Phoenix Park Master Plan
Initial Study/Mitigated Negative Declaration

Prepared for:

Fair Oaks Recreation and Park District

AECOM

August 2023

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Initial Study/Mitigated Negative Declaration

Prepared for:

Fair Oaks Recreation and Park District
4150 Temescal Street
Fair Oaks, CA 95628

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ACRONYMS AND OTHER ABBREVIATIONS

µm	micrometer
AB	Assembly Bill
ADA	Americans with Disabilities Act
AFB	Air Force Base
AIA	Airport Influence Area
ALUCP	Airport Land Use Compatibility Plan
ANSI S1.4	American National Standards Institute for Class 1 sound-level meters
ARB	California Air Resources Board
BACT	Best Available Control Technology
BMPs	best management practices
CAAQS	California ambient air quality standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CBC	California Building Standards Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CGS	California Geological Survey
CH_4	Methane
CHP	California Highway Patrol
CNPS	California Native Plant Society
CO_2	Carbon Dioxide
CO_2e	metric tons of carbon dioxide equivalent
Construction General Permit	NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-009-DWQ as amended by Order 2012-0006-DWQ)
CRR	Cultural Resource Report
CWA	Clean Water Act
L_{dn}	Day-Night Noise Level
dB	decibels
dBA	A-weighted decibels
District	Fair Oaks Recreation and Park District
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWMR	Department of Waste Management & Recycling
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMT	emergency medical technicians

EPA	U.S. Environmental Protection Agency
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FORPD	Fair Oaks Recreation and Park District
District	Fair Oaks Recreation and Park District
FOWD	Fair Oaks Water District
FTA	Federal Transit Administration
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWP	Global Warming Potential
High GWP	High Global Warming Potential
Hz	hertz
in/sec	inches per second
IS	Initial Study
MND	Mitigated Negative Declaration
K-8	kindergarten through 8th grade
LDL	Larson Davis Laboratories
L_{eq}	Equivalent sound level
L_{max}	Maximum sound level
LDR	Low Density Residential
LT	Long-term measurement
LUST	Leaking Underground Storage Tank
2010 Master Plan	*Master Plan for Parks, Facilities and Recreation Services*
Master Plan	Phoenix Park Master Plan
mgd	million gallons per day
MRZ	mineral resource zone
N_2O	Nitrous Oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NOI	Notice of Intent
NO_X	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
PCBs	polychlorinated biphenyls
PFER	Phoenix Field Ecological Reserve
PG&E	Pacific Gas and Electric Company
PM	particulate matter
PM_{10}	particulate matter equal to or less than 10 micrometers in diameter
$PM_{2.5}$	particulate matter equal to or less than 2.5 micrometers in diameter
PPV	peak particle velocity
PPVPP	Phoenix Park Vernal Pool Preserve
QSD	Qualified Stormwater Pollution Prevention Plan Developer

Regional San	Sacramento Regional County Sanitation District
RMS	root mean square
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
Sacramento County General Plan	*Sacramento County General Plan of 2005-2030*
SASD	Sacramento Area Sewer District
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SEL	sound exposure level
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SMUD	Sacramento Metropolitan Utility District
Superfund	U.S. Environmental Protection Agency's National Priorities List
SVAB	Sacramento Valley Air Basin
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board's
TACs	Toxic air contaminants
TCR	tribal cultural resources
TMDLs	total maximum daily loads
UCMP	University of California, Berkeley Museum of Paleontology
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VdB	vibration decibels
VFW	Veterans of Foreign Wars
VMT	vehicle miles travelled
WWTP	Wastewater Treatment Plant
µin/sec	micro inch per second

1 INTRODUCTION

1.1 OVERVIEW

The Fair Oaks Recreation and Park District (FORPD or District) has prepared this Initial Study/Proposed Mitigated Negative Declaration (IS/MND) in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines to address the environmental consequences of the proposed Phoenix Park Master Plan Project in Fair Oaks in unincorporated Sacramento County, California.

The proposed project would involve improvements to the existing Phoenix Park, including new parking areas, a new bike track, play/seating areas, shade structures, walking paths, and other ancillary improvements.

CEQA requires that all state and local government agencies consider the environmental consequences of projects they propose to carry out or over which they have discretionary authority, before implementing or approving those projects. The public agency that has the principal responsibility for carrying out or approving a project is the lead agency for CEQA compliance (CEQA Guidelines Section 15367). The District has principal responsibility for carrying out the proposed project and is therefore the CEQA lead agency for this IS/MND.

After the required public review of this document is complete, the District will consider adopting the proposed MND and a Mitigation Monitoring and Reporting Program, and then will decide whether to proceed with the proposed project.

1.2 PURPOSE OF THE INITIAL STUDY

This document is an IS/MND prepared in accordance with CEQA (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations). The purpose of this IS/MND is to (1) determine whether project implementation would result in potentially significant or significant effects on the environment; and (2) incorporate mitigation measures into the project design, as necessary, to eliminate the project's potentially significant or significant project effects or reduce them to a less-than-significant level.

If there is substantial evidence (such as the findings of an IS) that a project, either individually or cumulatively, may have a significant effect on the physical environment, the lead agency must prepare an Environmental Impact Report (EIR) (CEQA Guidelines Section 15064[a]). If the IS concludes that impacts would be less than significant, or that mitigation measures committed to by the applicant would clearly reduce impacts to a less-than-significant level, a negative declaration or MND can be prepared.

A negative declaration or MND is a written statement prepared by the lead agency describing the reasons why the proposed project would not have a significant impact on the environment, and therefore, would not require preparation of an environmental impact report (CEQA Guidelines Section 15371). According to Section 15070 of the CEQA Guidelines, a negative declaration or MND for a project subject to CEQA should be prepared when either:

- the initial study shows that there is no substantial evidence, in light of the whole record before the lead agency, that the project may have a significant impact on the environment; or

- the initial study identifies potentially significant impacts, but:
  - revisions made to the project plans or proposal before the proposed mitigated negative declaration is released for public review would avoid the impacts or mitigate the impacts to a point where clearly no significant impacts would occur; and
  - there is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant impact on the environment.

The District has analyzed the potential environmental impacts of the proposed project, determined that the proposed project's impacts would be less than significant or can be reduced to a less-than-significant level with the implementation of mitigation measures, and therefore has prepared this IS/MND.

1.3 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed project. The analysis in this Initial Study concludes that the proposed project, with implementation of mitigation measures, would have no significant impacts. As such, further environmental review is not required by CEQA. The District would adopt a Mitigation Monitoring and Reporting Program to ensure that all required mitigation measures are implemented.

1.4 APPROVALS

Approval of the proposed project requires discretionary action by the District, which includes adopting the IS/MND and a Mitigation Monitoring and Reporting Program.

Approvals that may be needed for construction and operation of the project may include, but are not necessarily limited to:

- Central Valley Regional Water Quality Control Board—Clean Water Act Section 402 National Pollutant Discharge Elimination System, Stormwater General Permit.
- Sacramento Area Sewer District – sewer connections and conveyance.
- Sacramento County – storm drain connection and stormwater runoff treatment, approval of a grading permit.
- California Department of Fish and Wildlife – oversight of improvements within the Phoenix Park Vernal Pool Preserve.

Other local, State, or federal approvals or permits may be necessary, pursuant to applicable laws and regulations.

1.5 DOCUMENT ORGANIZATION

This Initial Study is organized into four chapters:

- **Chapter 1, "Introduction,"** provides summary information about the proposed project and describes the purpose and content of the Initial Study, the project background, and the necessary permits and approvals.
- **Chapter 2, "Project Description,"** provides the project location, project objectives, and detailed project description and phasing.

- **Chapter 3, "Environmental Checklist,"** contains the completed initial study checklist. The checklist contains an assessment and discussion of impacts associated with each particular environmental issue. When the evaluation identifies potentially significant effects, as identified in the checklist, mitigation measures are provided to reduce such impacts to less-than-significant levels.
- **Chapter 4, "References,"** identifies the information sources used in preparing this Initial Study.

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2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND BACKGROUND

The proposed project site is located at the existing Phoenix Park at 9050 Sunset Avenue in the unincorporated community of Fair Oaks in Sacramento County (Figure 2.1-1 and Figure 2.1-2). Phoenix Park is approximately 65.9 acres in total land area, and comprised of five parcels (APNs 248-0052-039, 248-0052-027, 248-0064-017, 248-0036-027, 248-0048-054), owned and managed by Fair Oaks Recreation and Park District (District). Overall, the District manages a parks and recreation system consisting of 11 park sites totaling approximately 125 acres, eight facilities, and provides a wide range of recreation services to a population of approximately 31,000 residents.

Phoenix Park is a community park offering a variety of recreational facilities, including baseball fields, multipurpose fields, a bike park (Fair Oaks Bike Park), dog park, playgrounds, community gardens, walking trails, and other open spaces containing vernal pools (seasonal wetlands) and native oak trees. The Veterans of Foreign Wars (VFW) Center, a gathering space for veterans and community events, is an inholding within Phoenix Park but is not part of the park. Phoenix Park was established in 1979 and is the largest park in the District (District 2010). Major assets within the park are summarized below:

- 1 community garden
- 3 large ball diamonds
- 3 small ball diamonds
- 1 dog park
- 1 horseshoe pit
- 2 play areas
- 2 restroom buildings
- 1 bike park
- 4 large multipurpose fields
- 3 small multipurpose fields
- 4,772 feet of soft surface trails
- 6,679 feet of hard surface trails
- 17-acre vernal pool preserve area (Phoenix Park Vernal Pool Preserve)

Primary access to the park is provided from the northern and western boundaries at Sunset Avenue and Kruitof Way, respectively. Both roads connect to Maya Street, an internal road providing direct access to two centrally located surface parking lots and other park amenities. Secondary access to the park is provided from pedestrian entrances at surrounding residential streets, including Groff Drive, Vega Del Rio Drive, and Rigler Street.

Land surrounding the project site is primarily developed with single-family residences. Open spaces including the American River, Lake Natoma, the Mississippi Bar, and associated hiking trails are located just east of bordering residential neighborhoods. These adjacent open spaces are accessible on foot from Phoenix Park via the Vista Del Rio and Main Avenue trailheads. The project site is designated LDR (Low Density Residential) in the Sacramento County General Plan 2030 (Sacramento County 2011) and zoned O - Recreation. The O - Recreation zoning district permits public park facilities and wildlife preserves (Sacramento County 2021: Table 2.5).

Figure 2.1-1: Regional Project Location

Figure 2.1-2: Aerial View of Project Site

2.2 PROJECT CHARACTERISTICS

The proposed project would implement the Phoenix Park Master Plan (Master Plan) by making improvements to accommodate existing and future users of the park. The proposed improvements consist of additional recreational facilities and parking areas, along with ancillary improvements to improve operation and maintenance. Each of the proposed improvements are described below by location and/or category of use (see Figure 2.2-1 for a Master Plan overview).

2.2.1 AREA A - PARKING LOT

Area A consists of an existing dirt parking lot located to the south and east of the existing community gardens. Area A is proposed for development with an approximately 50,000-square-foot paved surface parking lot providing 129 vehicle spaces. The footprint of the existing parking lot would not change. Five-foot-wide concrete pathways would be constructed along the perimeter to connect the proposed parking lot to the interior of the park. A concrete garden entry plaza with space for seating, a drinking fountain, and materials storage would be installed in the northwest corner of Area A, along with a trellis at the main garden entrance gates. Biofiltration swales would buffer the parking lot from the roadway and the community garden and treat stormwater runoff from the new impervious surfaces (Figure 2.2-2).

