City of Victorville

NOTICE OF AVAILABILITY/ NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

PROJECT TITLE: Capital Improvement Project No. BM19-125 - New 1 MG Reservoir

PROJECT LOCATION: The Project Site is located within the Southern California Logistics Airport (SCLA). Specifically, the Project Site is located east of Westwind Road and south of Montana Street within abandoned base housing development associated with the former George Air Force Base.

PROJECT DESCRIPTION: The Proposed Project is a reclaimed water storage tank located at the Southern California Logistics Airport (SCLA) and identified in the Victorville Water District's Capital Improvement Project as No. BM19-125. Specifically, the Project Site is located east of Westwind Road and south of Montana Street within abandoned base housing development associated with George Air Force Base). The Proposed Project is within the City of Victorville (City) and will be funded solely by the Water District acting as the CEQA Lead Agency for the Proposed Project. The District is governed by a five-member Board of Directors, which are also members of the City of Victorville City Council. The District is considered a subsidiary district of the City.

The Proposed Project will consist of replacing the in-ground lined pond with a new 1 million-gallon (MG) prestressed circular reservoir and re-locating the underground piping and the pumps as necessary. The existing pond is designed to hold approximately 600,000 gallons of water. Upon completion of the tank, the pond would be backfilled and abandoned.

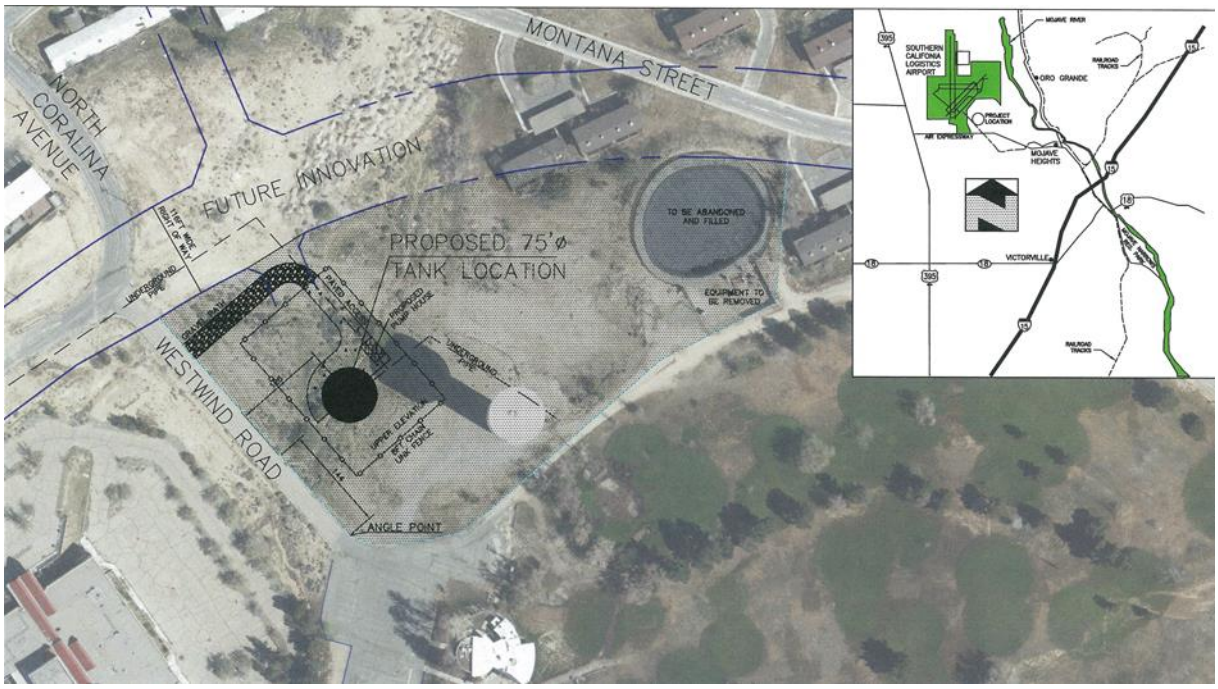
End users would continue to be industrial tenants of the SCLA. The water is treated to meet California Code of Regulations Title 22 of California's Water Recycling Criteria that includes State guidelines for how treated and recycled water is discharged and used. Title 22 includes specific uses allowed with disinfected tertiary recycled water (such as irrigating parks), uses allowed with disinfected secondary recycled water (such as irrigating animal feed and other unprocessed crops), and uses allowed with undisinfected secondary recycled water (such industrial uses). The tertiary recycled wastewater to be stored in the new tank would be from the Victor Valley Wastewater Agency's tertiary plant on Shay Road in Victorville and on occasion water from SCLA's Industrial Wastewater Treatment Plan and would be used for irrigation and other non-domestic industrial uses.

The Proposed Project includes connection to existing 16" water main and a proposed new 12" water main to serve as back up to supply recycled water to the tank. The new pipeline would be constructed within the Base Housing street system and within the north side of Air Expressway to the south of the tank location. Any old galvanized steel piping not re-used for the Proposed Project would be abandoned in-place; no asbestos pipe would be left in place or removed. Existing equipment, including pumps at the storage pond would be relocated to a pad constructed for the water tank and within a fenced area for security.

The estimated diameter of the tank is 75 feet; the area of disturbance including trenching, footings and construction area would be an approximate total diameter of 85 feet. The tank will be approximately 34 feet in height and approximately 24 feet will be buried below existing grade (top of tank at elevation 2,883 mean sea level). A retaining wall may be constructed for slope stability and would be between the estimated height of 6 feet to 8 feet dependent upon the final engineered location of the tank. The overflows for both reservoirs that are currently on-site drain to the sanitary sewer on-site. There will be no additional flow to the sewer line, only the re-routing of one overflow from the pond to the new tank.

HAZARDOUS WASTE SITES: The Project site is not located on any known listed toxic sites pursuant to Government Code Section 65962.5.

Vicinity Map



PUBLIC REVIEW AND WRITTEN COMMENTS: The review period for submitting written comments on the Mitigated Negative Declaration commences on March 30, 2020 and will close on April 29, 2020.

Comments should be addressed to:

Victor J. Fajardo, P.E. Senior Civil Engineer
City of Victorville Engineering Department
14343 Civic Drive
Victorville, CA 92393-2399
Phone: (760) 243-6311
Email: VFajardo@victorvilleca.gov

DOCUMENT AVAILABILITY: The Mitigated Negative Declaration is available for review on the City of Victorville's website at the following link: https://www.victorvilleca.gov/home/showdocument?id=3982

Persons interested in obtaining a digital copy of the document can email a request to: engineering@ci.victorville.ca.us.

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Capital Improvement Project No. BM19-125 - New 1 MG Reservoir

Lead Agency: City of Victorville Engineering Department — Contact Person: Victor Fajardo
Mailing Address: 14343 Civic Drive — Phone: (760) 243-6311
City: Victorville — Zip: 92392-2399 — County: San Bernardino

Project Location: County: San Bernardino — City/Nearest Community: City of Victorville
Cross Streets: Westwind Road & Montana Street — Zip Code: 92392
Longitude/Latitude (degrees, minutes and seconds): 34 ° 34 ′ 44.52″ N / 117 ° 21 ′ 31.66″ W — Total Acres: 6
Assessor's Parcel No.: 0459-211-14 — Section: 25 — Twp.: 6 North — Range: 5 West — Base: SBBM
Within 2 Miles: State Hwy #: SR- 66 — Waterways: Mojave River
Airports: Socal Logistics Airport — Railways: none — Schools: A.M.E. Charter Academy

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☒ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:
NEPA: ☒ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☒ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other:

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational:
☐ Recreational:
☒ Water Facilities: Type Water Tank MGD 1
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☒ Minerals
☒ Noise
☒ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☒ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☐ Growth Inducement
☒ Land Use
☐ Cumulative Effects
☐ Other:

Present Land Use/Zoning/General Plan Designation:

Reclaimed water pond & water facility/former at air force base housing/SCLA Specific Plan/ Public/Open Space (P/OS)

Project Description: *(please use a separate page if necessary)*

The Proposed Project is a 1 million-gallon (MG) reclaimed water storage tank located at the Southern California Logistics Airport. The Proposed Project will consist of replacing the in-ground lined pond with a new 1 MG prestressed circular reservoir and re-locating the underground piping and the pumps.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

_____	Air Resources Board	X	Office of Historic Preservation
_____	Boating & Waterways, Department of	_____	Office of Public School Construction
_____	California Emergency Management Agency	_____	Parks & Recreation, Department of
_____	California Highway Patrol	_____	Pesticide Regulation, Department of
_____	Caltrans District # _____	_____	Public Utilities Commission
_____	Caltrans Division of Aeronautics	X	Regional WQCB # 6
_____	Caltrans Planning	_____	Resources Agency
_____	Central Valley Flood Protection Board	_____	Resources Recycling and Recovery, Department of
_____	Coachella Valley Mtns. Conservancy	_____	S.F. Bay Conservation & Development Comm.
_____	Coastal Commission	_____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
_____	Colorado River Board	_____	San Joaquin River Conservancy
_____	Conservation, Department of	_____	Santa Monica Mtns. Conservancy
_____	Corrections, Department of	_____	State Lands Commission
_____	Delta Protection Commission	_____	SWRCB: Clean Water Grants
_____	Education, Department of	X	SWRCB: Water Quality
_____	Energy Commission	X	SWRCB: Water Rights
X	Fish & Game Region # 6	_____	Tahoe Regional Planning Agency
_____	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
_____	Forestry and Fire Protection, Department of	X	Water Resources, Department of
_____	General Services, Department of		
_____	Health Services, Department of	X	Other: Mojave Desert AQMD
_____	Housing & Community Development	_____	Other: _____
_____	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date March 30, 2020 Ending Date April 29, 2020

Lead Agency (Complete if applicable):

Consulting Firm: Lilburn Corporation
Address: 1905 Business Center Drive
City/State/Zip: San Bernardino, CA 92408
Contact: Natalie P. Patty
Phone: 909-890-1818

Applicant: City of Victorville Engineering Department
Address: 14343 Civic Drive
City/State/Zip: Victorville, CA 92393-2399
Phone: (760) 342-6311

Signature of Lead Agency Representative: Natalie P. Patty **Date:** March 26, 202(

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

INITIAL STUDY
ENVIRONMENTAL CHECKLIST FORM

1. **Project title:** Capital Improvement Project No. BM19-125 - New 1 MG Reservoir

2. **Lead agency name and address**: City of Victorville Engineering Department, PO Box 5001, Victorville, California 92393-5001.

3. **Contact person and phone number:** Victor J. Fajardo, P.E. Senior Civil Engineer, (760) 243-6311

4. **Project location:** 18003 Westwind Rd, Victorville, CA 92394

5. **Project sponsor's name and address:** Victorville Water District 14343 Civic Dr, Victorville, CA 92392

6. **Specific plan designation:** Public/Open Space (P/OS)

7. **Zoning:** Public/Open Space (P/OS)

8. **Description of project:** The Proposed Project is a reclaimed water storage tank located at the Southern California Logistics Airport (SCLA) (see Figure 1 Regional Location) and identified in the Victorville Water District's Capital Improvement Project as No. BM19-125. Specifically, the Project Site is located east of Westwind Road and south of Montana Street within an abandoned Base Housing development associated with George Air Force Base (see Figure 2 Site Vicinity). The Proposed Project is within the City of Victorville (City) and will be funded solely by the Water District acting as the CEQA Lead Agency for the Proposed Project. The District is governed by a five-member Board of Directors, which are also members of the City of Victorville City Council. The District is considered a subsidiary district of the City.

   The Proposed Project will consist of replacing the in-ground lined pond with a new 1 million-gallon (MG) prestressed circular reservoir and re-locating the underground piping and the pumps as necessary. The existing pond is designed to hold approximately 600,000 gallons of water and, upon completion of the tank, the pond would be backfilled and abandoned (see Figure 3 Project Design Plans).

   End users would continue to be industrial tenants of the SCLA. The water is treated to meet California Code of Regulations Title 22 of California's Water Recycling Criteria that includes State guidelines for how treated and recycled water is discharged and used. Title 22 includes specific uses allowed with disinfected tertiary recycled water (such as irrigating parks), uses allowed with disinfected secondary recycled water (such as irrigating animal feed and other unprocessed crops), and uses allowed with undisinfected secondary recycled water (such industrial uses). The tertiary recycled wastewater to be stored in the new tank would be from the Victor Valley Wastewater Agency's tertiary plant on Shay Road in Victorville and on occasion SCLA Industrial Wastewater Treatment Plant water may also be stored in the new tank and would be used for irrigation and other non-domestic industrial uses.

   The Proposed Project includes connection to existing 16" water main and a proposed new 12" water main to serve as back up to supply recycled water to the tank. The new pipeline would be constructed within the Base Housing street system and within the north side of Air Expressway to the south of the tank location (see Figure 3 Site Plan). Any old galvanized steel piping not re-used for the Proposed Project would be abandoned in-place; no asbestos pipe would be left in place or

Source: Lilburn Corporation, March, 2020.

LILBURN CORPORATION

REGIONAL LOCATION

Capital Improvement Project No. BM19-125 - New 1 MG Reservoir

Victorville, California

FIGURE 1

N

0 350

Feet

Source: Lilburn Corporation, March, 2020.

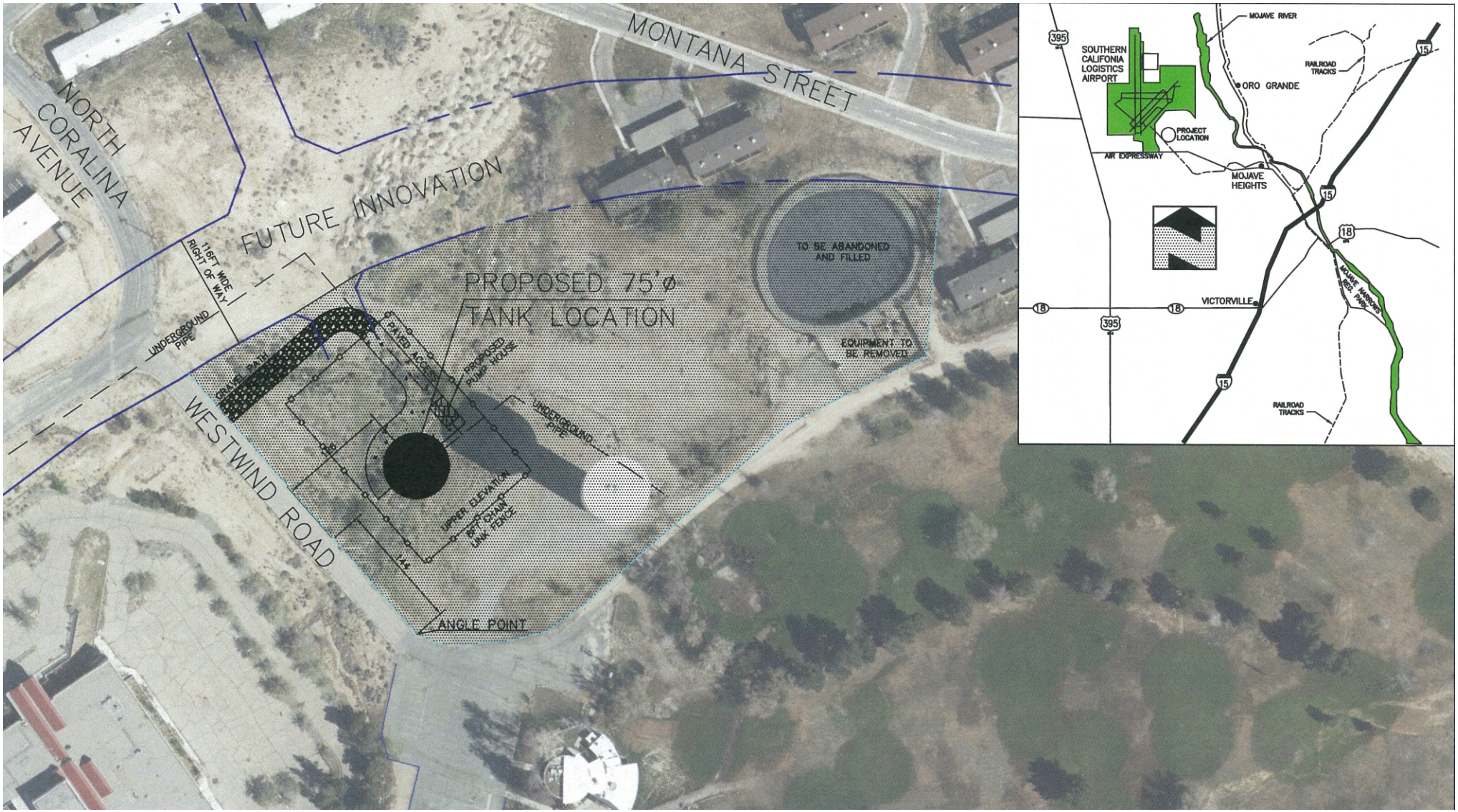
LILBURN CORPORATION

PROJECT VICINITY

Capital Improvement Project No. BM19-125 - New 1 MG Reservoir

Victorville, California

FIGURE 2



SITE PLAN

Capital Improvement Project No. BM19-125 - New 1 MG Reservoir

Victorville, California

FIGURE 3

LILBURN CORPORATION

removed. Existing equipment, including pumps at the storage pond would be relocated to a pad constructed for the water tank and within a fenced area for security.

The estimated diameter of the tank is 75 feet; the area of disturbance including trenching, footings and construction area would be an approximate total diameter of 85 feet. The tank will be approximately 34 feet in height and approximately 24 feet will be buried below existing grade (top of tank at elevation 2,883 mean sea level [MSL]l). A retaining wall may be constructed for slope stability and would be between the estimated height of 6 feet to 8 feet dependent upon the final engineered location of the tank. The overflows for both reservoirs that are currently on-site drain to the sanitary sewer on-site. There will be no additional flow to the sewer line, only the re-routing of one overflow from the pond to the new tank.

9. **Surrounding land uses and setting:** The Project Site is located within the City of Victorville and within the Southern California Logistics Airport Master Plan Area. The Southern California Logistics Airport (SCLA) encompasses approximately 2,200 acres of the former George Air Force Base (GAFB) and occurs in northwest corner of the City of Victorville. The Project Site is located east of Westwind Road and south of Montana Street within an abandoned Base Housing development associated with George Air Force Base. There are currently two water reservoirs for the storage of recycled water located on the Project Site; an elevated storage tank, and an in-ground lined storage pond. Access to the tank will be from the existing road to the east of the tank and from the parking lot to the south of project area. Approximately six acres of Assessor's Parcel Number 0459-211-14 would be impacted by the Project.

10. **Other public agency whose approval is required:** Recordation of a final map, issuance of a building permits and completion of structures to current building code is required by the City prior to establishment of any development on-site. In addition, approval by the Mojave Water Agency, Lahontan Regional Water Quality Control Board, Caltrans, California Department of Fish and Wildlife, Victor Valley Wastewater Reclamation Authority, Mojave Desert Air Quality Management District, Victor Elementary School District, Victor Valley Union High School District, as well as Southern California Edison, Southwest Gas, and Frontier Communications would also be required.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION:

On the basis of this initial evaluation:

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

X I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because of the incorporated mitigation measures and revisions in the project have been made by or agreed to by the project proponent. A NEGATIVE DECLARATION will be prepared.

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

__ I find that the proposed project MAY have a significant effect(s) on the environment, but at 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated". An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

__ I find that the proposed project WILL NOT have a significant effect on the environment, because no new potentially significant effects have been identified beyond those previously analyzed adequately in an earlier EIR, pursuant to applicable standards, and no additional mitigation measures beyond those imposed as part of that previous EIR are necessary to be imposed upon the proposed project to reduce mitigable impacts to a insignificant level. Therefore, no additional environmental documentation is necessary.

Signature:  Date: March 26, 2020

Natalie P. Patty For: Victor Fajardo

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is provided for all answers except "No Impact" answers that are adequately supported by the information sources the lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer is explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) "Potentially Significant Impact" is noted if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The lead agency describes the mitigation measures, and briefly explains how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses", may be cross-referenced).

5) Earlier analyses may be referenced where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on earlier analysis.

c) Mitigation Measures. For effects that are “Less Than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) The lead agency incorporates into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, includes a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

a) The significance criteria or threshold, if any, used to evaluate each question; and

b) The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL IMPACTS:

		Potentially Significant Impact	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
I.	**AESTHETICS.** *Would the proposal*:				
a)	Have a substantial adverse effect on a scenic vista? (3; 33)				X
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (3; 24)				X
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (1, Table LU-2; 33)				X
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (1, Table LU-2; 33)			X	

AESTHETICS

Explanations:

a. **No Impact** – The Resource Element of the City of Victorville's General Plan identifies the importance of conservation of local scenic resources such as natural and cultural resources and how they are necessary assets for the community. However, the General Plan does not identify any scenic vistas in the vicinity of the Project Site which is at the SCLA and is surrounded by development. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

b. **No Impact** – According the Victorville's 2030 General Plan Environmental Impact report, there are no existing or proposed State scenic highways in the Planning Area. Additionally, the Project Site has been disturbed, and does not contain any significant features such as rock outcroppings, trees, and/or historic buildings that could potentially be damaged by development of the Project Site. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

c. **No Impact** – The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. The in-ground lined storage pond will be filled upon completion of the new tank. The tank will be approximately 34 feet in height and approximately 24 feet will be buried below existing grade (top of tank at elevation 2,883 MSL). The Proposed Project will be within comparable height of current water facilities on site. The Proposed Project is an acceptable use within the Public/Open Space land use category. Additionally, the Proposed Project is outside of the Runway Protection Zone (RPZ). The RPZ is an area of restricted use as it is affected by existing and current airfield operations. Therefore, the Proposed Project would not degrade the visual character or quality of the Site or its surroundings. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

d. **Less Than Significant Impact** – The Proposed Project is in an area developed with former George Force Air Base housing. Existing light sources include streetlights and exterior security lighting at the Project Site and in the surrounding developments. Lighting associated with the 1 MG reservoir would consist of security lighting only and would be directed internally toward the Project Site. There would be no light or glare that would increase ambient lighting levels or adversely affect day or nighttime views in the area. Therefore, project construction and operation impacts related to substantial light or glare sources would be less than significant, and no mitigation is required.

II. Agriculture and Forestry Resources.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forestland, 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 proposal:

		Potentially Significant Impact	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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? (23)				X
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract? (1)				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))? (1)				X
d)	Result in the loss of forest land or conversion of forest land to non-forest use? (1; 4)				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 or forest land to non-forest use? (1; 4; 23)				X

Explanations:

a) **No Impact.** The Project Site was previous developed with Base Housing and currently supports an existing reclaimed water pond and associated infrastructure. There are currently no agricultural

operations occurring on-site or within the vicinity of the Project Site. The Department of Conservation's California Important Farmland Finder shows that the Project Site occurs within Urban and Built-Up Land. Therefore, the Proposed Project would not covert Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use and no impact would occur as result of construction and operation of the Proposed Project. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

b) **No Impact.** According to the 2030 General Plan Environmental Impact Report, the nearest farm under a Williamson Act contract is located approximately 5.3 miles southeast from the Project Site. Additionally, the California Department of Conservation: Farmland Land Finder shows that the Project Site occurs within an Urban and Built-Up Land. As discussed above, no land on or near the Project Site is currently under agricultural production, nor are any parcels zoned for agricultural uses. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

c) **No Impact.** The Proposed Project would be located on a site which was previous developed with Base Housing and that currently supports existing reclaimed water facilities. The Project Site is zoned Public/Open Space (P/OS) and the General Plan does not identify parcels zoned for forest land or timber within the vicinity. Therefore, construction and operation of the Proposed Project would not conflict with the existing zoning or cause rezoning of forest land or timberland resources. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

d, e) **No Impact.** The Project Site does not support forest land nor does the Project Site support farmland. Implementation of the Proposed Project would not convert forest land to non-forest use or farmland to non-agricultural use. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

III. AIR QUALITY. *Would the proposal*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan? (1; 2; 3; 10; 26; 33)			X	
b) Violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation? (3; 10; 11; 26; 33)			X	
c) Expose sensitive receptors to substantial pollutant concentrations? (4; 10; 11)			X	
d) Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people? (4; 10)				X

AIR QUALITY

Explanations:

a. **Less Than Significant Impact**. The Project Site is located in the Mojave Desert Air Basin (MDAB). The MDAB encompasses the desert potion of San Bernardino County. The Mojave Desert Air

Quality Management District (MDAQMD) has jurisdiction over air quality issues and regulations within the City of Victorville that includes the project area. To assist local agencies in determining if a project's emissions could pose a significant threat to air quality, the MDAQMD has prepared the CEQA and Federal Conformity Guidelines, August 2016. The air and dust emissions from the construction and operational use of the Proposed Project were evaluated and compared to the MDAQMD air quality thresholds to determine significance.

Air quality is determined primarily by the types and amounts of contaminants emitted into the atmosphere, the size and topography of the local air basin and the pollutant-dispersing properties of local weather patterns. When airborne pollutants are produced in such a volume that they are not dispersed by local meteorological conditions, air quality problems result. Dispersion of pollutants in the MDAB is influenced by periodic temperature inversions, persistent meteorological conditions and the local topography. As pollutants become more concentrated in the atmosphere, photochemical reactions occur, producing ozone and other oxidants.

