefore, the Proposed Project would not result in impacts to a Historical Resource.

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

Less Than Significant with Mitigation Incorporated. Sixteen archaeological resources were identified within a one-mile radius of the Project, but none directly within the Area of Potential Effects (APE). The archaeological resources present include 11 historic sites (four roads, five historic trash scatters, one transmission line, and one water conveyance system), four prehistoric lithic and artifact scatters, and one isolated historic can (Dudek 2018b).

The 2022 updated Cultural Resource Memorandum prepared by ECORP (ECORP 2022c; Appendix H), identified eighteen resources within one mile of the Proposed Project. Consisting of four pre-contact resources, 13 historic period resources, and one unknown resource due to a missing site record. None of the pre-contact resources are located within 0.25 mile of the Project Site, with the majority located east of Interstate 15 (ECORP 2022c).

Although the archaeological sensitivity of the Project Site is considered to be low, there always remains some potential for ground-disturbing activities to expose previously unrecorded cultural resources. With the implementation of **Mitigation Measures CUL-1** and **CUL-2**, potential impacts to unanticipated cultural resources found during Project construction would be less than significant.

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

Less Than Significant with Mitigation Incorporated. No known human remains are present within the Project Area. If human remains are inadvertently uncovered during project activities, adherence to **Mitigation Measure CUL-3** would reduce impacts to less than significant.

Mitigation Measures:

CUL-1: In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds 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.

CUL-2: If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

CUL-3: 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 pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

Cultural Resources Impact Conclusions:

With implementation of the above listed measures, less than significant impacts would occur.

6. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Environmental Setting

Energy consumption is analyzed in this Initial Study due to the potential direct and indirect environmental impacts associated with the Project. Such impacts include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) and emissions of pollutants during the construction phase. The impact analysis focuses on the two source of energy that are relevant to the Proposed Project: the equipment-fuel necessary for Project construction and energy use for lighting of the facility.

Energy Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with a majority of its electricity followed by renewables, large hydroelectric and nuclear (California Energy Commissions [CEC] 2021a). Southern California Edison (SCE) provides electrical services to San Bernardino County through state-regulated public utility contracts. SCE, the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. It provides 14 million people with electricity across a service territory of approximately 50,000 square miles.

The California Public Utilities Commission (CPUC) regulates SCE. The CPUC has developed energy efficiency programs such as smart meters, low-income programs, distribution generation programs, self-generation incentive programs, and a California solar initiative. Additionally, the CEC maintains a power plant data base that describes all of the operating power plants in the state by county. San Bernardino County contains 136 power plants that generating electricity, of which most are solar (CEC 2021a).

Existing Transmission and Distribution Facilities

The components of transmission and distribution systems include the generating facility, switching yards and stations, primary substation, distribution substations, distribution transformers, various sized transmission lines, and the customers. The United States contains over a quarter million miles of transmission lines, most of them capable of handling voltages between 115 kilovolts (kv) and 345 kv, and a handful of systems of up to 500 kv and 765 kv capacity. Transmission lines are rated according to the amount of power they can carry, the product of the current (rate of flow), and the voltage (electrical pressure). Generally, transmission is more efficient at higher voltages. Generating facilities, hydro-electric dams, and power plants usually produce electrical energy at fairly low voltages, which is increased by transformers in substations. From there, the energy proceeds through switching facilities to the transmission lines. At various points in the system, the energy is “stepped down” to lower voltages for distribution to customers. Power lines are either high voltage (115, 230, 500, and 765 kv) transmission lines or low voltage (12, 24, and 60 kv) distribution lines. Overhead transmission lines consist of the wires carrying the electrical energy (conductors), insulators, support towers, and grounded wires to protect the lines from lightning (called shield wires). Towers must meet the structural requirements of the system in several ways. They must be able to support both the electrical wires, the conductors, and the shield wires under

varying weather conditions, including wind and ice loading, as well as a possible unbalanced pull caused by one or two wires breaking on one side of a tower. Every mile or so, a “dead-end” tower must be able to take the strain resulting if all the wires on one side of a tower break. Every change in direction requires a special tower design. In addition, the number of towers required per mile varies depending on the electrical standards, weather conditions, and the terrain. All towers must have appropriate foundations and be available at a fairly regular spacing along a continuous route accessible for both construction and maintenance. A right-of-way is a fundamental requirement for all transmission lines. A right-of-way must be kept clear of vegetation that could obstruct the lines or towers by falling limbs or interfering with the sag or wind sway of the overhead lines. If necessary, land acquisition and maintenance requirements can be substantial. The dimensions of a right-of-way depends on the voltage and number of circuits carried and the tower design. Typically, transmission line rights-of-way range from 100 to 300 feet in width. The electric power supply grid within San Bernardino County is part of a larger supply network operated and maintained by SCE that encompasses a large portion of the Southern California region. This system ties into yet a larger grid known as the California Power Pool that connects with the San Diego Gas and Electric and Pacific Gas and Electric Companies. These companies coordinate the development and operation, as well as purchase, sale, and exchange of power throughout the State of California.

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh) and vehicle fuel use is typically measured in gallons (e.g., of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh. This Initial Study focuses on the two sources of energy that are relevant to the Proposed Project: the equipment-fuel necessary for Project construction/ material hauling and energy use for lighting of the facility.

The electricity consumption associated with all non-residential uses in San Bernardino County from 2016 to 2020 is shown in Table 4.6-1. As indicated, the demand has fluctuated since 2016.

Year	Electricity Consumption (kilowatt hours)
2020	9,865,589,938
2019	9,989,834,942
2018	10,214,939,044
2017	10,119,402,373
2016	9,985,382,081

Source: CEC 2021b

Off-road fuel consumption in San Bernardino County from 2017 to 2021 is shown in Table 4.6-2. Off-road fuel consumption has increased between 2017 and 2021.

Year	Total Fuel Consumption (gallons)
2021	23,276,908,094
2020	22,844,072,833

Year	Total Fuel Consumption (gallons)
2019	21,323,524,653
2018	19,857,004,473
2017	18,448,316,481

Source: CARB 2021

Notes: Off-Road fuel consumption includes the 'Construction and Mining' equipment sector only.

Impact Analysis

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

Less Than Significant. The impact analysis focuses on the two sources of energy that are relevant to the Proposed Project: the equipment-fuel necessary for Project construction/ material hauling and energy use for lighting of the facility. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use project. For the purpose of this analysis, the amount of electricity estimated to be consumed by the Project is quantified and compared to that consumed by all non-residential land uses in San Bernardino County. Similarly, the amount of fuel necessary for Project construction is calculated and compared to that consumed by off-road equipment in San Bernardino County.

The analysis of electricity usage is based on CalEEMod modeling conducted by Dudek Construction Engineering Company (2018) (see Appendix A), which quantifies energy use for Project operations. The amount of total construction-related fuel use was estimated using ratios provided in the Climate Registry’s General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. Energy consumption associated with the Proposed Project is summarized in Table 4.6-3 (Appendix A).

Energy Type	Annual Energy Consumption	Percent Increase Countywide
Energy Consumption		
Electricity Consumption	646,870 kilowatt-hours	0.00655 percent
Fuel Consumption		
Project Construction	20,332 gallons	0.00008 percent

Source: Refer to Appendix A for energy consumption and fuel consumption calculations.

Notes: The Project increases in electricity s consumption is compared with all of the non-residential uses in San Bernardino County in 2020, the latest data available. The Project increases in construction fuel consumption is compared with the countywide fuel consumption in 2021, the most recent full year of data.

Operations of the Proposed Project would include electricity usage from lighting. As shown in Table 4.6-3, the annual electricity consumption due to operations would be 646,870 kilowatt-hours resulting in an unperceivable

increase (0.00655 percent) in the typical annual electricity consumption attributable to all non-residential uses in the San Bernardino County.

Fuel necessary for Project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the Project Site. The fuel expenditure necessary to construct the physical building and infrastructure would be temporary, lasting only as long as Project construction. As further indicated in Table 4.6-3, the Project's gasoline fuel consumption during the one-time construction period is estimated to be 20,332 gallons during one time construction phase. This would increase the annual construction related fuel use in the county by 0.00008. As such, Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

For these reasons, this impact would be less than significant.

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

Less Than Significant. The Proposed Project includes the construction and operation of an additional 2-MG 28-foot-tall steel reservoir and 30-foot by 30-foot building. The Project is subject to all local, state, and federal standards set in place to promote the use of renewable energy or energy efficiency. Conformance with these standards ensures that the Project would not obstruct any renewable energy or energy efficiency plans.

For these reasons, this impact would be less than significant.

Mitigation Measures:

None required.

Energy Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

7. GEOLOGY AND SOILS

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

(Check if project is located in the Geologic Hazards or Paleontologic Resources Overlay District):

Environmental Setting

A site-specific geotechnical report was prepared for the Proposed Project by Converse Consultants in May of 2021 (Converse 2021; Appendix G). The report presents data from background review, field exploration, and laboratory testing, provides conclusions regarding the geotechnical conditions of the Project Site, and provides recommendations regarding design and construction of the proposed improvements.