2.2.2 AREA B - OPEN SPACE

Area B consists of Fair Oaks Bike Park, a playground, and a large undeveloped open space area covered by grass and ruderal vegetation in the central/western portions of the park. This area is bordered on the west by Maya Street and on the north and east by existing pedestrian pathways and ball fields. Area B is proposed for development with a new bike park/pump track[1], play area, open green space, picnic tables, shade structures, and two surface parking lots totaling 289 vehicle spaces and approximately 90,000 square feet. The proposed eastern parking lot would replace the existing Fair Oaks Bike Park in its current location, with the new bike park/pump track to be located to the immediate west. Both parking lots would be directly accessible from new access points on Maya Street. The proposed project would replace the existing playground in Area B in its current location with a new playground with a small water play feature. Pockets of green space would be interspersed throughout Area B, separating the parking lots from the play areas. Five- to six-foot-wide concrete pathways would be constructed along the perimeter of the parking lots to connect to other park facilities (Figure 2.2-3).

2.2.3 OTHER RECREATIONAL FACILITIES AND ANCILLARY PARK IMPROVEMENTS

Various recreational facilities would be added in select locations throughout Phoenix Park, including a new fitness/exercise court adjacent to the proposed Area B east parking lot (Area F), additional tables and bench seating (Area C), shade structures, and a sidewalk connecting existing pathways from Kruitof Way to the southern edge of the park. New seating areas and shade structures would primarily be installed adjacent to existing pathways in the eastern and southern areas of the park. Ancillary park improvements would also be implemented, including improving drainage around pathways and paved parking areas, improving the park irrigation system, upgrading existing restrooms, improving signage, and installing low voltage bollard lighting (Figure 2.2-1). All

1 A bike pump track allows cyclists of all ages to develop skills for off-road biking rather than trying to learn in more technical terrain, such as mountain biking trails.

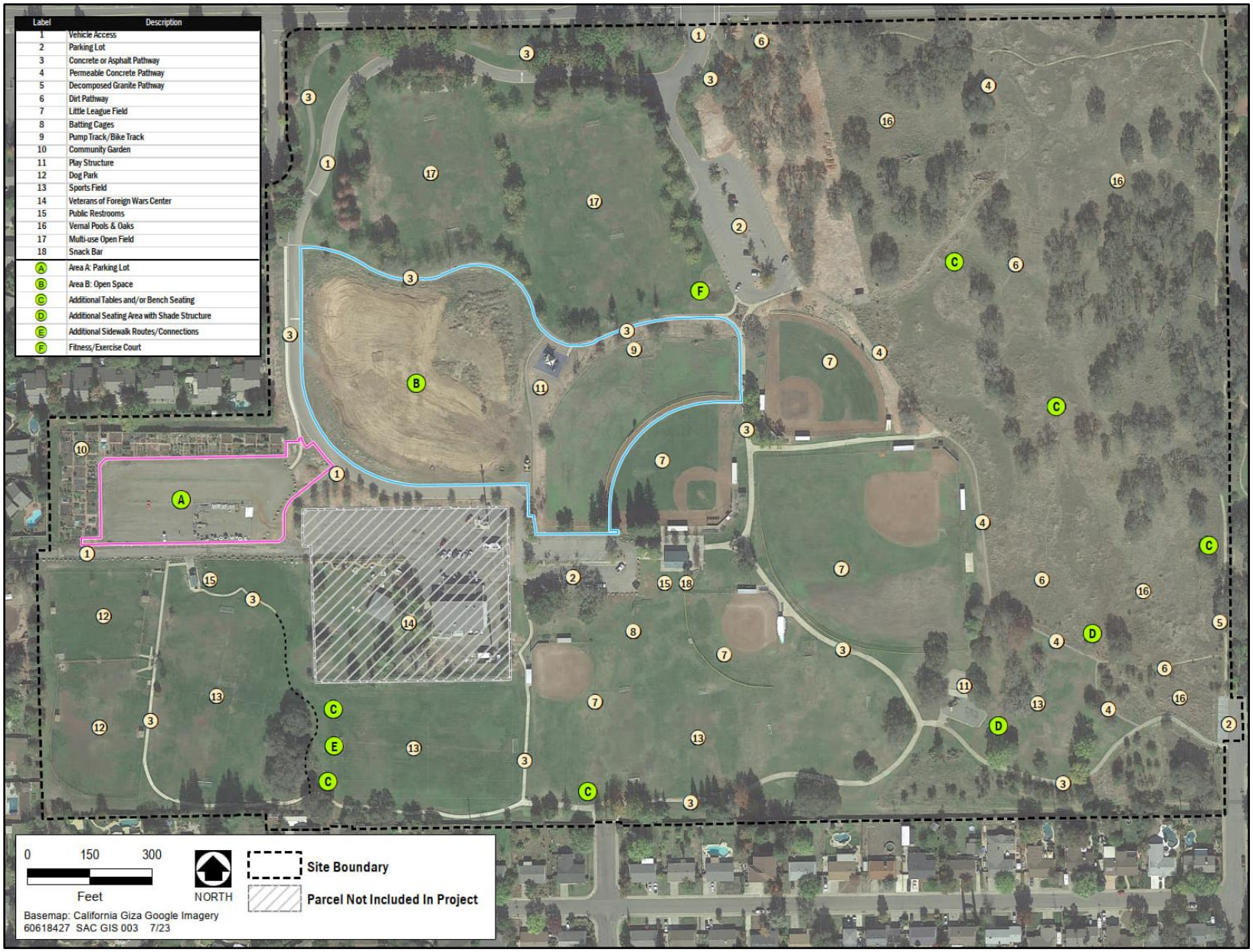

Figure 2.2-1: Proposed Master Plan Overview

Figure 2.2-2: Proposed Master Plan – Area A

Figure 2.2-3: Proposed Master Plan – Area B

new lighting would be shielded and directed downwards. The proposed shade structures and restroom building would use low-glare exterior materials to minimize the effects of glare on nearby land uses.

Overall, the District anticipates that with the proposed improvements a minor increase in park use would occur. The proposed bike park/pump track would replace the existing Fair Oaks Bike Park in generally the same location, but the improved facilities may encourage additional biking enthusiasts to use the site. The new shade structures, play areas, seating areas, and fitness court may also result in additional recreational use of Phoenix Park. No new large-scale events or change in hours of operation are planned and the general community-serving recreational use of the park would remain. Operations and maintenance activities and staff would not change under the proposed project.

2.3 PROJECT DEMOLITION, CONSTRUCTION, AND STAGING

All construction equipment and vehicles would be staged within the existing park, using portions of existing paved parking areas. The staging areas would be used as a location for construction worker parking and for workers to gather for instructional and planning meetings, as well as equipment and material storage. Project-related demolition and construction is anticipated to take 12 months in total. The proposed improvements may be completed in phases over the course of several years, based on funding availability, beginning with Areas A and B.

Typical equipment used during construction would include an excavator, backhoe, trencher, forklift, and paving equipment. Driving lanes along Maya Street or Kruitof Way may be temporarily affected as equipment such as concrete trucks, pumps, and compressors are brought into the site; however, construction equipment access will be focused on minimizing disruptions to users of the park. Appropriate traffic control will be implemented for all construction equipment ingress and egress.

The construction contractor will be responsible for erecting a chain-link fence with fabric screening or webbing around the proposed construction areas, to ensure that only authorized construction personnel and District representatives are allowed entry. In addition, warning signs indicating that the construction site poses a hazard to non-authorized personnel along with signs stating “No Admittance” would be posted on the fencing around the sites.

Demolition would be performed in a manner that maximizes salvage and recycling of materials. A minimum of 65 percent, by weight, of the solid waste generated would be diverted from landfill disposal through re-use and recycling. Materials to be recycled or re-used would be stored on-site in non-combustible containers. All demolition materials, waste, and debris that are not designated to be salvaged would become the project contractor’s property and would be removed and disposed of in compliance with applicable local, state, and federal regulations.

The proposed project would disturb over one acre of soil and would be required to conform to the stormwater treatment requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. A Notice of Intent (NOI) will be filed with the Regional Water Quality Control Board (RWQCB), and a Stormwater Pollution Prevention Plan (SWPPP) developed by a certified Qualified SWPPP Developer (QSD) prior to commencement of construction. The SWPPP will detail best management practices (BMPs) to be implemented by the project to reduce stormwater runoff from leaving the site during construction.

2.4 PROJECT OBJECTIVES

The objective of the project is to fulfill the mission of the District, which is to:

"Enrich Lives through Exceptional Parks and Recreation Opportunities That Strengthen Our Community."

2.5 PROJECT APPROVALS

Approval of the proposed project requires discretionary action by the District. The District is the lead agency for the proposed project. Pursuant to CEQA Section 21067, the lead agency means "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment." As the lead agency, the District has the responsibility for, among other things, preparing a CEQA document that analyzes the potential environmental impacts of the proposed project; identifying feasible mitigation measures that could avoid or minimize significant environmental impacts; and adopting a Mitigation Monitoring and Reporting Program to ensure that all required mitigation measures are implemented.

The project may require approvals from other agencies, including:

- Sacramento County: encroachment permit, grading permit
- Central Valley Regional Water Quality Control Board: construction general stormwater permit
- California Department of Fish and Wildlife: review and approval of new features within Phoenix Park Vernal Pools Preserve

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3 ENVIRONMENTAL CHECKLIST

	Category	Project Information
1.	Project Title:	Phoenix Park Master Plan
2.	Lead Agency Name and Address:	Fair Oaks Recreation and Park District, 4150 Temescal Street, Fair Oaks, CA 95628
3.	Contact Person and Phone Number:	Sean Ventura, Parks Manager Fair Oaks Recreation and Park District 4150 Temescal Street, Fair Oaks, CA 95628 sventura@forpd.org
4.	Project Location:	9050 Sunset Avenue, Fair Oaks, CA 95628
5.	Project Sponsor's Name and Address:	Fair Oaks Recreation and Park District
6.	General Plan Designation:	Low Density Residential (LDR)
7.	Zoning:	O - Recreation
8.	Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.	The proposed project would involve improvements to the existing Phoenix Park, including new parking areas, a new bike track, play/seating areas, a new fitness/exercise court, new or upgraded restroom facilities, open green space, shade structures, walking paths, drainage improvements along pathways, improvements to the park irrigation system, signage improvements, and low-voltage bollard lighting. The proposed improvements would be located within the boundaries of the existing 65.9-acre Phoenix Park.
9.	Surrounding Land Uses and Setting:	The project site is surrounded by single-family residential land uses.
10:	Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)	California Department of Fish and Wildlife, Central Valley Regional Water Quality Control Board, Sacramento Area Sewer District, Sacramento County Engineering Department, Sacramento County Department of Water Resources.

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.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

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

☒ I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Sean Ventura
Signature

2023.07.28
Date

Sean Ventura
Printed Name

Park Manager
Title

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). 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 the 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. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. 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.