Air emissions from the Proposed Project are subject to federal, State and local rules and regulations implemented through provisions of the federal Clean Air Act, California Clean Air Act, and the rules and regulations of the California Air Resources Board (CARB) and MDAQMD. Air quality management districts with air basins not in attainment of the air quality standards are required to prepare an Air Quality Management Plan (AQMP). An AQMP establishes an area-specific program to control existing and proposed sources of air emissions so that the air quality standards may be attained by an applicable target date.

The federal Clean Air Act and California Clean Air Act were established in an effort to assure that acceptable levels of air quality are maintained. These levels are based upon health-related exposure limits and are referred to as National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). The ambient air quality standards establish maximum allowable concentrations of specific pollutants in the atmosphere and characterize the amount of exposure deemed safe for the public. Areas that meet the standards are designated attainment and if found to be in violation of primary standards are designated as nonattainment areas.

The United States Environmental Protection Agency (EPA) and the CARB have designated portions of the MDAQMD as nonattainment for a variety of pollutants, and some of those designations have an associated classification. Table 1 lists these designations and classifications. The MDAQMD has adopted attainment plans for a variety of nonattainment pollutants.

The Project Site is within the MDAB and under the jurisdiction of the MDAQMD. The MDAQMD is responsible for updating the Air Quality Management Plan (AQMP). The AQMP was developed for the primary purpose of controlling emissions to maintain all federal and state ambient air standards for the district. The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. As such, the Proposed Project is an acceptable use on-site and consists primarily of enhancement of existing facilities. Furthermore, as demonstrated in Section III(b) below, the Proposed Project would not significantly increase local air pollutant emissions and therefore would not conflict with or obstruct implementation of the AQMP. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Table 1
State and Federal Air Quality
Designations and Classifications

Ambient Air Quality Standard	Status
Eight-hour Ozone (Federal 70 ppb (2015))	Expected Non-attainment; to be determined.
Ozone (State)	Non-attainment; classified Moderate
PM_{10} (24-hour Federal)	Non-attainment; classified Moderate (portion of MDAQMD in Riverside County is unclassifiable/attainment)
$PM_{2.5}$ (Annual Federal)	Unclassified/attainment
$PM_{2.5}$ (24-hour Federal)	Unclassified/attainment
$PM_{2.5}$ (State)	Non-attainment (portion of MDAQMD outside of Western Mojave Desert Ozone Non-Attainment Area is unclassified/attainment)
PM_{10} (State)	Non-attainment
Carbon Monoxide (State and Federal)	Unclassifiable/Attainment
Nitrogen Dioxide (State and Federal)	Unclassifiable/Attainment
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Unclassifiable/Attainment
Particulate Sulfate (State)	Attainment
Hydrogen Sulfide (State)	Unclassified (Searles Valley Planning Area is non-attainment)
Visibility Reducing Particles (State)	Unclassified

Source: MDAQMD CEQA and Federal Conformity Guidelines, August 2016

b) **Less Than Significant Impact.** The MDAQMD has established the following significant daily emissions thresholds for determining whether the impacts from a proposed project would be considered significant per CEQA:

Carbon Monoxide (CO)	548 lbs/day
Oxides of Nitrogen (NO_X)	137 lbs/day
Reactive Organic Gasses (ROG)	137 lbs/day
Oxides of Sulfur (SO_X)	137 lbs/day
Particulate Matter (PM_{10})	82 lbs/day
Particulate Matter ($PM_{2.5}$)	65 lbs/day

Construction emissions are considered short-term, temporary emissions and were modeled with the assumption that one crane, welder, grader, dozer, and three pieces of miscellaneous construction equipment would be required. The construction equipment was assumed to be operated for eight hours per working day. Upon completion of the construction phase, it was conservatively assumed that the Proposed Project's operational phase would consist of routine maintenance which will consist of the once weekly use of one maintenance truck for eight hours per day. Both the construction and operational emissions were estimated utilizing South Coast AQMD Off-Road Source Emission Factors for the 2019 operational year. The resulting emissions generated by construction of the Proposed Project are shown in Table 2 and Table 3.

Table 2
Construction Emissions Summary
(Pounds per Day)

Equipment	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Crane	0.76	5.79	3.19	0.23	0.21
Welder	0.28	1.47	1.47	0.09	0.09
Grader	0.79	5.19	4.63	0.25	0.23
Dozer	1.78	13.56	6.71	0.55	0.50
Miscellaneous Equipment[1]	1.43	9.53	8.45	0.38	0.35
Highest Value (lbs/day)	**5.04**	**35.55**	**24.45**	**1.50**	**1.38**
MDAQMD Threshold	137	137	548	82	65
Significant	**No**	**No**	**No**	**No**	**No**

Emission Sources: Off-Road Mobile Source Emission Factors (2019)

Table 3
Operational Emissions Summary
(Pounds Per Day)

Equipment	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Maintenance Truck	0.18	1.25	1.20	0.05	0.05
Total (lbs/day)	**0.18**	**1.25**	**1.20**	**0.05**	**0.05**
MDAQMD Threshold	137	137	548	82	65
Significant	**No**	**No**	**No**	**No**	**No**

Emission Sources: On-Road Mobile Source Emission Factors Delivery Trucks (>8500 pounds) (2020)

As shown above, the anticipated operational emissions are less than the MDAQMD thresholds and would be considered less than significant. Furthermore, the Proposed Project shall comply with MDAQMD Rules 402 and 403, as listed below.

Compliance with MDAQMD Rules 402 and 403

Although the Proposed Project does not exceed MDAQMD thresholds, the Applicant is required to comply with applicable MDAQMD Rules 402 for nuisance and 403 for fugitive dust control. This would include, but not be limited to the following:

1. The Project Proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.

2. The Project Proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site. Portions of the site that are actively being used shall be watered to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.

3. The Project Proponent shall ensure that disturbed areas are treated to prevent erosion.

4. The Project Proponent shall ensure that ground disturbing activities are suspended when winds exceed 25 miles per hour.

Although the Proposed Project would not exceed MDAQMD thresholds for exhaust emissions during operations, the Applicant would be required to implement the following conditions as required by MDAQMD:

5. All equipment must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.

6. The operator shall comply with all existing and future CARB and MDAQMD Off-Road Diesel Vehicle Regulations related to diesel-fueled trucks, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

MDAQMD rules for diesel emissions from equipment and trucks are embedded in the compliance for all diesel fueled engines, trucks, and equipment with the statewide CARB Off-Road Diesel Vehicle regulations. These measures will be implemented by CARB in phases with new rules imposed on existing and new diesel-fueled engines.

The Project Site is within the Mojave Desert PM_{10} Planning Area and the Western Desert Ozone non-attainment area. The State Implementation Plan (SIP) identifies sources of PM_{10} emissions and control measures to reduce emissions. The EPA requires the application of reasonable available control technology (RACT) to stationary emission sources and reasonable available control measures (RACM) to mobile sources. These will be incorporated through compliance with rules and regulations described above. As such, with compliance with existing rules and regulations, the Proposed Project would not violate any air quality standards or contribute to an existing or projected air quality violation. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) **Less Than Significant Impact.** The MDAQMD CEQA and Federal Conformity Guidelines (August 2016) describes sensitive receptors as being residences, schools, daycare centers, playgrounds and medical facilities. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using MDAQMD significance thresholds:

- Any industrial project within 1000 feet;
- A distribution center (40 or more tucks per day) within 1000 feet;
- A major transportation project (50,000) or more vehicles per day) within 1000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- A gasoline dispensing facility within 300 feet.

As such, the Proposed Project does not meet the criteria for a project type which is subject to sensitive receptor significance threshold evaluation. Furthermore, the modeling results (as shown in Table 2) indicate that development of the Proposed Project is not anticipated to exceed MDAQMD emissions thresholds. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

d) **No Impact**. The Proposed Project would not contain a land use typically associated with the emissions of objectionable odors. Potential odor sources associated with the Proposed Project may result from construction equipment exhaust; however, standard construction requirements would minimize odor impacts resulting from construction activity. It should be noted that any construction odor emissions generated would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction activity. The Proposed Project would also be required to comply with SCAMD Rule 402 to prevent occurrences of public nuisances.

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

IV. BIOLOGICAL RESOURCES. *Would the proposal result in impacts to*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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 regulation, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (3, Table RE-2; 10; 34)		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? (1; 3; 4; 10; 34)				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? (1; 4)				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? (3; 10; 13)				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (14)				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? (3)				X

Explanations:

a) **Less Than Significant Impact with Mitigation Incorporated**. A Desert Tortoise Survey was performed by ECORP Consulting, Inc. on November 27, 2018. According to the survey, the Project Site consists of approximately 10 acres of disturbed habitat, with dominant species being rabbitbrush (*Ericameria nauseosa*), fourwing saltbush (*Atriplex Canescens*), Russian thistle (*Salsola tragus*), and telegraph weed (*Heterotheca grandiflora*). The Project Site also contained chokecherry (*Prunus virginiana*) throughout and tamarisk (*Tamarisk aphylla*) and Desert Willow (*Chilopsis linearis*) occur along adjacent properties. The Project Site contained compacted soils and remnant piles of disturbed soil. The SCLA Specific Plan states that the wildlife population within the former Base is described as having “low stable population levels.” Both the diversity and abundance of wildlife are limited by lack of adequate food, sparse ground cover which limits nesting sites, and an unreliable source of water.

During the desert tortoise surveys, no desert tortoise, desert tortoise burrows, or sign of desert tortoise (e.g., scat, tracks, etc.) were identified on the Project Site, or within the 300-foot buffer. Although the Project Site is located within the desert tortoise range, the poor-quality habitat on-site

likely precludes this species from occurring on-site. However, to ensure potential impacts to this species are reduced to a less than significant level, the following mitigation measure shall be implemented:

Mitigation Measure BIO-1:

A preconstruction survey be conducted no more than 14 days prior to construction to ensure that no desert tortoises are on the Project Site prior to construction.

b) **No Impact.** The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. Upon completion of the new tank, the pond would be backfilled and abandoned. The SCLA Specific Plan states that the most important habitat for wildlife occurs to the east of the riparian plant community of the Mojave River, which is approximately one-mile away. The Project Site is not located within any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

c) **Less Than Significant**. The SCLA Specific Plan states that the wildlife population within the former Base is described as having "low stable population levels." Both the diversity and abundance of wildlife are limited by lack of adequate food, sparse ground cover which limits nesting sites, and an unreliable source of water. Therefore, the Project Site is not anticipated to include any State or federally protected wetlands as protected under CEQA, Section 1600 of the California Fish and Wildlife Code, or as defined by Section 404 of the Clean Water Act. Therefore, less than significant impacts are identified or anticipated and no mitigation measures are required.

d) **No Impact**. The Resource Element of the City's General Plan identifies a wildlife corridor of special concern located within the area of the Mojave River. Since the Mojave River is located approximately one-mile west of the Project Site, the Proposed Project is not anticipated to 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 since the site does not include disturbances to any sensitive areas. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

e) **No Impact**. The proposed use on-site would continue as public facilities for recycled water and is consistent with the existing land use designation of Public/Open Space (P/OS). There are no existing trees or other biological resources on site that would be impacted by the Proposed Project. Therefore, no impacts related to local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance are identified. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

f) **No Impact.** The Victorville General Plan does not identify the Project Site, nor the vicinity to be within a habitat conservation plan. The Proposed Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan since there is no adopted Habitat Conservation Plan or Natural Community Conservation Plan in the project area or local region. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

V. CULTURAL RESOURCES. *Would the proposal*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? (3; 35; 36)		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? (3; 35; 36)		X		
c) Disturb any human remains, including those interred outside of formal cemeteries? (3; 4; 35; 36)		X		

CULTURAL RESOURCES

Explanations:

a,b) **Less Than Significant Impact w/Mitigation Incorporated.** In October 2019, McKenna et al. (McKenna) prepared a Phase I Cultural Resources Investigation for the Proposed Project. An archaeological records check was completed at the California State University, Fullerton, South Central Coastal Information Center (CSUF-SCCIC) and identified a minimum of 52 cultural resources investigations within a one-mile radius of the Project Site. Research also identified 36 cultural resources within one mile of the Area of Potential Effects (APE) including one site reported to be within the George Airforce Base site, itself. In all, the records search identified 23 prehistoric resources, 12 historic resources, and one resource with both prehistoric and historic components. Two (2) of the resources noted were also identified as California Historical Landmarks: The Old Spanish Trail and the Mormon Trail. However, neither of these resources is within the current Project Site.

McKenna found the project area is sensitive for prehistoric archaeological resources. Additionally, the project area is moderately sensitive for historic archaeological resources. Therefore, potentially significant impacts could occur during site excavation, and the following mitigation measures are recommended to reduce impacts to a level of less than significant:

Mitigation Measure CR-1:

Project-related earthmoving activities within the project APE shall be monitored by an archaeological monitor with both prehistoric and historic archaeological qualifications. This monitoring program need not be conducted on a full-time basis and should be conducted while earthmoving involves impacts to the younger alluvium deposits. The extent would be based on the extent of younger alluvium and project development scheduling.

Mitigation Measure CR-2:

In the event any evidence of prehistoric archaeological resources are identified, a Native American representative, preferably of Serrano descent, shall be added to the archaeological monitoring program until it is determined the monitoring is no longer required.

c) **Less than Significant Impact.** Mckenna states that there is no evidence that human remains will be identified within the project area, but the presence cannot be completely ruled out. Construction activities, particularly grading, could potentially disturb human remains interred

outside of a formal cemetery. Thus, the potential exists that human remains may be unearthed during grading and excavation activities associated with project construction. Therefore, possible significant adverse impacts have been identified or anticipated and the following mitigation measure is required as a condition of project approval to reduce these impacts to a level of less than significant:

Mitigation Measure CR-3:

If, at any time, evidence of human remains (or potential human remain) is uncovered, the County Coroner must be notified immediately and permitted to examine the find(s). If the remains are determined to be of Native American origin, the Coroner will contact the Native American Heritage Commission and the Commission with name the Most Likely Descendant (MLD). In consultation between the City of Victorville, the MLD, and the consulting archaeologist, the disposition of the remains will be determined. If Native American human remains are identified within the project area, a Native American observer should be added to the overall monitoring program for the duration of the activities associated with excavation in soils likely to yield additional remains.

	Potentially Significant Impact	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VI. ENERGY. *Would the project*:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (3, 8, 16, 33)			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (3, 8,16, 33)			X	

ENERGY

Explanations:

Senate Bill 350

Senate Bill (SB) 350 (de Leon) was signed into law in October 2015. SB 350 establishes new clean energy, clean air and greenhouse gas reduction goals for 2030. SB 350 also establishes tiered increases to the Renewable Portfolio Standard: 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030.

Senate Bill 100

Senate Bill 100 (SB 100) was signed into law September 2018 and increased the required Renewable Portfolio Standards. SB 100 requires the total kilowatt-hours of energy sold by electricity retailers to their end-use customers must consist of at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045. SB 100 also includes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

a,b) **Less than Significant Impact.**

Electricity

Southern California Edison (SCE) currently provides electrical service to the Proposed Project Site which is developed with existing a reclaimed water pond and related water facilities. SCE is one of the nation's largest electric utilities, providing electric service to approximately 15 million people. Their service area includes portions of 15 counties and hundreds of cities and communities in a 50,000-square-mile service area within Central, Coastal and Southern California. Total electricity demand in SCE's service area is estimated to increase by approximately 12,000 Gigawatt hours between the years 2015 and 2026. The demand for electricity is expected to be sufficiently served by the existing SCE electrical facilities because the project's electricity demand would remain the same, as the original water pumps will be used for the new reclaimed water tank. Therefore, projected electrical demand would not significantly impact SCE's level of service. The Proposed Project would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation and no mitigation measures are recommended.

Natural Gas

The Proposed Project would not use natural gas and therefore would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation and no mitigation measures are recommended.

Fuel

During construction of the Proposed Project, transportation energy consumption is dependent on the type of vehicle and number of vehicle trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. However, Temporary transportation fuel use such as gasoline and diesel during construction would come from the transportation and use of delivery vehicles and trucks, construction equipment, and construction employee vehicles. Additionally, most construction equipment during grading would be powered by gas or diesel. Electric powered equipment shall be implemented as development furthers. The Proposed Project is estimated to used 13,678.90 gallons of fuel per day. Impacts related to transportation energy use during construction would be temporary and would not require the use of additional use of energy supplies or the construction of new infrastructure; therefore, impacts would be less than significant.

During operations of the Proposed Project, the use of fuel would be generated by maintenance staff and employee vehicle trips. Employees currently visit the site for maintenance and repair of the existing facilities. The fuel use related with vehicle trips produced by the new water tank would not increase over existing use and therefore would not be considered inefficient, wasteful, or unnecessary. The Proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts are less than significant, and no mitigation is recommended.

Project design and operation would comply with the Victorville's Climate Action Plan, and the State Building Energy Efficiency Standards related to appliance efficiency regulations, and green building standards. Project development would not cause inefficient, wasteful and unnecessary energy consumption, and no adverse impact would occur.

The Proposed Project is designed to adhere to Victorville's Climate Action Plan and Resource Element: Energy Conservation of the City General Plan to support decrease energy consumption

and GHG emissions to become a more sustainable community and to meet the goals of AB 32. The Proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce GHG emissions, AB 32, and SB 32; therefore, the Project is consistent with AB 32, which aims to decrease emissions statewide to 1990 levels by to 2020. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

VII. GEOLOGY AND SOILS. *Would the project*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or 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.) (7, Figure S-1)				X
ii) Strong seismic ground shaking? (7, Table S-1)				X
iii) Seismic-related ground failure, including liquefaction? (7)				X
iv) Landslides? (5, pg. 27; 7, Figure S-3)				X
b) Result in substantial soil erosion or the loss of topsoil? (5, pg. 27; 7; 27)			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (5, pg. 27; 7)				X
d) Be located on expansive soil, as defined on Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? (5, pg. 27; 8)			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? (19)				X
f) Directly or indirectly destroy a unique paleontological resources or site unique geological feature? (3)		X		

Explanations:

a. **No Impact**. The Proposed Project is not anticipated to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death as the Project Site use will remain the same and is a permitted use in accordance with the existing land use designation.

i. **No Impact** – The Project Site is located in seismically active southern California with numerous fault systems in the region. However, the Project Site is not located within an Alquist-Priolo Special Studies area. The General Plan states that there are no known or

suspected fault traces located within the Victorville Planning Area. According to the Southern California Earthquake Data Center, the nearest faults are the Mirage Valley Fault and Helendale Fault. The Mirage Valley Fault is located approximately 10.40 miles northwest of the Project Site and Helendale Fault is approximately 10 miles northeast of the Project Site. No impacts are identified or anticipated, and no mitigation measures are required.

ii. **No Impact** – According to the SCLA Specific Plan, the Project Site is located in the highly seismic southern California region within the influence of several fault systems that are considered to be active or potentially active. However, with compliance with the Victorville Municipal Building Development Codes and the latest adopted version of the California Building Code, the Proposed Project would be adequately reinforced for potential earthquakes. No impacts are identified or anticipated, and no mitigation measures are required.

iii. **No Impact** – According to the City's General Plan, the Project Site is not located within an area susceptible to liquefaction as the potential for liquefaction hazards are limited to the Mojave River floodplain and its tributary stream crossings where groundwater is shallow and loose sandy soils occur. The Mojave River is located approximately one-mile east of the Project Site. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

iv. **Less Than Significant** – The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. The Project Site would continue to be used for reclaimed water storage and related infrastructure which is a permitted use with the existing land use designation of Public/Open Space. The Safety Element of the General Plan identifies natural hazards, which include seismically induced surface rupture, ground shaking, ground failure, and liquefaction, along with slope instability leading to mudslides and landslides, subsidence, flooding, and wildland fires. According to Figure S-3: Slope Hazards, Project Site is outside the area of concern for slope hazards. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

b. **Less Than Significant**. According to the United States Department of Agriculture Web Soil Survey (accessed 10/14/2019), soils on-site consist of Bryman Loamy Sand (.04 percent), Mohave Variant Loamy Sand (45.9 percent), and Cajon Sand (53.7 percent) soils with a slope averaging 0 to 9 percent. Cajon Sand retains a slight hazard of water erosion and a high hazard of soil blowing. The Proposed Project will adhere to the City of Victorville's Municipal Code:10.30.210, Erosion and Sediment Control Plan ("ESCP") and the National Pollution Discharge Elimination System, which ensures potential impacts with regards to substantial soil erosion or the loss of topsoil to be less than significant.

c. **No Impact**. The Project Site is relatively flat. The potential of unstable soil condition, landslide, lateral spreading, subsidence, liquefaction or collapse is present because of the geographical make-up of the area and the frequency of earthquake occurrences in Southern California. According to General Plan Figure S-3, the Project Site is not located within a slope hazards area. Any project within the area of Southern California shall meet the latest UBC standards to minimize the potential impact caused by an earthquake. Therefore, the potential for instability occurring at this Project Site is less than significant with proper construction methods and development standards as defined in the City's Municipal Code and the latest UBC regulations. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

d. **Less Than Significant Impact**. Expansive (or shrink-swell) behavior is attributable to the water-holding capacity of clay minerals and can adversely affect the structural integrity of facilities including underground pipelines. The General Plan does not identify soil conditions in the area

that would lead to expansive behavior nor has there been any reported cases in the surrounding area. According to the United States Department of Agriculture: Web Soil Survey, the soil at the Project Site mostly consists of Cajon Sandy soil with a slope averaging 0 to 9 percent. Cajon Sandy soil is listed as Hydrologic Soil Group A. The United States Department of Agriculture: Hydrology National Engineering Handbook defines Hydrologic Soil Group A as having low runoff potential when thoroughly wet. Water is transmitted freely through the soil. Group A soils typically have less than 10 percent clay and more than 90 percent sand or gravel and have gravel or sand textures. Some soils having loamy sand, sandy loam, loam or silt loam textures may be placed in this group if they are well aggregated, of low bulk density, or contain greater than 35 percent rock fragments. The USDA states that the extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Since, Group A soils typically have less than 10 percent clay, the potential for expansion is considered less than significant.

e. **No Impact**. The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps, and will not include a septic tank, nor connection to the public sewer system. Therefore, no impacts related to incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater are identified. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

f. **Less Than Significant Impact with Mitigation Incorporated**. The Cultural Resources Investigation prepared for the Proposed Project states that a paleontological overview completed by McLeod identified the project area as consisting of some artificial fill above sedimentary deposits of older terrestrial Quaternary Alluvium derived from the Mojave River. These older deposits are generally referred to as Shoemaker gravel. Fossil specimens have been known to be associated with these deposits and the nearest specimens have been recovered from the western extents of George Air Force Base from depths exceeding ten feet below the present surface. Additional specimens have been recovered from the western banks of the Mojave River. McLeod concluded shallow excavations are unlikely to yield evidence of fossil specimens, but deeper excavations (greater than 10 feet) that impact the older alluvium may yield such specimens. Monitoring of these excavations is recommended and sampling of the back dirt may yield additional evidence of small fragments or specimens. Therefore, to ensure potential impacts to paleontological resources are reduced to a less than significant level, the following mitigation measure shall be implemented:

Mitigation Measure GEO-1:

Project-related earthmoving activities that exceed the depth of younger Quaternary alluvium and impact older Quaternary alluvium must be subjected to a paleontological monitoring program designed to meet the standards, policies, and guidelines of the San Bernardino County Museum Department of Earth Sciences if excavations are to impact older Quaternary alluvium. The program requirements would be based on the depth of older alluvium and final project design.

VIII. Greenhouse Gas Emissions. *Would the proposal*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment? (3; 10)			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (3; 10)			X	

Explanations:

a-b) **Less Than Significant Impact**. According to CEQA Guidelines section 15064.4, when making a determination of the significance of greenhouse gas emissions, the "lead agency shall have discretion to determine, in the context of a particular project, whether to (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." Moreover, CEQA Guidelines section 15064.7(c) provides that "a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts" on the condition that "the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

The City of Victorville adopted a Climate Action Plan (CAP) in May 2016. The CAP presents the greenhouse gas (GHG) inventories, identifies the effectiveness of California initiatives to reduce the GHG emissions, and identifies local measures that were selected by the City to reduce GHG emissions under the City's jurisdictional control to achieve the City's identified GHG reduction target. Additionally, the City participated in the San Bernardino County Regional GHG Reduction Plan (March 2014) (GHG Plan) and used the technical information within the County's GHG Plan in the development of the CAP.

As stated by the County's GHG Plan, the City of Victorville selected to reduce its community GHG emissions to a level that is 29% below its projected GHG emissions level in 2020. The City implements CEQA by requiring new development projects to quantify project GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance standard as stated in the County's GHG Plan of 3,000 metric tons of CO_2 equivalent ($MTCO_2e$) per year.

Construction and Operational Emissions

As stated, a threshold of 3,000 $MTCO_2e$ per year has been adopted by the County as potentially significant to global warming. Utilizing the SCAQMD's Off-Road Mobile Source Emission Factors (2019), construction and annual operation GHG emissions were estimated and are shown in Tables 4 and 5, respectively.

As shown in Tables 4 and 5, GHG emissions associated with construction and operation of the Proposed Project are not anticipated to exceed the County's GHG emissions threshold. Therefore, the Proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment. Additionally, the Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Table 4
Construction GHG Emissions Summary
(Tons per Year)

Equipment	CO_2	CH_4*
Crane (lbs/day)	1,032	0.07
Welder (lbs/day	205	0.02
Grader (lbs/day)	1,064	0.07
Dozer (lbs/day)	1,912	0.16
Miscellaneous Equipment[1] (lbs/day)	2,952	0.13
Total Per Year (lbs/day)	7,165	0.46
Total $MTCO_2e$	**423.25**	
County Threshold ($MTCO_2e$)	3,000	
Significant	**No**	

Source: Off-Road Mobile Source Emission Factors (2019)
Note: Assumes five eight-hour working days/week for a six-month construction schedule.
*CH_4 has a Global Warming Potential of 28 as provided by IPCC's 2013 Working Group I
[1]Assumes three pieces of miscellaneous construction equipment.