Geomorphic Setting

The Proposed Project is located in San Bernardino County CSA 70J, within the Mojave Desert Geomorphic Province of Southern California. The Mojave Desert is a broad interior region of isolated mountain ranges separated by wide desert plains. The Project Site is roughly triangular shaped and bounded by the Garlock Fault to the north, the San Andreas Fault to the southwest, and the Colorado River to the east. The drainages are primarily closed and terminate in playas within the valley floors (Converse 2021). The province is a seismically active region primarily characterized by a series of northwest-southeast-trending strike-slip faults and east-west trending secondary faults. The most prominent of the nearby fault zones include the Helendale, Lenwood,

Landers, and San Andreas Fault Zones, all of which have been known to be active during Quaternary time (Converse 2021). Extension of the region has resulted in exposure of basement rocks dating to the Precambrian age, deposition of young Holocene-aged sedimentary basins, and eruptions of volcanic units (Converse 2021).

Regional Seismicity and Fault Zones

An “active fault,” according to California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered “inactive.”

The Proposed Project is situated in a seismically active region. As is the case for most areas of Southern California, ground-shaking resulting from earthquakes associated with nearby and more distant faults may occur at the Project Site. During the life of the Project, seismic activity associated with active faults can be expected to generate moderate to strong ground shaking at the property. Review of recent seismological and geophysical publications indicates that the seismic hazard for the Project Site is high. The proposed reservoir site is not located within a currently mapped State of California Earthquake Fault Zone for surface fault rupture (Converse 2021).

Soils

Converse Consulting’s Geotechnical Report (Appendix G) identified the Project Site as being primarily underlain by Pleistocene-aged very old alluvial fan deposits (Qvof) consisting mainly of massive debris flow deposits of unsorted, unbedded, angular and subrounded gravel and cobbles derived from the San Gabriel Mountain terrane to the south.

Paleontological Resources

A paleontological records search was requested for the Proposed Project to determine if paleontological resources were present in or adjacent to the Project Site and assess the sensitivity of the Project Site for undiscovered paleontological resources. The records search was initiated with the Western Science Center (WSC) on April 8, 2022 and results were received on April 15, 2022. The results of the paleontological records search are included as Appendix I (WSC 2022). Additional information from a query of the WSC records, a review of regional geologic maps from the California Geological Survey, and a review of existing literature on paleontological resources of San Bernardino County were used to provide information about paleontological resources.

Impact Analysis

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.*
 - ii. *Strong seismic ground shaking.*
 - iii. *Seismic related ground failure, including liquefaction.*
 - iv. *Landslides.*

Less Than Significant.

- i.) The Proposed Project is not located within a State of California or San Bernardino County designated earthquake fault zone (Converse 2021). The risk of surface fault rupture is low. Impacts would be less than significant.
- ii.) As stated above, the Project is not located within a State of California Earthquake Fault Zone. However, like the majority of Southern California, the site is located in a seismically active area. In the event of an earthquake strong ground shaking is expected to occur on the Project Site. The Project does not include the construction of habitable structures and therefore would not expose people or structures to strong seismic ground shaking greater than what currently exists. The Project's design and construction would comply with current building codes and standards which would reduce the risk of loss, injury, or death downslope as a result of a tank rupture induced by strong ground-shaking. Impacts would be less than significant.
- iii.) Seismically induced settlement occurs in loose, granular sediments during ground shaking associated with earthquakes. Based on the dense subsurface conditions, the potential of seismic settlement is anticipated to be negligible (Converse 2021).

The Proposed Project is not located within an area designated as a liquefaction risk by the State of California and San Bernardino County (Converse 2021). The potential of liquefaction induced settlement is anticipated to be negligible.

Seismically induced lateral spreading involves primarily lateral movement of earth materials over deeper layers which have liquefied due to ground shaking. Due to the low risk of liquefaction and dense nature of the soil materials, the risk of lateral spreading is considered low (Converse 2021). Impacts would be less than significant.

- iv.) Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. The Proposed Project is not located within a designated State of California or San Bernardino County landslide hazard zone (Converse 2021). The slopes within and surrounding the Project Site were observed for slumps, scarps, fissures, deformation, or seepage. No visible indications of potential slope movement or instability were observed during site reconnaissance from Converse Consultants. Impacts would be less than significant.

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

Less Than Significant. Implementation of the Proposed Project would require ground-disturbing activities, such as grading and filling, which could potentially result in soil erosion or loss of topsoil. Project construction would be required to comply with the Construction General Permit, either through a waiver or through preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Best Management Practices (BMPs) are included as part of the SWPPP prepared for the Project and would be implemented to manage erosion and the loss of topsoil during construction-related activities. The Project's grading plan would also ensure that the proposed earthwork is designed to avoid soil erosion. Impacts from soil erosion or the loss of topsoil are considered less than significant.

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

Less Than Significant. As described above in response a) i-iv, the Proposed Project is not located on a geologic unit or soil that is unstable or would become unstable from Project construction, operation, and maintenance. Impacts are considered less than significant.

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

No Impact. A representative sample from the upper five feet of soils was tested by Converse Consultants as part of a Phase I ESA. Expansion potential was evaluated in accordance with ASTM Standard D4829. The test result indicates an Expansion Index (EI) of 0, corresponding to very low. Therefore, no impact is anticipated.

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

No Impact. Serving as County infrastructure, the Proposed Project would not include onsite wastewater disposal or management utilizing sewer systems or septic tanks. Therefore, no impact would occur.

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

Less Than Significant with Mitigation Incorporated. The geologic units underlying the project area are mapped entirely as alluvial fan gravel units dating from the Pliocene to Pleistocene epoch (WSC 2022). Pliocene and Pleistocene alluvial units are considered to be of high paleontological sensitivity, and while the WSC does not have localities within the project area, WSC does have numerous localities throughout the region in similarly mapped sediments. Southern California alluvial units are known to produce abundant Pleistocene and Pliocene fauna including those associated with mastodon (*Mammut pacificus*), mammoth (*Mammuthus columbi*), ancient horse (*Equus sp.*), camel (*Camelops hesternus*), and sabertooth cat (*Smilodon fatalis* and *Smilodon gracilis*). Similarly, fossil sites have been documented in the Shoemaker Gravels and Noble's old alluvium in the Hesperia region (Lilburn Corporation 2000). Although no paleontological resources are known to exist on the Project Site, there is a possibility that paleontological resources exist at sub-surface levels at the Project Site and may be uncovered during grading and excavation activities. Implementation of **Mitigation Measure GEO-1** will ensure that if any such resources are found during construction of the Project, they would be handled according to the proper regulations and any potential impacts would be reduced to less than significant levels.

Mitigation Measure:

GEO-1: Unanticipated Discovery – Paleontological Resources. If paleontological resources (i.e., fossil remains) are discovered during excavation activities greater than five feet, the contractor will notify the County and cease excavation until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g. fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

Geology and Soils Impact Conclusions:

With implementation of **Mitigation Measure GEO-1**, less than significant impacts would occur.

8. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

A Greenhouse Gas (GHG) Report was prepared in November of 2018 by Dudek Construction Engineering Company (Dudek 2018c). This GHG Report is included as Appendix E of this IS/MND and provides information for the following section.

Background

GHG emissions are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps more than 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

County of San Bernardino Greenhouse Gas

In September 2011, San Bernardino County adopted the San Bernardino GHG Reduction Plan (GHG Plan) based on the premise that the County and the community it represents are uniquely capable of addressing emissions associated with sources under the County's jurisdiction and that the County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to reduce emissions in an efficient and cost-effective manner. This GHG Plan presents a comprehensive set of actions to reduce the County's internal and external GHG emissions to 15 percent below current levels by 2020, consistent with the Assembly Bill (AB) 32 Scoping Plan. The GHG Plan identifies GHG emissions reduction goals, objectives, and strategies categorized in six sectors: Building Energy (addressing energy efficiency and alternative energy in buildings and renewable energy generation facilities), Transportation and Land Use, Solid Waste/Landfills, Stationary Sources, Agriculture and Resource Conservation, and Water Conservation. For each sector, reduction strategies have been developed to achieve the County's 2020 emissions reduction target.

The March 2015 update of the GHG Emissions Development Review Process updates the language the performance standard bringing it up to date with current code and improves upon the menu of options within the screening tables proportioning point values to more accurately account for expected GHG reductions and revised the descriptions of the energy efficiency related options to better describe the physical improvements that would be made in choosing that option. For the purposes of this evaluation, the Project is evaluated for consistency with the San Bernardino County GHG Emissions Reduction Plan. The GHG Plan is consistent with AB 32 and sets the County on a path to achieve a more substantial long-term reduction in the post-2020 period. In addition, the Project will also be compared to the interim screening level numeric bright-line threshold of 3,000 metric tons of CO_{2e} annually adopted in the GHG Emissions Reduction Plan. The numeric bright line threshold was developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners and lead agencies with regard to determining whether GHG emissions from a proposed project are significant.

Impact Analysis

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

Less Than Significant.