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3.1 AESTHETICS

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

3.1.1 DISCUSSION

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

No Impact. There are no scenic vistas at the project site or in the vicinity of the project site, which consists of an existing developed park surrounded by single-family residences, south of Sunset Avenue in the developed Fair Oaks area. Thus, there would be ***no impact***.

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

No Impact. There are no state- or locally-designated scenic highways in the vicinity of the project site. Garden Highway, the closest locally-designated scenic highway, is approximately 14 miles to the southwest (Sacramento County 2022a). State Route 160, the closest state-designated scenic highway, is approximately 20 miles to the southwest (California Department of Transportation 2023). Thus, there would be ***no impact***.

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

EXISTING VISUAL RESOURCES

The approximately 65.9-acre Phoenix Park is located in the developed area of Fair Oaks, which is an unincorporated community in Sacramento County. The area immediately surrounding the park consists of single-

family residential development. Phoenix Park and the immediately surrounding development are situated on a flat alluvial terrace south of Sunset Avenue, east of Hazel Avenue, and west of the Mississippi Bar area of the American River Parkway. Views of Phoenix Park from Hazel Avenue are blocked by a tall block soundwall on the east side of Hazel Avenue, along with intervening single-family residences with associated tall landscape trees. Views of Phoenix Park from the American River Parkway are blocked by the intervening elevated topography and oak woodlands. Views of the northern half of the Phoenix Park are available to motorists traveling eastbound and westbound on Sunset Avenue. Maya Street serves as the main park entrance from Sunset Avenue and traverses a portion of the park in an east-west and then a north-south direction.

As described in detail in Chapter 2, "Project Description," Phoenix Park was developed in 1979 and includes a variety of recreational facilities, including baseball fields, multipurpose fields, a bike park (Fair Oaks Bike Park), dog park, playgrounds, community gardens, walking trails, and other open spaces containing vernal pools (seasonal wetlands) and native oak trees. The park consists primarily of irrigated turf grass open space and play fields, wetland areas (green in spring but brown for most of the year), oak woodlands and urban landscape trees, and parking areas (Figure 3.1-1). Most of the proposed improvements would be situated in Areas A and B, shown on Figure 2.2-1 through Figure 2.2-3 in Chapter 2, "Project Description" of this Initial Study.

Area A consists of an existing parking lot surrounded by a community garden (Figure 3.1-2). The parking lot is composed of gravel, and is surrounded by large decorative boulders (to restrict vehicular access), along with metal trash cans. The community garden is immediately adjacent to the parking lot to the north; the garden is enclosed by 6-foot-tall, metal chain link fencing. On the north side of the garden, the fencing is covered with ivy, which provides a year-round, green visual screen for the adjacent residences. The community garden consists of raised beds with gravel paths, plastic chairs, tarps, and various garden supports for plants such as trellises.

Area B consists of undeveloped open space on the east side of Maya Street, and a portion of the park that is immediately north of the existing baseball/softball fields. East of Maya Street, this portion of Area B consists of a slightly elevated terrain composed of previous soil piles, over which low-growing natural vegetation has established. There are currently no developed recreational activities in this location (Figure 3.1-3). Area B immediately north of the existing softball/baseball fields consists of undeveloped open space covered with low-growing grasses, a children's play structure, a pump track and bike track, and two connecting pathways (north-south and east-west) around the perimeter (Figure 3.1-4).

Impact Analysis

Less-than-Significant Impact. The improvements proposed for Phoenix Park were envisioned with community input as part of the District's *Master Plan for Parks, Facilities & Recreation Services* (Pros Consulting 2010), and further defined through additional community outreach in 2023 during development of the Phoenix Park Master Plan. As part of the proposed project, in the eastern portion of the park (shown in Figure 3.1-1), additional tables and bench seating would be provided for recreationists using the existing vernal pools/oak woodland trails. In Area A (shown in Figure 3.1-2), the existing gravel parking area would be replaced by a paved parking lot with perimeter shade trees. Bioswales would be installed around the perimeter and in the middle of the parking area to improve drainage and provide water quality pre-treatment. On the northwest side, a concrete entry plaza to the existing community garden would be installed, with space for bench seating, a drinking fountain, and garden materials storage. A new entry to the community garden with a trellis would be provided. This area would also include garden waste bins and trash bins with a concrete apron.

Source: Google Earth 2023

Figure 3.1-1: View of Phoenix Park East Side in Summer, Looking South from Sunset Avenue.
Wetlands and oak woodlands are visible in the foreground and middleground, along with an unpaved walking trail through this portion of the park. The back side of fencing associated with the softball/baseball fields is also visible in the middleground, on the right side of the photo.

Source: Google Earth 2020

Figure 3.1-2: View of Area A in Early Spring, Looking West from Maya Street.
Small landscape trees, a paved pathway, the community garden surrounded by chain link fencing, and the gravel parking lot surrounded by boulders and a yellow gate are visible in the foreground. Green turf soccer fields, a white soccer net, and a tan concrete block restroom building with a green roof are visible in the middleground, along with an overhead power pole and power lines. Tall landscape trees (a mix of evergreen and deciduous) are visible along the park boundary and within the adjacent single-family residential development.

Source: Google Earth 2020

Figure 3.1-3: View of Area B North in Early Spring, Looking Southeast from Maya Street.
Undeveloped open space covered with grasses and weeds is visible in the foreground. In the middleground, the parking area with landscape trees just south of Sunset Avenue is visible in the left side of the photo, an existing children's play structure (dark blue) is visible in the center, and the back side of fencing around one of the softball/baseball fields along with landscape trees next to another parking area are visible in the right side of the photo. Oak trees in the eastern portion of the park, along with landscape trees in adjacent residential areas, are visible in the background.

Source: Google Earth 2020

Figure 3.1-4: View of Area B East in Early Spring, Looking Northeast from Maya Street.
A paved pathway with wooden markers, undeveloped open space surrounded by metal chain link fencing, the back side of fencing surrounding a softball/baseball field, and a fenced children's play structure are visible in the foreground. Turf grass play fields with landscape trees, the northern parking area with landscape trees, and the edge of the existing bicycle track (beyond the blue barrel) are visible in the middleground. Tall oak trees in the eastern portion of the park, and landscape trees associated with single-family residential development, are visible in the background.

In the northern portion of Area B (shown in Figure 3.1-3), the pump track and bike track would be moved from their current location to this area of undeveloped open space. The new tracks would be flanked by new paved parking along Maya Street. Turf grass would be installed around the perimeter of the tracks, with new paved pathways, landscaping (including shade trees), seating areas, picnic tables, a drinking fountain, plaza space at the new bicycle parking, and a shade structure capable of accommodating up to 32 people. In the eastern portion of Area B (shown in Figure 3.1-4), the existing pump track and bike track would be replaced by a paved parking area surrounded by turf grass and landscaping (including shade trees). The existing children's play structure would be replaced and augmented with a water play feature, plaza area with bicycle parking, large seating area, drinking fountain, restroom building, and a shade structure capable of accommodating up to 32 people.

The project site is designated LDR (Low Density Residential) in the Sacramento County General Plan and is zoned O – Recreation (Sacramento County 2023a). The O - Recreation zoning district permits public park facilities and wildlife preserves (Sacramento County 2023b: Table 2.5), and is intended to preserve the open space and other areas of unusual scenic beauty and recreational potential that are unique to Sacramento County and California and to protect the County's physical, social, recreational, aesthetic, and economic resources.

Phoenix Park is designated as a Recreation Facility in the *Fair Oaks Community Plan*, and the proposed project is consistent with the policies adopted in the Parks and Recreation Plan Element of the Fair Oaks Community Plan (Sacramento County 1975), which are focused on preserving existing parks and acquiring land for additional parks.

As part of the Community/Neighborhood Preservation and Enhancement goal in the Sacramento County General Plan (Sacramento County 2020), the County includes an objective to preserve and enhance the quality and character of the County's unique communities. The unincorporated area of the County, including the project site, is a mosaic of unique communities, each possessing a distinct character and a different set of needs. The County intends that the quality of life offered in these communities should be preserved and/or enhanced to ensure that each community is a safe and attractive place to live, work, and play. Quality of life can be affected by a number of factors, including high quality and diverse housing, a wide variety of recreational opportunities, excellent schools, and interesting shopping destinations. The proposed project would help achieve the objective to preserve and enhance the unique character of this area of Fair Oaks, and would enhance the visual character of the existing project site.

The *Sacramento Countywide Design Guidelines* (Sacramento County 2022b) contain several guidelines that are specific to parks, and it also contains general guidelines that would apply to a variety of projects. These policies and guidelines are related to topics such as new development that complements the aesthetic style and character of nearby existing development, land use connectivity including walkable communities, high-quality architectural design, incorporation of natural features such as trees and rock outcroppings into site-specific design, the use of anti-reflective exterior coatings, and the need for shielding of nighttime lighting to reduce light pollution. The proposed project would be compatible within the context of the project's surroundings and the project would be a positive addition to the community, both functionally and aesthetically. Thus, the proposed project would not conflict with the County's design guidelines.

The proposed project designs (shown in Figure 2.2-1 through Figure 2.2-3 in Chapter 2, "Project Description") would visually improve the existing park complex by improving the landscaping, lighting, signage, and pathways in a manner that is consistent with District and County standards. The proposed project would complement and

enhance the park viewshed by providing improved green grass areas and numerous new shade trees, replacing dirt parking with paved parking, improving the area around the community garden, improving the connectivity of pathways in the park, and providing new landscaped and paved parking areas to better accommodate visitor use. The proposed project would improve the visual character and quality of the viewshed both on site and for the surrounding area as a whole, and would be consistent with District and Sacramento County standards governing scenic quality. This impact would be ***less than significant (beneficial)***.

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

Less-than-Significant Impact. There is minimal existing nighttime lighting in the project area in the form of low-voltage security lighting at surrounding single-family residences. Overhead street lighting is present along Hazel Avenue, approximately 440 feet west of the western park boundary, and on Sunset Avenue at the northern park boundary. Phoenix Park closes at dusk/dark. There are minimal sources of nighttime lighting in the park, primarily limited to security lighting in parking areas and restroom facilities. As part of the proposed project, the sports fields would not be lit at night. However, minimal low-voltage bollard lighting would be provided along pedestrian pathways in the interior of the park to assist visitors exiting the park in the evening and to improve safety and security. The proposed bollard lighting would be shielded and directed downward, and would be of low voltage. No lighting would be installed in Areas A or B which are closer to sensitive receptors. Furthermore, the lighting would at a low height from the ground, and the lights would be few in number. The new shade structures and restroom building would be composed of low-glare materials. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and this impact would be ***less than significant***.

3.2 AGRICULTURE & FORESTRY RESOURCES

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

3.2.1 DISCUSSION

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

No Impact. The proposed project would make improvements to the existing Phoenix Park, which is located in a developed area of Fair Oaks in unincorporated Sacramento County. There is no Prime Farmland, Unique

Farmland, or Farmland of Statewide Importance located on the project site (California Department of Conservation 2023a). Therefore, no farmland would be converted to non-agricultural use and there would be ***no impact***.

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

No Impact. The project site is not zoned for agricultural use or under a Williamson Act contract (California Department of Conservation 2023b). The proposed improvements to Phoenix Park would not result in conflicts with these land use restrictions. Therefore, there would be ***no impact.***

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

No Impact. The project site does not contain any lands zoned as forest land, timberland, or Timberland Production. The project site is zoned O – Recreation in the Sacramento County Zoning Code and the proposed park improvements would not result in zoning conflicts. Therefore, there would be ***no impact***.