Table 5
Operational GHG Emissions Summary
(Tons per Year)

Equipment	CO_2	CH_4*
Maintenance Truck (lbs/day)	427.72	0.01
Total Per Year (lbs/day)	427.72	0.22
Total $MTCO_2e$	**10.09**	
County Threshold ($MTCO_2e$)	3,000	
Significant	**No**	

Source: On-Road Mobile Source Emission Factors Delivery Trucks (>8500 pounds) (2020)
Note: Assumes one eight-hour working day per week.
*CH_4 has a Global Warming Potential of 28 as provided by IPCC's 2013 Working Group I

IX. HAZARDS AND HAZARDOUS MATERIALS. *Would the proposal*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (1; 10)				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? (1; 10)		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? (1; 10)				X
d) Be located on a site which is included on a list of hazardous materials site compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (7; 10)				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 of excessive noise for people residing or working in the project area. (1; 4; 10)			X	
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (7, Fig. S-5)				X
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (1; 4; 7)				X

Explanations:

a) **No Impact.** Construction activities associated with the Proposed Project would involve use of limited quantities of hazardous materials such as petroleum, hydrocarbons, and their derivatives (e.g., gasoline, diesel, oils, and lubricants) to operate the construction equipment. Construction activities would be short-term and would involve the limited transport, storage, use, and disposal of hazardous materials. These materials would be used with construction equipment and stored in vessels engineered for safe storage.

Similar to construction, operation of the Proposed Project could involve limited quantities of hazardous materials such as petroleum, hydrocarbons, and their derivatives (e.g., gasoline, diesel, oils, and lubricants) during periodic maintenance activities. The use or disposal of these hazardous substances would occur according to instructions provided by the product manufacturer and be subject to federal, state, and local health and safety regulations involving storage, transport, use, and disposal. Therefore, the Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant impacts and no mitigation is required.

b) **Less Than Significant Impact with Mitigation Incorporated.** As described under item VIII a) above, construction and operational activities associated with the Proposed Project would involve relatively small quantities of hazardous substances associated with the operation of equipment and vehicles. Construction vehicles on site may require refueling or maintenance that could result in minor releases of oil, diesel fuel, transmission fluid, or other materials. Inadvertent releases of hazardous materials on construction sites are typically localized and would be cleaned up in a timely manner in compliance with state and local laws that govern proper containment, spill control, and disposal of hazardous waste generated during construction.

Mandatory compliance with all federal, state, and local regulations on the transport, use, and disposal of hazardous materials would further reduce the likelihood of an accidental release of hazardous materials into the environment. Construction and operation of the Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

GEOTEK, Inc. performed a Limited Phase II Environmental Site Assessment (ESA) in June 2019, at the location of the Project Site. As noted in the letter report, services were conducted in substantial conformance with the scope and limitations of the American Society of Testing and

Materials (ASTM) E1903-11, "*Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*."

The Project Site is situated within the Southern California Logistics Airport (SCLA) industrial park (former. George Air Force Base). The George Air Force Base was opened in June 1941 and officially closed of all military activities in December 1992. The Site is vacant of structures and surface vegetation consists of sporadic light brush. GEOTEK'S scope of work for the project consisted of the following:

- Excavation of 4 exploratory borings on-site utilizing a GeoProbe® direct push rig (truck mounted),
- Collection of soil samples of the on-site materials,
- Laboratory testing of selected soil samples collected from the site, and
- Compilation of a letter report that presents findings, conclusions and recommendations.

The borings were extended to a depth of approximately three feet below the existing ground surface. Soil samples were collected from depths of 0 to 6" and at 3 feet below the existing ground surface from each of the borings. The number of borings, depths of the borings and depths of the samples were dictated to us by the United States Air Force.

Analysis of the soil samples did not detect measurable quantities of OCP constituents is Samples ENV-1 at 3'; ENV-2 a 0'; ENV-2 at 3'; and ENV-3 at 3'. Analysis of the soil samples did detect measurable quantities of the OCP constituents aldrin, chlordane and dieldrin in Samples ENV-1 at 0'; ENV-3 at 0'; ENV-4 at 0'; and ENV-4 at 3'.

The OCP constituent dieldrin is in concentrations above the regional screening level for industrial soils, as determined by EPA Regional Screening Levels (RSLs) for industrial soil, April 2019 for Samples ENV-1 at 0' and ENV-4 at 0'.

As concluded in the letter report, due to the presence of pesticides (i.e. dieldrin) detected in the soil samples, and the existing known environmental concerns at the SCLA industrial park, the following mitigation measure shall be implemented:

Mitigation Measure HAZ-1:

Appropriate safety measures shall be taken during soil excavation due to the presence of pesticides. Prior to field work the City shall consult with a Geotechnical Engineer to determine the need for sampling and laboratory testing prior to excavations at the Project Site.

c) **No Impact.** No schools occur within 0.25-mile of the Project Site. However, there are several schools within approximately 0.5-mile of the Project Site including: Excelsior Charter School, George Air Force Base Elementary, Harold H George Magnet School, Adelanto Charter Academy, and Harry Sheppard Middle School. As described under items VIII a) and b) above, construction and operation of the Proposed Project would involve the transport and use of small quantities of hazardous materials. Such materials would be transported, stored, and disposed of in accordance with applicable codes and regulations and would not create a significant hazard to the public or the environment. The Proposed Project would not have an adverse effect on any existing or proposed schools through hazardous emissions or handling. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

d) **No Impact.** According to the California Department of Toxic Substances Control EnviroStor (accessed 10/31/2019), the Project Site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

e) **Less Than Significant.** The Project Site is located approximately one-mile southeast from the SCLA. As shown in the General Plan: SCLA Existing Airport Noise Contours Map, the Project Site is located outside of the airport noise contours. Construction of the Proposed Project would cause a short-term increase in noise levels. During operation, the Proposed Project would not require the use of mechanical equipment or generators which would not result in excessive noise levels. The Proposed Project is not anticipated to exceed the standard noise levels which allows for up to 70 decibels (dB) is considered "Normally Acceptable" for utilities as identified in the Noise Element of the General Plan. The Proposed Project is not anticipated to result in a safety hazard of excessive noise for people residing or working in the project area. Therefore, less than significant impacts identified or are anticipated, and no mitigation measures are required.

f) **No Impact.** According to the City's General Plan and the SCLA Area Plan, the Project Site does not occur in an area designated for an emergency response plan or emergency evacuation plan. Additionally, the Project Site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. During construction of the reservoir, the contractor would be required to maintain adequate emergency access for emergency vehicles. Operation of the reservoir, which would include inspections, maintenance, would not result in excessive vehicle trips to the Project Site. The Project Site would be maintained to allow for appropriate off-road parking. The Proposed Project would not impair an adopted emergency response plan or emergency evacuation plan. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

g) **No Impact:** As discussed in the City's General Plan Safety Element, the National Fire Protection Association defines a wildland fire as "any forest, grass, brush or tundra fire involving lands not under cultivation." An urban fire is a fire that occurs in developed areas which may include structures and vehicles. The Project Site occurs in an urban area; no forest land or significant areas of bio mass occur near the Project Site that would fuel a wildfire. The City of Victorville has adopted a Fire Hazard Abatement Ordinance (Chapter 8.09, Victorville Municipal Code) which requires the abatement of weeds in excess of three inches above the grade in the area of growth on such portion of the lot or premises within one hundred feet of any structure. Russian Thistle (tumbleweeds) are not permitted to grow in excess of three inches within City limits on any property, regardless of surrounding improvements. Adherence to this ordinance reduces the likelihood of fires on undeveloped lands and on vacant lots in the developed portions of the Planning Area. During a recent site visit conducted in October 2019, the Project Site is mostly lack of any vegetation and visibility of the soils was a prominent feature. Therefore, the Proposed Project is not anticipated to exacerbate wildfire risks, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

X. HYDROLOGY AND WATER QUALITY. *Would the proposal*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? (3; 10; 17; 20)				X
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (1; 3; 10; 21; 27)				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: (10; 17; 20)			X	
i) result in substantial erosion or siltation on- or off-site (10);			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite (10);			X	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (10); or;			X	
iv) impede or redirect flood flows? (7, Figure S-2; 9, Panel 6480).			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (7, Table S-1)			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

Explanations:

a) **No Impact**. The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. The stored reclaimed water from operation of the Proposed Project shall adhere to Title 22 of California's Water Recycling Criteria. Title 22 includes specific uses allowed with disinfected tertiary recycled water (such as irrigating parks), uses allowed with disinfected secondary recycled water (such as irrigating animal feed and other unprocessed crops), and uses allowed with undisinfected secondary recycled water (such industrial uses). Therefore, the Proposed Project will not violate any water quality standards, wastewater discharge requirements or degrade surface and/or groundwater quality. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

b) **No Impact.** The new reservoir will store reclaimed water is used for irrigation and industrial cooling by tenants of the SCLA. As an alternative to potable water the use of reclaimed water reduces demands on groundwater supplies. There are no groundwater recharge facilities near the Project Site. Therefore, the Proposed Project shall not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin; no impacts are identified or are anticipated, and no mitigation measures are required.

c) **Less Than Significant Impact.** The Proposed Project will not substantially alter the existing drainage pattern of the site or area as there are no existing streams or rivers that traverse the area. The Proposed Project includes replacing an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and re-locating the underground piping and the pumps. During construction, all projects are required to comply with National Pollutant Discharge Elimination System (NPDES) requirements; for this project:

- For control of construction and post-construction related storm water the City shall meet the requirements of the Small MS4 General Permit. In addition, the City shall:
- Prepare a project specific Storm Water Pollution Prevention Plan (SWPPP) as required in the NPDES permit and shall identify site-specific erosion and sediment control best management practices that will be implemented;
- The SWPPP shall be applicable to all areas of the project site including construction areas, access roads to and through the site, and staging and stockpile areas; and
- Temporary best management practices for all components of the project must be implemented until such time as permanent post-construction best management practices are in place and functioning.

i-iv **Less Than Significant Impact**. The Proposed Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, since the Project Site is currently permitted for use as a water facilities site. The Proposed Project will not increase runoff water more than what is currently permitted and would not impede or redirect current flows.

d) **No Impact**. According the Figure S-2: Flood Hazards Map of the of the General Plan, the Proposed Project is within Zone X. Areas within Zone X are subject to flooding in the event of a 500-year flood, areas subject to a 100-year flood with average floodwater depths anticipated to be less than one foot or with drainage areas less than one square mile, and areas protected by levees from the 100- year flood. Therefore, the Proposed Project is not anticipated to expose people or structures to a significant risk of loss, injury or death involving flooding as no flood hazards traverse the project area, nor is the Project Site subject to inundation by seiche or mudflow hazards. Due to the Proposed Project location in the High Desert, there are no impacts related to tsunamis. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

e) **No Impact.** The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. The Proposed Project shall adhere to Title 22 of California's Water Recycling Criteria. The Proposed will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

XI. LAND USE AND PLANNING. *Would the proposal*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Physically divide an established community? (4)				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? (1, Table LU-2; 1, Figure LU-1; 2; 33)				X

Explanations:

a) **No Impact.** The Project Site is located on city-owned land that is currently developed with existing reclaimed water storage facilities. Surrounding land uses include former George Air Force Base housing. Proposed construction would be contained to within an estimated a 1,000 square-foot portion of the Project Site. The Proposed Project would not divide an established community. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

b) **No Impact**. The Project Site is within the SCLA Specific Plan area and is designated Public/Open Space. Existing development on-site includes an in-ground lined pond used for reclaimed waters storage. The Proposed Project would not change the existing land use. Additionally, construction of the Proposed Project would consist of short-term and operational activities consistent with existing uses on-site. There would be no anticipated impacts to adjacent developments. No new uses would be established at the Project Site. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

XII. MINERAL RESOURCES. *Would the proposal*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state? (3, Fig. RE-1)			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? (3, Fig. RE-1)			X	

MINERAL RESOURCES

Explanations:

a,b) **Less than Significant** – According to City of Victorville General Plan Figure RE-1, the Project Site occurs in the MRZ-3a Zone. MRZ-3a areas are defined as containing known mineral occurrences of undetermined mineral resource significance. Further exploration work within these areas could result in the reclassification of specific localities into MRZ-2A or MRZ-2b categories. However, the Project Site and vicinity are not designated for mining. Once the replacement reservoir is constructed, fill material would be brought in to reclaim the existing pond. Therefore, the Proposed Project would not result in a significant loss of availability of a known or locally important mineral resource or the loss mineral resources that would be of value to the region and the residents of the

state. Therefore, less than impacts are identified or anticipated and no mitigation measures are required.

XIII. NOISE. *Would the proposal result in*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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? (1; 10; 15, Tables N-2 & N-3; 28)			X	
b) Generation of excessive groundborne vibration or groundborne noise levels? (10)			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? (1, 4, 10)			X	

Explanations:

a,b) **Less Than Significant Impact** –The Noise Element of Victorville General Plan identifies hospitals, convalescent homes, schools, churches and sensitive wildlife habitats as being sensitive to noise. However, there no hospitals, convalescent homes, schools, churches or sensitive wildlife habitats adjacent to or within the Project Site. According to Table N-3: Victorville Land Use Compatibility Standard of the City of the Victorville General Plan, noise levels of up to 70 decibels (dB) is considered "Normally Acceptable" for industrial, manufacturing, and utilities. Temporary or periodic increase in ambient noise levels in the project vicinity will increase when events such as construction activities occur. While these events will increase ambient noise levels in the short term, they are typical short term increases that would be assumed under existing development standards. Additionally, the Victorville Municipal Code anticipates such occurrences and accordingly regulates such activities through base ambient noise level time frames that will mitigate potential adverse impacts. According to the Chapter 13: Noise Control of Victorville's Municipal Code, construction activities would be limited to the hours between 7:00 AM and 10:00 PM for residential zones with noise levels up to 65 dB, anytime for all commercial noise levels up to 70 dB and anytime for all industrial zones noise levels up to 75 dB. With adherence to the Noise Element of the Victorville General Plan and Municipal Code, potential adverse impacts are anticipated to be less than significant.

c) **Less Than Significant Impact –** The Project Site is located within the SCLA Capability Area 3. However, the Noise Element of the Victorville General Plan: SCLA Existing Airport Noise Contours Map, shows that the Project Site is located outside of airport noise contours. Additionally, the development of the Proposed Project would cause short term noise level increases during construction, but during operate shall not exceed the utilities standard of the noise levels up to 70 decibels (dB). Therefore, less than significant impacts are identified for airport land use plan or within the vicinity of any public or private airstrip that would be affected.

XIII. POPULATION AND HOUSING. *Would the proposal*:

	Potentially Significant Impact	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? (4; 6; 10; 12; 31; 33)				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (4; 6; 10)				X

Explanations:

a) **No Impact**. The Proposed Project does not include new construction of residential development or other uses that would directly or indirectly induce population growth in the area. The Proposed Project would continue to provide reclaimed water storage for tenants of the SCLA. Therefore, the Proposed Project would not indirectly induce population growth by increasing the available water supply. No growth-inducing impacts are anticipated to result from construction or operation of the Proposed Project. The Proposed Project would not induce substantial population growth in the area, either directly or indirectly. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

b) **No Impact**. The construction and operation of the Proposed Project would occur on an existing reclaimed water storage facilities site. No housing would be removed as part of the Proposed Project and, therefore, the Proposed Project would not result in the displacement of people. As a result, construction and operation of the Proposed Project would not have impacts on the number or availability of existing housing in the area and would not necessitate the construction of replacement housing elsewhere. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

XV. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government 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:*

	Potentially Significant Impact	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Fire protection? (10)			X	
b) Police protection? (10)			X	
c) Schools? (10)				X
d) Parks? (10)				X
e) Other public facilities? (10)			X	

Explanations:

a) Fire protection?

Less Than Significant Impact. According the General Plan the fire protection services are provided by the City of Victorville Fire Department. The closest fire station to the Project Site is SCLA Fire Station located at 18500 Readiness Street, in Victorville, approximately one-mile from the Project Site. During construction, Fire Protection District emergency access would not be impacted. Operation of the Proposed Project is passive and would not require additional fire protection. Therefore, less than significant impacts would occur to fire protection services as result of construction and operation of the Proposed Project and no mitigation is required.

b) Police protection?

Less Than Significant Impact. Police projection services are provided to the City of Victorville by the San Bernardino County Sheriff's Department. The closest station to the Project Site is located at 11613 Bartlett Ave in the City of Adelanto, which is approximately three miles to the west. Project operations would be passive and would not require additional police protection. The Proposed Project would not result in substantial changes to population, housing or traffic that would increase demand on police protection services. Construction and operation of the Proposed Project would not result in the need for construction of additional police protection facilities nor would it adversely affect service ratios. Therefore, less than significant physical impacts would occur to police protection services as result of construction and operation of the Proposed Project and no mitigation is required.

c) Schools?

No Impact. The closest school to the Project Site is Excelsior Charter School in Victorville, which is located approximately 0.5-mile to the west. However, no population increase in the Project area would result from the construction and operation of the Proposed Project and would not result in the need for physical modifications to existing school facilities. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

d) Parks?

No Impact. The construction and operation of the Proposed Project would not generate additional population that would increase demand for neighborhood, regional parks or other recreational facilities. There are no parks located immediately adjacent to the Proposed Project within the City of Victorville. The closest park is the Schmidt Park, which is located approximately 0.3-mile west of the Project Site. Therefore, construction and operation of the Proposed Project would not affect use of the trail. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

e) Other public facilities?

Less Than Significant Impact. No other public facilities are located in the vicinity of the Proposed Project. Therefore, construction of the Proposed Project would not have the potential to temporarily impact access to public facilities adjacent to the Proposed Project. Less than significant physical impacts to public facilities are anticipated from construction and operation of the Proposed Project and no mitigation is required.

XV. RECREATION. *Would the proposal*:	*Potentially Significant Impact*	*Less Than Significant w/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? (10; 16)				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? (10; 16)				X

RECREATION

Explanations:

a) **No Impact**. According to the General Plan, the City of Victorville has 147.9 acres dedicated to parkland, which consist of 20 parks and recreation centers. The major regional recreational areas within and near the city are the Mojave Narrows Regional Park (840 acres), Lake Gregory (150 acres), and Mojave River Forks (1,100 acres). The three parks are operated by the County of San Bernardino Regional Parks system. The closest park to the Project Site is the Schmidt Park, which is located approximately 0.3-mile to the west. However, the Proposed Project would not generate additional population that would increase the use of existing neighborhood or regional parks or other recreational facilities. Therefore, no impacts to existing neighborhood and regional parks or other recreational centers are anticipated from construction and operation of the Proposed Project. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

b) **No Impact**. The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. Construction and operation of the Proposed Project would not include recreational facilities or require construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. Therefore, no impacts are expected from construction and operation of the Proposed Project.

XVI. TRANSPORTATION. *Would the proposal result in*:	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities? (10; 12; 17; 22)				X
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3 Subdivision (b)(1)? (10; 12; 25)			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)? (10; 12; 22)			X	
d) Result in inadequate emergency access? (4; 10; 29)				X

Explanations:

a) **No Impact**. The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and pumps at an existing reclaimed water facilities site. The Proposed Project is not anticipated to conflict with programs, plans, ordinances or policies addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

b) **Less Than Significant Impact.** Implementation of the Proposed Project would result in a short-term increase in trips and vehicle miles travelled (VMT) associated with construction and grading activities. Operation of the Proposed Project is not anticipated to generate more vehicle trips that typically occur at the site for repair and maintenance. Therefore, the Proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)(1). Less than significant impacts are identified or anticipated and no mitigation measures are required.

c) **Less Than Significant Impact**. The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. The Proposed Project will not include dangerous design features and will not alter existing rights-of-way locations. No off-site road improvements are associated with the Proposed Project. The Proposed Project will adhere to the goals and policies within the Circulation Element of the General Plan to ensure potential impacts are less than significant.

d) **No Impact**. The Proposed Project replaces existing facilities on a City-owned site and would not result in changes to emergency access. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

XVIII. TRIBAL CULTURAL RESOURCES.	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) 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:			X	
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined by Public Resources Code section 5020.1(k), or			X	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?		X		

Explanations:

a, i-ii) **Less Than Significant.** California Assembly Bill 52 (AB52) was approved by Governor Brown on September 25, 2014. AB52 specifies that CEQA projects with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource may have a significant effect on the environment. As such, the bill requires lead agency consultation with California Native American tribes traditionally and culturally affiliated with the geographic area of a Proposed Project, if the tribe requested to the lead agency, in writing, to be informed of proposed projects in that geographic area. The legislation further requires that the tribe-requested consultation be completed prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

McKenna et al. (McKenna) completed a Phase I Cultural Resources Investigation for the Proposed Project in October 2019, which included communication with Native American tribes. The Phase I Cultural Resources Investigation concluded the Project area is moderately sensitive for historic archaeological resources. On August 15,2019, Mckenna submitted a written request to the State of California Native American Heritage Commission (NAHC) for a records search in the commission's Sacred Lands File. Following the NAHC's recommendations and previously established consultation protocol, Mckenna further contacted the ten listed persons/tribes in writing on August 21, 2019 in accordance with CEQA for additional information on potential Native American cultural resources in the vicinity.

The Phase I Cultural Resources Investigation states only one response was received on August 26, 2019 from Jessica Mauck of the San Manuel Band of Mission Indians. The response indicated that the project area is within the ancestral territory of the Serrano and is highly sensitive for both archaeological resources and sacred sites. Significant sites noted include the Turner Springs site and Oro Grande, both having been associated with the presence of human remains and grave goods. Both sites have been tested and determined eligible for listing in the National Register of Historic Places. Neither site will be impacted by the Proposed Project, but associated resources may still be present, given their proximity to the APE and the presence of the Mojave River to the east.

In accordance with AB52, the City of Victorville also provided letters to tribes that requested receiving information. Ms. Jessica Mauck of the San Manuel Band of Mission Indians provided an email response to the City on November 25, 2019. In her email response Ms. Mauck indicated that the Project area exists within a sensitive portion of Serrano ancestral territory and, therefore, is of interest to the Tribe. Ms. Mauck requested copies of the Cultural and Geotechnical reports prepared for the Project Site. As stated in Ms. Mauck's response, the provision of information within these reports would assist San Manuel Band of Mission Indians in ascertaining how the Tribe will assume consulting party status under CEQA and participate, moving forward, in project review and implementation.

In a follow up email, Ms. Mauck concluded that based on the size/scope of the Project, as well as the soil sample results, SMBMI does not have major concerns at this time. However, since the Project site occurs within a highly sensitive area, SMBMI's standard mitigation was provided. Ms. Mauck stated that SMBMI is not requesting monitoring either archaeological or Tribal but is requesting that the measures be utilized if the City does require monitoring. Therefore, to ensure potential impacts to Tribal Cultural Resources are reduced the following mitigation measures shall be implemented.

Mitigation Measure TCR-1: OPTIONAL

In the event the City elects to implement monitoring, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI). Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

Mitigation Measure TCR-2:

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 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.

Mitigation Measure TCR-3:

If significant pre-contact 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.

Mitigation Measure TCR-4:

The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in TCR-1, of any pre-contact 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.

Mitigation Measure TCR-5:

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.

XVIX. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	*Potentially Significant Impact*	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (3; 16; 19; 30)				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (1; 3; 10; 21; 27)				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? (3; 16; 19; 30)				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? (3; 10; 30)			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (3)			X	

Explanations:

a) **No Impact.** The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. All existing operations at the site would continue except the storage pond which will be replaced by the new tank. The Proposed Project. The Proposed Project would therefore not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

b) **No Impact.** As discussed above, the Proposed Project would not require sewer collection or wastewater treatment services and therefore no new wastewater treatment facilities or expansion of existing facilities would be required. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

c) **No Impact.** The Proposed Project would not require new wastewater treatment facilities or expansion of existing facilities. The development of the Proposed Project will include replacement of reclaimed water storage facilities and does not include any uses that would exceed wastewater

treatment requirements. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

d,e) **Less Than Significant Impact**. According to the General Plan, the City of Victorville deposits trash at the Victorville Landfill, which is operated by the Solid Waste Management Division of the San Bernardino County Public Works Department in accordance with a Waste Disposal Agreement between the City and the County. The Victorville landfill currently operates on 67 acres of a total 491-acre property with a capacity of 1,180 tons per day. Construction debris would be recycled and/or transported to the Victorville Landfill. The temporary generation of construction debris would not permanently affect the long-term landfill capacity. Operation of the Proposed Project would not generate solid waste. As a result, less than significant impacts to landfill capacity are anticipated and no mitigation is required.