Construction

Construction of the Proposed Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor trucks, and worker vehicles. CalEEMod Version 2016.3.2 was used to calculate the annual GHG emissions based on information provided by Dudek Construction Engineering Company (2018) such as construction phasing, construction timing, equipment, etc. (see Appendix E). On-site sources of GHG emissions include off road equipment and off-site source; include hauling and vendor trucks and worker vehicles. Construction of the Project also includes the initial filling of the water storage tank. The filling of the tank will be performed by the existing Reservoir 2A booster pump. Table 4.8-1 illustrates the specific construction generated GHG emissions that would result from construction of the Project. The duration of construction is estimated at approximately six months.

Table 4.8-1. Construction-Related Greenhouse Gas Emissions				
Construction Scenario	CO₂	CH₄	N₂O	CO_{2e}
Construction (CalEEMod)	205.53	0.03	0.00	206.36
Initial Tank Filling	0.75	0.00	0.00	0.76
30-Year Amortization of Construction Emissions				6.90
Total				214.02
<i>County of San Bernardino GHG Reduction Plan</i>				<i>3,000</i>
Exceed Threshold?				No

Source: Dudek Construction Engineering Company (2018). Refer to Appendix A for Model Data Outputs and assumptions used in this analysis (construction phasing, construction, equipment, etc.)

As shown in Table 4.8-1, Project emissions do not exceed San Bernardino County GHG Emissions Reduction Plan screening threshold of 3,000 metric tons of CO₂e per year. In addition, GHG emissions sources used during construction of the Proposed Project would be short term in nature, lasting only for the duration of the construction period; they would not represent a long-term source of GHG emissions. As there is no construction only GHG emissions threshold, the amortized construction emissions were added to the operational emissions and the significance was determined below. Therefore, the impact is less than significant.

Operations

Operation of the Proposed Project would result in minimal GHG emissions from the proposed additional facilities associated with the new storage tank. The CalEEMod estimated operational project generated GHG emissions from energy use (onsite lighting) are presented in Table 4.8-2. The amortized GHG construction emissions from Table 4.8-1 have been added to the annual operational emissions for comparison with the significance threshold of 3,000 MT CO₂e per year.

Table 4.8-2. Operational-Related Greenhouse Gas Emissions				
Construction Scenario	CO₂	CH₄	N₂O	CO₂e
Energy (CalEEMod)	206.11	0.01	0.00	206.84
30-Year Amortization of Construction Emissions				6.90
Total				213.74
<i>County of San Bernardino GHG Reduction Plan</i>				<i>3,000</i>
Exceed Threshold?				No

Source: Dudek Construction Engineering Company (2018). Refer to Appendix E for Model Data Outputs and assumptions used in this analysis.

As shown in Table 4.8-2, the estimated total GHG emissions (annualized construction emissions plus emissions associated with operational activities) would be 213.74 MT CO₂e per year. As shown, the total annual emissions would not exceed the GHG significance threshold of 3,000 MT CO₂e per year. As such, a less than significant impact would occur.

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

Less Than Significant. The San Bernardino County GHG Reduction Plan establishes a GHG emissions reduction target for the year 2020 that is 15 percent below year 2007 emission levels. The GHG Plan is consistent with AB 32 and sets the County on a path to achieve a more substantial long-term reduction in the post-2020 period. Achieving this level of emissions would ensure that the contribution to GHG emissions from activities covered by the GHG Reduction Plan would not be cumulatively considerable. As described in Chapter 4.0 of the GHG Plan, all new development under the jurisdiction of the County is required to quantify a project’s GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance.

The County GHG Reduction Plan identifies a review standard of 3,000 metric tons of CO₂e per year to identify and mitigate project emissions. Projects estimated to generated less than 3,000 metric tons of CO₂e per year

are considered less than significant. For projects exceeding 3,000 metric tons of CO₂e per year, the developer may use the GHG Reduction Plan Screening Tables in the GHG Reduction Plan as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. Projects that garner 100 or more points on the Screening Tables are considered less than significant. (The point system was devised to ensure project compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those from existing development, would allow the County to meet its year 2020 target and support longer-term reductions in GHG emissions beyond year 2020.)

As shown in Table 4.8-1 and Table 4.8-2, above, Project construction and operations would not exceed the County's 3,000 metric tons of CO₂e per year screening threshold. Therefore, the Project does not conflict with the San Bernardino Greenhouse Gas Emissions Reduction Plan. A less than significant impact would occur.

Mitigation Measures:

None required.

Greenhouse Gas Emissions Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

9. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site 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?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk loss, injury or death involving wildland fires?			X	

Environmental Setting

The Proposed CSA 70J Project Site is located Approximately 4,040 feet above National Geodetic Vertical Datum (NGVD), with prevailing slope towards the east-northeast. The closest water surface is the Oro Grande Wash (dry), approximately 600 feet east-southeast of the Project Site. The Project Site's soil is classified as Wrightwood loamy sand with moderate infiltration rates; soils are deep and moderately deep, moderately well and well drained soils with moderately coarse textures; coarse-grained sands, sands with fines, and silty sand. The first occurrence of groundwater is greater than 1,000 feet below grade surface (bgs) (Terracon 2019).

Impact Analysis

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

Less Than Significant. The construction phase of the Proposed Project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, pesticides, and other similar materials. These activities would be short term and one-time events and would be subject to federal, state, and local health and safety requirements. The transport of hazardous materials by truck is regulated by federal safety standards under the

jurisdiction of the U.S. Department of Transportation. Additionally, the implementation of BMPs stipulating proper storage of hazardous materials and vehicle refueling would be implemented during construction as part of the SWPPP. All transport, handling, use, and disposal of substances such as petroleum products, paints, and solvents related to the operation and maintenance of the Proposed Project would comply with all Federal, State, and local laws regulating management and use of hazardous materials. Construction is also anticipated to use and dispose of hazardous materials. Heavy machinery has the potential to leak petroleum products, coolant, and hydraulic fluid. All transport, handling, use, and disposal of substances such as petroleum products, paints, and solvents related to the operation and maintenance of the Proposed Project would comply with all Federal, State, and local laws regulating management and use of hazardous materials. Long-term operation of the Proposed Project would continue the site's existing use as a reservoir facility for county water storage. A less than significant impact related to the use or transport of hazardous materials is expected to occur.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant. On-site storage and/or use of large quantities of hazardous materials capable of affecting soil and groundwater are not proposed. However, during construction some hazardous materials, such as diesel fuel and paints, would be used. A SWPPP, listing BMPs to prevent construction pollutants and products from violating any water quality standard or waste discharge requirements would be prepared for the Proposed Project. The potential risk associated with accidental discharge during use and storage of equipment-related hazardous materials would be low since the handling of such materials would be addressed through the implementation of BMPs. With the implementation of BMPs, the Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material. Impacts would be less than significant.

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

No Impact. The nearest school to the Project Site is Oak Hills High School, approximately three miles northeast of the Project Site. As such, the Project would not emit hazardous emissions or handle hazardous materials within one-quarter mile of a school. No impact would occur.

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?

No Impact. The Project Area is not listed in the Department of Toxic Substances Control (DTSC) Envirostor Database. Two cases are identified by State Water Resource Control Board's (SWRCB) Geotracker database near the Project. Both are located within one mile of the Project. The first is a leaking underground storage tank (LUST) cleanup site approximately 0.7-mile south of the Proposed Project, at the Summit Inn Texaco. The second identified case is a pilot diesel tanker spill site approximately 0.6-mile east of the Project. Cleanup efforts for both sites have been completed (DTSC 2021). No Recognized Environmental Conditions (RECs) were identified as a result of the Envirostor/Geotracker database reviews.

The online National Pipeline Mapping System (NPMS) database is maintained by the Office of the California State Fire Marshal. NPMS is a Geographic Information System (GIS) database of pipeline information for the specific intent of emergency response. The database does not include natural gas lines or liquefied natural gas facilities. No pipelines were mapped on or within 1,500 feet of the Project Site (NPMS 2021). No RECs were

identified from review of the NPMS database review. No RECs were identified from review of the CalGEM web map, the analysis did not identify any oil and gas wells on or within 1,500 feet of the Project (CalGEM 2021).

The Project Site is not included on a compiled list of hazardous materials sites pursuant to Government Code Section 65962.5 (DTSC 2021). Therefore, no impact would occur.

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

No Impact. The Proposed Project is located more than two miles west of the nearest airport, Hesperia Airport. No impact would occur.

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

No Impact. The San Bernardino County 2018 Emergency Operations Plan (EOP) identifies emergency response and actions. The Plan identifies potential hazardous situations, emergency management, and recovery operations (County of San Bernardino 2018a). The Project Site would not involve the closure of emergency routes or interfere with facilities that would be used during emergency response. As such, the Proposed Project would not impair or interfere with an adopted emergency response plan. No impact would occur.

g) *Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Less Than Significant. A complete review of Sanborn Library of Fire Insurance map reports completed as part of the Phase I ESA found no fire insurance maps of the Project Site. The California Fire Alliance has identified the Oak Hills community as a “community at risk” from wildfires. The Project Site is located on relatively vacant land surrounded by rural residential uses. Additionally, the Proposed Project is located on land designated as a High Fire Hazard Severity Zone (FHSZ) within a State Responsibility Area (SRA) (CAL FIRE 2019). However, the Project would not substantially alter the slope, wind patterns, or other factors that could exacerbate fire risk. The Project would construct a 2-MG reservoir, which would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Thus, impacts are considered less than significant as the Proposed Project would not expose surrounding residents to pollutant concentrations from a wildfire or uncontrolled spread of wildfire.