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

No Impact. The project site does not contain any forest land. Therefore, there would be ***no impact***.

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

No Impact. The proposed project is located in a developed area and would not affect any farmland or forest land, either directly or indirectly. Therefore, there would be ***no impact***.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
III. Air Quality. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 ENVIRONMENTAL SETTING

Air quality is defined as the concentration of pollutants in relation to their impact on human health. Ambient concentrations of air pollutants are determined by the amount of emissions released by pollutant sources and the ability of the atmosphere to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight. Therefore, existing air quality conditions in the project area are influenced by factors such as topography, meteorology, and climate, as well as the quantity emissions released by air pollutant sources.

The proposed project site is located in the Sacramento Valley Air Basin (SVAB). The SVAB climate is characterized by hot, dry summers and cool, rainy winters. Typically, winds transport air pollutants northward out of the SVAB; however, during approximately half of the time from July to September, the wind pattern shifts southward, blowing air pollutants back into the SVAB and exacerbating the concentration of air pollutant emissions in the air basin. In addition, between winter storms, high pressure and light winds contribute to low-level temperature inversions and stable atmospheric conditions, resulting in the concentration of air pollutants.

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) as being of concern both on a nationwide and statewide level: ozone; carbon monoxide; nitrogen dioxide; sulfur dioxide; lead; and particulate matter (PM), which is subdivided into two classes based on particle size – PM equal to or less than 10 micrometers in diameter (PM_{10}) and PM equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$).

Health-based air quality standards have been established for these pollutants by EPA at the national level and by ARB at the state level. These standards are referred to as the national ambient air quality standards (NAAQS) and the California ambient air quality standards (CAAQS), respectively. The NAAQS and CAAQS were established to protect the public with a margin of safety from adverse health impacts caused by exposure to air pollution. Both EPA and ARB designate areas of California as "attainment," "nonattainment," "maintenance," or "unclassified" for the various pollutant standards according to the federal Clean Air Act and the California Clean Air Act, respectively. Because the air quality standards for these air pollutants are regulated using human and environment health-based criteria, they are commonly referred to as "criteria air pollutants."

Within the SVAB, the Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for ensuring that emission standards are not violated and for attainment planning required to achieve air pollution standards for pollutants for which the area is currently in non-attainment. With respect to regional air quality, the SMAQMD region, including Sacramento County, is currently designated as nonattainment for the NAAQS and CAAQS for ozone, and nonattainment for the NAAQS for 24-hour $PM_{2.5}$, and the CAAQS for PM_{10}.

3.3.2 DISCUSSION

This section includes an evaluation of direct impacts, as well as cumulative effects given the nature of criteria air pollutant emissions impacts. This section also evaluates impacts related to pollutant concentrations, with a focus on how those pollutants could affect sensitive populations.

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

Less-than-Significant Impact with Mitigation Incorporated. Air quality plans describe air pollution control strategies to be implemented to bring an area that does not attain the NAAQS or CAAQS into compliance with those standards, or to maintain existing compliance with those standards, pursuant to the requirements of the federal Clean Air Act and the California Clean Air Act.

SMAQMD has adopted air quality plans pursuant to regulatory requirements under EPA and ARB for the attainment and maintenance of federal and state ambient air quality standards. The goal of the air quality plans is to reduce criteria air pollutant emissions for which the SVAB is designated as nonattainment in order to achieve NAAQS and CAAQS by the earliest practicable date. For ozone nonattainment, the regional air quality management plan was developed and most recently updated as the 2017 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2017 Ozone Attainment and Progress Plan); this plan describes and demonstrates how the Sacramento Federal Nonattainment Area is meeting requirements under the federal CAA in demonstrating reasonable further progress and attainment of the NAAQS for ozone (SMAQMD 2017). Some elements of the Ozone Attainment and Progress Plan were updated in 2018 and included in the 2018 Updates to the California State Implementation Plan, which updated State Implementation Plan (SIP) elements for nonattainment areas throughout the state, as needed. These updates to the plan were adopted by ARB on October 15, 2018. The Ozone Attainment and Progress Plan is the currently adopted and applicable air quality plan for the region. For particulate matter, SMAQMD developed the $PM_{2.5}$ Maintenance Plan and Redesignation Request (SMAQMD 2013) to address how the region attained and would continue to attain the 24-hour $PM_{2.5}$ standard and the PM_{10} Implementation/ Maintenance Plan and designation Request for Sacramento County (SMAQMD 2010). In 2017, EPA found that the area attained the 2006 24-hour $PM_{2.5}$

NAAQS by the attainment date of December 31, 2015. The $PM_{2.5}$ Maintenance Plan and Redesignation Request will be updated and submitted in the future based on the clean data finding made by the EPA.

As documented in the SMAQMD CEQA Guide (SMAQMD 2021), the recommended construction and operational mass emissions thresholds for ozone precursors correlate to the reactive organic gas (ROG) and nitrogen oxide (NO_X) reductions from heavy-duty vehicles and land use project emission reduction requirements committed to in the Ozone Attainment Plan for the Sacramento Federal Ozone Nonattainment Area; therefore, projects whose emissions would be less than the recommended thresholds of significance for criteria air pollutants would not conflict with or obstruct implementation of applicable air quality plans related to the attainment of ozone. Similarly, the construction and operational mass emissions thresholds for PM correlate to the SMAQMD's permitting offset trigger levels, which prevents deterioration of ambient air quality and ensures projects do not worsen the region's attainment status (SMAQMD 2015). Therefore, projects whose emissions do not exceed the recommended PM thresholds of significance would also not conflict with or obstruct implementation of the applicable air quality plans related to PM.

The proposed project construction-related activities would be required to comply with SMAQMD rules and regulations established, in part, to ensure implementation of and consistency with strategies and actions of the applicable air quality plans, including but not limited to Rule 401 (Ringlemann Chart), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), and Rule 405 (Dust and Condensed Fumes). As discussed in detail in impact discussion 'b)' below, modeled project construction and operational emissions would not exceed the SMAQMD thresholds of significance for any criteria pollutant. However, due to the nonattainment status of the SVAB with respect to ozone, PM_{10}, and $PM_{2.5}$, SMAQMD recommends that all construction projects implement the SMAQMD Basic Construction Emission Control Practices (SMAQMD 2019). Without incorporation of SMAQMD's Basic Construction Control Practices, the proposed project construction activities would be considered **potentially significant**.

Mitigation Measure AQ-1: Implement the SMAQMD Basic Construction Emission Control Practices.

The District shall require that the construction contractor(s) comply with Basic Construction Emission Control Practices identified by the SMAQMD and listed below or as they may be updated in the future, and as applicable to the construction activities:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry powered sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

SIGNIFICANCE AFTER MITIGATION

As stated above, construction-related and operational emissions associated with the proposed project would not exceed the SMAQMD-recommended thresholds of significance and are therefore consistent with those anticipated for the purpose of regional air quality attainment plans. Mitigation Measure AQ-1 would ensure that the project's construction activities implement applicable emission control practices, established by SMAQMD for the purposes of minimizing emissions and aligning with regional air quality attainment plan strategies. Therefore, with implementation of Mitigation Measure AQ-1, the proposed project would not conflict with or obstruct an applicable air quality plan, and this impact would be ***less than significant with mitigation incorporated***.

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

Less-than-Significant Impact with Mitigation Incorporated. The nonattainment status of regional pollutants is a result of past and present development within the SVAB, and this regional impact is cumulative in nature rather than being attributable to any one source. A single project's emissions may be individually limited, by could be cumulatively considerable when considered in combination with past, present, and future emissions sources within the air basin. With respect to regional air quality, the SMAQMD region, including Sacramento County, is currently designated as nonattainment for the NAAQS and CAAQS for ozone, and nonattainment for the NAAQS for 24-hour $PM_{2.5}$, and the CAAQS for PM_{10}. The SMAQMD has established project-level construction and operational emissions thresholds of significance for ROG (only an operational emissions threshold is established for this pollutant), NO_X, PM_{10}, and $PM_{2.5}$. If a project's emissions are below the SMAQMD thresholds of significance, the project is not considered to result in a cumulatively considerable contribution to a significant impact on regional air quality (SMAQMD 2021).

Construction

Construction emissions are described as short-term or temporary in duration but have the potential to adversely affect air quality. Construction would result in temporary emissions of criteria air pollutants and ozone precursors from activities such as demolition, site preparation (e.g., excavation, grading, and clearing), project component and/or infrastructure construction, paving, and application of architectural coatings. Ozone precursor emissions of ROG and NO_X are associated primarily with construction equipment exhaust and construction-related vehicle exhaust from worker commute trips and material deliveries. Evaporative ROG emissions would also result from asphalt paving and the application of architectural coatings. PM emissions are also generated by equipment and vehicle exhaust. Clearing and earthmoving activities comprise the major source of construction dust generation, but re-entrained road dust from vehicle travel and general disturbance of the soil also contribute to these emissions. Fugitive dust PM generation is dependent on soil type, soil silt content, soil moisture, wind speed, as well as the amount of total acreage actually involved in clearing, grubbing and grading activities and total vehicle

travel. Sand, lime, or other fine particulate materials may be used during construction and stored onsite. If not stored properly, such materials could become airborne during periods of high winds.

The California Emissions Estimator Model (CalEEMod), Version 2022.1.1.14, was used to model project emissions. Table 3.3-1 summarizes the emissions of ROG, NO_X, PM_{10} and $PM_{2.5}$ associated with construction of the project. Model reports showing emissions inputs and outputs, including the daily and annual emissions estimates are included in Appendix A. As there can be differences in the emissions between winter and summer, the maximum daily emissions shown in the below tables for construction and operations show the maximum level of emissions between the seasons.

Table 3.3-1: Summary of Construction-Related Emissions of Criteria Air Pollutants and Ozone Precursors

	Maximum Daily Emissions ROG (pounds per day)	Maximum Daily Emissions NO_x (pounds per day)	Maximum Daily Emissions PM_{10} (pounds per day)	Maximum Daily Emissions $PM_{2.5}$ (pounds per day)	Maximum Annual Emissions PM_{10} (tons per year)	Maximum Annual Emissions $PM_{2.5}$ (tons per year)
Project Construction Emissions	5.67	54.3	29.5	15.8	0.77	0.42
SMAQMD Significance Threshold[1]	N/A	85	80	82	14.6	15
Do Project Emissions Exceed SMAQMD Threshold?	N/A	No	No	No	No	No

Notes:

N/A = not applicable (i.e., there is no established threshold for this pollutant); NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; $PM_{2.5}$ = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ROG = reactive organic gases; SMAQMD = Sacramento Metropolitan Air Quality Management District

[1] Thresholds for PM_{10} and $PM_{2.5}$ represent SMAQMD thresholds of significance with the application of Best Management Practices (BMPs) and Best Available Control Technology (BACT).

Emissions modeled by AECOM in 2023. See Appendix A for detailed construction inputs and model output files.