XX. WILDFIRE. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*

	Potentially Significant Impact	*Less Than Significant w/Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
a) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or other uncontrolled spread of a wildfire?				X
b) 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
c) 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

a) **No Impact.** The Project Site does not contain any emergency facilities, nor is located adjacent to an emergency evacuation route. During construction and long-term operation, the contractor would be required to maintain adequate emergency access for emergency vehicles as required by the City of Victorville fire and police. The Proposed Project would not impair an adopted emergency response plan or emergency evacuation plan. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

b) **No Impact.** As discussed in the City's General Plan Safety Element, the National Fire Protection Association defines a wildland fire as "any forest, grass, brush or tundra fire involving lands not under cultivation." An urban fire is a fire that occurs in developed areas which may include structures and vehicles. The Project Site occurs in an urban area; no forest land or significant areas of bio mass occur near the Project Site that would fuel a wildfire. The City of Victorville has adopted a Fire Hazard Abatement Ordinance (Chapter 8.09, Victorville Municipal Code) which requires the abatement of weeds in excess of three inches above the grade in the area of growth on such portion of the lot or premises within one hundred feet of any structure. Russian Thistle (tumbleweeds) are not permitted to grow in excess of three inches within City limits on any property, regardless of surrounding improvements. Adherence to this ordinance reduces the

likelihood of fires on undeveloped lands and on vacant lots in the developed portions of the Planning Area. During a. recent site visit conducted in October 2019, the Project Site is mostly lack of any vegetation and visibility of the soils was a prominent feature Therefore, the Proposed Project is not anticipated to exacerbate wildfire risks, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

c) **No Impact.** The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. The Proposed Project will not 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. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

d) **No Impact.** The Proposed Project includes replacement of an existing in-ground lined pond with a new 1 MG prestressed circular reservoir and relocation of the existing underground piping and the pumps. According the San Bernardino County Land Use Plan: Hazards Overlay: EH30B, the Proposed Project is not within an area that will expose people or structures to a significant risk of loss, injury or death involving flooding as no flood hazards traverse the project area, nor is the Project Site subject to, wildfire or inundation by mudflow hazards. The Proposed Project will not 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. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE.	*Potentially Significant Impact*	*Less Than Significant w/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? (1; 3; 10; 13)			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. (10; 25; 30)			X	
c) Does the project have environmental effects that will cause substantial adverse affects on human beings, either directly or indirectly? (1; 2; 10; 33)			X	

Explanations:

a) **Less Than Significant Impact**. According to the General Plan, the Project Site does not occur within an area identified as Critical Habitat. A Desert Tortoise Survey was performed by ECORP

Consulting, Inc. on November 27, 2018. According to the survey, the Project Site consists of approximately 10 acres of disturbed habitat. The Project Site contained compacted soils and remnant piles of disturbed soil. The SCLA Specific Plan states that the wildlife population within the former Base is described as having "low stable population levels." Both the diversity and abundance of wildlife are limited by lack of adequate food, sparse ground cover which limits nesting sites, and an unreliable source of water. During the desert tortoise surveys, no desert tortoise, desert tortoise burrows, or sign of desert tortoise (e.g., scat, tracks, etc.) were identified on the Project Site.

In October 2019, McKenna prepared a Phase I Cultural Resources Investigation for the Proposed Project. An archaeological records check was completed at the California State University, Fullerton, South Central Coastal Information Center (CSUF-SCCIC) identified a minimum of 52 cultural resources investigations within a one-mile of the Project Site. Research also identified 36 cultural resources within one mile of the Area of Potential Effects. McKenna found the project area is sensitive for paleontological resources and prehistoric archaeological resources. The project area is moderately sensitive for historic archaeological resources. Implementation of Mitigation Measures BIO-1, and CR-1 to CR-3, as provided in this Initial Study, would ensure impacts to biological and cultural resources are less than significant. Therefore, no significant adverse impacts are identified or anticipated and no additional mitigation measures are required.

b) **Less Than Significant Impact**. Cumulative impacts are defined as two or more individual affects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The CEQA Guidelines, Section 15130 (a) and (b), states:

(a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Impacts associated with the Proposed Project would not be considered individually or cumulatively adverse or considerable. Impacts identified in this Initial Study can be reduced to a less than significant impact. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) **Less than Significant Impact.** The incorporation of design measures, City of Victorville policies, standards, and guidelines and proposed mitigation measures would ensure that the Proposed Project would have no substantial adverse effects on human beings, either directly or indirectly on an individual or cumulative basis. Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

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ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

November 27, 2018
(2018-220)

Brent Sutter
Woodard & Curran
980 Washington Street Suite 325
Dedham, MA 02026
Via email: bsutter@woodardcurran.com

Subject: **Results of Protocol-level Desert Tortoise Survey Conducted for the SCLA Reclaimed Water Reservoir II Project, City of Victorville, California**

Dear Mr. Sutter:

This letter report presents the results of the protocol-level desert tortoise (*Gopherus agassizii*) survey conducted by ECORP Consulting, Inc. (ECORP) for the SCLA Reclaimed Water Reservoir II Project (Project), City of Victorville, San Bernardino County, California. The protocol-level desert tortoise survey was conducted in accordance with the recommended survey protocol methods described in the USFWS document *Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise*, which requires a 100 percent coverage pedestrian transect survey of the project site be conducted prior to construction activities to ensure that no desert tortoises or desert tortoise burrows are located within the Project Site. This report contains a summary of the survey results.

Project Description and Location

The City of Victorville proposes to construct a new 1,000,000-gallon pre-stressed concrete water storage reservoir on city-owned, undeveloped property, in the City of Victorville, San Bernardino County, California (Figure 1). The Project Site is approximately three miles east of State Route 395, one and a half miles west of National Trails Highway, and a half mile north of Air Base Road. The Project Site is located within the northwest portion of the U.S. Geological Survey (USGS) Victorville 7.5-minute topographic quadrangle in Sections 25, Township 6 North, Range 5 West. Elevation at the site is approximately 2,875 feet above mean sea level (Figure 2). The Project Site is bounded by the former George Air Force Base Barracks with abandoned housing to the north and northeast, an equipment storage facility to the west, run-down base facilities to the southwest, and the West Winds Golf Course to the south and southeast.

The Project Site consists of approximately 10-acres of disturbed habitat, with dominant species being rabbitbrush (*Ericameria nauseosa*), fourwing saltbush (*Atriplex Canescens*), Russian thistle (*Salsola tragus*), and telegraph weed (*Heterotheca grandiflora*). The Project Site also contained chokecherry (*Prunus virginiana*) throughout and tamarisk (*Tamarisk aphylla*) and Desert Willow (*Chilopsis linearis*) occurr along the edges of the abandoned housing facilities. The Project Site contained compacted soils and remnant piles of disturbed soil were also present within the Project Site. Signs of vehicle disturbances were present in the form of two-track trails within the Project Site.

Location: N:\2018\2018-220 sub to Woodard and Curran DT Survey SCLA\MAPS\Location_Vicinity\SCLA_reservoir_project_vicinity.mxd *(AA)-mapping_guest 11/26/2018*

Map Date: 11/26/2018

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

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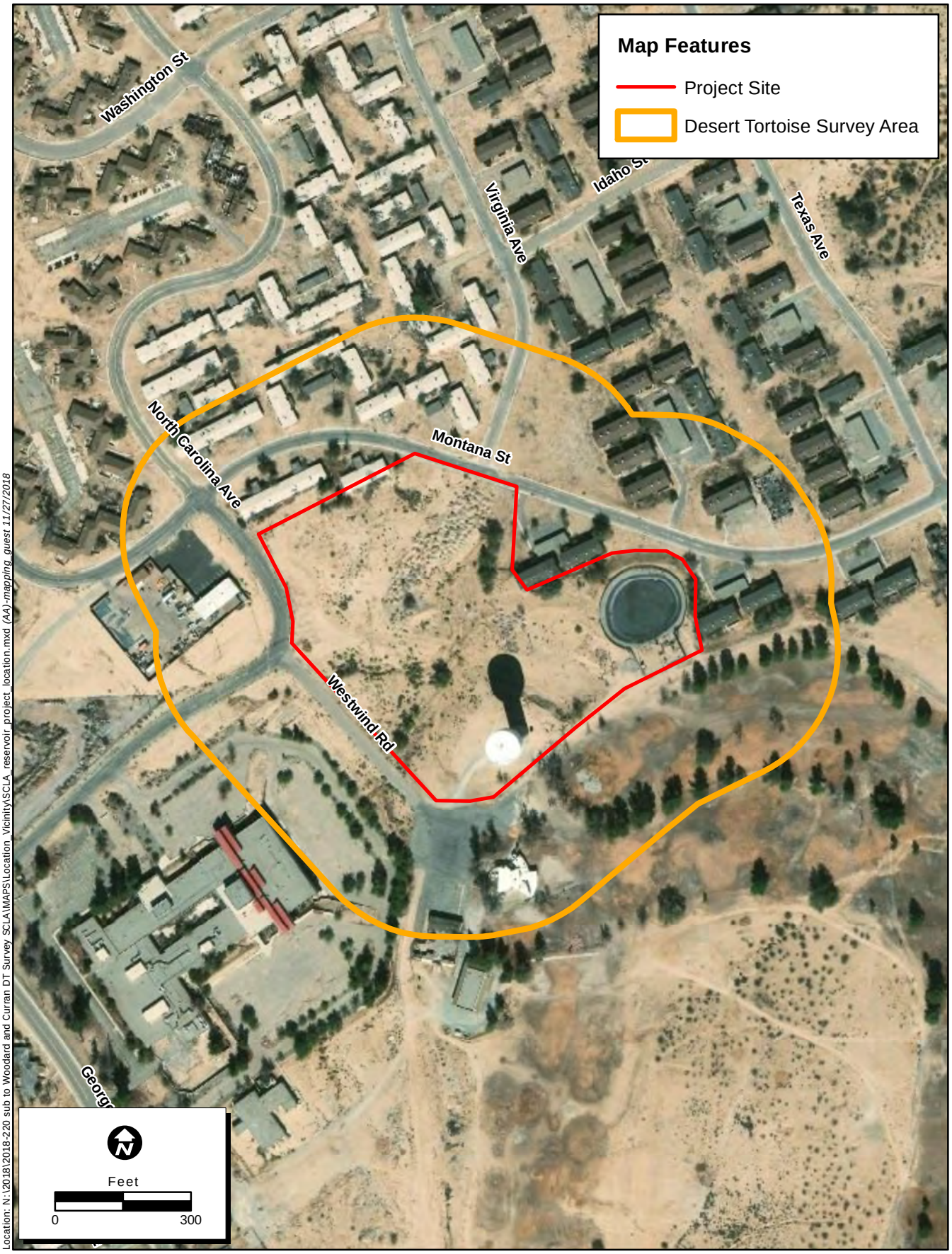
Figure 1. Regional Project Location

2018-220 SCLA Reclaimed Water Reservoir II Project



Location: N:\2018\2018-220 sub to Woodard and Curran DT Survey SCLA\MAPS\Location_Vicinity\SCLA_reservoir_project_location.mxd *(AA)-mapping_guest 11/27/2018*

Map Date: 11/27/2018

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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Figure 2. Project Location

2018-220 SCLA Reclaimed Water Reservoir II Project

Methods

Protocol-level survey for the desert tortoise was conducted by qualified biologists according the methods listed in the USFWS document *Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise*, which requires a 100 percent coverage survey of the Project Site, with a focus on locating all desert tortoises above and below ground within the Project Site. As described in the protocol, the first survey was conducted prior to project activities to determine presence or absence of desert tortoise within and around the Project Site.

The desert tortoise survey area included the entire project boundary and a 300-foot buffer. The biologists walked throughout the desert tortoise survey area using pedestrian transects spaced no more than 30 feet apart to provide 100-percent survey coverage. The biologists checked under shrubs and trees and visually inspected any burrows encountered for desert tortoise or desert tortoise sign. The biologists conducted surveys during atmospheric conditions most conducive to observing desert tortoise and avoided adverse conditions that might have inhibited tortoise activity, including high winds and temperature extremes (less than 50 degrees Fahrenheit [°F] and greater than 104°F). If encountered, desert tortoises or their sign (e.g., burrows, carcasses, scat, pallets, drinking sites, tracks, mating rings) were recorded using a GPS device unit in Universal Transverse Mercator (UTM) coordinates, North American Datum 1983 (NAD 83), Zone 11. The date of observation, sign type, sign classification (according to the survey protocol), amount of sign, and any pertinent comments were recorded for any sign encountered. When feasible, photographs were taken of desert tortoises and representative desert tortoise sign.

Results

The protocol-level Desert tortoise survey was conducted by ECORP senior wildlife biologist, Phillip Wasz and assistant biologist, Torrey Rotellini on October 30, 2018. Weather conditions during the survey are presented in Table 1.

Table 1. Weather Conditions during Survey

Date	Time		Temperature (˚F)		Cloud Cover (%)		Wind Speed (m.p.h.)	
	start	end	start	end	start	end	start	end
10/30/2018	0800	1000	52	63	0	0	1-3	1-3

No desert tortoise, desert tortoise burrows, or sign of desert tortoise (e.g., scat, tracks, etc.) were identified on the Project Site, or within the 300-foot buffer during the protocol level desert tortoise surveys.

Discussion

Based on the negative findings of the pre-construction presence/absence surveys, it was determined that desert tortoise was not present on the Project Site at the time of the survey. Protocol-level desert tortoise surveys are formally valid for a period of one year from the date of the survey. For this reason, the survey may need to be updated if construction is delayed past one year from the date of the survey, or if noteworthy changes occur to the project's impact area.

Although the Project Site is located within the desert tortoise range, the poor-quality habitat on site likely precludes this species from occurring on site. However, to avoid project-related impacts to

tortoises potentially occurring on or in the vicinity of the Project Site, it is recommended that a pre-construction survey be conducted no more than 14 days prior to construction to ensure that no desert tortoises are on the Project Site prior to construction.

Thank you for the opportunity to work on your project. If you have any questions regarding the contents of this letter report, please contact me at (909) 307-0046 or pwasz@ecorpconsulting.com.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

SIGNED: _____ DATE: November 27, 2018

Phillip Wasz
Senior Wildlife Biologist
ECORP Consulting, Inc.
215 N. 5th Street
Redlands, CA 92374

Attachments:
Attachment A: Representative Site Photos

Photo 1: Middle of Project Site looking northeast.

Photo 2: Middle of Project Site looking west.

Photo 3: Vehicle disturbances within Project Site looking east

Photo 4: Soil pilings within Project Site looking south

A PHASE I CULTURAL RESOURCS INVESTIGATION FOR THE PROPOSED VICTORVILLE 1 MG RESERVOIR AND PIPELINE PROJECT, CITY OF VICTORVILLE, SAN BERNARDINO CO., CALIFORNIA

(USGS Victorville Quadrangle, rev. 1993)

Prepared for:

LILBURN CORPORATION
Attn: Cheryl Tubbs
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Prepared by:

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Job No. 08-19-10-2011
October 29, 2019

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A PHASE I CULTURAL RESOURCS INVESTIGATION FOR THE PROPOSED VICTORVILLE 1 MG RESERVOIR AND PIPELINE PROJECT, CITY OF VICTORVILLE, SAN BERNARDINO CO., CALIFORNIA

(USGS Victorville Quadrangle, rev. 1993)

by,

Jeanette A. McKenna, MA/RPA
McKenna et al., Whittier CA

INTRODUCTION

McKenna et al. (Appendix A) initiated this Phase I cultural resources investigation of the proposed 1 MG Reservoir and pipeline project in the City of Victorville, San Bernardino County, California, at the request of Lilburn Corporation, San Bernardino, California, and the City of Victorville, Lead Agency for the project. The proposed project involves the development of a one million gallon pre-stressed, circular, concrete reservoir within the Southern California Logistics Airport (SCLA) industrial park (aka George Air Force Base), and an associated pipeline extending to Air Expressway and a connection to the existing system north of Air Expressway. These studies were completed for compliance with the California Environmental Quality Act (CEQA), as amended, and local City of Victorville policies and guidelines.

LOCATION AND SETTING

The proposed project area is located in the western portion of the City of Victorville, adjacent to the City of Adelanto, west of the Mojave River, and within the SCLA boundaries (Figures 1 and 2). The Area of Potential Effects (APE) is illustrated in Figure 3. This location is equated to Township 6 North, Range 5 West, Section 25 (see Figure 2). More specifically, the location is within the abandoned residential community of George Air Force Base; northeast of Westwind Road and Southwest of Montana Street (Figure 4). The existing tower within the project area is located at NAD 83 UTMs 467132E/3826352N (NAD 27 UTMs = 467243E/3826151N).

Figure 1. General Location of the Project Area.

The average elevation within the project area is 2,880 feet above mean sea level (AMSL). In general, the topography of the SCLA slopes to the east, towards the Mojave River channel, which is less than one mile east of the project area and at an elevation of approximately 2,640 feet AMSL.

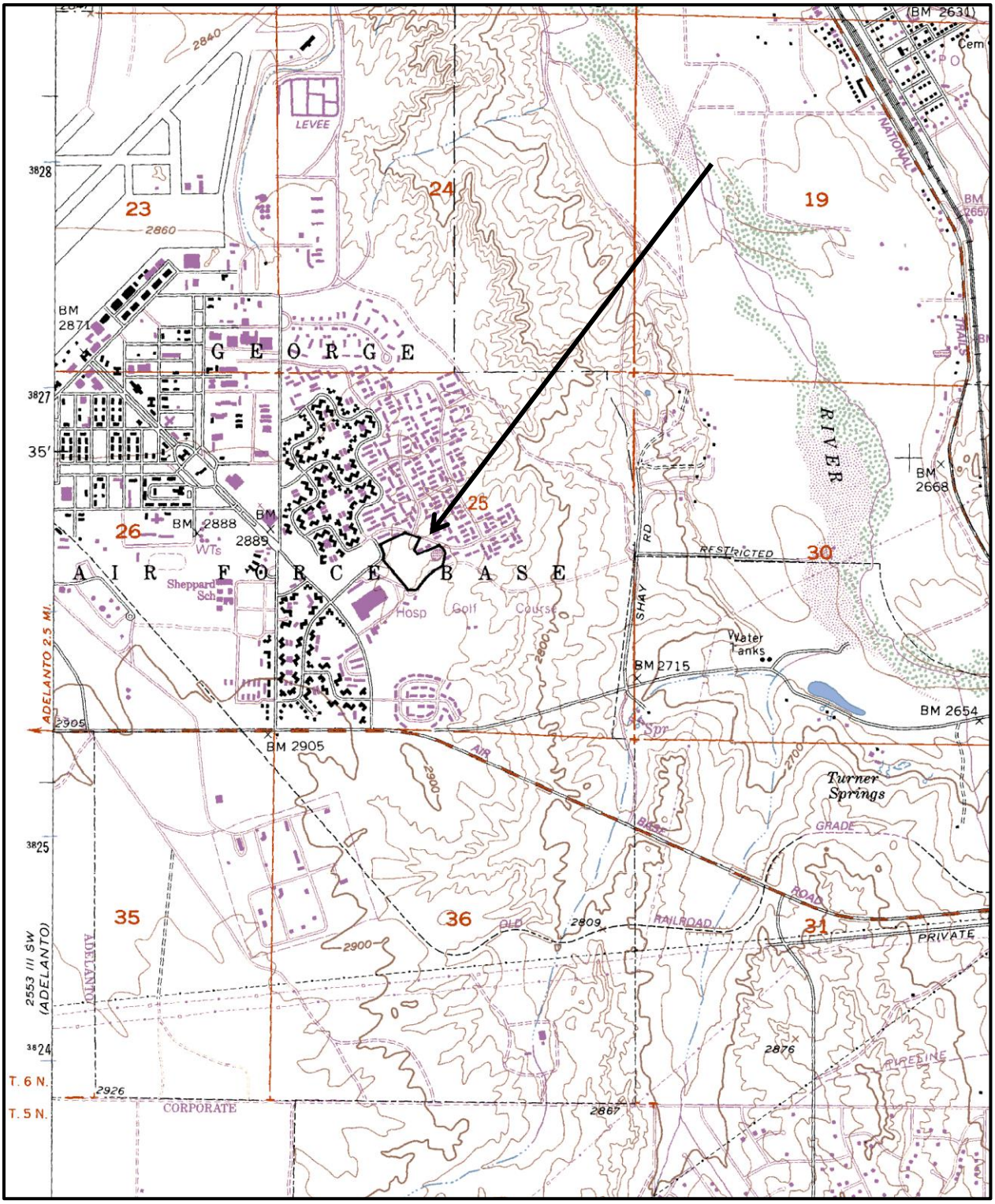

Figure 2. Specific Location of the Project Area (USGS Victorville Quadrangle, rev. 1993).

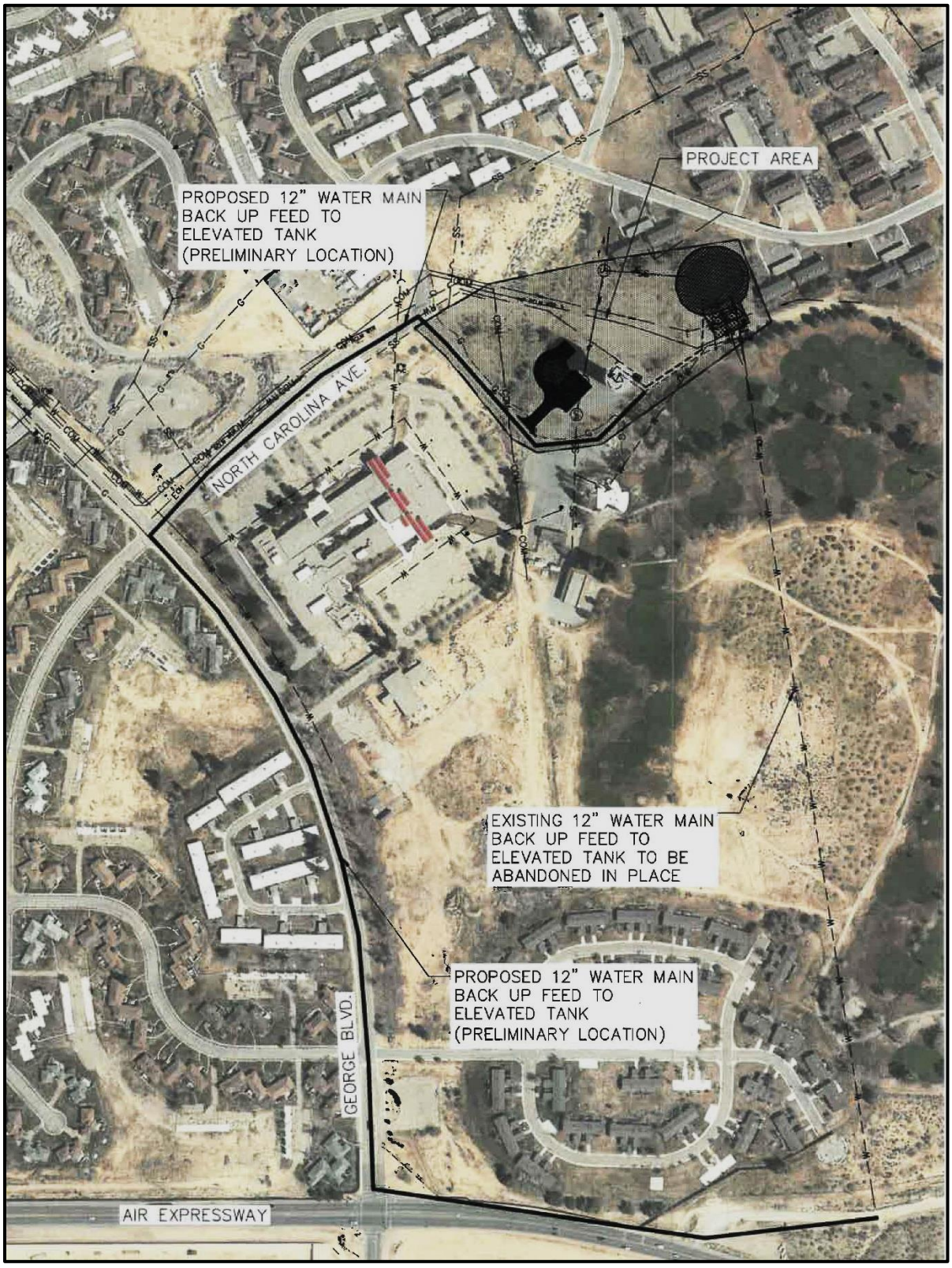

Figure 3. Area of Potential Effects.