Mitigation Measure:

None required.

Hazards and Hazardous Materials Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

10. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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?			X	
I. Result in substantial erosion or siltation on – or off-site;			X	
II. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on – or off-site;			X	
III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or			X	
IV. Impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X

Environmental Setting

The Project Site is located within moderately to gently sloping terrain and is primarily composed of mostly undisturbed land within CSA 70J. The Project Site slopes downward to the west along the eastern boundary and downward to the east along the western boundary. The Project Site is mostly undeveloped with the exception of an existing fence line for an existing water tank facility.

Impact Analysis

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

Less Than Significant. During construction of the Proposed Project, water quality impacts could occur without proper controls. Soils loosened during grading and fluid or fuel spills from vehicles and equipment, if mobilized or transported offsite in overland flow, have the potential to degrade water quality. The area of disturbance affected by project construction does not exceed one acre, as such the Project would not be subject to the requirements of the statewide National Pollutant Discharge Emission System (NDPES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Permit). Project related construction activities including cutting, filling and grading would affect less than half an acre for the 120-

foot diameter reservoir and surrounding access road. During construction, to comply with the Construction General Permit the County would be required to implement a SWPPP, which would include BMPs to prevent construction pollutants and products from violating any water quality standards or any waste discharge requirements. When in operation, the Proposed Project would not involve uses which would result in waste discharges that could degrade surface or groundwater quality. Impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant. The Proposed Project would rehabilitate and expand an existing County water storage facility. A proposed retention basin to regulate stormwater and overflow is included in construction activities. The proposed 16-foot-wide access road would be paved and located entirely within the County owned parcel surrounding the 120-foot diameter reservoir. The addition of the proposed access road, 30-foot by 30-foot building, and reservoir is not anticipated to result in a substantial increase of impervious surface area; runoff from the Project Site would be redirected to the Project's detention basin to facilitate onsite infiltration. Therefore, impacts to groundwater supplies and recharge are considered less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river 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 off-site.*
- III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or*
- IV. Impede or redirect flood flows?*

Less Than Significant.

- I. The Proposed Project would require grading of the Project Site which would result in localized changes to drainage patterns, which could result in erosion and/or siltation. Erosion and/or siltation during construction would be minimized by implementation of BMPs included in the Project's SWPPP. Furthermore, the grading plan and stormwater management system has been designed by a registered civil engineer to meet County development standards and safely collect and convey runoff to the proposed retention basin. Impacts would be less than significant.
- II. The Proposed Project's WQMP details the project's strategy to control the velocity and volume of on-site surface runoff. The WQMP includes the use of a retention basin, which would accept runoff from the Project Site. The Project's retention basin is designed to allow stormwater to infiltrate into the ground reducing the velocity and volume of stormwater that is discharged from the Project Site. As such, the potential for flooding on or offsite is reduced. Impacts would be less than significant.
- III. The Proposed Project's stormwater management system was designed by a registered civil engineer to ensure that the system's components are sized to treat the runoff volumes that are anticipated for the post-construction conditions. Impacts would be less than significant.
- IV. The proposed grading plan and stormwater management system are designed to prevent flooding conditions. On-site runoff would be conveyed to the retention basin for on-site infiltration. Impacts would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. The Project Site is identified as a minimal flood hazard zone (Zone X) in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Map Number 06071C7185H. Proposed construction activities and facility operations are not anticipated to impede flood flows. As such, no impact to flood hazards are anticipated.

The Project Site is located approximately 60 miles inland from the Pacific Ocean. Additionally, no major surface water bodies are located in the project vicinity. Due to the distance to the ocean and large bodies of water, the Project Site would not be subject to inundation from seiches or tsunamis. No impact would occur.

Mitigation Measures:

None required.

Hydrology and Water Quality Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

11. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Environmental Setting

The Project Site is mostly undeveloped with existing County reservoir infrastructure. The 1.62-acre parcel is located in SCA 70J, south of Jenny Street and east of Columbine Road. The surrounding parcels to the north, south, and east are zoned as OH/RL. Surrounding parcels are developed with rural single-family residences, with open space/floodway downslope to the east.

Impact Analysis

a) *Physically divide an established community?*

No Impact. The Proposed Project includes the expansion of an existing county reservoir facility, which is surrounded on three sides by existing development. The proposed project would expand potable water infrastructure to better serve the community and increase the County’s fire suppression capabilities. No impact would occur.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Less than Significant Impact. The Proposed Project includes the expansion of existing County infrastructure for increased operational capacity. Utility facilities are incompatible with the current RL zoning. A conditional use permit is required for project approval. With the inclusion of a conditional use permit, impacts are considered less than significant.

Mitigation Measures:

None required.

Land Use and Planning Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

12. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Environmental Setting

There are no known mineable resources in the Oak Hills area of CSA 70J, as no formal survey has been done on the Victorville Fan (Oak Hills Community 2000). The Harold Formation at the base of the fan and the Shoemaker Gravel above it contains gravel and cobbles in a sand matrix but the quality of materials is unknown. Inspection of road cuts and eroded surfaces of the washes on Baldy Mesa indicate schist is the dominant clast, with feldspars next most common. Granitic and gneissic material is present on a lesser basis (Oak Hills Community 2000). The California Division of Mines and Geology has classified the Victorville Fan as Mineral Resource Zone-3a (MRZ-3a), quality and quantity of aggregates present unknown (Oak Hills Community 2000).

Impact Analysis

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

No Impact. The community contains no known mineral resources (Oak Hills Community 2000). According to the Community Plan, the Project Site is designated as MRZ-3a, which represents areas where development has limited the ability to determine the presence or quantity of mineral resources. The current Community Plan does not designate any land within its boundaries for mineral resources. The proposed Land Use Plan does not designate any land for mineral production or conversion from mineral resources to a different land use. The Proposed Project, therefore, would not result in the loss of availability of a known mineral resource.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. The Project Site does not contain a locally important mineral resource recovery site, and none are delineated in the current Draft General Plan, a specific plan, or other land use plan. No impact would occur.

Mitigation Measures:

None required.

Mineral Resources Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

13. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		X		
b) Generation of excessive groundborne vibration of groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

A Noise Report was prepared in November of 2018 by Dudek Construction Engineering Company (Dudek 2018d). This Noise Report is included as Attachment F of this IS/MND and provides information for the following section.

Environmental Setting

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels/community noise equivalent level (in $L_{dn}/CNEL$). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- **Equivalent Noise Level (L_{eq})** is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- **Day-Night Average (L_{dn})** is a 24-hour average L_{eq} with a 10-dBA “weighting” added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .
- **Community Noise Equivalent Level (CNEL)** is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. and a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations.

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed (FHWA 2011).

The manner in which older structures in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer structures is generally 30 dBA or more (HMMH 2006).

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70-dBA range, and high, above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1.0 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3.0-dBA change is considered a just-perceivable difference.
- A change in level of at least 5.0 dBA is required before any noticeable change in community response would be expected. An increase of 5.0 dBA is typically considered substantial.
- A 10.0-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Noise Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as hospitals, historic sites, cemeteries, and certain recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered

noise-sensitive land uses. The Project Site is located in a rural residential neighborhood. There are numerous single-family residences surround the Project Site, with the closest located approximately 125 feet distant.

Vibration Fundamentals

Ground vibration can be measured several ways to quantify the amplitude of vibration produced. This can be through peak particle velocity or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively.

Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual’s sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

Existing Ambient Noise Measurements

The Project Site is currently an undeveloped 1.62-acre fenced, vacant property located adjacent to existing water tanks and a booster station within an area characterized by rural residential uses. In order to quantify existing ambient noise levels in the Project area, Dudek Construction Engineering Company conducted four daytime, short-term (1 hour or less) noise measurements. The noise measurements were taken between 9:31 a.m. and 10:59 a.m. on September 13, 2018. These short-term noise measurements are representative of typical existing noise exposure within and immediately adjacent to the Project Site during the daytime (see Attachment F). Existing ambient noise measurements were conducted adjacent to the Project to characterize the existing noise environment. The sound level measurements were taken with a Piccolo Soft dB sound-level meter. This sound-level meter meets the current American National Standards Institute (ANSI) standard for a Type 2 (General Purpose) sound-level meter. The calibration of the sound level meter was verified before and after the measurements were taken, and the measurements were conducted with the microphone positioned approximately five feet above the ground. The primary noise sources at the measurement locations consisted of traffic along the adjacent roads. As shown in Table 4.13-1, noise levels ranged from approximately 54.9 dBA L_{eq} to 59 dBA L_{eq} .