As shown in the Table 3.3-1, the proposed project construction would not exceed the significance thresholds established by SMAQMD. As discussed under impact 'a)' above, although construction emissions would not exceed SMAQMD thresholds, SMAQMD recommends that all construction projects implement the SMAQMD Basic Construction Emission Control Practices (SMAQMD 2019). Therefore, without incorporation of SMAQMD's Basic Construction Emission Control Practices, the project's construction activities could potentially result in a cumulatively considerable contribution to a significant impact on regional air quality. Therefore, this impact related to project construction would be **potentially significant.**

Operations

Implementation of the proposed project is not anticipated to substantially change operations or maintenance activities associated with the park. Once a project is completed, additional pollutants are emitted through the use or operation of the site. Daily activities associated with the current use and operations of the park generate criteria air pollutant emissions and precursors from mobile, energy and area sources. Public parks typically involve the following sources of emissions: motor vehicle trips generated by the land use; fuel combustion from landscape maintenance equipment; evaporative emissions of ROG associated with the use of consumer products; and

evaporative emissions of ROG resulting from the application of architectural coatings. In the case of the proposed project, park operations would include electricity to accommodate lighting and maintenance of the park but are not anticipated to have a need for natural gas service and would be similar to existing operations. In addition, area source emissions associated with intermittent architectural coating reapplication are accounted for in long-term operational emissions estimates. No increase in operations and maintenance staff and associated vehicle trips would result from the proposed project. However, the proposed project would improve and renovate an existing park to enhance cohesion and usability of the park's facilities as a community-serving use and could result in a minor net increase in park users traveling to and from the park with an associated minor net increase in operational mobile source emissions.

While construction emissions are considered short-term and temporary, operational emissions are considered long-term and occur for the lifetime of the project. Long-term operational emissions were modeled using CalEEMod, Version 2022.1.1.14. The acreage of improvements and overall disturbance areas were included in the model. For modeling purposes, the proposed park improvements were conservatively assumed to be new park land uses as opposed to replacements or upgrades to existing land uses, thereby informing the estimated net increase in operational emissions, including mobile and area source emissions. The resultant long-term operational emissions estimates are shown in Table 3.3-2.

Table 3.3-2: Summary of Operational Emissions of Criteria Air Pollutants and Precursors

	Maximum Daily Emissions ROG (pounds per day)	Maximum Daily Emissions NO_x (pounds per day)	Maximum Daily Emissions PM_{10} (pounds per day)	Maximum Daily Emissions $PM_{2.5}$ (pounds per day)	Maximum Annual Emissions PM_{10} (tons per year)	Maximum Annual Emissions $PM_{2.5}$ (tons per year)
Operational Emissions	0.06	0.01	0.01	< 0.005	< 0.005	< 0.005
SMAQMD Significance Threshold[1]	65	65	80	82	14.6	15
Do Project Emissions Exceed SMAQMD Threshold?	No	No	No	No	No	No

Notes:

NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; $PM_{2.5}$ = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ROG = reactive organic gases; SMAQMD = Sacramento Metropolitan Air Quality Management District

[1] Represents SMAQMD Threshold of Significance with the application of Best Management Practices (BMPs) and Best Available Control Technology (BACT).

Emissions modeled by AECOM in 2023. See Appendix A for detailed construction inputs and model output files.

As shown in Table 3.3-2, maximum daily and annual operational emissions would not approach any SMAQMD threshold. This comparison to the SMAQMD thresholds shows that operations would not contribute substantially to any existing or projected air quality violation and would not conflict with efforts to reach attainment of any air quality standards. Therefore, impacts to air quality from long-term operations with implementation of the proposed project would be ***less than significant***.

SIGNIFICANCE AFTER MITIGATION

Construction-related and operational project emissions would be below the SMAQMD emissions thresholds. Mitigation Measure AQ-1 described under impact discussion 'a)' above ensures that the project would implement the SMAQMD-recommended basic emission control practices during construction, allowing the use of the non-zero particulate matter construction significance thresholds and further reducing construction-related emissions, in alignment with the recommendations of SMAQMD. Therefore, this impact would be ***less than significant with mitigation incorporated***.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less-than-Significant Impact. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, those with existing health conditions, and athletes or others who engage in frequent exercise are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered sensitive receptors include schools, daycare centers, parks and playgrounds, and medical facilities.

Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation.

Sensitive receptors nearest to the project site are users of the park and residences surrounding the park. Residents near the project site are either adjacent to park roadways or park boundaries.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a set of airborne pollutants that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage; or short-term acute affects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.

Stationary sources of TACs include gasoline stations, dry cleaners, and diesel backup generators. On-road motor vehicles and off-road sources, such as construction equipment and trains, are also common sources of TACs. According to the California Almanac of Emissions and Air Quality (ARB 2013), most of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being diesel particulate matter (DPM). Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as DPM. More than 90 percent of DPM is less than 1 micrometer (µm) in diameter, and thus is a subset of $PM_{2.5}$. Other TACs for which data are available that currently pose the greatest ambient risk in California are benzene, formaldehyde, hexavalent chromium, 1,3-butadiene and acetaldehyde.

Operations of the proposed project would not include substantial sources of TACs. Construction would generate DPM emissions from the use of off-road diesel-powered equipment and any diesel-powered trucks serving construction activities. These activities may expose nearby receptors to TACs, including surrounding residents

and onsite park users. As noted above, DPM is a subset of exhaust generated $PM_{2.5}$, and therefore a subset of the total and maximum daily $PM_{2.5}$ presented in Table 3.3-2.

Health risk is a function of the concentration of contaminants in the environment and the duration of exposure to those contaminants. Concentrations of mobile-source DPM emissions are typically reduced by approximately 60 percent at a distance of around 300 feet (100 meters) (Zhu and Hinds 2002). While there are residences surrounding the proposed project site, construction activities would be dispersed throughout the entire approximately 8-acre construction disturbance area. Additionally, the proposed project site is surrounded by open space and vegetation that provides a 70-foot buffer between the project site and a residential neighborhood; vegetation buffers can limit the exposure of sensitive receptors to diesel emissions from construction (USDA 2023). In addition, as shown in the detailed emissions outputs in Appendix A, the maximum daily exhaust $PM_{2.5}$ emissions are estimated to be less than 2.25 pounds per day or average daily emissions of approximately 0.5 pound per day on average.

The risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. Health effects from TACs are often described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs (OEHHA 2015). Construction activities for the proposed project would be temporary, would vary in activity and equipment intensity over that time, and would take place throughout the entirety of the project site, thereby limiting the amount of time that emitting equipment would be within a distance that would expose sensitive receptors to substantial concentrations. If the duration of construction activities near a sensitive receptor was for the entirety of a year, which is not anticipated, then the exposure would be 3.3 percent of the total exposure period used for typical health risk calculations (i.e., 30 years). In addition, the proposed project would implement Mitigation Measure AQ-1 to comply with the SMAQMD-recommended emission reduction measures, which would also help reduce construction-related TAC emissions. Due to the intermittent and temporary nature of construction activities, the dispersive properties of TACs, and the fact that average daily $PM_{2.5}$ emissions, of which DPM is only a subset, would be less than 0.5 pound per day, short-term construction would not expose sensitive receptors to DPM emission levels that would result in a health hazard. As a result, this impact would be **less than significant**.

Health Effects of Criteria Air Pollutants

Criteria air pollutants can have human health effects at various concentrations, dependent upon the duration of exposure and type of pollutant. CAAQS and NAAQS were established to protect the public with a margin of safety from adverse health impacts caused by exposure to air pollution. Similarly, air districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations and attainment designations under the NAAQS and CAAQS. As noted above, projects that emit criteria air pollutants that exceed the SMAQMD thresholds of significance are considered to be "cumulatively considerable" and may contribute to the regional cumulative degradation of air quality that could result in impacts to human health.

Health effects associated with ozone include respiratory symptoms, worsening of lung disease, and damage to lung tissue. In recent years, a correlation has also been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality (EPA 2022). ROG and NO_X are precursors to ozone, for which the SVAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of ROG and NO_X to regional ambient ozone concentrations is the result of complex photochemistry. The increases in ozone concentrations in the SVAB due to ozone precursor emissions tend to be found downwind of the source

location because of the time required for the photochemical reactions to occur. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of ozone precursors is speculative. Health effects associated with short- and long-term exposure to elevated concentrations of PM_{10} include respiratory symptoms, aggravation of respiratory and cardiovascular diseases, a weakened immune system, and cancer (WHO 2016). $PM_{2.5}$ poses an increased health risk because these very small particles can be inhaled deep in the lungs and may contain substances that are particularly harmful to human health.

The proposed project would primarily generate criteria air pollutant emissions during the construction phase, and the primary pollutants of concern would be ozone precursors (ROG and NO_X) and PM. Adverse health effects induced by regional criteria pollutant emissions generated by the proposed project (ozone precursors and PM) are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, gender]). For these reasons, ozone precursors (ROG and NO_X) contribute to the formation of ground-borne ozone on a regional scale, where emissions of ROG and NO_X generated in one area may not equate to a specific ozone concentration in that same area. Similarly, some types of particulate pollutant may be transported over long distances or formed through atmospheric reactions. As such, the magnitude and locations of specific health effects from exposure to increased ozone or regional PM concentrations are the product of emissions generated by numerous sources throughout a region, as opposed to a single individual project.

Existing models have limited sensitivity to small changes in regional criteria pollutant concentrations, and as such, translating project-generated regional criteria pollutants to specific health effects would not produce meaningful results. In other words, minor increases in regional air pollution from project-generated ROG and NO_X would have nominal or negligible impacts on human health. Currently, ARB and EPA have not approved a quantitative method to meaningfully and consistently translate the mass emissions of criteria air pollutants from a project to quantified health effects. As explained in the amicus brief filed by the South Coast Air Quality Management District (SCAQMD) in the *Sierra Club v. County of Fresno* (2014) 26 Cal.App.4th 704, it "takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels" (SCAQMD 2015).

In 2020, SMAQMD published *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (SMAQMD 2020), which provides a screening level analysis estimating the health effects of criteria ai pollutants and their precursors, as well as provides guidance for conducting a health effects analysis of a project that satisfies the requirements of the *Sierra Club v. County of Fresno*, 2018, 6 Cal. 5th 502 case ruling regarding the proposed Friant Ranch Project. The Guidance was prepared by conducting regional photochemical modeling and relies on the EPA's Benefits Mapping and Analysis Program to assess health impacts from ozone and $PM_{2.5}$. An analysis was conducted to estimate the level of health effects for a proposed project that has emissions at the maximum SMAQMD-recommended thresholds of significance using 41 hypothetical project locations, as well as a screening model conducted to estimate potential health effects for strategic areas where development is anticipated to cause exceedance of thresholds of significance. The results were used to develop two screening tools intended to support individual projects in analyzing health risks from criteria pollutants: the Minor Project Health Screening Tool for projects with criteria pollutant emissions below SMAQMD's adopted thresholds of significance, and the Strategic Area Project Health Screening Tool for projects with emissions between two and six times the SMAQMD threshold levels.

The modeling results support a conclusion that any one proposed project in the Sacramento Federal Nonattainment Area, which is inclusive of the proposed project site, with emissions at or below the maximum SMAQMD thresholds of significance levels for criteria air pollutants does not on its own lead to sizeable health effects. The findings of the SMAQMD screening modeling indicate that the mean health incidence for a project emitting at the threshold of significance levels at all 41 representative locations was less than 3 per year for mortality and less than 1.5 per year for other health outcomes evaluated. The maximum reported mortality rate is 22 incidences per year and all other health outcomes evaluated are under 9 per year from a project emitting 656 pounds/day of each NO_X, ROG, and $PM_{2.5}$ at the downtown Sacramento strategic area that was defined and used in SMAQMD's analysis.