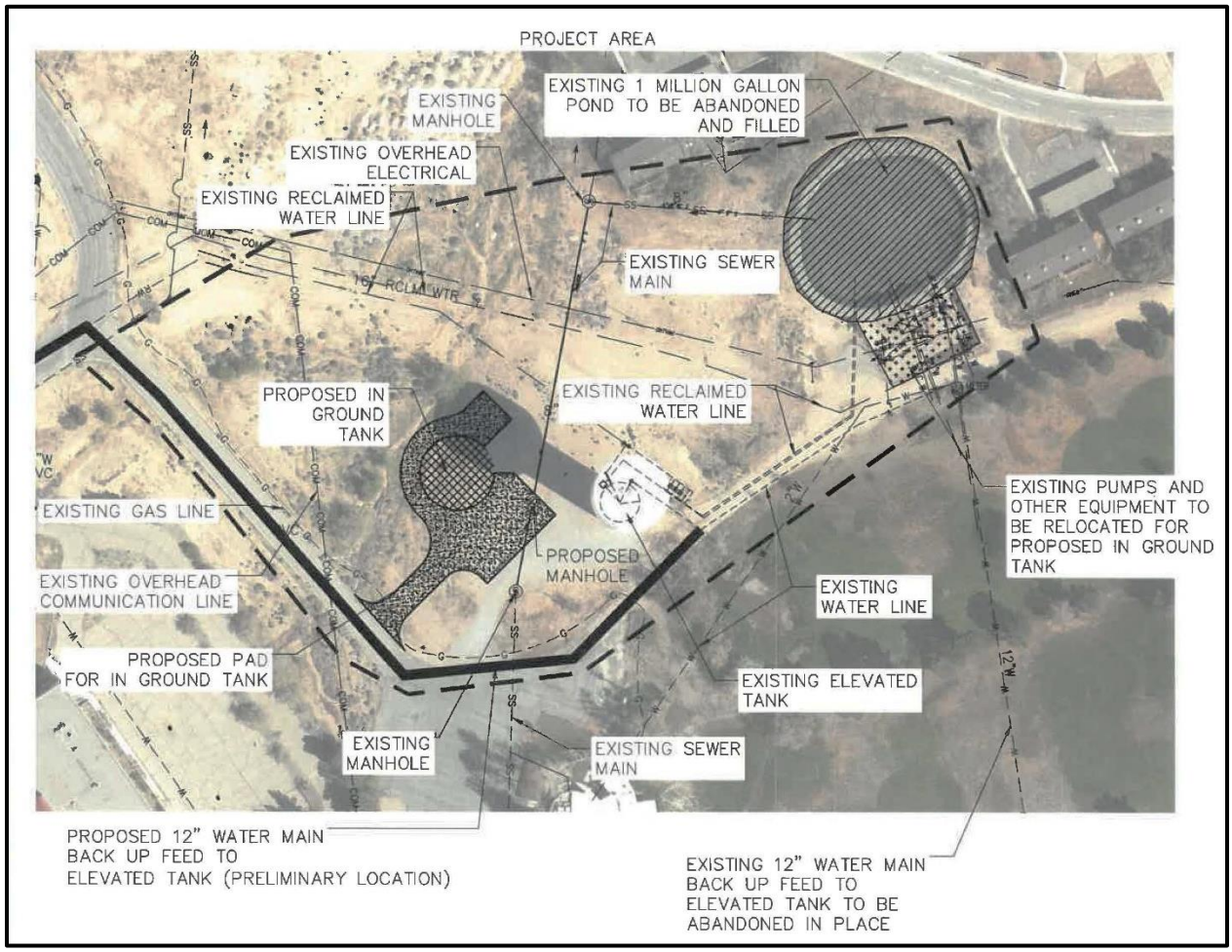

Figure 4. Proposed Development Plan.

The project area is due west of the Mojave River and within the Mojave Desert, north of the San Bernardino Mountains. The Mojave River is fed by run-off from the San Bernardino Mountains and numerous creeks and drainages (e.g. Oro Grande Wash) both north and south of the river course. Norris and Webb (1990:240-241) state:

> The Mojave River, the only major stream crossing the Mojave block, is intermittent through most of its course from its head in the San Bernardino Mountains to its pre-sent terminus in Soda Lake ... In earlier postglacial time, the river continued north and joined the Amargosa River flowing into Death Valley. The unusual variation in the river's channel patterns are at least partially due to the complex local history of segments of the Mojave block.

> The Mojave River has three widely separated areas of construction where surface flow usually occurs. The Victorville water gap, on which the river is superimposed, is a mass of bedrock formerly buried by alluvium ... The bedrock is now being exhumed because of local shift in base level ...
>
> Like most desert streams, the Mojave River is characterized by wide swings in water volume, Its average runoff is 101 million cubic meters (82,300 acre feet), but it varied from as few as 5.3 million cubic meters (4,340 acre feet) in 1951 to as many as 425 cubic meters (345,000 acre feet) in 1922, a volume greater than observed in any other southern California stream apart from the San Gabriel River.

Soils along the Mojave River tend to consists of loose, sandy soils of decomposing granitics from the nearby mountains. Organic material carried by the river allows for the development of loams and grasslands intermixed with the desert sage scrub and juniper pines of the lower elevations. There may be some cacti in the area, but its presence would be considered intermittent.

The Mojave Desert region is geologically a great wedge-shaped fault block bounded by the San Andreas and Garlock fault zones on the southwest and north, respectively, but has no definite natural eastern limits. Mountain ranges separate the Mojave Desert from the coastal areas to the southwest and from the Basin and Range province to the north. Duke and Shattuck note this area as being associated with deposits of "… well sorted metamorphic and granitic gravels and cobbles that are eroding from the San Bernardino Mountains to the south. The Lucerne Valley is rich in minerals … mining efforts are primarily concentrated on mining of non-metal minerals such as gravel, calcium carbonate and high quality limestone for the construction industry …" (2003:4-5).

The desert itself is characterized by north-south trending mountain ranges which enclose expanses of arid valleys and low-lying basins or sinks (Harry 1992). Lithic resources are restricted to the buttes and ridges which rise above the unconsolidated alluvium. Because few systematic archaeological surveys have been conducted in the area, it is unknown how widespread are lithic materials suitable for prehistoric tool production (Harry 1992). McLeod (2012) identifies the specific project area as consisting of some artificial fill in the northwestern portion of the project area and older terrestrial Quaternary Alluvium deposits derived from the "ancestral Mojave River" and referred to as Shoemaker Gravel. Fossil specimens have been known to be associated with these older alluvial deposits, including specimens from the western portion of George Air Force Base [SCLA} and from the western banks of the Mojave River.

The climate of the area is described as sub-arid, transitional between the relatively colder climate of the nearby Great Basin and the subtropical climate of the Sonoran Desert (McCorkle-Apple and Lilburn 1992:2; Axelrod 1979). Seasonal temperatures vary, as do levels of rain, general humidity, and wind. Temperatures can range from below 60^{o} Fahrenheit to over 100^{o} Fahrenheit. Sparse precipitation and high temperatures create a situation where evaporation exceeds precipitation, particularly in those areas lying below 5,000 feet above mean sea level (AMSL) in elevation (Warren and Crabtree 1986:183). Reliable water sources are currently available only along major rivers, intermittent streams and springs, and seasonal clay pans.

During the early Holocene (10,500 to 8,000 B.P.) climatic fluctuations have been recorded, along with a trend towards warming and drying characterized by the disappearance of lakes and a reduction in the number of springs. The area became wetter in the middle Holocene (ca. 5,100 B.P.) and warmer and drier again post-2,000 B.P. Citing Weide (1982), the last 2,000 years have been characterized by considerable "climatic oscillations" ranging from extreme droughts and massive flooding.

The effects of changing paleoclimatic conditions on the hydrological, floral and faunal patterns of the western Mojave Desert and adjacent mountain areas are only partially understood. The flora and fauna of this area adjusted to the changing conditions. Flora is dominated by the presence of creosote bush scrub *(Larrea divaricata*) and salt bush (*Atriplex confertifolia*). Citing Barbour and Major (1977), creosote is drought-tolerant and salt bush is often found near dry playas. Blackbrush (*Coleogyne ramosissima*) and various species of cacti are also common.

Local fauna includes a variety of reptiles, rodents, small carnivores, and birds. Species of reptiles include the desert tortoise (*Gopherus Agassizi*), chuckawalla (*Sauromalus obesus*), rattlesnakes (*Crotalus*), shovelnose snake (*Chionactis occupitalis*) and several species of lizards. Carnivores include coyotes (*Canis latrans*), badger (*Taxidea taxus*), desert kit fox (*Vulpes macrotis*), and bobcat (*Felis rufus*). The small mammals include black-tailed jackrabbits (*Lepus californicus*), woodrat (*Neotoms* sp.), ground squirrels (*Spermophjilus* sp.), and cottontail jackrabbits (*Sylvilagus audobonii*).

Large herbivores associated with high elevations include the desert bighorn sheep (*Ovis canadensis*) and mule deer (*Odocoileus hemionus*). Avifauna includes the LeConte thrasher (*Toxostoma lecontei*), sage thrasher (*Oreoscoptes montanus*), cactus wren (*Heleodytes brunneicapillus*), raven (*Corvus corax*), red-tailed hawk (*Buteo jamaicensi*) turkey vulture (*Cathartes aura*), various ducks (*Anas*), and the American coot (*Fulica americana*).

CULTURAL/HISTORICAL BACKGROUND

The project area is located within ethnographic boundaries of the prehistoric, proto-historic, and historic Serrano Indians of Southern California (Bean and Smith 1978:570). Through their association with the San Bernardino Mountains, the Serrano were named from the Spanish word for "mountaineers" or "highlanders" Kroeber (1976:611; McKenna 1991:3). Their territory, however, also extended well onto the Mojave Desert floor, and the Serrano utilized numerous resources found in both mountain and desert environments (Bean and Brake-Vane 1981). Serrano life ways have been documented by Benedict (1924, 1926), Kroeber (1925), Strong (1929), and Drucker (1937).

The Serrano are culturally associated with their surrounding neighbors (the Gabrielino, Luiseno, Cahuilla, and Cupeno), but distinguished by their linguistic associations with Takic speakers of the eastern desert regions - of Shoshonean stock (e.g. the Kitanemuk and Vanyume; see Bright 1975; Kroeber 1907 and 1925). Known as hunters and gatherers, there are no definitive boundaries for Serrano territory. Kroeber (1976:615) states:

> Their territory was, first the long San Bernardino Range culmination in the Peak of that name, and in Mount San Gorgonio, more than 11,000 feet high. Next, they held a track of unknown extent northward. In the east this was pure desert, with an occasional water hole and two or three flowing springs. In the west it was a region of timbered valleys between rugged mountains. Such was the district of Bear Lake and Creek. In the third place they occupied the San Gabriel Mountains or Sierra Madre west to Mount San Antonio. This range is almost a continuation of the San Bernardino Range ...

Although their exact territorial boundaries were undefined, the Serrano are known to have identified definitive or favored territories for the exploitation of Native resources (Strong 1929). Bean and Smith suggest that the Serrano territory was somewhat restricted to the San Bernardino Mountains, east of the Cajon Pass and between Yucaipa and Victorville (1978:570).

Serrano material culture included bedrock mortars, portable mortars, pestles, metates, manos, and numerous forms of chipped stone tools. The Serrano also produced many items from wood, plant fibers, and animal products, including decorated baskets, feathered costumes, and rabbit skin blankets. Shells were traded from coastal groups. Pottery was made late in prehistory. Ceremonial rock art – *pictographs* (rock paintings) and *petroglyphs* (rock carvings) – are also found in Serrano territory.

Serrano family dwellings consisted of circular, domed structures with thatched exteriors. Cooking and other routine household activities were usually conducted outside, under an open-air shelter or *ramada*. Hearths situated within structures were generally used for heating. Larger ceremonial structures were reserved for lineage leaders, group ritual events, and storage of religious materials. Because most items associated with ceremonial life were of perishable materials, few religious artifacts have been identified in Serrano archaeological sites. Substantial structures such as earth-covered, semi-subterranean sweat houses were generally features of larger settlements.

The Serrano practiced cremation prior to European contact. The deceased was cremated immediately following death, along with most of the personal possessions. Some personal items were burned by the deceased's family during a special ceremony one month later. Annual seven-day mourning ceremonies involving one or more villages commemorated all those who had died the previous year. These larger events also served as opportunities to trade, socialize, and share food and gifts.

McCorkle-Apple and Lilburn (1992:6) provided a relatively detailed discussion on the prehistory of the greater western Mojave Desert:

> While much is known about the prehistory of the Mojave Desert, relatively few formal archaeological investigations have been conducted in the southern portion of the central Mojave. As a result, little specific regional information on prehistory is known. General summaries can be found in Stickel and Weinman-Roberts (1980), Warren (1980, 1984), and Warren and Crabtee (1986).
>
> Chronological Framework
>
> The earliest generally accepted evidence for human occupation of the Mojave [d]esert dates from around 12,000 B.P. [although more recent studies have cited the presence of Paleo-Indian resources, including Clovis Points]. Claims have been made for much earlier dates (e.g. Simpson 1958), but as Warren and Crabtree (1986:184) note, these are controversial and bear little relationship to later cultural developments in the region.
>
> Sites dating to the Lake Mojave period (12,000 to 7,000 B.P.) serve as the basis for our understanding of the earliest undisputed occupation of the Mojave Desert. Sometimes considered a Paleo-Indian assemblage, the Lake Mojave complex is thought by some researchers to be directly ancestral to

the subsequent early Archaic cultures (Warren and Crabtree 1986). Lake Mojave period sites are usually open air sites and are limited to the surface, although sites with substantial subsurface deposits have been recently identified in the central Mojave (Jenkins 1985).

Since sites of the Lake Mojave period are often found in association with Late Pleistocene/Early Holocene lake stands and outwash drainages, some researchers have suggested that lacustrine resources were a subsistence focus. Others argue that grasslands suitable for the grazing of Late Pleistocene mega-fauna would have surrounded the terminal Pleistocene lakes, and that this was the main subsistence focus of the Lake Mojave cultural groups (Warren and Crabtree 1986). Regrettably, few sites dating to the early part of the Lake Mojave period have been excavated and little direct evidence of subsistence practices has been reported. Recent excavations of sites dated to the latter part of the period have revealed an unexpectedly high incidence of small mammal bone relative to large mammal bone. This suggests that we may need to refine our ideas about the subsistence focus of Lake Mojave cultures, or at least grant that substantial subsistence change occurred during the period.

Artifacts typical of the period include leaf-shaped points and long-stemmed, narrow-shouldered points of the Lake Mojave series and the short-bladed, shouldered points of the Silver Lake series. A variety of large scrapers and flaked stone crescents are also considered diagnostic of the period. Milling equipment is thought to be rare or absent (Amsden 1937). Fluted points are sometimes found in possible association with Lake Mojave sites, but their cultural and chronological relationship to the stemmed point series remains questionable.

Relatively little material from the Lake Mojave period has been documented in the southern Mojave. Some of the earliest widely accepted finds come from the Black Butte site (CA-SBR-1554). This site is located on the south side of Black Butte, a volcanic plug approximately 6km west of the Troy Lake portion of Lake Manix. The site assemblage is dominated by later period Pinto points but also contains a Lake Mojave point, a Silver Lake point and two items tentatively identified as crescents (Lord 1987).

The next identifiable period in the Mojave Desert is that associated with Pinto series points (Warren and Crabtree 1986). Although period markers, some questions remain concerning their placement in time …

Two scenarios exist, both of which are tied to the transition to arid conditions in the middle Holocene. Some archaeologists (Donnan 1964; Kowta 1969; Wallace 1962) have proposed by the desert was essentially abandoned between 7,000 and 5,000 B.P. Other researchers (Susia 1964; Tuohy 1974; Warren 1980) argue that no evidence of an occupational hiatus of any great magnitude exists within the archaeological record. Central to this debate are the definition and dating of Pinto points (Warren and Crabtree 1986). The problem is complicated by the fact that points morphologically similar to Pinto points occur generally later in time in the central and eastern Great Basin than do true Pinto points in the Mojave (Thomas 1981; Vaughan and Warren 1986).

Like sites of the preceding period, Pinto sites are typically found in open settings in relatively well-watered locales. Early Pinto sites have been found in close association with late Lake Mojave sites, lending support to Warren and Crabtree's suggestion that the Pinto cultures developed directly from the preceding Lake Mojave ones. The Pinto period signals the beginning of cultural adaption to the desert, an adaptation to the more arid conditions. Grinding tools were incorporated into the artifact assemblage, suggesting that the processing of hard seeds became more important in the subsistence system. It is, however, generally thought that Pinto peoples maintained a mobile subsistence strategy, focused primarily on hunting large mammals.

A time of greater effective moisture in the Mojave dates to approximately 4,000 B.P. This time period, sometimes referred to as the Little Pluvial (Warren 1980), also corresponds to a new era in Mojave Desert pre-history. It was during this time, the Gypsum Period (4,000 to 1,500 B.P.), that more favorable environmental conditions allowed an increase in the population (Elston 1982). Ritual items such as zoomorphic rock art and split-twig figures are thought to indicate a continued emphasis on hunting, while the increased importance of processing of plant foods is indicated by an increase in the frequency and diversity of groundstone implements (Warren and Crabtree 1986). Open sites are in evidence, along with rock shelters and caves. Such sites have yielded perishable goods including basketry and atlatls from the Gypsum period. Habitation sites with well developed middens are found in association with water and near resource areas. During this period shell beads from coastal California are found in the desert for the first time. Trade activity appears to have been greater in many parts of the Great Basin during the Gypsum period (Bennyhoff and Hughes 1987) …

Eastgate and Rose Spring points began to dominate artifact assemblages in the Mojave sometime after 2,000 B.P. (Lyneis 1982:176). In the chronology presented by Warren and Crabtree (1986) these are assigned to the Saratoga Springs period (1,500 B.P. to 750 B.P.). This time period was marked by an increase in regional differences, except in the northwestern Mojave where sociocultural continuity seems to have occurred (Whitley 1988).

Basketmaker III and Anasazi developments occurred along the tributaries of the Colorado River. Anasazi "influence" in the form of painted ceramics extended well into the eastern Mojave. Although the exact nature of this influence is not completely understood (Lyneis 1982), it seems probable that the increased distribution of these painted ceramics resulted from exchange rather than by Anasazi attempts to greatly expand their territory. Different influences were felt in the southern Mojave. Here Hakatayan (or Yuman) ceramics similar to those originating in the lower Colorado River occur, along with Cottonwood points. This interaction is most evident along the Mojave River, supporting the widely held conclusion that the Mojave River served as a major trade corridor connecting the coastal portion of California with regions to the east (Warren and Crabtree 1986).

The Oro Grande site in the western Mojave [near Victorville] may be a key site in understanding varying cultural influences during the Saratoga Springs period. Situated on the Mojave River near Victorville, this site contains a midden deposit dated to the period between 1,100 and 650 B.P. (Rector 1979). Cottonwood series points dominate the point assemblage. Significantly, no ceramics were recovered. Other materials at the site, however, were similar to those found in other sites along the river. The more gradual development of Lower Colorado River influences may account for the lack of pottery at Oro Grande although Warren (1984) considers the absence of ceramics to be strong evidence for the presence of Rogers' (1945) "nonceramic Yuman" pattern. The Oro Grande complex would then be the "initial phase" of the Hakataya influence in the upper Mojave. Warren (1984:403) proposes that the complex may not have developed in the Mojave Sinks, because the Anasazi influence may have persisted there until it was replaced by fully developed Hakatayan cultures.

The next period, the Protohistoric period (750 B.P. to contact), was marked by the presence of Desert Side-notched projectile points. The Numic influ-

> ence during this period is identified with the presence of brownware, considered typical of the Paiute and Shoshone. Based on the distribution of this brownware, the contact between the Numic and the Lower Colorado (Patayan or Hakatayan) traditions was located north of Soda Lake and Cronise Lake basins (Warren 1984:425). Recent work in the region appears to support this conclusion (Schneider 1988; Jenkins 1986; York 1989). Protohistoric period sites include habitation sites with developed middens, located near reliable water sources. Temporary camps and a variety of resource procurement and processing stations also occur.

The Serrano were patrilocal and small encampments generally consisted of a nuclear family and the married sons' families. They recognized totemic moieties and a series of band or local subdivisions - though not necessarily associated with clan systems. The Serrano acknowledged the power of Shamanism. Citing Bean and Smith (1978: 573):

> The Serrano shaman *h^{w}öm_*, like most southern California shamans, was "psychically" predisposed for his possessions and acquired his various power through dreaming, assisted in the process by the ingestion of datura (Strong 1929; Bean 1962-1972). Shamans were mainly curers, healing their patients through a combination of sucking out the disease-causing agents and administering herbal remedies (Benedict 1924).
>
> Serrano cosmogony and cosmography closely parallel that of the Cahuilla. There are twin creator gods, a creation myth told in "epic poem: style, each local group having its own origin story, water babies whose crying foretells death, supernatural beings of various kinds and on various hierarchically arranged power-access levels, and Orpheus-like myth, mythical deer that no one can kill, and tales relating the adventures (and misadventures) of Coyote, a tragicomic trickster-transformer culture hero (Bean 1962-1972; Benedict 1924).

Fauna exploited by the Serrano include mountain sheep, antelope (suggesting exploitation further north), deer, rabbits, small rodents, birds, and occasionally fish (Bean 1962 and 1972). Meats were generally prepared in earthen ovens and watertight baskets, although hot coals and trays were also used (Bean and Smith 1978:571). Surplus meats were dried for future use.

Serrano women were predominantly responsible for the greater amount of gathering. Flora utilized by the Serrano include: acorns, seeds, pinon nuts, bulbs, tubers, shoots, roots, berries, and mesquite (Strong 1929; Kroeber 1925). Other primary resources included yucca roots, cacti fruits, and chia (Strong 1929; Kroeber 1925; Drucker 1937; and Benedict 1924).

European contact with the Serrano dates to 1771, with the founding of the Mission San Gabriel de Arcangel, and 1772 (Pedro Fages' California expedition). Contact was minimal until ca. 1819, when the Redlands *Asistencia* were established. Between 1819 and 1824, the majority of Serrano were physically relocated to the Mission properties (Beattie and Beattie 1939:336), but with Secularization (beginning in 1824), many of the remaining Serrano returned to their traditional territories.

The recognized Serrano of today are associated with the San Manuel and Morongo Reservations in San Bernardino and Riverside Counties, respectively. It is estimated that fewer than 3,000 Serrano remain in Southern California (Robinson 1990:16-17).

The contact period with Native American populations was initiated with Spanish explorations of the Mojave Desert and the coastal regions of Southern California. First contact with Europeans probably occurred in 1772, when Spanish explorer Pedro Fages passed through Serrano lands.

More substantial interaction with Europeans came through establishment of an *asistencia* (outlying chapel) of Mission San Gabriel at Redlands in 1819. Many Serrano were forced to live near the Asistencia and other Spanish mission areas (Beattie and Beattie 1939). Inhumations (rather than cremations) are generally associated with the historic period and reflect a level of acculturation attributed to the European influences.

Historically, the San Bernardino Mountains and western Mojave Desert were partially explored by Spanish and Mexican populations prior to the early 1850s exploitation by U.S. citizens looking for lumber, gold, and/or recreational purposes (Lawton 1965 - reprinted from 1883). Little is known about the Serrano's transition into the historic period (see Campbell 1931; Haenszel 1957; Hicks 1959). In fact, prior to 1883, only a few roads were developed in the San Bernardino Mountains - all associated with the lumber industry (Lawton 1965:94) – and even fewer crossed into the Mojave Desert.

The Mojave Trail (later known as the Mormon Trail and/or National Old Trails Highway) was one of the earliest and ran relatively close to the Mojave River, through Oro Grande and Victorville, connecting Salt Lake City with San Bernardino. Citing Duke and Shattuck (2003:6-7):

> Although the Spanish explorer Francisco Garces visited the Mojave Desert and took note of its native inhabitants during the 1700s, the area remained largely unsettled by European descendents [sic] until the American Period of 1848 ...

The current project area is located outside the boundaries of any recorded Spanish or Mexican Land Grant. Likewise, the project area is relatively distant from any Mission settlements. The property is, however, located in a general area traversed during historic times and associated with historic routes, depicted on early maps. The Bureau of Land Management General Land Office Records identify the land associated with Township 6 North, Range 5 West, and Section 25 as being granted to the Southern Pacific Railroad in 1918 (along with many other odd-numbered sections).

With respect to the development of George Air Force Base and its associated support systems, the Base was opened in 1941 as a training school for World War II flyers and was officially closed to military activities in 1992 (www.trazzler.com/trips/george-air-force-base-southern-california-logistics-airport-in-victorville-ca-92394. A base summary prepared by the Pacific Southwest, specifically for George Air Force Base reads:

> George Air Force Base occupies 5,347 acres and is located in San Bernardino County, California near the cities of Victorville and Adelanto. The base was established in World War II and closed in December 1992. Its mission was to support tactical fighter operations and provided training for air crews and maintenance personnel. The meet mission requirements, the base engaged in a variety of support operations such as aircraft maintenance and fire fighting training that mandated the use and disposal of hazardous and non-hazardous materials.

A more detailed history of the base was derived from the Air Force Historical Research Agency (2012):

> George Air Force base (1941-1992) is the former United States Air Force base located within city limits, 8 miles northwest of central Victorville, California, about 75 miles northeast of Los Angeles, California. The facility was closed by the Base Realignment and Closure (or BRAC) 1992 commission at the end of the Cold War. It is now the site of Southern California Logistics Airport. The base was listed as a Superfund site on February 21, 1990.

George Air Force Base was named in honor of Brigadier General Harold Huston George (1892-1942) on June 2, 1950. A World War I fighter ace, General George directed air operations on Bataan at the beginning of World War II. He died on April 29, 1942 in an aircraft accident bear Darwin NT, Australia … George AFB, originally called the Victorville Army Flying School, was constructed between 1941 and 1943 as a flight training school. It was renamed Victorville Army Air Field on April 23, 1943, and after the creation of the United States Air Force, Victorville Air Force Base on January 13, 1948. Known World War II units based at Victorville AAF were:

- 87th Air Base Squadron (November 1941-April 1944) (Administrative Headquarters Unit)
- 3035th AAF Base Unit (April 944-Navember 1945) (Administrative Headquarters Unit)
- 4196th AAF Base Squadron (November 1945-January 1948 (Administrative Headquarters Unit)
- USAAC/USAAF Advanced Flight School (June 1941-December 1944)
- USAAF Bombardier School (June 1941-December 1944)
- Army Air Force Radar Observer School (September 1944-October 1943)
- 516th, 517th, 518th Basic Flight Training Squadron (November 1941-February 1944)
- 520th, 521th, 522d, 524th Bombardier Training Squadron (January 1942-April 1944)
- 983d, 984th, 985th Bombardier Training Squadron (July 1942-April 1944)

Known sub-bases and auxiliaries of Victorville AAF were:

- Hawes Auxilliary Airfield (No. 1) 34º55’30”N 117º22’27” (Abandoned)
- Helendale Auxilliary Airfield (No. 2) 34º49’40”N 117º18’18” (Abandoned, non-aviation use)
- Mirage Auxilliary Airfield (No. 3) 34º37’29”N 117º35’59”
- Grey Butte Auxilliary Airfield (No. 4) 34º34’00”N 117º40’25”

… Flight training remained the primary mission of George AFB throughout the Cold War and a number of bomber, glider, single engine, twin engine, and jet fighter aircraft were flown by various organizations assigned.