Receptors	Location (Land Use)/ Address	Date	Time	L_{eq} (dBA)	L_{max} (dBA)
ST1	North of 6535 Oak Hill Road, Oak Hills, CA 92344	September 13, 2018	9:31 a.m. – 9:46 a.m.	54.9	63.8
ST2	6575 Columbine Road, Oak Hills, CA 92344	September 13, 2018	9:53 a.m. – 10:08 a.m.	56.7	69.4
ST3	10485 Jenny Street, Oak Hills, CA 92344	September 13, 2018	10:10 a.m. – 10:25 a.m.	57.0	66.7
ST4	10545 Jenny Street, Oak Hills, CA 92344	September 13, 2018	10:44 a.m. – 10:59 a.m.	59.3	77.6

Source: Dudek Construction Engineering Company (2018d). Refer to Appendix F.
 Notes: L_{eq} is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. L_{min} is the minimum noise level during the measurement period and L_{max} is the maximum noise level during the measurement period.

Impact Analysis

- 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?

Less Than Significant with Mitigation Incorporated.

Construction Noise Impacts

Construction noise associated with the Proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., site preparation, excavating, paving). Noise generated by construction equipment, including excavators, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). Construction noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

The County's regulations with respect to construction noise are included in Chapter 7, *Noise Abatement and Control*, of the San Bernardino County Municipal Code. Specifically, Section 24.0706, *Special Sound Source Standards*, prohibits construction between the hours of 7:00 p.m. and 7:00 a.m. Monday through Saturday and no construction is permitted on Sundays or Federal Holidays. The County does not promulgate a numeric threshold pertaining to the noise associated with construction. It is typical to regulate construction noise with time limits as opposed to numeric noise thresholds since construction noise is temporary, short term, intermittent in nature, and would cease on completion of the Project. Additionally, construction would occur through the Project Site and would not be concentrated at one point.

Sensitive receptors that may be affected by Project generated noise include a single-family detached residential dwelling located approximately 125 feet south of the Project Site. Additional single-family residences are located approximately 170 feet to the west, 220 feet to the north, and 450 feet to the northeast of the Project Site. Noise from the construction phase of the Proposed Project was estimated by Dudek Construction Engineering Company using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM; FHWA 2008). Input variables for the RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. No topographical or structural shielding was assumed in the modeling of construction noise. Construction scenario assumptions, including phasing and equipment mix, were based on the Project construction details provided by Dudek Construction Engineering Company. Construction noise levels were assessed at two distances for each of the nearby receivers. One represents the anticipated construction noise that may be experienced at the closest work area boundary. The second represents anticipated construction noise during more typical conditions, when construction activities would generally take place at a central location within the Project Site. Table 4.13-2 summarizes these estimated construction noise levels, with separate calculations provided for the different types of construction activities that would occur for this Project. The detailed RCNM input and output is provided in Appendix F.

Table 4.13-2. Construction Noise Summary (dBA L_{eq})		
Construction Phase	Construction Noise Level (Nearest Work Area)	Construction Noise Level (Typically)
West Receiver		
	Nearest Source-Receiver Distance 125 Feet	Typical Source-Receiver Distance 185 Feet
Site Preparation	75	72
Grading	79	75
Tank Construction	77	74
Sand Blasting	73	69
Tank Coating	73	69
Piping Installation	78	74
Asphalt/Concrete Paving	75	72
West Receiver		
	Nearest Source-Receiver Distance 170 Feet	Typical Source-Receiver Distance 230 Feet
Site Preparation	72	70
Grading	76	73
Tank Construction	75	72
Sand Blasting	70	67
Tank Coating	70	67
Piping Installation	75	72
Asphalt/Concrete Paving	73	70
North Receiver		
	Nearest Source-Receiver Distance 220 Feet	Typical Source-Receiver Distance 220 Feet
Site Preparation	70	68
Grading	74	72

Table 4.13-2. Construction Noise Summary (dBA L_{eq})		
Construction Phase	Construction Noise Level (Nearest Work Area)	Construction Noise Level (Typically)
Tank Construction	72	70
Sand Blasting	68	66
Tank Coating	68	66
Piping Installation	73	71
Asphalt/Concrete Paving	70	68
Northeast Receiver		
	Nearest Source-Receiver Distance 450 Feet	Typical Source-Receiver Distance 510 Feet
Site Preparation	64	63
Grading	68	66
Tank Construction	66	65
Sand Blasting	61	60
Tank Coating	61	60
Piping Installation	67	65
Asphalt/Concrete Paving	64	63

Source: Dudek Construction Engineering Company (2018d). Refer to Appendix F.

As shown in Table 4.13-2, noise levels from construction activities would be as high as 79 dBA L_{eq} at the nearest existing residence. At more typical distances, construction noise during grading would be approximately 75 dBA L_{eq} at the nearest residence. During the other construction phases, construction noise would range from approximately 69 dBA L_{eq} to approximately 74 dBA L_{eq} at the nearest residence. At other nearby residences, construction noise would similarly vary depending upon the construction phase. For example, at the receiver to the north (noise measurement location ST3), typical construction noise levels would range from approximately 66 dBA L_{eq} during tank coating activities to approximately 72 dBA L_{eq} during grading activities.

As previously described, Section 24.0706 of the San Bernardino County Municipal Code prohibits construction between the hours of 7:00 p.m. and 7:00 a.m. Monday through Saturday, and no construction is permitted on Sundays or Federal Holidays. Although nearby off-site residences would be exposed to elevated construction noise levels, the exposure would be short term and would cease upon completion of Project construction. However, construction noise levels would be substantially higher than existing ambient daytime noise levels, particularly during the louder phases of construction. For this reason, noise impacts from construction would be considered potentially significant. **Mitigation Measures NOI-1** and **NOI-2** have been set forth to reduce

construction noise associated with the Proposed Project and to ensure that nearby receptors are informed of construction activities. The effectiveness of the measures listed in **NOI-1** would vary from several decibels (which in general is a relatively small change) to 10 or more decibels (which would be perceived as a substantial change). The range of effectiveness would vary based on the equipment in use, the original condition of the equipment, the specific location of the noise source and receiver, etc. The noise reduction achieved by equipment silencers would range from several decibels to well over 10 decibels. Limiting equipment idling could reduce overall noise levels up to several decibels. However, the measures listed in **NOI-1**, would result in a substantial decrease in construction noise. While **NOI-2** would not reduce construction noise levels, it would ensure that receptors in the vicinity of the Project Site are prepared for any nuisances that may occur and would allow them to plan accordingly. Upon implementation of **NOI-1** and **NOI-2**, impacts would be less than significant with mitigation incorporated.

Operational Noise Impacts

The existing pumps at the Project Site would not be upgraded or modified as part of the Project. The existing pumps are adequate to supply water to the proposed new storage tank. Once filled, no further extra pumping would be needed; the pumping requirements would revert to the current rate based on service connections in the lower zones. Therefore, there would be no long-term increase in pumping as a result of the Project. In terms of operational noise, there would be no impact to sensitive receptors as a result of the Proposed Project.

- b) Generation of excessive groundborne vibration of groundborne noise levels?

Less Than Significant. Construction activities may expose persons to excessive groundborne vibration or groundborne noise, causing a potentially significant impact. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2013). Information from Caltrans indicates that continuous vibrations with a peak particle velocity of approximately 0.1 inch/second begin to cause annoyance. Heavier pieces of construction equipment, such as bulldozers, have peak particle velocities of approximately 0.089 inch/second or less at a distance of 25 feet (Dudek 2018a).

Groundborne vibration typically attenuates over short distances. At the distance from the nearest residence to the construction area (approximately 125 feet) and with the anticipated construction equipment, the peak particle velocity would be approximately 0.008 inch/second peak particle velocity (PPV). At the closest sensitive receptors, vibration levels would be well below the vibration threshold of potential annoyance of 0.1 inch/second. Therefore, vibration impacts related to construction activities would be less than significant.

Construction can also affect nearby buildings by inflicting damage from vibration. However, construction vibration associated with this Project would not result in structural building damage. Building damage typically occurs at vibration levels of 0.5 inch/second or greater for buildings of reinforced concrete, steel, or timber construction. The heavier pieces of construction equipment used for this Project would include excavators, graders and water trucks. Pile driving, blasting, or other special construction techniques would not be used for construction of the Proposed Project; therefore, excessive groundborne vibration and groundborne noise with the potential to adversely affect nearby buildings would not be generated. Once operational, the Project would not generate groundborne vibration. As such, no building damage would be expected to occur as a result of Project-related vibration during construction or operation. Groundborne vibration impacts would be less than significant.

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

No Impact. There are no public or private airports within two miles of the Project Site. The nearest airports to the Project Site are the Hesperia Airport, located approximately 6.4 miles east of the Project Site, and the Southern California Logistics Airport in Victorville, located approximately 14.5 miles north of the Project Site. Due to the distance from the nearest airports, the Project would result in no impact associated with exposure of people to excessive public airstrip noise.