As shown in Table 3.3-1 and Table 3.3-2, project-related emissions during both construction and operational phases would be well below the SMAQMD-recommended thresholds of significance and those emissions levels used to inform the SMAQMD screening described above. As described previously, the SMAQMD modeling indicated that for projects with emissions at or below the maximum SMAQMD thresholds of significance levels for criteria air pollutants, the project on its own does not lead to sizeable health effects. As discussed above, the nature of criteria pollutants is such that the emissions from an individual project cannot be directly identified as responsible for health impacts within any specific geographic location. As a result, attributing health risks at any specific geographic location to a single proposed project is not feasible.

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

Less-than-Significant Impact. The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Typically, odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e., irritation, anger, or anxiety) to the physiological, including circulatory and respiratory effects, nausea, vomiting, and headache. The ability to detect odors varies considerably among the population and overall is quite subjective.

The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines and emissions associated with asphalt and non-asphalt paving and the application of architectural coatings may be considered offensive to some individuals. Surrounding residents may be exposed to such construction-related odors. However, the odors would be temporary and disperse rapidly with distance from the source. Therefore, construction-generated odors would not result in the frequent exposure of receptors to objectionable odor emissions. Furthermore, the proposed project is required to comply with applicable portions of SMAQMD Rules 402 (Nuisance) and 442 (Architectural Coatings), which would help ensure that odors generated by short-term construction would not affect a substantial number of people. Therefore, this impact would be ***less than significant***.

Parks are not typically considered to be sources of objectionable odors. Industries and/or facilities that are likely to emit objectionable odors include wastewater treatment plants, landfills, composting facilities, petroleum refineries, and manufacturing plants. The proposed project would not include any of these types of facilities. In addition, implementation of the proposed project would not substantively increase or change operations and maintenance activities for the park. As a result, this impact would be ***less than significant.***

3.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IV. Biological Resources. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

3.4.1 DISCUSSION

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

Less-than-Significant Impact with Mitigation Incorporated. The proposed project site is within the existing Phoenix Park recreation complex administered by the Fair Oaks Recreation and Park District. A field survey was completed for the proposed project to assess habitat quality and the potential for occurrence of special-status species (AECOM 2023). The purpose of the survey was to evaluate habitats and sensitive biological resources present within and adjacent to the project site.

The project site consists of gravel lots, developed roadways, multiple managed fields/open spaces, naturalized nonnative annual/perennial grassland, a gravel and dirt bike park, baseball diamonds, and other recreational infrastructure used by the public. Land uses surrounding the project site are primarily residential, with pockets of commercial and industrial land uses located along Sunset Avenue and Hazel Avenue to the west and southwest of the site, respectively.

Land cover for areas affected by the proposed project include urban (developed), managed recreational fields and open spaces, disturbed-ruderal areas, and naturalized annual/perennial grassland. Residential land uses surround the project site and have very low-quality habitat for many species; however, planted native and nonnative trees within the park boundaries and within adjacent residential yards may provide nesting habitat for passerine birds and raptors while open spaces and naturalized annual/perennial grassland may provide foraging habitat for predatory birds.

Oak woodlands and vernal pool habitats are present within Phoenix Park and are primary protected features of the park. Vernal pools are seasonally inundated wetlands that form after winter rains. There is potential for presence of sensitive and special-status species within the vernal pools, and they provide higher quality habitat than the adjacent managed open spaces and disturbed areas; however, no construction disturbance would occur within them, and they will be protected in perpetuity in accordance with the approved Phoenix Vernal Pools Management Plan (CDFW 2006). The Phoenix Vernal Pools Management Plan encompasses the Phoenix Field Ecological Reserve (PFER) and the Phoenix Park Vernal Pool Preserve (PPVPP), collectively referred to as the Phoenix Vernal Pools. The approximately 8-acre PFER was established as a mitigation site in 1979 for a nearby housing development and is managed by CDFW. The PFER is located outside of the Phoenix Park boundaries, northeast of the site across Sunset Avenue. The approximately 15-acre PPVPP was designated as a separate management area to conserve vernal pool habitat for Sacrament Orcutt grass (*Orcuttia viscida*) and the western spadefoot toad (*Scaphiopus hammondii*) and is managed by the District in cooperation with U.S. Fish and Wildlife Service (USFWS), CDFW, California Native Plant Society (CNPS), and the National Park Service's (NPS) National Natural Landmark Program. This area generally encompasses the eastern portion of Phoenix Park and is identified with signage throughout the park.

Developed land cover is present throughout the project area and is defined by areas developed by humans and mostly devoid of vegetation. Many of these areas were mapped as part of larger open spaces and managed fields altered for specific recreation purposes. Examples of these areas include concrete and asphalt sidewalks, paved roads, gravel parking areas, concrete pads for bench seating and signage adjacent to the oak woodland/vernal pool complex, and a community garden within Area A. No special-status species are expected to occur within these areas. Opportunistic bird species that are tolerant of anthropogenic disturbance commonly use developed areas for foraging and graveling. Other wildlife that may use developed areas for cover and forage include western fence lizard (*Sceloporus occidentalis*) and eastern fox squirrel (*Sciurus niger*); these species also provide prey for predatory birds.

The managed field land cover type consists of multiple areas within Phoenix Park, all associated with a specific recreational use or feature. These areas include highly managed, homogeneous grass fields with planted oak tees acting as fence lines or visual blocks separating fields from each other and from traffic along Sunset Ave, managed fields bordered by asphalt walkways used for sports, a bike pump and jump track, multiple baseball diamonds, dog park, and playground area. The vegetation community is dominated by a single planted grass and some ruderal, weedy vegetation including pineapple weed (*Matricaria discoidea*), musk stork's bill (*Erodium*

moschatum), cheeseweed (*Malva parviflora*), and dandelion (*Taraxacum officinale*) along field edges or within thin margins of oak woodland bordering managed fields. This managed field habitat may provide limited foraging, roosting, resting, and nesting sites for birds and small mammals. Wildlife that may be found in this land cover type includes opportunistic birds like American crow, rock pigeon (*Columba livia*), mourning dove, northern mockingbird (*Mimus polyglottos*), California scrub jay (*Aphelocoma californica*), and European starling. A large parliament of magpies was observed foraging throughout areas mapped and used as a managed field. Other wildlife that may use developed areas for cover and foraging include western fence lizard and eastern fox squirrel. Use as foraging habitat by small mammals, reptiles, and birds increases potential use as foraging habitat for predatory birds.

Naturalized annual and perennial grassland cover is dominated by introduced, non-native species that act as ruderal vegetation and thrive in disturbed areas of Phoenix Park. A narrow band of ruderal vegetation is present between oak woodland and developed walkways. Area B contains the largest area of standalone grassland habitat other than the oak woodland/vernal pool complex and is characterized by nonnative annual grasses including ripgut brome (*Bromus diandrus*) and wild oats (*Avena* spp.), intermixed with Ithuriel's spear (*Triteleia laxa*) and mustard (*Brassica nigra*). There are no direct paths currently traversing the undeveloped grassland area in Area B. This feature does not appear to be maintained in any way. No wildlife was observed using this patch of grassland vegetation at the time of the survey, and no evidence of wildlife use (i.e., tracks, scat, or burrows) was found.

Trees within the project site may provide suitable nesting habitat for migratory and resident birds. Construction activities could have direct or indirect impacts to nesting and foraging habitat for migratory and resident species. Direct impacts could occur through removal of vegetation containing nests, specifically within Area B (naturalized annual/perennial grassland to be converted to managed open space), and through disturbance associated with demolition and construction activities. Construction activities could potentially result in nest abandonment by adults and mortality of chicks and eggs. Loss of the nests of common bird species would not result in a substantial impact on local or regional populations; however, 'destruction' of bird nests is a violation of the Migratory Bird Treaty Act and Section 3503 of the California Fish and Game Code.

It is possible that special-status wildlife species could occur within the oak woodland/vernal pool complex within the project site. All tree cover within the project site could also offer potential nesting habitat for listed raptors such as Swainson's hawk. Aside from the oak woodland/vernal pool complex, it is unlikely that special status wildlife species could occur within the developed, naturalized annual/perennial grassland, and managed field areas of the project site due to a lack of suitable habitat, the highly disturbed nature of ruderal vegetation and trees within the site, and the proximity of this site to traffic and residential developments. No special-status plant or wildlife species were observed in the proposed project site during the reconnaissance survey. Based on the presence of intact oak woodland and vernal pool habitat it is possible that candidate, sensitive, or special-status plant or wildlife species could occur in or near the project site. Impacts of the proposed project on these resources would be ***potentially significant*.**

Mitigation Measures BIO-1. Avoid Impacts on Common Nesting Migratory Birds

The District shall require contractor/s to implement the following measures during demolition and construction activities to avoid adverse effects to special-status nesting birds and common nesting birds:

- Wherever feasible, the contractor will conduct construction activities that could potentially affect common nesting birds outside of the nesting season. The nesting season for common nesting birds

(raptors, passerines) is February 1 to August 31. If construction activities are completed outside of these nesting seasons, no additional measures are required to avoid adverse effects on nesting birds.

- If construction activities that could affect suitable habitat for nesting birds cannot be conducted outside of the nesting seasons listed above, a qualified biologist shall complete pre-construction surveys for nesting birds. Surveys will be conducted by a qualified biologist within suitable nesting habitat that could be affected by construction activities (e.g., staging areas, access routes) and will include a 500-foot buffer area. The qualified biologist will complete preconstruction surveys within 1 week of the start of construction activities. Surveys will be repeated if construction activities lapse for more than 1 week. If no nesting birds are detected during preconstruction surveys, no additional measures are required.
- If nesting birds have been identified by a qualified biologist in or adjacent to a proposed construction area, the qualified biologist will establish a non-disturbance avoidance buffer for construction activities that would potentially affect the nesting birds. The buffer is 150 feet for passerines, 500 feet for raptors, and 200 feet for heron or egret rookeries. Buffers will be marked on plans and specifications and in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers. Work will not occur within nest exclusion buffers without CDFW approval of work activities and the presence of an approved biological monitor onsite.
- Construction activities will not occur within the buffer unless the qualified biologist determines that such construction activities would not adversely affect nesting activities. Construction activities that may impact special-status nesting birds occurring within the avoidance buffer/s described above will be monitored by a qualified biologist either continuously or periodically during work, as determined by the qualified biologist. The qualified biologist will be empowered to stop construction activities that, in the biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on nesting birds (e.g., nest abandonment). Buffers will be maintained until there is no longer a threat of disturbance to the nesting bird (e.g., young have fledged, individuals have moved out of the area), as determined by a qualified biologist.