> George Air Force Base was assigned to continental Air Command, October 10, 1950, reassigned to Air Defense Command, January 1, 1951, reassigned to Strategic Air Command on July 23, 1951, then assigned to Tactical Air Command in November 1951 …
>
> George Air Force Base was officially decommissioned in December 1992. In 1993, President Bill Clinton announced a "Five Part Plan" to speed economic recovery in communities where military bases were to be closed. One part of the plan called for improving public participation in the base's environmental cleanup program. George AFB was among a number of installations where environmental cleanup was placed on a "fast track" so base property could be quickly transferred to the community for reuse. Many of the old base housing homes and buildings are currently used by the Army and Marine Corps for urban warfare training.

In 1980, Dorn et al. completed a historical assessment of George Air Force Base. A map provide in this report (1980:3) identifies the base as involving Township 6 North, Range 5 West, all of Sections 22, 23, 25, 26, 35, and 36 and portions of Sections 13, 14, 15, 24, and 27. Dorn et al. completed research to identify land owners subsequent to the previously noted Southern Pacific Railroad and State of California holdings. Their data is presented in Table 1. The gravel pit owned by H-Grade Materials, Inc. was located in the southern portion of Section 25 – in the general vicinity of the existing golf course – adjacent to the current project area.

Following World War II, the Base was inactive for approximately three years (1945-1948. With reactivation, the Base was on "Minimum Operational Status" and maintained it existing development plan. Expansion of the facilities was initiated in the late 1960s and into the 1970s, resulting in the improvements identified at the time of Base closure in 1992. The 1934 USGS Barstow quadrangle illustrates the project area. Here, the early alignment of Air Expressway is evident (previously Adelanto Road), ending at Turner Road (veering to the east/northeast).

A dirt access road is present in the general vicinity of George Blvd. While structures are evident in the area of Turner Springs (east) and Adelanto (west), there are no structures or other improvements identified within Section 25. By 1956, George Air Force Base is present and well developed. The residential housing between Nevada Avenue and George Blvd. is illustrated, in part, but there is no housing to the east of George Blvd. The gravel pit is still identified to the north of Adelanto Road (Air Expressway) and Shay Road (now Phantom East) is present (Figure 5).

Table 1. Pre-1941 Land Owners Associated with the George Air Force Base Property (compiled by Dorn et al. 1980).

Tract	Land Owner	Tract	Land Owner
16	John C. Sutherland	57	W.L. Mitchell
17	Sarah Gerecht	58	Fred and Bertha Honnold
18	N. and Louise Neece	61	County of San Bernardino
19	Nita Belle Lehane et al.	62A	County of San Bernardino
20	Southern Pacific Land Co.	63	City of Los Angeles
21	Eleanora Pauline Vossler	64	California Electric Power Co.
22	Margaret Rogers	C-201	Alfred E. Moore et al.
23	Gladys and Walter Platt	C-202	Clarence E. Riley et ux.
24	Maise and Edwin Cummings	C-203	Nick L. Notterman et ux.
25	Flo and Frank Stanley	C-204	S. Robert Culbertson et ux.
26	Herbert and Eliza Stowe	C-205	Thomas L. Spaulding et ux.
27	Emily M. Courtney	C-209	Samuel S. Farrar et ux.
28	Eylar and Lois Fillmore	C-210	H.R. McKay et ux.
29	Merle and Mollie Rogers	C-211	Marrion B. Betty et ux.
30	Theodore and Verda Lee	C-212	Clifford Edward Van Vleck
31	California Electric Power Co.	C-213	Ball Van Vleck, Jr.
32	Maise and Edwin Cummings	C-214	J.C.B. Cleveland et ux.
33	Emily M. Courtney	C-215	Marie Gubler
35	Charles and Leatrice Rogers	C-216	Walter Q. Orr et ux.
36	Charles Rogers & S.E. Donaldson	C-217	Henry J. Praeger
37	George and Una Winter	C-220	Hugh Seiz
38	George and Una Winter	C-221	Hugh Seiz
39	James and Vera Richardson	C-222	J.C.B. Cleveland et ux.
40	James and Vera Richardson	C-223	H.R. McKay et ux.
41	Jack and Dorothy Loop	C-224	Dewey G. Whitton et ux.
42	Jack and Dorothy Loop	C-225	J.C.B. Cleveland et ux.
45	Hal and Julia Brookes	301	Nelson Gray
46	Estate of Edward Hartner	302	AVA, Inc.
47	Addie C. Schmitt	303	Lyndon D. Sharp et ux.
48	C.O. and Eliza Lee	304	Larry F. Branson
49	Harvey Hare et al.	305	Frank Notterman
50	Mrs. S.O. Houghton	306	Fay R. Branson et ux.
51	Abraham and Helen Mintzer	307	Propagation of the Faith Society
52	William Heffron, Trustee	308	Abigail V. Notterman
53	Arthur and Ruby Easton	309	Everett L. Elliason
54	Louise Pearson	310	Joseph Matisohm
55	H.S. Gadnette	311	Hi-Grade Materials Co.
56	Thomas G. Stacey	312	Vivian E. Berg

The residential development in the southeastern portion of the Base dates to after 1948, when the Base was reactivated after World War II. Shay Road is completed to Turner Road, but does not extend to Adelanto Road/Air Expressway.

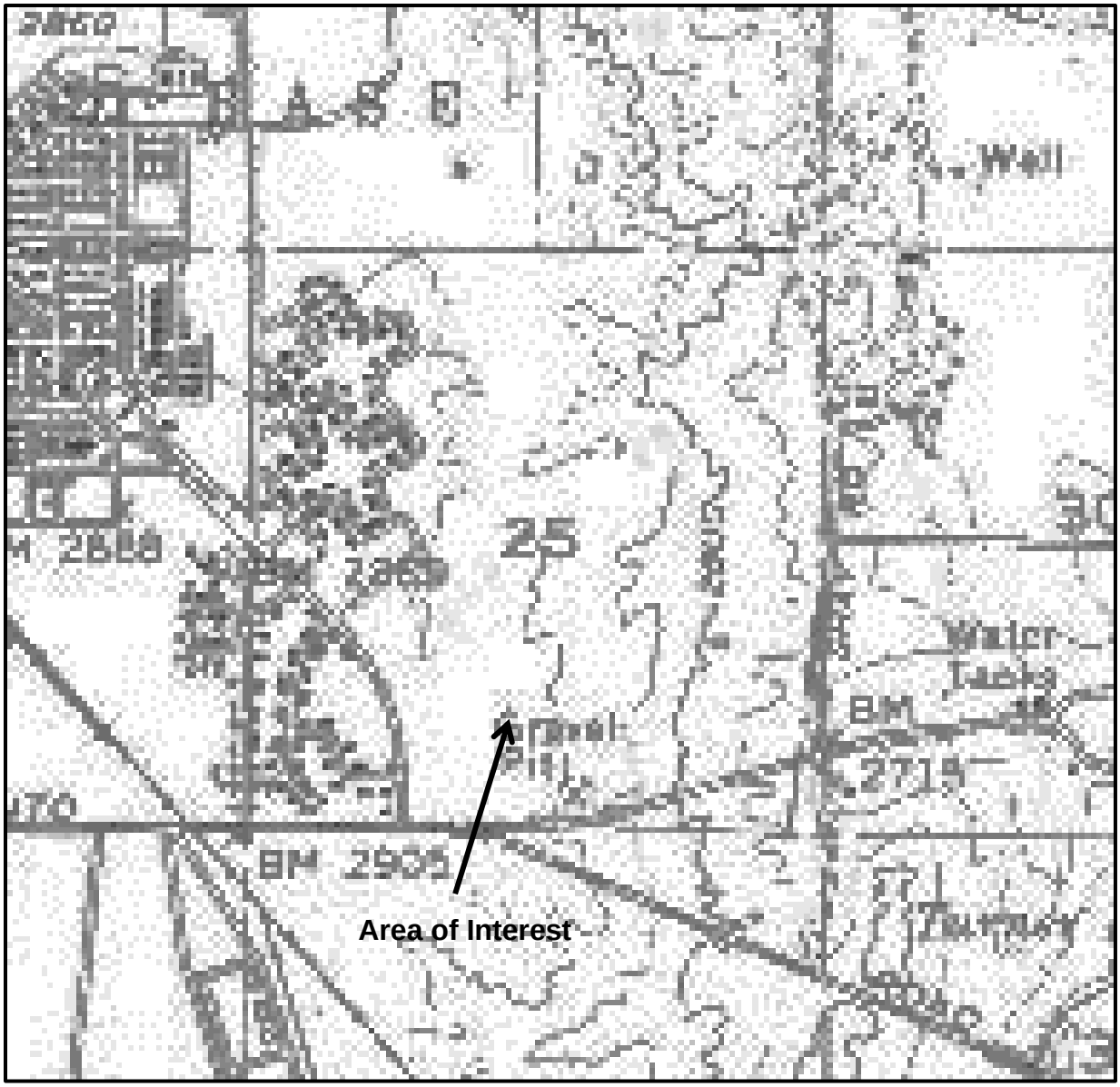

Figure 5. USGS Victorville Quadrangle, rev. 1956.

By 1981, the USGS Victorville Quadrangle illustrates the presence of additional residences to the west of George Blvd. and the construction of residences to the east of George Blvd.

In general, the construction of housing identified to the west of George Blvd. date between 1948 and 1956, with additional housing added to the area after 1981. The housing located east of George Blvd. dates to post-1981 – pre-1993, reflecting the need for additional family housing and support facilities with the area. One of the more recent additions to the area was the Community Center at the intersection of Nevada Avenue and George Blvd. Another relatively large addition was the school complex at Carolina Avenue and George Blvd. (outside, but near the current project area APE). Housing to the north of the school has already been subjected to some demolition activities. All housing and associated facilities were abandoned by 1993. The water tank and pond area currently within the APE was established in 2009 (Lambrano 2009).

METHODOLOGY

To complete these studies in compliance with the data requirements defined by the Office of Historic Preservation, Sacrament, for compliance with CEQA, McKenna et al. completed the following tasks:

1. **Archaeological Records Search**: McKenna et al. completed an archaeological records search through the California State University, Fullerton, South Central Coastal Information Center (CSUF-SCCIC). This research was completed in August, 2019, and designed to compile data on previously completed studies within one mile of the project area APE (Appendix B). McKenna et al. obtained copies of all recorded site forms and the historic maps covering the area. In addition, research included a review of the listings of properties in the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest. Locally recognized resources were also investigated. McKenna et al. obtained copies of technical reports specifically involving the project area. The locations of the earlier studies were mapped and compared to the data presented in the technical report(s). The data were used to assess the potential for the project area to yield evidence of prehistoric or historic uses within the APE.

2. **Project Description and Understanding**: McKenna et al. was provided a preliminary project description by Lilburn Corporation, San Bernardino, California. This data included project-related maps, an aerial photograph with the study area boundaries, and a brief written description (provided by the City of Victorville).

3. **Native American Consultation**: McKenna et al. contacted the Native American Heritage Commission, and inquired into the presence or absence of known religious or sacred Native American sites within or near the project

area. In addition, McKenna et al. obtained a listing of local Native American representatives wishing to consult with respect to projects in the general area. Letters and the records search results were mailed to all listed persons/groups (Appendix C). Responses, if received, were incorporated into this document. However, it is noted, the City of Victorville, as Lead Agency, is responsible for AB-52 and SB-18 consultation, as applicable.

4. **Paleontological Overview**: McKenna et al. requested and obtained a paleontological overview for the area through the Natural History Museum of Los Angeles County (Appendix D). This overview was designed to place the project area in a context for the preliminary assessment of the relative sensitivity for the area to yield evidence of fossil specimens.

5. **Field Studies**: McKenna et al., conducted the field survey of the project area on both Friday, August 9, 2019, and October 26, 2019, following amendments to the APE. The field survey was completed with the assistance of M. Abraham McKenna (B.A./J.D.), under the direct supervision of Jeanette A. McKenna, Principal Investigator. McKenna et al. conducted a pedestrian survey of the project APE by traversing the property systematically and at an average interval of less than 15 meters and walked the proposed pipeline route to the terminus north of Air Expressway (old Turner Road alignment). McKenna et al. also conducted a reconnaissance level of survey for areas peripheral to the APE to insure all required areas were addressed. McKenna et al. maintained field notes (on file, Whittier, CA) and a photographic record (Appendix E). All data required to complete the California Department of Parks and Recreation DPR-523 forms were compiled, should forms be needed.

6. **Historic/Supplemental Background Research**: Supplemental background research and land use history was researched through the Bureau of Land Management General Land Office files; the San Bernardino County Archives, Redlands; the San Bernardino County Recorder's Office, San Bernardino; the San Bernardino County Museum; and the in-house library at McKenna et al. Local histories were perused and articles relating to the area were researched on-line. Historic maps were reviewed. All pertinent data was compiled and assessed for application to the current research and supplemental research data has been included in Appendix F of this report.

7. **Analysis and Report Preparation**: McKenna et al. complete the analysis for this project in compliance with the criteria for significance presented in the CEQA guidelines, as amended. This report was prepared in a format requested by the Office of Historic Preservation (OHP), Sacramento (ARMR Guidelines); and the CSUF-SCCIC. McKenna et al. included all required data and formatted this report in a manner conducive to understanding the proposed project and potential impacts to cultural resources. All supplemental and supporting data deemed important to this study has been pre-

sented in the attached appendices. Additional research data is on file at McKenna et al. Appendix G presents any required DPR-523 forms for re-located or recently identified resources.

PREVIOUS RESEARCH

A standard archaeological records search was completed through the CSUF-SCCIC on August 15, 2019 (Appendix B). This research confirmed the project area APE was previously surveyed, in part or as a whole, at least five times: 10601051; 10602570; 10604447; 10607054, and 10607168. Overall, a minimum of fifty-two (52) area-specific studies and general overviews have been completed for an area of one mile surrounding the project area (Table 2).

Table 2. Cultural Resources Studies Completed within a One Mile Radius of the Current Project Area.

No.	Report	Citation	Description	Resources
1	10600257	SBCMA 1975	Wastewater Fac.	
2	10600428	Hearn et al. 1976	Mojave River Agency	
3	10600612	SBCMA 1978	Water System	
4	10600719	Coombs et al. 1979	Overview	Yes
5	10600891	Stickel/Weinman-Roberts 1980	Overview	Yes
6	10601051	Geoscientific Systems 1980	George AFB	Yes
7	10601479	Dames & Moore 1985	Transmission Line	
8	10601503	Lerch 1985	Adelanto Well Fields	
9	10601646	Norwood 1987	Boundary Fence	Yes
10	10602570	Sheets and Woodman 1990	George AFB	Yes
11	10602644	Yohe and Parr 1992	Oro Grande Sewer	
12	10602731	Macko et al. 1993	AT&T Lightguide Sys.	Yes
13	10602735	Yohe 1993	Oro Grande Testing	Yes
14	10603164	Alexandrowicz et al. 1996	Airbase Road Imp.	Yes
15	10603785	Spanne 1985	Water Supply Imp.	
16	10603799	Self 1999	High Desert Power	
17	10604427	Dahsul 2003	SCLA Specific Plan	
18	10604436	Chadderdon 2003	Federal Corrections	
19	10604437	Self 2001	Waterline Survey	
20	10604442	McKenna 2002	Shay Road Monitoring	
21	10604447	Woodward and Hatheway 1991	George AFB	Yes
22	10601152	Dice and Tanaguchi 2003	Cell Tower Site	
23	10605158	Ahmet and Lerch 2005	SCE Pole Replacement	
24	10605223	Mirro 2004	Keily Property (39 ac.)	
25	10605337	Jordan and Craft 2006	SCE Pole Replace	
26	10605508	William Self Associates 2003	High Desert Power	

Table 2. Cultural Resources Studies Completed within a One Mile Radius of the Current Project Area (cont'd.).				
No.	Report	Citation	Description	Resources
27	10605832	Bean and Brakke-Vane 1982	Overview	Yes
28	10607054	Lambrano 2009	Elevated Water Tank	
29	10607094	McGlade 2009	Two Water Projects	
30	10607120	Wetherbee 2009	Various Water Projects	
31	10607121	Baker and Maniery 2007	US Army Reserve Proj.	Yes
32	10607168	McKenna 2012	Air Expressway Sewer	
33	10607191	Horne and McDougall 2006	Turner Springs Testing	Yes
34	10607918	Earle 2015	Ethnohistory Overview	Yes
35	10607953	Estes et al. 2007	Hybrid Power Project	Yes
36	10607969	Wetherbee 2009	Various Water Projects	Yes
37	10607982	Dietier et al. 2013	Adelanto North Survey	
38	10607998	Brunzell 2013	Expressway Solar	
39	10608161	Gust 2014	High Desert Corridor	Yes
40	10608162	Sikes et al. 2014	Archaeological Testing	Yes
41	10608162A	Sikes and Gust 2014	Extended Phase I	Yes
42	10608163	Gust et al. 2014	High Desert Corridor	Yes
43	10601863A	Earle 2014	Turner Springs	Yes
44	10601864	Gust et al. 2014	High Desert Testing	Yes
45	10608165	Gust et al. 2015	High Desert Treat. Plan	Yes
46	10608165A	Gust et al. 2015	Shell Bead Analysis	Yes
47	10608165B	Martinez 2015	Lithic Analysis	Yes
78	10608165C	Gust et al. 2015	RTI Analysis	Yes
49	10608165D	Gust et al. 2015	VPSEM Analysis	Yes
50	10608165E	Gust et al. 2015	High Desert Corridor	Yes
51	10608166	Sikes 2014	High Desert Corridor	Yes
52	10608167	Fumis et al. 2014	High Desert Corridor	Yes

Research also identified 36 cultural resources within one mile of the APE (Table 3), including one site reported to be within the current APE: 36-025787 (CA-SBR-016313H; McKenna 2012), the George Airforce Base site, itself. In all, the listing identified 23 prehistoric resources, 12 historic resources, and one resource with both prehistoric and historic components. Two (2) of the resources noted in Table 3 were also identified as California Historical Landmarks: the Old Spanish Trail (CHL-576) and the Mormon Trail (CHL-577). Neither of these resources is within the current project area. Further, in addition to the two pending sites noted by the SBCM-AIC, two additional resources were identified within George AFB, resulting in four military-related resources not included in the overall listing for George Air Force Base (36-025787), including:

36-015465 Bomber Revement (1941)
36-015466 Facility 811 (1954)
36-015467 Hangar 756 (1945)
36-015468 Pursuit Plane Revement (1941)

Table 3. Cultural Resources Identified within a One Mile Radius of the Current Project Area.

Site No.	Cross-Reference	Citation	Description
36-000069	CA-SBR-69	Bierman and Mohr 1949	Prehistoric Site
36-005431	CA-SBR-5431	Childers 1980	Prehistoric Site
36-005432	CA-SBR-5432H; GAB-105A	Sheets et al. 1990	Historic Site
36-006782	CA-SBR-3782	White 1990	Prehistoric Site
36-006784	CA-SBR-6784H; SAIC-1	Sheets et al. 1990	Historic Site
36-008388	CA-SBR-8388H; 95-11-1	Alexandrowicz and Krautkramer 1995	Historic Site
36-008390	CA-SBR-8390H; 95-11-3	Alexandrowicz and Krautkramer 1995	Historic Site
36-008391	CA-SBR-8391; 95-11-4	Alexandrowicz 1996	Prehistoric Site
36-008392	CA-SBR-8392; 95-11-5	Alexandrowicz and Krautkramer 1996	Historic Site
36-008863	CA-SBR-8863	Sharp and Self 1997	Prehistoric Site
36-010959	p/o CA-SBR-7004; CRM-TECH 992-10H	Ballester and Eddy 2003	Prehistoric and Historic Site
36-012609	CA-SBR-12336; AE-TS-1	McDougall et al. 2006	Prehistoric Site
36-012918	NA	Unknown 2006	Prehistoric Site
36-021292	VV 2 Site 32	Arrigoni et al. 2006	Historic Site
36-025783	CA-SBR-016309H	McKenna 2012	Historic Site
36-025784	CA-SBR-016310H	McKenna 2012	Historic Site
36-025785	CA-SBR-016311H	McKenna 2012	Historic Site
36-025786	CA-SBR-016312H	McKenna 2012	Historic Site
36-025787	CA-SBR-016313H	McKenna 2012	George AFB
36-026893	CRM- TECH Isolate 6	Ballester 2003	Prehistoric Site
36-026894	CRM- TECH Isolate 7	Ballester 2003	Prehistoric Site
36-026895	CRM- TECH Isolate 8	Ballester 2003	Prehistoric Site
36-025896	CRM- TECH Isolate 9	Ballester 2003	Prehistoric Site
36-029351	SIL 130-H-1	Brunzell 2013	Historic Site
36-029491	Topipabit District	Lev-Tov 2015	Prehistoric Site
36-061270	GAB-106	Childers 1980	Prehistoric Site
36-061278	IA1584-9	Sheets 1990	Tested Cobble
36-061279	IA1584-10	Sheets 1990	Tested Cobble
36-061281	IA1584-12	Sheets 1990	Tested Cobble
36-061282	IA1584-13	Sheets 1990	Tested Cobble
36-061283	IA1584-14	Sheets 1990	Flake/Chopper
36-061284	IA1584-15	Sheets 1990	Tested Cobble
36-061285	IA1584-16	Sheets 1990	Flake
36-061286	IA1584-17	Sheets 1990	Tested Cobble
36-061287	IA1584-18	Sheets 1990	Tested Cobble
36-061288	IA1584-19	Sheets 1990	Chopper

As a result of the studies noted in Table 2, only 36-025787 (George Air Force Base) has been associated with the current project area. It is noted, however, this association is

based solely on the fact that the APE is within George Air Force Base, and not that any other resource is actually within the APE boundaries. Nonetheless, given the extent of prehistoric and historic archaeological resources, standing structures, and the presence of the Base, the project area is considered moderately sensitive for the presence of additional resources.

Similarly, preliminary results of the Native American Heritage Commission consultation also resulted in a determination that the general area in and surrounding the project area APE is sensitive for the identification of prehistoric and/or historic period Native American resources.

With respect to paleontological resources, McLeod (2019) identified the project area as consisting of artificial fill associated with the development of George Air Force Base, with this fill material overlying older Quaternary alluvial deposits derived from the "ancient Mojave River." Fossil vertebrate specimens have been identified and recovered from such deposits within George Air Force Base, including meadow vole, extinct horse, extinct bison, and mammoth. Excavation in the fill soils are not expected to yield fossil specimens, but deeper excavations impacting the older alluvium do have a potential for specimens. Therefore, the area should be considered highly sensitive for fossil remains.

In summary, the general area surrounding the current project area has been surveyed and studied for many years and, as a result, has yielded physical evidence of prehistoric and historic archaeological resources, standing structures, and, per the Native American Heritage Commission, the potential for religious or sacred resources associated primarily with the Serrano of San Bernardino County. The area is also considered highly sensitive for the presence of paleontological resources.

EVALUATION CRITERIA

The state (**CEQA**, Section 15064.5) criteria for evaluation mirror the federal guidelines and read as follows:

a) For purposes of this section, the term "historical resources" shall include the following:

   1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).

2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code§5024.1, Title 14 CCR, Section 4852) including the following:

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

   B) Is associated with the lives of persons important in our past;

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

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

The local Victorville historic preservation policies and guidelines are presented in the General Plan of 2008. The project APE is identified as being within the SCLA Planning Area, which "… [I]ncludes all the land within the former George Air Force Base and an area north to the existing City boundary, and east towards the Mojave River and along the north side of Air Expressway of the former base ..." (10,800 acres). Per the General Plan (R28-29), the local policies and guidelines read:

PROTECT IDENTIFIED ARCHAEOLOGICAL, PALEONTOLOGIC RESOURCES AND HISTORIC RESOURCES WITHIN THE PLANNING AREA

Objective 5.1: Preserve known and expected cultural resources.

Policy 5.1.1: Determine presence/absence of and consider impacts to cultural resources in the review of public and private development and infrastructure projects.

Implementation Measure 5.1.1.1: As a City Planning Department function, maintain maps illustrating areas that have a moderate-high probability of yielding important cultural resources as a result of land alteration projects.

Implementation Measure 5.1.1.2: Establish a transmittal system with the ~~Archaeological Information Center (AIC) at the San Bernardino County Museum, Redlands~~ [now the CSUF-SCCIC]. When a project is in its initial phase, the City may send a location map to the AIC for a transmittal-level records search. The transmittal identifies the presence or absence of known cultural resources and/or previously performed studies in and near the project area. The ~~AIC~~ [CSUF-SCCIC] also offers recommendations regarding the need for additional studies, if warranted.

Implementation Measure 5.1.1.3: When warranted based on the findings of reconnaissance level surveys by a qualified professional archaeologist and/or transmittals from the ~~AIC~~ [CSUF-SCCIC], require Phase I cultural resource assessments by qualified archaeologists, historians, and/or architectural historians, especially in areas of high sensitivity for cultural resources, as shown on the maps maintained in the City Planning Department. The scope of such a survey shall include, as appropriate, in-depth records search at the ~~AIC~~ [CSUF-SCCIC], historic background research, intensive-level field survey, consultation with the Mohave Historical Society, and consultation with the appropriate Native American representatives and tribal organizations.