Mitigation Measures:

NOI-1: Construction Mitigation Measures. In addition to adherence to the San Bernardino County policies found in the Noise Element and Municipal Code limiting the construction hours of operation, the following measures shall be implemented to reduce construction noise and vibrations, emanating from the Proposed Project:

- 1.) During all Project Site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards.
- 2.) The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project Site.
- 3.) Equipment shall be shut off and not left to idle when not in use.
- 4.) The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project Site during all Project construction.
- 5.) The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project Site during construction.
- 6.) The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment.

NOI-2: Notification. Effective communication with local residents shall be maintained prior to and during construction. Specifically, San Bernardino County shall inform local residents of the schedule, duration, and progress of the construction. Additionally, residents shall be provided contact information for noise complaints.

Noise Impact Conclusions:

With implementation of **Mitigation Measures NOI-1** and **NOI-2** impacts will be less than significant.

14. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Environmental Setting

The Proposed Project is located within the City of Hesperia’s Sphere of Influence (SOI), specifically the Oak Hills community, CSA 70J. The community of Oak Hills originally encompassed approximately 28 square miles within a transitional area located between the foothills of the San Bernardino Mountains to the south and the Mojave Desert to the north. CSA 70J has a population of 10,162 (SBC DPW 2020). The rural desert character of the community is defined in part by the geographic location, desert environment, and low/medium density rural development.

Impact Analysis

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

Less Than Significant. The Project would expand the capacity of the County service area’s water system. The Proposed Project is not anticipated to induce unplanned population growth in the area, as the Proposed Project would not result in new residential uses or result in a permanent increase in employment opportunities capable of inducing population growth. Therefore, impacts are considered less than significant.

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

No Impact. Currently there are no homes within the Project Site. As such, the Proposed Project would not displace existing people or housing. No impact would occur.

Mitigation Measures:

None required.

Population and Housing Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

15. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?				X
ii. Police protection?				X
iii. Schools?				X
iv. Recreation/Parks?				X
v. Other public facilities?				X

Environmental Setting

Fire protection services within CSA 70J are provided by the San Bernardino County Fire Department (SBCFD), which provides administration and support for the fire districts and other services such as hazardous materials regulation, dispatch communication, and disaster preparedness. The closest fire station to the Project Site, SBC Fire Station 40, is approximately 0.4-mile due east of the Project Site along I-15.

The San Bernardino County Sheriff's Department provide police protection services to the Project area. The closest Sheriff's station is the Hesperia Patrol Station located approximately 7.5 miles northeast of the Project Site.

The Snowline Joint Unified School District serves Oak Hills and the surrounding communities. The closest school to the Project Site is Baldy Mesa Elementary School located on the northwest corner of Baldy Mesa Road and Avenal Street.

Impact Analysis

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

No Impact. The Proposed Project is the expansion of CSA 70J facilities including the addition of a 2-MG reservoir to increase the service capacity of County infrastructure. Construction and operation of the Proposed Project is not anticipated to increase the demand for emergency response in the region for the duration of the Project's construction and operation. The Proposed Project would not create the need for new or expanded fire or police facilities and/or services.

The Proposed Project is not anticipated to induce population growth; therefore, it would not create additional demand for schools, parks, or other public facilities. No impact would occur.

Mitigation Measures:

None required.

Public Services Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

16. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Environmental Setting

The character of the Oak Hills Community is defined by the rural residential portion of the community. There are currently no community parks in the Oak Hills community. The Oak Hills community plan area contains 160 acres of Bureau of Land Management (BLM) lands; the southwestern boundary of the plan abuts the San Bernardino National Forest. The National Forest provides opportunities for hiking, biking, camping, and skiing. The Hesperia Recreation and Park District was established in 1957 and provides park and recreational services to the City of Hesperia. There are approximately 173 acres of parkland within the Park District Boundary. Five neighborhood parks account for 28 acres of parkland, with the remaining 145 acres distributed amongst four community parks.

Impact Analysis

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 would not result in the increase of the region's population because it does not include housing and would not result in the creation of a significant number of permanent jobs. Therefore, no direct increase in the use of existing neighborhood and regional parks or other recreational facilities would occur. The Proposed Project would not improve access to, or capacity of community or regional parks in the area. Therefore, the Proposed Project would not increase use of parks. No impact would occur.

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 Proposed Project is the expansion of County facilities with the construction of a 2-MG reservoir. The Project would not require the construction or expansion of recreational facilities. Therefore, no impact is anticipated. Adverse physical effects from the construction of the Proposed Project are discussed in this Initial Study. Where potentially significant impacts have been identified, mitigation measures are proposed to reduce impacts to a less than significant level.

Mitigation Measures:

None required.

Recreation Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

17. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?				X
d) Result in inadequate emergency access?				X

Environmental Setting

The Oak Hills Community Plan area is located along either side of I-15, south of Victorville, west of Hesperia, and east of the unincorporated community of Baldy Mesa. I-15 provides access from San Diego to Victor Valley, Barstow, and Baker in the north. I-15 terminates at Canada's southern border in Montana. Most travel trips in the plan area are made by automobiles using the existing network of interstates, state highways, and County roads. The local unpaved roads are heavily used, with a maximum of 10,282 average daily trips on a single road (Oak Hills Community 2019).

Impact Analysis

a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

No Impact. The Proposed Project is the expansion of the CSA 70J facilities with the construction of a 2-MG reservoir in the community of Oak Hills. The Proposed Project does not conflict with a program, plan, ordinance, or policy addressing the circulation system. Therefore, no impact would occur.

b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less Than Significant. According to CEQA Guidelines Section 15064.3 subdivision (b), vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects that would decrease or cause no change in VMT compared to existing conditions should be considered to have a less than significant transportation impact. Construction of the Project would include the temporary travel of construction worker vehicles traveling to and from the Project Site. The Project would not generate new permanent traffic on the local or regional road network as there are no permanent on-site employees associated with water main operations. No change in VMT is anticipated as a result of the Project. A less than significant impact would occur.

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

No Impact. The final design of the Proposed Project would be completed in accordance with guidelines and requirements of state and local regulations. No impact would occur.

d) *Result in inadequate emergency access?*

No Impact. The Proposed Project has been designed to meet County development standards including proposed access roads. The Proposed Project would be located entirely within a County owned parcel south of Oak Hills Road with access from Columbine Road. Project land would also be reviewed by the County's fire and sheriff's departments to ensure adequate emergency access is provided. No impact would occur.

Mitigation Measures:

None required.

Transportation Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

18. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Regulatory Setting

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include Tribal Cultural Resources (TCRs), the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code defines California Native American tribes as “a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004.” This includes both federally and non-federally recognized tribes.

Section 21074(a) of the Public Resource Code defines TCRs for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
 - B. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
 - C. 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria A. and B. also meet the definition of a historical resource under CEQA, a TCR may also require additional consideration as a historical resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

Summary of AB 52 Consultation

On October 15, 2021, the County of San Bernardino initiated environmental review under CEQA for the Proposed Project. On December 12, 2021, the County of San Bernardino sent a project notification letter to the San Manuel Band of Mission Indians (SMBMI), who had previously submitted a general consultation request letters pursuant to 21080.3.1(d) of the Public Resources Code.

SMBMI was provided a brief description of the Proposed Project and its location, project documentation, the lead agency contact information, and a notification that the tribe had 30 days to request consultation. The 30-day response period concluded on December 27, 2021.

As a result of the initial notification letter, the County of San Bernardino received a response from the SMBMI:

SMBMI requested incidental finds measures be added to the Proposed Project. Specific measure language was agreed upon on December 27, 2021 (**Mitigation Measures TCR-1** and **TCR-2** below and **CUL-1** through **CUL-3** [included in the Cultural Resources Section) and consultation was closed.

Impact Analysis

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)?*

No Impact. An updated cultural resources records search was completed at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton in March 2022 (ECORP 2022c; Appendix H). No CRHR eligible resources were identified within the Project Site's Area of Potential Effect. As such, no impact would occur.

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?*

Less Than Significant with Mitigation Incorporated. No TCRs were identified within the Project area during AB 52 consultation. The Proposed Project would not result in significant impacts to known TCRs. However, as a result of AB 52 consultation the Tribes identified a potential for the discovery of unknown TCRs during construction, which may result in a significant impact if such resources are found and affected. Impacts to unknown TCRs would be less than significant with the implementation of **Mitigation Measures TCR-1** and **TCR-2**.

Mitigation Measures:

TCR-1: The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in **CUL-1**, of any pre-contact and/or historic-era cultural resources discovered during project implementation, 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 SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.

TCR-2: 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 applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

Tribal Cultural Resources Conclusions:

With implementation of the above listed measures, less than significant impacts would occur.

19. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
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?				X
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?				X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

Environmental Setting

In the County, provision and maintenance of infrastructure facilities and public services is coordinated through Special Districts and County Service Areas (CSAs). CSA 70 Zone J provides water and sewer services to the Oak Hills community. Solid waste management is provided by CR&R, Inc. Solid waste is hauled to Sheep Creek Transfer Station for processing/transfer to a County disposal facility.