Mitigation Measure BIO-2. Adhere to Adopted Phoenix Vernal Pools Management Plan

The District shall require contractor/s to implement the following measures during final design, demolition, and construction activities to avoid impacts to nearby vernal pools and special-status species potentially present within them:

- Construction activities shall be implemented in accordance with the management goals and tasks set forth in the adopted Phoenix Vernal Pools Management Plan (CDFW 2006), including but not limited to restricting access to the vernal pool areas for all construction workers, vehicles, and equipment; maintaining existing cyclone fencing and signage around the vernal pools; minimizing erosion, sedimentation, and deposition in the vernal pools during construction activities; maintaining adequate drainage; minimizing the spread of invasive species; and educating construction personnel about sensitive resources within the vernal pools and the importance of avoiding them.
- Drainage improvements shall be designed and constructed to adhere to the specifications set forth in the Phoenix Vernal Pools Management Plan. Adequate seasonal drainage shall be maintained for all vernal pools.

- Final design plans for improvements within the Phoenix Park Vernal Pools Preserve shall be provided to CDFW for confirmation and recommendation of any additional measures for consistency with the management goals of the Phoenix Vernal Pools Management Plan.

Mitigation Measure BIO-3: Protect Existing Vernal Pool Habitat and Special-Status Species During Construction

The District shall require contractor/s to implement the following measures during final design, demolition, and construction activities to avoid impacts to nearby vernal pools and special-status species potentially present within them:

- Restricted vernal pool areas shall be identified on all construction plans and specifications in consultation with a qualified biologist.
- A 50-foot no-disturbance buffer around vernal pools will be identified by a qualified biologist prior to the start of construction. Exclusionary fencing will be installed at the edge of the work area to ensure work does not infringe on the vernal pools.
- Ground disturbance adjacent to vernal pool areas shall be limited to the minimum needed to complete the work and scheduled during the dry season to avoid potential runoff effects.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure BIO-1 would reduce impacts to nesting birds to less-than-significant levels by requiring preconstruction surveys if construction occurs within the nesting season of birds with potential to occur near the project site and the establishment of non-disturbance buffers around active nests, if identified. Additionally, continued adherence to the established Phoenix Vernal Pools Management Plan (Mitigation Measure BIO-2) and protection of vernal pools during construction (Mitigation Measure BIO-3) would reduce impacts to special-status species present in this management area. This impact is ***less than significant with mitigation incorporated.***

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

Less than Significant Impact with Mitigation Incorporated. The habitat present within the project site consists of oak woodland, vernal pools, developed, managed fields, naturalized nonnative annual/perennial grassland, and ruderal vegetation. Oak woodland/vernal pool habitat is a primary feature of the park; this habitat is under state and federal protection due to the potential presence of listed plant and animal species. Work planned within the vicinity of these sensitive habitats consists of minor improvements adjacent to existing walking trails, such as the construction of small seating areas or shade structures. No native oak or other protected native trees are planned for removal in any of the proposed work areas throughout Phoenix Park and no work would occur within any identified vernal pool habitat. Nonetheless, erosion, sedimentation, and deposition are key concerns for preservation of vernal pool habitat and would need to be minimized to the maximum extent feasible, even when installing minor features such as seating areas. As described in further detail in Section 3.10, "Hydrology and Water Quality", the proposed project would disturb over one acre of soil and would be required to comply with the NPDES General Construction Permit, along with preparing an Erosion and Sediment Control Plan in compliance with the County's Grading and Erosion Control Ordinance. These regulatory requirements would ensure that erosion control BMPs are identified and implemented throughout construction to avoid and minimize

any impacts to waterbodies on- and off-site, including the vernal pools. Mitigation Measures BIO-2 and BIO-3 would further minimize the potential for impact to this sensitive natural community during construction by requiring continued compliance with the provisions of the Phoenix Vernal Pools Management Plan and establishment of avoidance areas by a qualified biologist prior to construction. Therefore, this impact would be ***less than significant with mitigation incorporated.***

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

Less-than-Significant Impact with Mitigation Incorporated. No federally protected wetlands will be altered or removed as a result of work activities. Work activities within Area C will not impact vernal pool habitat or federally protected wetlands with the implementation of the mitigation measures detailed herein. The only area of concern identified during the biological resources survey was the oak woodland/vernal pool complex within the eastern end of the survey area, and no wetlands besides the vernal pools previously noted were identified during the database investigation. Additionally, the proposed improvements are restricted to the existing Phoenix Park, which consists primarily of developed land cover (asphalt, gravel, residential buildings, and recreational infrastructure) and managed fields with planted oaks (both native and nonnative). Protection of the vernal pools in Phoenix Park is implemented in accordance with the Phoenix Vernal Pools Management Plan (CDFW 2006) and overseen through a collaborative effort between the District, USFWS, CDFW, CNPS, and NPS. As stipulated in Mitigation Measure BIO-2, the proposed project would continue to adhere to these requirements and would not interfere with ongoing management efforts for this sensitive wetland habitat. Mitigation Measure BIO-3 would require pre-construction review and establishment of avoidance areas by a qualified biologist to further minimize the potential for impact. Therefore, this impact would be ***less than significant with mitigation incorporated***.

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

No Impact. Wildlife movement corridors link areas of suitable wildlife habitat that may otherwise be separated by rugged terrain, changes in vegetation, and/or areas of human disturbance or urban development. Topography and other natural factors, in combination with urbanization, can fragment or separate large open-space areas. The fragmentation of natural habitat creates isolated "islands" of habitat that may not provide sufficient area to accommodate sustainable populations and can adversely impact genetic and species diversity. Movement corridors mitigate the effects of this fragmentation by allowing animals to move between remaining habitats, which in turn allows depleted populations to be replenished and promotes genetic exchange between separate populations. The proposed project would not interfere with wildlife movement, migratory corridors, or nursery sites. This project does not contain any significant waterways for fish passage and does not serve as a corridor for any migratory or native wildlife. Vernal pool habitat within the park acts as an isolated fragment of formerly widespread vernal pool habitat in Sacramento County. These pools may act as breeding habitat for listed vernal pool invertebrates; however, this project site is located within the Fair Oaks community, a developed area consisting primarily of residential and commercial land uses, and there is no potential for migration from vernal pool habitat within Phoenix Park to adjacent habitat. Developed residential areas surround the project site on all sides. Therefore, there would be ***no impact***.

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

No Impact. No trees are proposed for removal within any of the planned work areas. During the reconnaissance survey, AECOM biologists did not identify any protected trees within Area A (gravel lot), Area B (annual grassland), or Area C (vernal pool shade structures and trail improvements) which would need to be removed or trimmed to facilitate the proposed improvements. Therefore, there would be ***no impact***.

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

Less-than-Significant Impact. The proposed project site is located partially within the PPVPP, which is managed pursuant to the approved Phoenix Vernal Pools Management Plan. The proposed project would be implemented consistent with the goals and tasks of the existing management plan and would not conflict with any of its provisions. The PPVPP would be maintained and protected during construction and operation of the proposed project. The proposed project is not within the planning area of any other Habitat Conservation Area, Natural Community Conservation Plan, or other conservation plan. Thus, implementation of this project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other conservation plan, and the impact would be ***less than significant***.

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3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

3.5.1 DISCUSSION

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

No Impact. A Cultural Resource Report (CRR) was prepared by AECOM for the project. The following information is based on this report. A discussion of the historic, prehistoric, and ethnographic setting can be found in the CRR in Appendix B (AECOM 2023).

A review of files maintained at the North Central Information Center (NCIC) of the California Historical Resources Information System was conducted on June 20, 2023 for the project site and a 0.25-mile radius. No previously recorded cultural resources have been documented within the project site and seven resources were previously identified outside of the project site within the 0.25-mile search radius.

On June 19, 2023, on behalf of the District, AECOM consulted with the Native American Heritage Commission (NAHC) pursuant to California Government Code Sections 65352.3 and 65352.4, AB 52, and Public Resources Code sections 21080.1, 21080.3.1, and 21080.3.2. A response from the NAHC dated July 7, 2023 stated that the results of the sacred lands search were negative. The NAHC also provided a list of Native American contacts that may have additional information.

In accordance with Assembly Bill (AB)) 52, pursuant to Public Resources Code Section 21080.3.1 and on behalf of the District AECOM prepared and distributed requests for consultation letters to the United Auburn Indian Community, Ione Band of Miwok Indians, Shingle Springs Band of Miwok Indians, Buena Vista Rancheria of Mewuk Indians, Tsi Akim Maidu, Wilton Rancheria, and Colfax-Todds Valley Consolidated Tribe on June 30, 2023. To date no responses have been received.

On June 22, 2023 AECOM cultural resource senior archaeologist Richard Deis conducted pedestrian survey of the Phoenix Park project site. No cultural material or sites were observed during the pedestrian survey. No historic-age built environment features were identified within the project site.

Based on review of the background research, NAHC Sacred Lands File negative results, and results of the field survey, there are no identified cultural resources, no historic-age built environment features, and therefore, no historical resources within the project site. Therefore, there would be ***no impact***.

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

Less-than-Significant Impact with Mitigation Incorporated. Based on review of previous investigations and pedestrian survey, no cultural resources were identified within the project site during the current investigation, and the probability for the presence of unanticipated finds is considered to be extremely low; however, a possibility still exists that archaeological features could be discovered in the project site, including in areas where structures are not currently developed (e.g., grass playfields). The impact is considered ***potentially significant.***

Mitigation Measure CUL-1: Unanticipated Cultural Resources

The District and its contractor(s) shall implement the following measures during demolition and construction activities to minimize impacts to unanticipated cultural resources.

- In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained by the District to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained.

    1. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either (1) not cultural in origin; or (2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.

    2. If a potentially eligible resource is encountered, then the archaeologist and District staff shall arrange for either (1) total avoidance of the resource, if possible; or (2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the District for verification that the provisions of CEQA for managing unanticipated discoveries have been met.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure CUL-1 provides appropriate actions for inadvertant discovery of cultural resources (excluding human remains, which are addressed below). Implementation of Mitigation Measure CUL-1 would reduce potential impacts on previously undiscovered cultural resources to a less-than-significant level because compliance with the above-listed procedures would address concerns about loss of, or substantial adverse changes to, significant cultural resources. If an inadvertent discovery of cultural materials is made during project-related construction activities, disturbances in the area of the find must be halted and appropriate treatment and protection measures must be implemented, all in consultation with a professional archaeologist and/or Native American monitor. As a result, this impact would be ***less than significant with mitigation incorporated.***

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

Less-than-Significant with Mitigation Incorporated. There has been no indication or evidence that the area has been used for human burials in the recent or distant past. Therefore, human remains are unlikely to be encountered. Project construction would involve grading, trenching, excavation, and potentially other earthmoving activities. In the unlikely event that human remains are discovered during subsurface activities, they could be inadvertently disturbed and damaged. Therefore, this impact would be ***potentially significant***.

Mitigation Measure CUL-2: Unanticipated Human Remains

The District shall require contractor/s to implement the following measures during demolition and construction activities to minimize impacts to unanticipated human remains:

- Pursuant to Sections 5097.97 and 5097.98 of the Public Resources Code, and Section 7050.5 of the Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the District shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure CUL-2 provides appropriate actions for inadvertent discovery of human remains. If remains are encountered, the above-described mitigation measure would require compliance with the procedures in Section 7050.5 of the Health and Safety Code and Public Resources Code Section 5097.98. Public Resources Code Section 5097.94 identifies the responsibilities for acting upon notification of a discovery of Native American human remains. These procedures are specifically designed to reduce the potential adverse effect of project implementation related to human remains by requiring that the human remains are treated in an appropriate and respectful manner and in accordance with applicable laws and regulations. As a result, this impact would be ***less than significant with mitigation incorporated***.