Implementation Measure 5.1.1.4: Complete a Planning Area-wide assessment of the paleontological sensitivity, based on a review of geologic formations and a review of paleontological records that identify those formations that have yielded or are expected to yield fossil materials of importance to the scientific community.

Policy 5.1.2: Prohibit destruction of cultural and paleontological materials that contain information of importance to our knowledge of the evolution of life forms and history of human settlement in the Planning Area, unless sufficient documentation of that information is accomplished and distributed to the appropriate scientific community.

Require mitigation of any significant impacts that may be identified in project or program level cultural and paleontological assessments as a condition of project or program approval.

Implementation Measure 5.1.2.1: Enact a historic preservation ordinance and/or prepare a historic preservation plan to outline the goals and objectives of the City's historic preservation programs and present an official historic context statement for the evaluation of cultural resources within the City's jurisdiction.

Implementation Measure 5.1.2.2: Assist local property owners in finding and taking advantage of incentives and financial assistance for historic preservation that are available through various federal, state, or city programs.

Implementation Measure 5.1.2.3: Require paleontological monitoring of land alteration projects involving excavation into native geologic materials known to have a high sensitivity for the presence of paleontological resources.

RESULTS OF THE INVESTGIATIONS

McKenna et al. initiated the cultural resources investigations for the proposed 1 MG Reservoir and pipeline alignment project within the SCLA (George Air Force Base) property in August, 2019. The study was completed in late October, 2019. These investigations included:

- a general overview of the paleontological sensitivity for the area to yield fossils specimens;
- consultation with local Native American representatives with respect to the sensitivity of the area to yield evidence of significant prehistoric or protohistoric Native American resources;
- research into general land use during the historic period (post-1769);
- an archaeological records search;
- an intensive field survey of the project areal and
- an analysis of any resources identified as a result of the current studies.

Paleontological Findings

A paleontological overview completed by McLeod (2019; Appendix D) identified the project area as consisting of some artificial fill above sedimentary deposits of older terrestrial

Quaternary Alluvium derived from the Mojave River. These older deposits are generally referred to as Shoemaker gravel. Fossil specimens have been known to be associated with these deposits and the nearest specimens have been recovered from the western extents of George AFB - from depths exceeding ten feet below the present surface. Additional specimens have been recovered from the western banks of the Mojave River.

McLeod concluded shallow excavations are unlikely to yield evidence of fossil specimens, but deeper excavations that impact the older alluvium may yield such specimens. Monitoring of these excavations is recommended and sampling of the back dirt may yield additional evidence of small fragments or specimens. Measure 5.1.2.3 of the Victorville General Plan requires paleontological monitoring of land alteration projects involving excavation into native geologic materials known to have a high sensitivity for the presence of paleontological resources.

Native American Consultation

McKenna et al. contacted the Native American Heritage Commission (see Appendix C) to inquire into the presence/absence of sacred sites in the general area. McKenna et al. also contacted – via mail – representatives of the Native American community identified by the Commission. Ten individuals/groups were contracted, but as of this writing, only one response was received.

Jessica Mauck of the San Manuel Band of Mission Indians, Highland, responded with an emphasis that the project area is within the ancestral territory of the Serrano and is highly sensitive for both archaeological resources and sacred sites. Significant sites noted include the Turner Springs site and Oro Grande, both having been associated with the presence of human remains and grave goods. Both sites have been tested and determined eligible for listing in the National Register of Historic Places. Neither site will be impacted by the current project, but associated resources may still be present, given their proximity to the APE and the presence of the Mojave River to the east. The Serrano will be involved in further consultation with the City.

Historic Period Land Use

Historic period land use identified Section 25 as being granted to the Southern Pacific Railroad in 1918. Dorn (1980) listed numerous individuals who acquired land within the boundaries of the later-established Air Base. However, a review of maps indicated no improvements were present within the area of the current project area prior to the establishment of the Base.

Historic maps showed the presence of various dirt or semi-paved roads within Section 25. In 1934, the alignment for Adelanto/Air Base Road/Air Expressway is illustrated, as is Turner Road leading to Turner Springs. A third road is illustrated as extending north from Adelanto Road, through the western extent of Section 25 and in the general vicinity of today's George Blvd. This road continues well to the north and runs along the terrace above the western bank of the Mojave River, almost to Helendale.

By 1956, George Air Force Base is illustrated and the north/south dirt road is no longer evident, having been obliterated by residential construction west of George Blvd. Adelanto Road has been improved and extended to Victorville, and Turner Road is identified as a paved road. All improvements are identified in or north of Air Expressway (Adelanto Road) and within the boundaries of George Air Force Base. Shay Road is illustrated, but the golf course is not. A gravel pit is located east of the housing complex. By 1981, the golf course has been established and the housing complex has been enlarged to include structures east of George Blvd. and around (but not in) the current APE. The existing tower and pond within the APE were established in 2009.

As a result of the historic research, George Air Force Base, Air Expressway/Adelanto Road, Turner Road, and the third unnamed road are considered historic period resources. They were recorded by McKenna et al. in 2012.

George Air Force Base (36-025787; CA-SBR-16313H)

In 1980, an Archaeological/Assessment of George Air Force base was completed by Dorn et al. The purpose of the study was described as a survey to identify archaeological or historical sites within the base that may be eligible for listing in the National Register of Historic Places for future planning purposes. The study also included a relatively detailed history of the Base. Despite the completion of this study, no formal recording of George Air Force Base was completed and the Base still lacked a permanent reference number. Subsequent studies addressed some individual structures within the Base, but again, the Base was not recorded as a whole. This lack of recordation was primarily the result of the base failing to meet the minimum age requirements in 1980. The Base was, however, over 45 years of age in 1986 and all post-1986 studies should have recognized the Base as a resource warranting recording and the assignment of a permanent reference number. McKenna et al. recorded the Base in 2012 and the permanent Primary Number was assigned. All base-related components should be considered components/features of the larger site and potentially significant components of the site. The current project area is not in an area considered historically significant and only associated with post-1993 improvements.

Adelanto Road (now Air Expressway; 36-025786; CA-SBR-16312H)

The alignment of Adelanto Road is illustrated on the 1934 USGS Victorville Quadrangle, based on the 1894 version of the map. It is quite possible this alignment was part of the original Turner Road alignment, although not referenced as such. In any case, the road alignment once ended in Section 25, connecting with Turner Road, suggesting a direct connection. Adelanto was not established as a community until ca. 1915 and the Post Office in 1917, suggesting the name was not officially used until that time. Therefore, before ca. 1917, any reference to Adelanto Road would not be recognized. In contract, Turner Springs was established by 1883, suggesting access to the ranch from the west was needed prior to the founding of Adelanto.

The historic alignment of Adelanto Road, as it relates to this project, extends from the western extent of Turner Road (just east of George Blvd.) to the intersection at Highway 395 (approximately 3 linear miles along the Township line between Township 5 North and Township 6 North, and within Range 5 West. Adelanto Road would have been known historically as part of Turner Road.

The Adelanto Road alignment has been surveyed, in part, at least five times (Geoscientific Systems 1980; Macko et al. 1993; Alexandrowicz et al. 1996, Self 2001; and William Self Associates, Inc. 2003). Despite these surveys, the alignment has never been recorded as a cultural resource. McKenna et al. completed the required forms for recording this road alignment. At the time of recording, McKenna et al. acknowledged the road has been widened, improved, and no evidence of the historic alignment remains. The purpose of the recording is to acknowledge the historic location of the alignment and to document to loss of its integrity as a result of developments following the establishment of George Air Force Base.

Turner Road (36-025785; CA-SBR-16309H)

Turner Road should be considered a part of the larger Turner Springs Archaeological District (36-000066; CA-SBR-66). The exact boundaries of the district have changed as research yielded addition components of the prehistoric and historic use(s) of the area. In this case, Turner Road is identified as a linear road alignment extending from its intersection with Adelanto Road (western extent) to the Turner Springs Ranch complex on the Mojave River. It likely continued to the west (which is now the alignment of Adelanto Road/Air Expressway). Within the current project area, Turner Road was identified at UTM coordinates ^{0}467387 Easting and ^{38}25419 Northing. This road is currently described as an asphalt road with no curbs, but a line of utility poles leading to the Turner Spring

Ranch. Although currently outside the chain link fencing bounding George Air Force Base, this road alignment was actually within the lands acquired for the Base. An updated site form was been prepared by McKenna in 2012 to add this feature to the overall description of the Turner Springs Archaeological District.

Unnamed Dirt Access Road (North/South; 36-025784; CA-SBR-16310H)

No physical evidence of the unnamed north/south road in the western extent of Section 25 was identified in 2012. However, this road should have been in the general vicinity of George Blvd. Development of the housing complex in this area has obliterated any evidence of this early road, at least within respect to Section 25.

Previously Identified Resources

In addition to the resources discussed earlier in this report, above, only one is associated with the APE – that of the general site number for George Air Force Base **(36-025787)**. No specific resources (isolates or features) have been identified in the immediate vicinity of the APE.

Recently Identified Resources

The recent survey of the 1 MG Reservoir and pipeline project area yielded no evidence of prehistoric or historic archaeological resources. No standing historic structures are within the project APE. The only identifiable resources in the reservoir project area are modern, including the Water tower and pond (established in 1993.). The pipeline alignment runs along existing roadways within the George Air Force Base residential community (1981-1993) and a segment that involves portions of Air Expressway and Turner Road. Although both alignments have historic origins, but both have been significantly altered via upgrading, widenings, and repaving. Neither maintains the necessary integrity for recognition as significant resources and, therefore, any potential impacts resulting from the pipeline improvements will not result in any adverse environmental impacts.

CONCLUSIONS AND RECOMMENDATIONS

The recent investigations by McKenna et al. resulted in the following conclusions and recommendations:

1. The project area is sensitive for paleontological resources;
2. The project area is sensitive for the presence of prehistoric archaeological resources (primarily in a buried context);
3. The project area is moderately sensitive for historic archaeological resources (e.g. historic road alignments);
4. There is no evidence that human remains will be identified within the project area, but the presence cannot be completely ruled out.

Based on these findings, McKenna et al. presents the following recommendations to lessen any potentially adverse or significant impacts to level of insignificance:

1. Project-related earthmoving activities that exceed the depth of younger Quaternary alluvium and impact older Quaternary alluvium must be subjected to a paleontological monitoring program designed to meet the standards, policies, and guidelines of the San Bernardino County Museum Department of Earth Sciences. The extent would be based on the extent of older alluvium and project development scheduling;

2. Project-related earthmoving activities within the project area APE should be monitored by an archaeological monitor with both prehistoric and historic archaeological qualifications. This monitoring program need not be conducted on a full-time basis and should be conducted while earthmoving involves impacts to the younger alluvium deposits. The extent would be based on the extent of younger alluvium and project development scheduling.

3. Should any evidence of prehistoric archaeological resources be identified, a Native American representative, preferably of Serrano descent, be added to the archaeological monitoring program – until it is determined the monitoring is no longer required;

4. If, at any time, evidence of human remains (or potential human remain) is uncovered, the County Coroner must be notified immediately and permitted to examine the find(s). If the remains are determined to be of Native American origin, the Coroner will contact the Native American Heritage Commission and the Commission with name the Most Likely Descendant (MLD). In consultation between the City of Victorville, the MLD, and the consulting archaeologist, the disposition of the remains will be determined.

   If Native American human remains are identified within the project area, a Native American observer should be added to the overall monitoring pro-

gram for the duration of the activities associated with excavation in soils likely to yield additional remains.

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CERTIFICATION. I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological/cultural resources report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Jeanette A. McKenna _____ Oct. 28, 2019

Jeanette A. McKenna, Principal Investigator, McKenna et al. Date

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GeoTek, Inc.
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June 19, 2019
Project No. 2124-CR

City of Victorville
14343 Civic Drive
Victorville, California 92392

Attention: Mr. Victor Fajardo

Subject: Limited Phase II Environmental Site Assessment
Proposed Water Reservoir
Southern California Logistics Airport (SCLA)
City of Victorville, San Bernardino County, California

Dear Mr. Fajardo:

GEOTEK, INC. (GEOTEK) has performed a Limited Phase II Environmental Site Assessment (ESA) at the location of the proposed water reservoir facility (the "Site"), located in the City of Victorville, San Bernardino County, California. Our services were conducted in substantial conformance with the scope and limitations of the American Society of Testing and Materials (ASTM) E1903-11, "*Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*", and GEOTEK Proposal No. P-0502219, dated May 10, 2019. Any additions or deletions from our scope of services are discussed in the appropriate sections of this assessment.

Site and Project Description

The Site is located adjacent to and on the northeast side of Westwind Road, near its intersection with North Carolina Avenue, in the City of Victorville, San Bernardino County, California. The Site coordinates are approximately 34.5785º N Latitude and -117.3590º W Longitude, and the project Site is situated within the Southern California Logistics Airport (SCLA) industrial park (a.k.a. George Air Force Base). George Air Force Base was opened in June 1941 and officially closed of all military activities in December 1992. The Site is vacant of structures and surface vegetation consists of sporadic light brush. Based on a review of Google Earth aerial photographs, the Site elevation is approximately 2,873 feet above mean sea level.

Scope of Work

GEOTEK'S scope of work for the project consisted of the following:

- Excavation of 4 exploratory borings on-site utilizing a GeoProbe® direct push rig (truck mounted),
- Collection of soil samples of the on-site materials,
- Laboratory testing of selected soil samples collected from the Site, and
- Compilation of this report which presents our findings, conclusions and recommendations.

Field Investigation

Prior to our field investigation, our firm notified Underground Services Alert of our field activities and boring locations. Additionally, an encroachment permit was obtained from the United States Air Force. A copy of the permit is provided in Appendix A.

Our field investigative services at the Site commenced on May 29, 2019. GEOTEK advanced 4 exploratory borings (Borings B-1 through B-4) at the Site within the limits of the proposed water reservoir (see Boring Location Map, Figure 1). The borings were extended to a depth of approximately three feet below the existing ground surface. Soil samples were collected from depths of 0 to 6" and at 3 feet below the existing ground surface from each of the borings. The number of borings, depths of the borings and depths of the samples were dictated to us by the United States Air Force.

Laboratory Testing

All of the soil samples collected from the excavations were transported and submitted to a state certified laboratory (Orange Coast Analytical, Inc. of Tustin, California) under proper chain of custody protocols. The 8 soil samples were submitted for analysis of organo-chlorinated pesticides (OCP's) in accordance with United States Environmental Protection Agency (EPA) Method 8081A. Soil laboratory test results are provided in Appendix B.

Soil Laboratory Test Results

Analysis of the soil samples did not detect measurable quantities of OCP constituents is Samples ENV-1 @ 3'; ENV-2 @ 0'; ENV-2 @ 3'; and ENV-3 @ 3'.

Analysis of the soil samples did detect measurable quantities of the OCP constituents aldrin, chlordane and dieldrin in Samples ENV-1 @ 0'; ENV-3 @ 0'; ENV-4 @ 0'; and ENV-4 @ 3'. The applicable results of the laboratory analysis are summarized in the following table:

TABLE 1
OCP SUMMARY ANALYTICAL RESULTS

Sample	Aldrin (ug/kg)	Chlordane (ug/kg)	Dieldrin (ug/kg)
ENV-1 @ 0'	<8.0 (ND)	<120 (ND)	210
ENV-3 @ 0'	<2.0 (ND)	<30 (ND)	6.6
ENV-4 @ 0'	19	43	1300
ENV-4 @ 3'	<2.0 (ND)	<30 (ND)	7.8
Screening Level	**180[2]**	**6100[2]**	**140[1]**

ug/kg = micrograms per kilogram
ND = Not Detected
1 = EPA Regional Screening Levels (RSLs) for industrial soil, April 2019
2 = DTSC Recommended Screening Levels (RSLs) for industrial soil, April 2019

Findings

The OCP constituent dieldrin is in concentrations above the regional screening level for industrial soils, as determined by EPA Regional Screening Levels (RSLs) for industrial soil, April 2019 for Samples ENV-1 @ 0' and ENV-4 @ 0'.

The laboratory report is attached.

Conclusions

Due to the presence of pesticides (i.e. dieldrin) detected in the soil samples, and the existing known environmental concerns at the SCLA industrial park, appropriate safety measures should be taken during future soil excavation and with associated Site personnel. Additional field investigation, sampling and laboratory testing may be required prior to construction of the water reservoir.

We appreciate this opportunity to be of service. If you have any questions, or if we can be of further service, please contact us at (951) 710-1160.

Respectfully Submitted,
GEOTEK, INC.

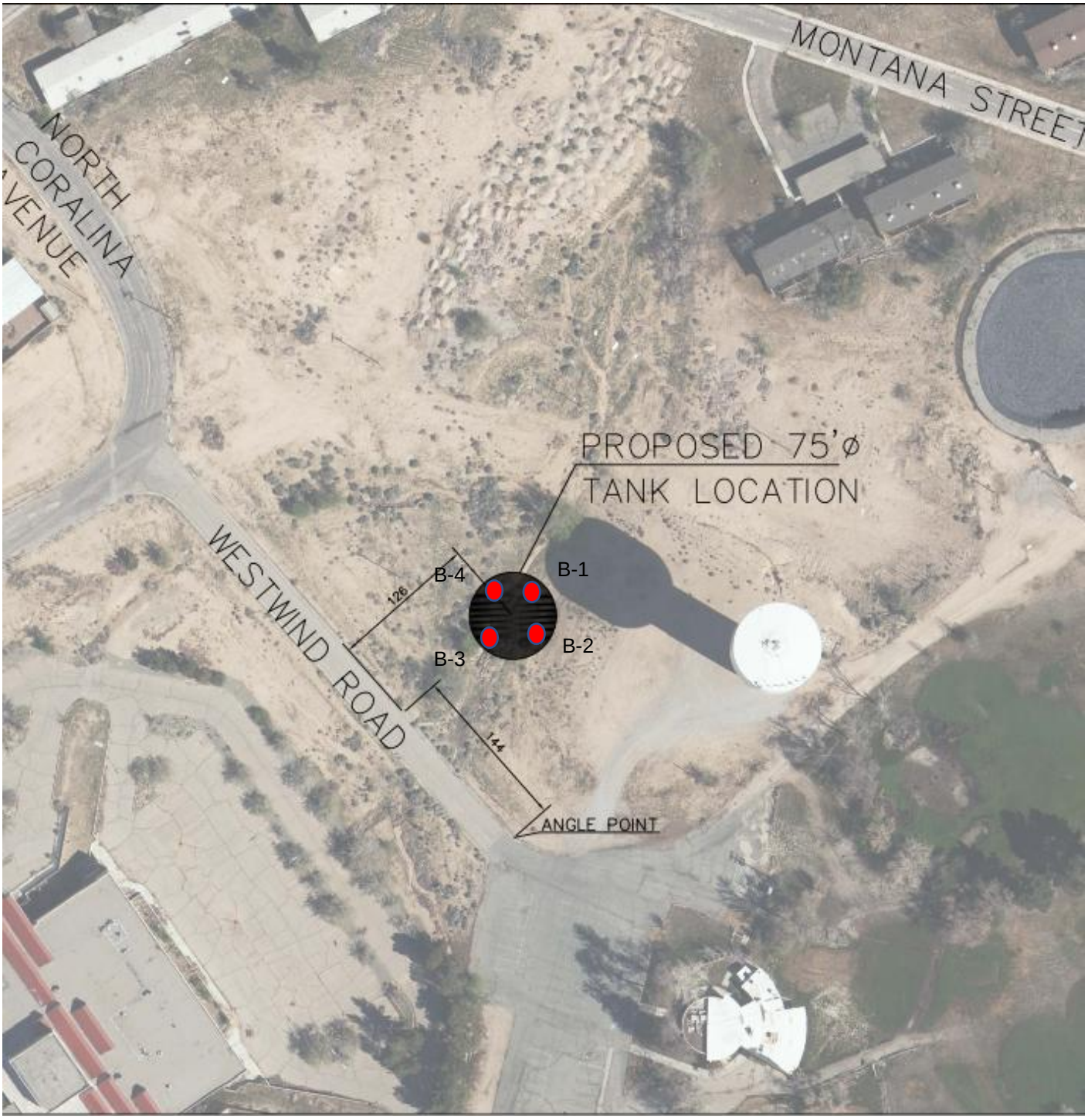
Edward H. LaMont
CEG No. 1892, Exp. 07/31/20
Principal Geologist

J. Michael Batten
REPA No. 113162, Exp. 06/15/20
Environmental Services Manager

Anna M. Scott
Project Geologist

Enclosures: Figure 1 – Boring Location Map
Appendix A – Encroachment Permit
Appendix B – Soil Laboratory Test Results

G:\Projects\2101 to 2150\2124CR City of Victorville Project BM19-121 Reservoir\Limited Phase II ESA\2124CR Limited Phase II Environmental Site Assessment Project BM19-121.doc



LEGEND

B-4 — Approximate Location of Exploratory Boring

City of Victorville
Project BM19-121
Victorville, San Bernardino County, California

GeoTek Project No. 2124-CR

NORTH

Figure 1

Boring Location Map

GEOTEK

APPENDIX A

ENCROACHMENT PERMIT

George Permit Number: 9200-06019-01

AFCEC ENCROACHMENT PERMIT APPLICATION
PART 1 - APPLICATION SUBMITTAL
(To be completed by Requestor)

1. PROPOSED PROJECT WORK SITE ADDRESS/LOCATION:		
2. PROJECT POC Anna M. Scott	**3. PHONE NUMBER** 951-205-1653	**4. ORGANIZATION** GeoTek, Inc.
5. PROJECT CONTRACTOR Strongarm Environmental	**6. PHONE NUMBER** 562-404-6656	**7. ORGANIZATION** Strongarm Environmental
8. PERMIT REQUEST RECEIVED/ACCEPTED 05/21/2019	**11. DATE PERMIT NEEDED BY:** 5/21/2019	**12. PERMIT EXPIRES ON:** 6/21/2019

13. TYPE OF WORK INVOLVED (CHECK TYPE)

X	NEW CONSTRUCTION		EXISTING FACILITY IMPROVEMENT		OPERATION AND MAINTENANCE
	NEW UTILITY		EXISTING UTILITY		OTHER

LIST UTILITY(IES): See attached USA Ticket

PROJECT DESCRIPTION: Drill four soil borings for the sampling and environmental testing.