Impact Analysis

a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

No Impact. The Proposed Project does not include the construction or operation of facilities that would require a new permanent water source, electric power, natural gas, or telecommunication facility. The Proposed Project would also not generate wastewater. The proposed reservoir would be an extension of the existing water facility. As such no impact would occur.

b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

No Impact. The Proposed Project would utilize existing County infrastructure in the expansion of existing county facilities. A new water source is not required, as existing pumps onsite will be utilized for water accumulation and distribution. The Proposed reservoir would not require irrigation nor an onsite potable water source. No impact would occur.

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

No Impact. The Proposed Project would not require wastewater services from the County. No impact would occur.

d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

No Impact. The Proposed Project would generate minor solid waste during construction, which would be taken to Sheep Creek Transfer Station for transfer/processing. The most recent inspection report retrieved indicates greatest incoming tonnage received in a day for the month of September 2021 was 163.95 tons, well below their permitted maximum of 600 tons per day (tpd) (CalRecycle 2021). Operation of the Proposed Project would not generate solid waste; therefore, no new demand on the waste disposal capacity is expected to occur.

e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

No Impact. All solid waste generated during project construction would be disposed of by the contractor at an approved site. The contractor is required to comply with federal, state, and local statutes and regulations regarding solid waste. No impact would occur.

Mitigation Measures

None required.

Utilities and Service Systems Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

20. WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				X
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?			X	
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?				X
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?				X

Environmental Setting

The Project Site is located within a State Responsibility Area (SRA) within a High Fire Hazard Severity Zone (FHSZ) (CAL FIRE 2019). Oak Hills is identified as a community at risk by the County of San Bernardino Safety Background Report (County of San Bernardino 2018b). The Project area includes the existing reservoir facility to the south. The surrounding area is characterized by low density rural residential development, with an undeveloped portion of land which appears to have burned in a previous fire on the sloping parcel adjacent to the Project Site on its eastern boundary.

Impact Analysis

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

No Impact. The Proposed Project is the expansion of County facilities with the construction of a 2-MG reservoir, which would be unmanned for the duration of the Project’s operational lifetime. The development of the parcel would not conflict with access and/or circulation of emergency vehicles in response to an emergency and/or evacuation consistent with the County of San Bernardino’s Current Emergency Response Plan. No impact is anticipated.

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?*

Less Than Significant. The Proposed Project is located within an SRA and is designated as a High FHSZ (CAL FIRE 2019). As mentioned previously, the Project Site is within an area characterized by rural residential development. Because of the existing developed nature of the Project area, it is not anticipated that the Proposed Project would increase the risk related to wildfires. Impacts would be less than significant.

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

No Impact. The Proposed Project would not require the installation or maintenance of infrastructure that would exacerbate fire risk resulting in temporary or ongoing impacts to the environment. No impact would occur.

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?*

Less Than Significant. The Proposed Project is located on relatively flat undeveloped terrain and would not include the construction of habitable structures. Additionally, the Project would not substantially change the existing on-site runoff patterns from existing conditions.

Due to the lack of fire fuel with the surrounding area the steel tank failing to a degree of losing its water supply is highly unlikely. In the event of tank failure, the Proposed Project includes an earthen detention basin for tank overflow and site drainage in the northern portion of the Project Site. Therefore, the Proposed Project would not expose people or structures to risks including downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impact would occur.

Mitigation Measures:

None required.

Wildfire Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

21. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant with Mitigation Incorporated. The Proposed Project would not substantially degrade the quality of the environment or substantially reduce the habitat of a fish or wildlife species. With the implementation of **Mitigation Measure BIO-1** through **BIO-4** outlined in the Biological Resources section of this Initial Study, the Proposed Project would not cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. With **Mitigation Measure CUL-1, CUL-2, CUL-3, TCR-1, and TCR-2** the Project will not eliminate important examples of the major periods of California history or prehistory. Therefore, the Project would have a less than significant impact with mitigation incorporated.

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 with Mitigation Incorporated. Impacts from the Proposed Project on transportation, air quality, greenhouse gas emissions and noise are discussed in corresponding sections of this Initial Study. As discussed in their respective sections of this Initial Study document, no significant impacts associated with air quality, greenhouse gas, or traffic have been identified. Consequently, Project impacts when considered with cumulative projects would be less than significant with implementation of **Mitigation Measure NOI-1 and NOI-2**.

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. The checklist categories of: Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Cultural, Geology and Soils, Hydrology and Water Quality, Population and Housing, Tribal Cultural, Noise, Transportation, and Wildfire evaluate Project impacts that may have adverse effects on human beings, either directly or indirectly. All of the Project's impacts on human beings, both direct and indirect, that are attributable to the Project were identified and mitigated. Therefore, the Proposed Project would not either directly or indirectly cause substantial adverse effects on human beings because all potentially adverse direct and indirect impacts of the Proposed Project are identified as having no impact, less than significant impact, or less than significant impact with mitigation. Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study.

SECTION 5 – SUMMARY OF MITIGATION MEASURES

The following mitigation measures were identified to reduce impacts to less than significant:

BIOLOGICAL RESOURCES:

BIO-1: Preconstruction Plant Surveys. Preconstruction surveys for special-status plants, including western Joshua tree, and plant species protected under the San Bernardino County Development Code – Plant Protection and Management (Chapter 88.01), including members of the *Agavaceae* family, shall be completed within the property boundaries prior to the start of ground-disturbing Project activities. One preconstruction survey shall be conducted during the blooming period for short-joint beavertail and Palmer’s mariposa lily (April through June) prior to ground disturbance and vegetation removal activities by a qualified botanist or biologist specializing in special-status plant identification. The survey shall be performed according to the CNPS Botanical Survey Guidelines (CNPS 2001). If special-status plants are found within the Proposed Project impact area and Project-related impacts to the individuals are unavoidable, then coordination with CDFW may need to occur to identify additional protection or mitigation measures. Additional protection or mitigation measures may include additional biological monitoring, transplanting, seed salvage, and non-disturbance buffers established around plant locations.

Another preconstruction plant survey shall be conducted between 60 days and eight months prior to the start of ground disturbing activities to inventory individuals of the *Agavaceae* family present on the property, including western Joshua tree, chaparral yucca, and Mojave yucca. The survey shall be performed by a botanist or qualified biologist with experience identifying and inventorying plants in the *Agavaceae* family. The locations of the yuccas, including Joshua tree, shall be recorded with a submeter GPS unit. During the survey, the biologist will also determine whether any of the Tucker oaks present within the Proposed Project impact area have a DBH of 5 inches or greater above natural grade. If Joshua tree is found within the Proposed Project impact area and unavoidable Project-related impacts to Joshua tree will occur, then an ITP from CDFW under Section 2081 of the California ESA will be required as long as Joshua tree remains a candidate or listed species under the California ESA. Additional measures to reduce Project-related impacts to Joshua trees will likely be included within the approved ITP and these may include additional biological monitoring, transplanting, acquisition of mitigation land, or payment to an in-lieu mitigation fee program. If any members of the *Agavaceae* family or Tucker oaks with a DBH of 5 or more inches are found within the Proposed Project impact area, a San Bernardino County Tree or Plant Removal Permit will be required in accordance with Chapter 88.01 of the San Bernardino County Development Code. The requirements for the Tree or Plant Removal Permit are explained in detail in Chapter 88.01 of the Plant Protection and Management section of the San Bernardino County Development Code. During the Tree or Plant Removal Permit review process, the County may require certification from an appropriate arborist, registered professional forester, or a Desert Native Plant Expert; a detailed plan showing the protection, preservation or relocation of the plants affected by the Project; and a health assessment of the affected plant(s).

BIO-2: Biological Monitoring. A biologist experienced with identification of the sensitive and common biological resources in the region shall be present to monitor all initial ground disturbing and

vegetation clearing activities regardless of the time of year such activities are scheduled to begin (biological monitor). The biological monitor shall perform biological clearance sweeps at the start of each workday that ground disturbing activities take place. The biological monitor shall be present on a full-time basis during the initial ground-disturbing and vegetation-clearing activities to ensure the activities do not affect sensitive biological resources and to move or redirect wildlife out of harm's way as necessary. The monitor will be responsible for communicating regularly with the Project Proponent and onsite contractor on non-compliance issues and ways to ensure that impacts to sensitive biological resources will be avoided to the fullest extent possible in accordance with the appropriate Project agreements and permits, as applicable. Biological monitoring shall take place until the Proposed Project impact area has been completely cleared of any vegetation. The biological monitor shall keep a record of monitoring activities in a log that contains representative photographs of the work activities monitored and any sensitive biological resources incidentally encountered during Project activities.

BIO-3: Preconstruction Burrowing Owl and Special-Status Wildlife Surveys. Preconstruction surveys for burrowing owl and coast horned lizard (Blainville's horned lizard) shall be completed within the property boundaries prior to the start of initial ground-disturbing activities. The surveys shall be performed on the property and within a 500-foot buffer, where accessible, in accordance with the take avoidance survey methods identified in the California Department of Fish and Game (CDFG) *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The first survey shall be conducted between 14 and 30 days prior to the start of initial ground-disturbing activities and a second survey shall be conducted no more than 24 hours prior to the start of initial ground-disturbing activities (including vegetation removal). If survey results are negative for both species, Project activities may occur and no additional protection measures are required. If coast horned lizard is found to be present in the work area during the 24-hour preconstruction survey, biologists will redirect the individuals outside of the work area. If burrowing owl or occupied burrowing owl burrow(s) (e.g., whitewash, feathers, pellets, bones of prey items) is/are observed on or immediately adjacent to the Proposed Project impact area, additional mitigation measures will need to be implemented to offset impacts to burrowing owl. These measures shall be developed in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) and may include additional biological monitoring, seasonal work restrictions, establishing a non-disturbance buffer around each burrow location, or passive relocation. Coordination with CDFW may need to occur to perform passive relocation of burrowing owls and/or to devise a specific mitigation methodology for the Project Site if one is found to be necessary.

BIO-4: Preconstruction Survey for Nesting Birds. Wherever feasible, any ground-disturbing activities shall be conducted during the nonbreeding season for birds (approximately September 1 through January 31) in order to avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds, including special-status bird species (e.g., burrowing owl and loggerhead shrike), are scheduled to occur during the bird breeding season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys no more than 3 days prior to the start of construction activities. The nesting bird survey shall include the Proposed Project impact area and adjacent areas where Project activities have the potential to cause nest failure. If no nesting birds are observed during the survey, site preparation and construction activities may begin. If nesting birds (including nesting raptors) are

found to be present, avoidance or minimization measures shall be proposed by the Project biologist and implemented to avoid potential Project-related impacts to active nests. Measures may include additional biological monitoring, seasonal work restrictions, or establishment of a non-disturbance buffer until nesting has been completed as determined through periodic nest monitoring by the biologist. The size of the non-disturbance buffer will be determined by the Project biologist. Typically, this is 300 feet from the nest site in all directions (500 feet is typically recommended by CDFW for raptors) until the juveniles have fledged and there has been no evidence of a second attempt at nesting, as determined by the Project biologist.

CULTURAL RESOURCES:

- CUL-1:** In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds 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.
- CUL-2:** If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.
- CUL-3:** 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 pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

GEOLOGY AND SOILS:

- GEO-1: Unanticipated Discovery – Paleontological Resources.** If paleontological resources (i.e., fossil remains) are discovered during excavation activities greater than five feet, the contractor will notify the County and cease excavation until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g. fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

NOISE:

NOI-1: Construction Mitigation Measures. In addition to adherence to the County of San Bernardino policies found in the Noise Element and Municipal Code limiting the construction hours of operation, the following measures shall be implemented to reduce construction noise and vibrations, emanating from the Proposed Project:

- 1.) During all Project Site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards.
- 2.) The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project Site.
- 3.) Equipment shall be shut off and not left to idle when not in use.
- 4.) The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project Site during all Project construction.
- 5.) The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project Site during construction.
- 6.) The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment.

NOI-2: Notification. Effective communication with local residents shall be maintained prior to and during construction. Specifically, the County of San Bernardino shall inform local residents of the schedule, duration, and progress of the construction. Additionally, residents shall be provided contact information for noise complaints.

TRIBAL CULTURAL RESOURCES:

TCR-1: The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in **CUL-1**, of any pre-contact and/or historic-era cultural resources discovered during project implementation, 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 SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.

TCR-2: 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 applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

SECTION 6 – REFERENCES

[CAL FIRE] Office of the State Fire Marshal

2019 Fire and Resource Assessment Program, Fire Hazard Severity Zones Maps. Available at <https://egis.fire.ca.gov/FHSZ/>. Accessed November 24, 2021.

[CalGEM] California Department of Conservation

2021 CalGEM GIS Well Finder. Available at <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.94276/37.12009/6>. Accessed November 24, 2021.

[CARB] California Air Resource Board

2019 State and Federal Area Designation Maps. Available at <http://www.arb.ca.gov/deg/adm/adm.htm>.

2021 EMFAC2021 Web Database Emissions Inventory. Available at <https://www.arb.ca.gov/emfac/2021/>.

Cal Recycle

2021 Sheep Creek Transfer Station Report, Monthly Inspection on 10/28/2021. Available at <https://www2.calrecycle.ca.gov/SolidWaste/SiteInspection/Details/334567?siteID=2748>. Accessed December 3, 2021.

[Caltrans] California Department of Transportation

2013 Transportation and Construction Vibration Guidance Manual. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. September 2013. Sacramento, CA.

2018 California Aviation Facilities. Web Map Application. 2018. Accessed November 5, 2018.
<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=966ebca3d4044e84bb352b98c5a62a35>.

2020 Transportation- and Construction-Induced Vibration Guidance Manual.

[CEC] California Energy Commission

2021a Annual Generation – County. Available at https://ww2.energy.ca.gov/almanac/electricity_data/web_qfer/Annual_Generation-County_cms.php.

2021b California Energy Consumption Database. Available at <http://www.ecdms.energy.ca.gov/Default.aspx>.

City of Hesperia

2020 NR-3 Scenic Routes & Highways Policy Map. Available at <https://www.arcgis.com/apps/webappviewer/index.html?id=01c32a4480954deba20af965275b81e7>. Accessed December 1, 2021.

Converse Consultants

2021 Project Site Geotechnical Report prepared by Converse Consultants, May 10, 2021.

[DOC] California Department of Conservation

2018 California Department of Conservation Important Farmland Finder. Available at <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed November 24, 2021.

DOT U.S. Department of Transportation Federal Transit Administration, Office of Planning and Environment

2006 FTA-VA-90-1003-06. Transit Noise and Vibration Impact Assessment. (Prepared under contract by Harris, Miller, Miller and Hanson). Burlington, MA.

[DTSC] Department of Toxic Substances Control

2021 Department of Toxic Substance Control EnviroStor Database: Hazardous Waste and Substance Site List (CORTESE). Available at <https://calepa.ca.gov/sitecleanup/corteselist/>. Accessed November 24, 2021.

Dudek

2018a Air Quality Report.

2018b Cultural Report for CSA 70J Reservoir 3A prepared by Dudek, November 5, 2018.

2018c Greenhouse Gas Report.

2018d Noise Analysis.

[ECORP] ECORP Consulting, Inc.

2022a Biological Technical Report.

2022b Aquatic Resources Delineation.

2022c Cultural Records Search Results.

[FHWA] Federal Highway Administration

2006 Roadway Construction Noise Model (RCNM),

2011 Effective Noise Control During Nighttime Construction. Available at http://ops.fhwa.dot.gov/wz/workshops/accessible/schexnayder_paper.htm.

HMMH

2006 Transit Noise and Vibration Impact Assessment, Final Report.

Lilburn Corporation

2000 Program Environmental Impact Report for the Oak Hills Community Plan, 383 pages.

[NPMS] US DOT Pipeline and Hazardous Material Safety Administration

2021 National Pipeline Mapping System. Available at <https://www.npms.phmsa.dot.gov/>. Accessed November 24, 2021.

Oak Hills Community

2000 Oak Hills Program EIR for The Oak Hills Community Plan. Available at <http://www.sbcounty.gov/Uploads/lus/Squire/EntireOHCP.pdf>. Accessed November 22, 2021.

2013 Oak Hills Community Plan, Land Use Element. Available at <http://www.sbcounty.gov/Uploads/lus/CommunityPlans/OakHillsCP.pdf>. Accessed November 22, 2021.

2019 Oak Hills Community Plan, Community Action Guide. Available at https://countywideplan.com/wp-content/uploads/sites/68/2020/07/12_Oak-Hills_CAG_FINAL.pdf. Accessed April 8, 2022.

San Bernardino, County of

- 2021 County of San Bernardino Municipal Code.
- 2018a San Bernardino County, Emergency Operations Plan (EOP), Available at https://www.sbcounty.gov/uploads/SBCFire/documents/OES/2018_EOP_Update.pdf. Accessed April 19, 2022
- 2018b San Bernardino Countywide Plan, Safety Background Report. Available at http://countywideplan.com/wp-content/uploads/2018/12/Safety_CWP_221-223_BackgroundReport_FinalDraft_20181128.pdf. Accessed December 3, 2021.
- 2010 San Bernardino County Geologic Hazard Maps, Regional Index Map EHFH C. Available at http://www.sbcounty.gov/Uploads/lus/GeoHazMaps/EHFHC_20100309new.pdf. Accessed April 19, 2022
- 2009 San Bernardino Development Code. Available at <http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DCWebsite.pdf>. Accessed November 20, 2018.

[SBC DPW] San Bernardino County Dep. Public Works, Special Districts.

- 2020 San Bernardino County Department of Public Works Special Districts CSA 70J Oak Hills Urban Water Management Plan. Available at https://specialdistricts.sbcounty.gov/wp-content/uploads/sites/54/2021/08/CSA-70J-UWMP-Final-Report_Full_Compiled-3.pdf. Accessed December 1, 2021.

[SCAQMD] South Coast Air Quality Management District.

- 1992 1992 Federal Attainment Plan for Carbon Monoxide.

Terracon Consultants, Inc.

- 2019 Phase I Environmental Site Assessment prepared by Terracon Consultants, Inc. October 18, 2019.

[WSC] Western Science Center

- 2022 Paleontological Records Search.