A. PROPOSED WORK PARAMETERS

1. Type of Soil Disturbance(s): ☐ Excavation ☐ Grading ☐ Pot Holing (Exploratory Excavations) ☐ Trenching ☑ Other: Drilling

2. Size of excavation area	100	SF
3. Maximum depth of excavation	4	FT
4. Size of area to be graded		SF
5. Maximum depth of grading disturbance		FT
6. Lineal feet of trenching		LF
7. Maximum depth of trenching		FT
8. Estimated volume of soil disturbance		CY
9. Estimated volume of surplus soil		CY
10. Maximum depth of pot holing		FT
11. Estimated volume of soil/sludge/slurry		CY

Additional information/comments: (include size, depth, limits of disturbance of any types of soil disturbance listed as "Other". Calculate volume of disturbed soil using the following formula - Length X Width X Depth = cubic feet / 27 = cubic yards)

12. Estimated volume of imported backfill/borrow (cubic yards): ☑ N/A ☐ _____ Cubic Yards

13. Source of imported backfill/borrow- ☑ N/A ☐ On-site Location:

☐ Offsite source (requires AFCEC approval) - list source: NONE

14. Construction Derived Waste (CDW) to be generated: ☐ ACM ☐ Asphalt ☐ Concrete ☐ Steel ☐ Vegetation ☐ Wood ☑ None ☐ Other:

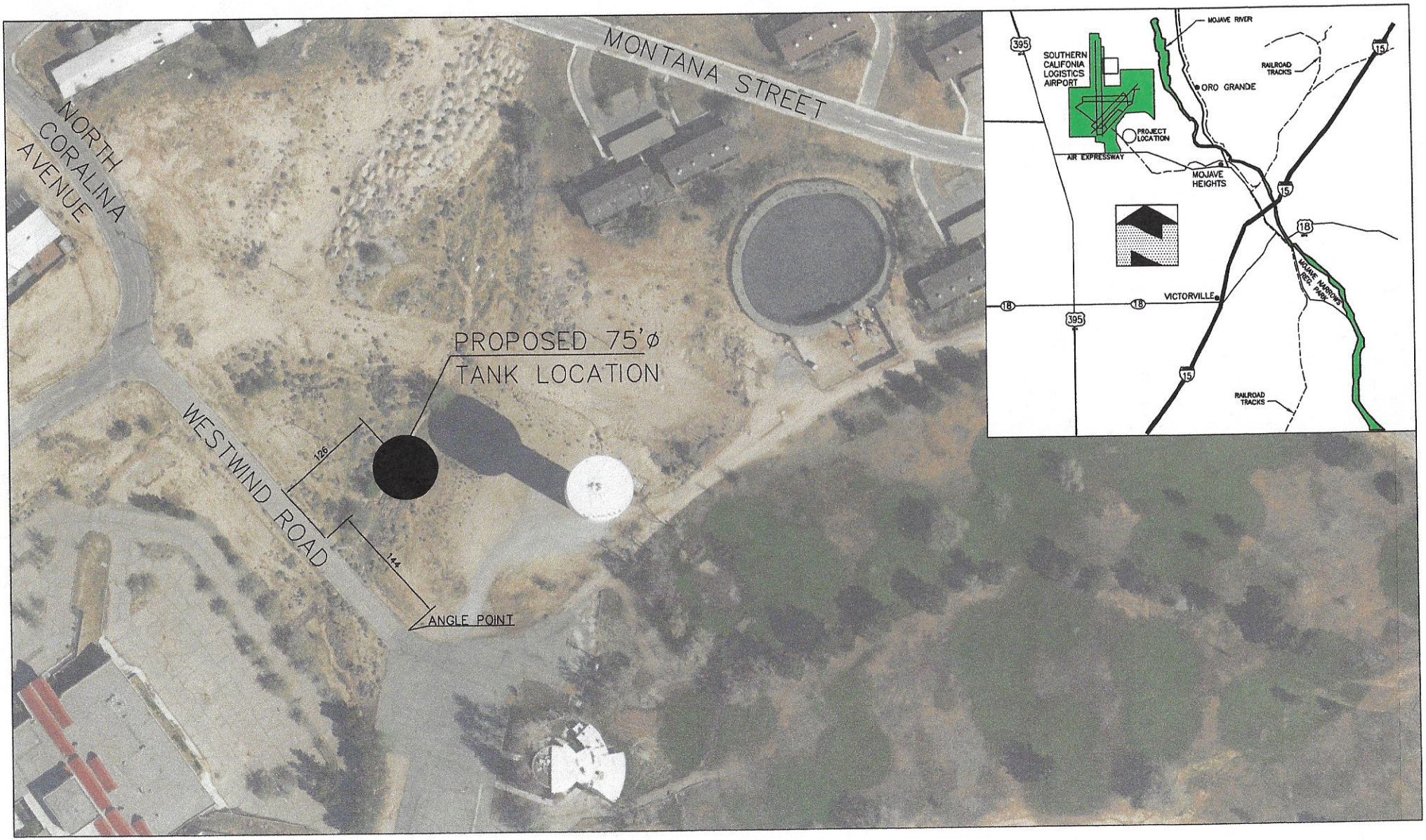
15. Disposition of CDW/Suplus Soil: Off-site disposal (list site): NONE On-Site Location:

B. PROJECT SCHEDULE (Provide your best estimate)

1. Exploratory Excavations 4 Borings	Start Date : 05/29/2019	Finish Date: 05-29-2019
2. Excavation	Start Date:	Finish Date:

☑ **SEE ATTACHED CONSTRUCTION DRAWINGS** ☐ **SEE ATTACHED PROJECT VICINITY MAP**

ATTACHMENT 1



George Permit Number: Sea-060119-01

AFCEC ENCROACHMENT PERMIT APPLICATION
PART 2 - CLEARANCE REVIEW/PROJECT COORDINATION
(To be completed by AFCEC)

The AFCEC ENCROACHMENT / WORK CLEARANCE PERMIT request is used for any excavation work, improvement project or off-road encroachment planned on Air Force and transferred properties. This form is used to coordinate the required work with key Air Force, SCLA and Stirling personnel to minimize interference and identify potentially hazardous worker exposure to contaminated soils. The AFCEC ENCROACHMENT / WORK CLEARANCE PERMIT facilitates preliminary planning review and MUST be processed prior to start of work with sufficient lead time to allow for coordination and research of the subject site. This PERMIT must be revised if the project is altered or conditions at the job site change. Following issuance of this approved PERMIT, the requestor must then contact Underground Services Alert at 811 48-hours prior to commencement of excavation to arrange for utility marking. Provide the AFCEC ENCROACHMENT PERMIT NUMBER to USA when requesting utility marking/clearance. A Copy of this PERMIT (with all attachments) shall be maintained at the job-site/work area and be made available to all workers when performing field activities.

COORDINATION

Agency/Program	Phone	Initials / Date	REMARKS	REVIEWER'S NAME
Environmental Screen IRP	(909) 553-3792	CJC 6/14/2019	N/A	Calvin Cox
Soil Contamination	(909) 553-3792		Dieldrin in soil	Calvin Cox
Soil Vapor Risks	(909) 553-3792		N/A	Calvin Cox
TPH/ Fuels	(909) 553-3792			Calvin Cox
Radiological / Radiation	(909) 553-3792			Calvin Cox
Asbestos/HazWaste Compl.	(909) 553-3792			Calvin Cox
Sensitive / Protected Habitat	(909) 553-3792			Calvin Cox
Remedial Investigation	(909) 553-3792			Calvin Cox
AFCEC Real Estate	(909) 553-3792		SCLAA Property	Calvin Cox
IRP Utilities & Soils Mgmt.	(909) 553-3792		N/A	Calvin Cox
Industrial Waste Water Syst	(909) 553-3792			Calvin Cox
Sanitary Sewer	(909) 553-3792			Calvin Cox
Storm Drainage	(909) 553-3792			Calvin Cox
Street Right-of-Ways	(909) 553-3792			Calvin Cox
Stirling Infastructure Plans	(909) 553-3792			Calvin Cox
Stirling Property Mgr.	(909) 553-3792			Calvin Cox
AFCEC Property Manager	(909) 553-3792			Calvin Cox
Airfield Mgr SCLA Airports	(760) 243-1900		No Concerns	George Jenkins
Stirling Soils Mgr	(760) 778-1000		N/A	Anita Tuckerman
			N/A	

ENVIRONMENTAL REVIEW

☐ IRP Site(s) Involved ☐ Non-IRP Site Involved ☐ Known Contaminated Sites Involved ☐ Protected Habitats Involved ☐ USTs and Piping

List IRP Sites Involved: OT07

Contaminants of Concern: ☐Fuels ☐VOC ☐Non-VOC ☐Radiological ☐None - No further Remedial Investigation recommended

References: IRP Site Maps/Environmental Summary Folders/Remedial Investigation Characterization Summaries for OU

FUELS/TPH - Screen conducted by: CJC

Contaminant screening for the soils in proposed excavation area: ☑ **NO KNOWN FUEL CONTAMINANTS**

☐ Petroleum Hydrocarbons (Fuels) at depth of feet bgs **AND**: ☑ Excavation Area IS NOT impacted ☐ Excavation Area IS impacted (see below)

Fuels Contaminant(s) detected at ppm. Monitoring during excavation in the impacted area is: ☐ Required ☑ Not Required

A review of the reference documents indicates that the following FUELS/TPH contaminants are present in the soil that may cause worker exposures to exceed OSHA PEL's:

NON-VOC/HEAVY METALS - Screen conducted by: CJC

Contaminant screening for the soils in proposed excavation area: ☑ **NO KNOWN METAL CONTAMINANTS > OSHA PELs**

☐ Metals (NonVOC) at depth of feet bgs **AND**: ☑ Excavation Area IS NOT impacted ☐ Excavation Area IS impacted (see below)

A review of the reference documents indicates that the following NonVOC/Heavy Metals are present in the soil that may cause worker exposures to exceed OSHA PEL's:

George Permit Number: GSG-DCE0119-01

VOLATILE ORGANIC COMPOUNDS (VOC) - Screen conducted by: Cal

Contaminant screening for the soils in proposed excavation area: ☑ **NO KNOWN VOC CONTAMINANTS**

☐ VOCs at depth of feet bgs **AND:** ☐ Excavation Area IS NOT impacted ☐ Excavation Area IS impacted (see below)

VOC Contaminant(s) detected at ppm. Monitoring during excavation in the impacted area is: ☐ Required ☑ Not Required

A review of the reference documents indicates that the following VOC contaminants are present in the soil that may cause worker exposures to exceed OSHA PEL's:

RADIOLOGICAL CONTAMINANTS (Low Level) - Screen conducted by: Cal

Contaminant screening for the soils in proposed excavation area: ☑ **NO KNOWN RADIOLOGICAL CONTAMINANTS**

☐ Radiological contaminants at depth of feet bgs **AND:** ☑ Excavation Area IS NOT impacted ☐ Excavation Area IS impacted (see below)

Radiological Contaminant(s) detected at pCi/g. Monitoring during excavation in the impacted area is: ☐ Required ☑ Not Required

Soil Category(ies): A , B and/or C - Determined by: Cal

☐ Category A (Non-IRP): ☐ Entire Proposed Area of Excavation ☑ Other (Specify) Drilling

☐ Category B (IRP): ☐ Entire Proposed Area of Excavation ☐ Other (Specify)

☐ Category C (Contaminated): ☐ Entire Proposed Area of Excavation ☐ Other (Specify)

Disposition of Surplus or Contaminated Soil: ☑ **NO SURPLUS SOIL PROPOSED** leave onsite

☐ **Surplus Non-IRP**:

☐ **Surplus IRP**:

☐ **Contaminated Soil**: Containerize at work site for shipment to U.S. EPA approved Class I / II Landfill

Environmental Monitoring: ☑ N/A ☐ Entire Proposed Area of Excavation ☐ Other (Specify)

PROTECTED HABITAT - Screen conducted by:

☑ Project does not encroach upon or disturb Protected Habitat area.

☐ Project encroaches upon or disturbs Protected Habitat area, see attached Natural Resource Protection Measures.

GENERAL WORK CONDITIONS

(Based on the above environmental review, per all Plans as submitted following conditions are imposed on this project)

1. Excavation locations are limited to project area as proposed (see attached Map/Drawing)
2. Removal of asbestos containing materials shall be accomplished in accordance with current State and Federal regulations
3. All category A and B excavated soils shall be returned to the same area it was excavated from to the maximum extent practical
4. Excavated soil must be stockpiled in the immediate project work area unless otherwise approved by AFCEC
5. Implementation of BMP's is required for all excavations to ensure that no soils/sediments enter the storm drains/creeks
6. Protected habitat areas shall not be encroached upon, de-watered to, or disturbed in any manner.
7. **CONTACT AFCEC** (Mike Swart: OFC: 916-643-0830 x 230 CELL: 916-712-7462) **PRIOR TO MOVEMENT OF ANY SOIL TO AN OFFSITE LOCATION**

STOP WORK CONDITIONS

All work shall cease and the Air Force, Calvin Cox, (909) 553-3792 (Cherokee Nation Businesses (CNBus)) and the Project POC shall be notified should any of the following occur:

1. Encountering soils with discoloration, unusual odors, buried debris or munitions
2. Encountering piping with suspected asbestos materials
3. Release of hazardous substance to the environment (spill)
4. Damage caused to any utility
5. Unauthorized encroachment into a Protected Habitat
6. Project area becomes flooded and requires dewatering procedures to be approved/implemented

SPECIAL PROVISIONS

1. Coordinate excavation activities with the onsite AFCEC field person (Calvin Cox, CNBus, (909) 553-3792) to allow for soil management oversight
2. If applicable, a HAZWOPER trained crew is required for excavation in area as depicted on attached map
3. A Site Specific Health and Safety Plan required to address excavation of soils contaminated with: ☐ N/A ☐ VOC's ☐ NonVOC's ☐ Rad ☐ Fuels
4. Imported backfill/borrow must be sampled in accordance with the attached soil sampling protocol, sample results must be reviewed and approved by AFCEC prior to backfilling. Offsite backfill/borrow must be approved by AFCEC PRIOR to use/stockpiling on Air Force property.

IRP UTILITIES AND WELLS

Known IRP utilities within proposed project area - Screen conducted by: Cal

☐ Industrial waste line - depth: feet bgs	Additional Information/Comments:
☐ Groundwater Lines- depth: feet bgs (If Known)	
☐ SVE piping - depth: feet bgs (If Known)	
☑ Groundwater well(s) (well lid at surface) - Well No.s: NZ-120	

Impacts to any Air Force utilities shall not be allowed without AF approval. Contact the Air Force Field Representative upon encountering/damaging any suspected Air Force utilities. The requestor shall burden all costs to repair damaged Air Force utilities and wells as a result of this project.

CONTRACTOR ACKNOWLEDGEMENT

(To be Completed Prior to the Commencement of Soil Disturbance Activities)

I, the undersigned, have read and understand the terms and conditions of this Encroachment Permit as applicable to my project. I further acknowledge that I, the Contractor, am solely responsible for familiarity and compliance with all applicable requirements of this Encroachment Permit. This Permit must be revised if the project is altered or if conditions of the job site change.

Name (please print) Anna M. Scott **Signature** Anna M. Scott **Date 05-21-2019**

Company: GeoTek, Inc. **Phone Number: 951-205-1653**

AFCEC APPROVAL

REQUESTED ENCROACHMENT ☑ **APPROVED** ☐ **DISAPPROVED (See Attached Memo)**

DATE 1 June 2019

SIGNATURE OF AFCEC ENCROACHMENT PERMIT APPROVING OFFICIAL: Cal C. Cox

Anna Scott

From: noreply@digalert.org
Sent: Monday, May 20, 2019 1:00 PM
To: Anna Scott
Subject: DigAlert Confirmation for Ticket A191210545-01A

EMLCFM 03289A USAS 05/20/19 13:00:11 A191210545-01A REMK NORM POLY LREQ

Thank you for contacting Underground Service Alert of Southern California.
This is an automatically generated confirmation of your DigAlert.

For your safety please excavate carefully around the marked utility lines.

For more information regarding DigAlert's web portals, mobile apps and text messaging, please visit www.digalert.org or text Services to DIGALT (344258).

This email comes from an automated program that is NOT MONITORED.
DO NOT REPLY TO THIS EMAIL.

This is not a certified copy of the ticket.

Ticket: A191210545 Rev: 01A Created: 05/20/19 12:59 User: LAC Chan: 100

Work Start: 05/22/19 17:01 Legal Start: 05/22/19 17:01 Expires: 06/17/19 23:59
Response required: Y Priority: 2
Re-Marks Required: ALL

Excavator Information
Company: GEOTEK
Co Addr: 1548 N MAPLE ST
City : CORONA State: CA Zip: 92880
Created By: KYLE MCHARGUE Language: ENGLISH
Office Phone: 951-206-5443 SMS/Cell: 951-205-1653
Office Email: ASCOTT@GEOTEKUSA.COM

Site Contact: ANNA SCOTT
Site Phone: 951-205-1653 Site SMS/Cell:
Site Email:

Excavation Area
State: CA County: SAN BERNARDINO Place: VICTORVILLE
Zip: 92394
Location: Address/Street: WESTWIND RD
: X/ST1: NORTH CAROLINA AVE
:
: BOUNDED AREA: FRM N/E SIDE OF WESTWIND RD AT APPROX 200FT S/E OF
: NORTH CAROLINA AVE, N/E FOR APPROX 200FT, S/E FOR APPROX 275FT, S/W
: FOR APPROX 200FT & N/W FOR APPROX 275FT BACK TO STARTING POINT

Delineated Method: STAKES,WHITEPAINT
Work Type: (5) SOIL BORINGS
Work For : CITY OF VICTORVILLE
Permit: NOT REQUIRED Job/Work order: 2124-CR
1 Year: N Boring: N Street/Sidewalk: N Vacuum: N Explosives: N

Lat/Long
Center Generated (NAD83): 34.578559/-117.360274 34.579715/-117.359283

: 34.577330/-117.358838 34.578486/-117.357848

Excavator Provided:

Map link:
https://newtin.digalert.org/newtinweb/map_tkt.nap?TRG=468rFiFgDkBk3mB-c

Comments:

REQUEST RE-MARKS FROM ALL-WORK CONTINUING PER KYLE MCHARGUE--[LAC 05/20/2019 12:59:01 PM]

Members:

ADE01 C/OF ADELANTO-PERC WTR-WTR/SW	RAY CIRDERO	760-518-1606
BZALHAM BOOZ/ALLEN/HAMIL.-ENVIRONMEN	CALVIN COX	760-246-5360
SCIAIR SC LOGISTICS AIRPORT	OPERATIONS/SECURITY GUAR	760-243-1915
UCHARTER01 UTILIQUEST FOR CHARTER CO	ROY ONEAL	909-866-8316
USCE73 UTILIQUEST 4 SCE - VICTORVILL	SC EDISON PERSONNEL	800-611-1911
UVZBIS UTILIQUEST 4 FRONTIER -BISHOP	REPAIR CALL CENTER	800-921-8101
VIC01 C/OF VICTORVILLE-SWR,WTR,STD	CITY OF VICTORVILLE	760-243-6365
VICTMUNUS VICTORVILLE MUN UTIL - GAS	ANSWERING SERVICE	877-760-8687
VVWD VICTORVILLE WTR DIST	WADE PIEPER	760-955-2551

APPENDIX B

SOIL LABORATORY TEST RESULTS

GEOTEK

Orange Coast Analytical, Inc.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.: 2576
Expiration Date: 2020
Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client:	GeoTek, Inc.
Laboratory Reference:	GTK 24426
Project Name:	Victorville Reservoir
Project Number:	2124-CR
Date Received:	5/29/2019
Date Reported:	6/5/2019
Chain of Custody Received:	☑
Analytical Method:	8081A,

Mark Noorani, Laboratory Director

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 0.7ºC, on ice.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
ENV-1 Surface	24426-001	5/29/2019	5/29/2019	Soil
ENV-2 Surface	24426-002	5/29/2019	5/29/2019	Soil
ENV-3 Surface	24426-003	5/29/2019	5/29/2019	Soil
ENV-4 Surface	24426-004	5/29/2019	5/29/2019	Soil
ENV-1 @3'	24426-005	5/29/2019	5/29/2019	Soil
ENV-2 @3'	24426-006	5/29/2019	5/29/2019	Soil
ENV-3 @3'	24426-007	5/29/2019	5/29/2019	Soil
ENV-4 @3'	24426-008	5/29/2019	5/29/2019	Soil

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
ENV-1 Surface	24426-001	5/29/2019	5/29/2019	5/30/2019	6/3/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<8.0
alpha-BHC	319-84-6	<20
beta-BHC	319-85-7	<20
gamma-BHC (Lindane)	58-89-9	<20
delta-BHC	319-86-8	<40
Chlordane	57-74-9	<120
4,4'-DDD	72-54-8	<40
4,4'-DDE	72-55-9	<20
4,4'-DDT	50-29-3	<40
Dieldrin	60-57-1	210
Endosulfan I	959-98-8	<40
Endosulfan II	33213-65-9	<20
Endosulfan sulfate	1031-07-8	<40
Endrin	72-20-8	<40
Endrin aldehyde	7421-93-4	<40
Endrin ketone	53494-70-5	<20
Heptachlor	76-44-8	<8.0
Heptachlor epoxide	1024-57-3	<20
Methoxychlor	72-43-5	<40
Toxaphene	8001-35-2	<160

Surrogate:	% RC*
Decachlorobiphenyl	90

* Acceptable Recovery: 41-133 %

Dilution Factor: 4

Data Qualifiers: D2,

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
ENV-2 Surface	24426-002	5/29/2019	5/29/2019	5/30/2019	6/3/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	95

* Acceptable Recovery: 41-133 %

Dilution Factor: 1

Data Qualifiers: None

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
ENV-3 Surface	24426-003	5/29/2019	5/29/2019	5/30/2019	6/3/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	6.6
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	97

* Acceptable Recovery: 41-133 %

Dilution Factor: 1

Data Qualifiers: None

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
ENV-4 Surface	24426-004	5/29/2019	5/29/2019	5/30/2019	6/3/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	19
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	43
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	1300
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	98

* Acceptable Recovery: 41-133 %

Dilution Factor: 1

Data Qualifiers: D2, N1,

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
ENV-1 @3'	24426-005	5/29/2019	5/29/2019	5/30/2019	6/3/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	95

* Acceptable Recovery: 41-133 %

Dilution Factor: 1

Data Qualifiers: None

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
ENV-2 @3'	24426-006	5/29/2019	5/29/2019	5/30/2019	6/3/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	97

* Acceptable Recovery: 41-133 %

Dilution Factor: 1

Data Qualifiers: None

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
ENV-3 @3'	24426-007	5/29/2019	5/29/2019	5/30/2019	6/3/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	100

* Acceptable Recovery: 41-133 %

Dilution Factor: 1

Data Qualifiers: None

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
ENV-4 @3'	24426-008	5/29/2019	5/29/2019	5/30/2019	6/3/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	7.8
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	103

* Acceptable Recovery: 41-133 %

Dilution Factor: 1

Data Qualifiers: None

Ms. Anna Scott
GeoTek, Inc.
1548 N. Maple St
Corona, CA, 92880

Lab Reference #: GTK 24426
Project Name: Victorville Reservoir
Project #: 2124-CR

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBAV0530191			5/30/2019	5/31/2019	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	92

* Acceptable Recovery: 41-133 %

Dilution Factor: 1

Data Qualifiers: None

QA/QC Report
for
Organochlorine Pesticides (EPA 8081A)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 5/30/2019
Date of Analysis: 5/31/2019
Dup Date of Analysis: 5/31/2019
Laboratory Sample #: 24425-037
MS/MSD Qualifiers: None
Reference #: GTK 24426

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Gamma-BHC	0.00	20.0	14.0	15.8	70	79	12	48-130	26	☐
Heptachlor	0.00	20.0	16.6	18.3	83	91	10	47-130	26	☐
Aldrin	0.00	20.0	14.1	15.4	71	77	9	46-130	25	☐
Dieldrin	0.00	50.0	39.8	46.8	80	94	16	45-130	25	☐
Endrin	0.00	50.0	43.5	50.8	87	102	15	46-142	27	☐
DDT	0.00	50.0	45.9	50.0	92	100	9	43-138	29	☐

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Decachlorobiphenyl	80	87	☐

LCS	LCSD	Qual
91	99	☐

ACP % RC
41-133

Laboratory Control Sample

Date of Extraction: 5/30/2019
Date of Analysis: 5/31/2019
Dup Date of Analysis: 5/31/2019
Laboratory Sample #: AV0530191
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Gamma-BHC	20.0	15.0	16.5	75	82	10	47-130	24	☐
Heptachlor	20.0	17.2	19.2	86	96	11	47-130	25	☐
Aldrin	20.0	14.4	16.3	72	81	12	46-130	26	☐
Dieldrin	50.0	46.3	49.7	93	99	7	45-130	22	☐
Endrin	50.0	49.8	53.7	100	107	8	48-143	20	☐
DDT	50.0	49.0	53.8	98	108	9	47-135	22	☐

Data Qualifier Definitions

Qualifier

D2 = Sample required dilution due to high concentration of target analyte.

N1 = See case narrative.

24426-004	8081A	Sample reran at 20 fold dilution for Dieldrin. Run on 06/03/19 at 16:04.

Definition of terms:

R1	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: {(MS-R1) / SP CONC} x100
%MSD	Percent recovery of MSD: {(MSD-R1) / SP CONC} x 100
RPD (for MS/MSD)	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: {(LCS) / SP CONC} x100
%LCSD	Percent recovery of LCSD: {(LCSD) / SP CONC} x 100
RPD (for LCS/LCSD)	Relative Percent Difference: {(LCS-LCSD) / (LCS+LCSD)} x 100 x 2
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

ORANGE COAST ANALYTICAL, INC. www.ocalab.com
3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064 Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

Lab Job No: 24426
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: 48 Hours: 24 Hours:

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY:	GEOTEK	PROJECT NAME:	VICTORVILLE RESERVOIR
SEND REPORT TO:	ANNA SCOTT	NUMBER:	
EMAIL:		ADDRESS:	
ADDRESS:			
		P.O. #:	2124-CR
PHONE:	FAX:	SAMPLED BY:	

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	ANALYSIS REQUEST / PRESERVATIVE: GCP	REMARKS/PRECAUTIONS
ENV-1 Surface	1	5/29/19		SO	Sleeve	X	
ENV-2 Surface	1	5/29/19		↓	↓	X	
ENV-3 Surface	1	5/29/19		↓	↓	X	
ENV-4 Surface	1	5/29/19		↓	↓	X	
ENV-1 @ 3'	1	↓		↓	↓	X	
ENV-2 @ 3'	1	↓		↓	↓	X	
ENV-3 @ 3'	1	↓		↓	↓	X	
ENV-4 @ 3'	1	↓		↓	↓	X	

Total No. of Samples: Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Relinquished By:	Date/Time:	Received By:	Date/Time:
	5/29/19 12:43 PM		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: OCACA	Date/Time: 5/29/19 1243

Sample Matrix: DW - Drinking Water; GW - Groundwater; WW - Wastewater; SS - Soil/Solid; OT- Other

Sample Integrity: Intact ✓ On Ice ✓ IR# 0.6 °C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due with 30 days of invoice date unless otherwise agreed upon in writing with Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samp

Sample Receipt Report

Laboratory Reference: GTK 24426 Logged in by: MM

Received:	05/29/19 12:43	Company Name:	GeoTek, Inc.
Method of Shipment:	Hand Delivered	Project Manager:	Ms. Anna Scott
Shipping Container:	Cooler	Project Name:	Victorville Reservoir
# Shipping Containers:	1	Project #:	2124-CR

Sample Quantity
4 Soil

Chain of Custody		Complete ☑	Incomplete ☐	None ☐
Samples On Ice		Yes, Wet ☑	Yes, Blue ☐	No ☐
Observed Temp. (°C):	0.6	Thermometer ID: IR#1	Adjusted Temp.:	0.6+0.1=0.7
Shipping Intact		Yes ☑	N/A ☐	No ☐
Shipping Custody Seals Intact		Yes ☐	N/A ☑	No ☐
Samples Intact		Yes ☑		No ☐
Sample Custody Seals Intact		Yes ☐	N/A ☑	No ☐
Custody Seals Signed & Dated		Yes ☐	N/A ☑	No ☐
Proper Test Containers		Yes ☑		No ☐
Proper Test Preservations		Yes ☑		No ☐
Samples Within Hold Times		Yes ☑		No ☐
VOAs Have Zero Headspace		Yes ☐	N/A ☑	No ☐
Sample Labels		Complete ☑	Incomplete ☐	None ☐
Sample Information Matches COC		Yes ☑	N/A ☐	No ☐

Notes

Client Notified _____ By _____ On _____