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3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with 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?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

3.6.1 ENVIRONMENTAL SETTING

Energy systems in California include electricity from renewable and non-renewable sources, natural gas, and petroleum.

ELECTRICAL SERVICE

The Sacramento Metropolitan Utility District (SMUD) generates, transmits, and distributes electrical service to approximately 1.5 million customers through its approximately 900-square mile service area, which covers the majority of Sacramento County and small, adjoining portions of Placer and Yolo Counties (SMUD 2023). In 2021, SMUD delivered approximately 11,217 gigawatt-hours (GWh) of electricity to its customers (CEC 2021a).

In 2018, California enacted legislation requiring utility companies to have 60 percent of their power mix come from renewable energy resources by 2030 and, by 2045, all retail electricity must be met by carbon-free resources. SMUD provides power from a variety of sources, including hydropower, natural-gas-fired generators, renewable energy, and purchases. SMUD offers a program called Greenergy, in which customers may select carbon-free energy for either 100 or 50 percent of their electricity use for an extra fee each month; this program grew 19 percent in the year 2018. SMUD has also developed an Integrated Resource Plan that identifies its commitment to achieve a net-zero greenhouse gas (GHG) position by the year 2040 (SMUD 2019).

In July 2020, SMUD's Board of Directors adopted a Climate Emergency Declaration prompting SMUD to develop a plan for reaching zero carbon by 2030. Subsequently, SMUD developed the 2030 Zero Carbon Plan to eliminate carbon emissions from our power supply by 2030. The 2030 Zero Carbon Plan focuses on renewables and storage to eliminate the need to run plants for energy. With a range of other clean energy resources, SMUD's energy supply is, on average, 50 percent carbon-free today (SMUD 2021).

NATURAL GAS

Natural gas service is provided to Sacramento County and surrounding areas by Pacific Gas and Electric Company (PG&E) through portions of PG&E's approximately 43,500 miles of natural gas distribution pipelines. In 2020, PG&E generated approximately 29,326 GWh net electricity and purchased an additional 24,602 GWh of electricity (PG&E 2021). Natural gas consumption within the PG&E service area was approximately 4,493

million therms in 2021 (CEC 2021b), approximately 6.6 percent (300 million therms) of which was provided to users in Sacramento County (CEC 2021c).

PETROLEUM

Petroleum products (gasoline, diesel, jet fuel) are consumed almost exclusively by the transportation sector, and account for about 83 percent of the energy used in California by the transportation sector (U.S. Energy Information Administration 2023). The 2005 Renewable Fuel Standard Program and 2007 Energy Independence and Security Act establish requirements for renewable fuel use to replace petroleum-based fuels. In Sacramento County, it is estimated that 220 million gallons of gasoline were sold in 2021 (CEC 2021d).

PLANS RELEVANT TO RENEWABLE ENERGY OR ENERGY EFFICIENCY

Sacramento County General Plan:

The Sacramento County General Plan's Energy Element includes the following goals related to energy.

- Reverse the historical trend of increasing per capita consumption of energy;
- Shift toward using a greater share of renewable sources of energy;
- Shift seasonal and daily peak energy demands to increase the load factor of electrical generating facilities; and
- Maintain or enhance the general standard of living, the level of employment, and the quality of the environment.

The County's General Plan also includes policies related to energy, including the following:

- **EN-1.** Develop standards which would reduce the energy required to maintain interior spaces in the comfort zone, including such standards as tree planting and proper orientation of dwellings.
- **EN-3.** Encourage the conservation and rehabilitation of existing housing and the revitalization of older, more intensively developed neighborhoods in the urban area.

In addition to the Energy Element, other elements of the General Plan include policies and implementation measures that could result in energy conservation for the region. These include the following:

Land Use Implementation Measure J: Update the Energy Element and/or the Public Facilities Element of the General Plan to include policies related to alternative energy production within the County, which may include a General Plan Land Use Diagram overlay designation reflecting prime or allowable areas for alternative energy production (such as solar or wind farms).

- **Policy CI-5.** Land use and transportation planning and development should be cohesive, mutually supportive, and complement the objective of reducing per capita vehicle miles travelled (VMT).
- **Policy CO-143**. Work cooperatively with local utilities to assure that new trees are planted in locations that will maximize energy conservation and air quality benefits.

3.6.2 DISCUSSION

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

Less-than-Significant Impact. Implementation of the proposed project would involve the consumption of energy during construction and ongoing energy use in the form of electricity and fossil fuels (e.g., gasoline, diesel fuel).

The primary energy demands during construction would be associated with construction equipment and vehicle fueling. Energy in the form of fuel and electricity would be consumed during this period by construction vehicles and equipment operating onsite, trucks delivering equipment and supplies to the site, and construction workers driving to and from the site.

The proposed project includes renovations to an existing park and does not include unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites. Due to the limited proposed construction activities and limited construction workers required, fuel energy demands during construction would be temporary and not represent a substantial amount of fuel relative to the approximately 220 million gallons of gasoline sold in Sacramento County in 2021. Temporary electric power for as-necessary lighting and electronic equipment (e.g., computers) would be provided by SMUD.

The electricity used for such activities would be temporary and would have a negligible contribution to the proposed project's overall energy consumption. In addition, construction equipment and vehicles used for the proposed project would be required to comply with all federal and State standards and regulations, including limiting idling to 5 minutes or less (Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9) which would minimize the wasteful consumption of fuel during construction. Energy use during construction would be temporary and short-term (i.e., 12 months). In addition, the proposed project does not include unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at a comparable construction site. The actual adverse physical environmental effects associated with energy use during construction are reported in the Section 3.3 Air Quality and Section 3.8 Greenhouse Gas of this document. Therefore, construction fuel consumption associated with the proposed project would not result in an inefficient, wasteful, or unnecessary consumption of energy resources during project construction and this impact would be ***less than significant***.

The operations would require electricity park maintenance, lighting, and water and wastewater treatment and conveyance. While proposed park improvements may increase accessibility and use of the park, overall park energy usage and demand is not anticipated to substantially increase from existing conditions. Minor increases in energy use from fuel consumption may occur due to additional park visitors traveling to the site to use new and/or upgraded facilities; however, these visitors are likely to come from within the Fair Oaks community and the increase in fuel consumption would be negligible relative to Sacramento County's overall demand. The proposed project would involve improvements to an existing community park and does not propose new recreational uses of the site beyond those which already occur. Additionally, Sacramento County electricity demand in 2021 was 11,217 GWh and the proposed project would result in a minimal increase in electricity consumption relative to the County (CEC 2021a). As described in Section 3.3, "Air Quality" and Section 3.8, "Greenhouse Gas" of this document, no adverse physical environmental effects associated with energy use during operations would occur.

Operations under the proposed project would not result in an inefficient, wasteful, or unnecessary consumption of energy resources and this impact would be ***less than significant.***

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

No Impact. Construction activities under the proposed project would use construction equipment and vehicles that are in compliance with federal and State standards for fuel efficiency. In addition, as described above, proposed construction and operational activities would not result in an inefficient or wasteful consumption of energy resources.

The proposed project would implement the Phoenix Park Master Plan by making improvements to accommodate existing and future users of the park. The proposed improvements consist of additional recreational facilities and parking areas, along with ancillary improvements to improve operation and maintenance that are in alignment with the County of Sacramento General Plan Public Facilities Element policies (PF-120, PF-121 and PF-122), which calls to provide parks sufficient to meet the needs of a growing service. Therefore, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and there would be ***no impact.***

3.7 GEOLOGY AND SOILS

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

3.7.1 DISCUSSION

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on

other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

No Impact. Surface fault rupture is an actual cracking or breaking of the ground along a fault during an earthquake. Structures and underground pipelines that are built over a fault can be torn apart if surface ground rupture occurs. Geologists have determined that the greatest potential for surface fault rupture and strong seismic ground shaking is from active faults—that is, faults with evidence of activity during the Holocene epoch (the last 11,700 years). Faults that are the most likely to result in surface rupture are classified under the Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Sections 2621–2630). The project site is situated in the Sacramento Valley, which has historically experienced a very low level of seismic activity. The nearest active faults, including those that are classified under the Alquist-Priolo Earthquake Fault Zone Act, are located approximately 56 miles north near Lake Oroville and 55 miles west in the Coast Ranges (California Geological Survey [CGS] 2022, Jennings and Bryant 2010). The nearest known fault is the Bear Mountain Fault Zone, approximately 16 miles east of the project site, which is not classified as "active" (Jennings and Bryant 2010) Thus, there would be ***no impact***.

ii) Strong seismic ground shaking?

Less-than-Significant Impact. As noted above, the nearest active faults are located approximately 55–56 miles to the north and west. The intensity of ground shaking depends on the distance from the earthquake epicenter to the site, the magnitude of the earthquake, and site soil conditions. Peak horizontal ground acceleration, which is a measure of the projected intensity of ground shaking from seismic events, can be estimated by probabilistic method using a computer model. The California Building Standards Code (CBC) requires a site-specific calculation of the peak horizontal ground acceleration for use in earthquake-resistant design.

Calculations of earthquake shaking hazard for California are part of a cooperative project between the U.S. Geological Survey (USGS) and CGS, and are part of the National Seismic Hazard Mapping program. Earthquake shaking hazards are calculated by projecting earthquake rates based on earthquake history and fault slip rates, the same data used for calculating earthquake probabilities. Fault parameters are developed for these calculations by the Working Group on California Earthquake Probabilities. As part of the joint USGS/CGS program, a map was developed showing the probabilistic *Earthquake Shaking Potential for California* (Branum et al. 2016, digitized by the California Department of Conservation in 2018). A review of this data indicates that the project site is the lowest potential shaking hazard intensity. Regions in the low intensity categories are distant from known, active faults and are projected to experience lower levels of shaking less frequently.

Proposed new buildings and improvements to existing buildings would be subject to the requirements of the CBC, which contains engineering and design requirements that are specifically intended to reduce the loss of life and property from seismic hazards. Therefore, this impact would be ***less than significant***.

iii) Seismic-related ground failure, including liquefaction?

No Impact. Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, becoming similar to quicksand. Factors determining liquefaction potential are soil type, level and duration of ground motions, and depth to groundwater. Liquefaction is most likely to occur in low-lying areas where the substrate consists of poorly consolidated to unconsolidated water-saturated sediments, recent Holocene-age sediments, or deposits of artificial

fill. The project site is underlain by stable, well cemented Pliocene-age sediments, and the nearest active seismic sources are at least 55 miles away. Furthermore, the depth to groundwater in the project area in the spring of 2022 was reported to be approximately 90–100 feet below the ground surface (California Department of Water Resources [DWR] 2023). Therefore, liquefaction would not represent a hazard at the project site, and there would be ***no impact***.

iv) Landslides?

No Impact. The topography at the project site and the surrounding area is generally level. There are no steep slopes at the project site or nearby that would result in landslide hazards. Thus, there would be ***no impact***.

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

Less-than-Significant Impact. Project implementation would include earthmoving activities in various locations throughout the 65.9-acre park. However, most earthmoving activities would be concentrated in Areas A and B, shown on Figure 2.2-1 through Figure 2.2-3 in Chapter 2, "Project Description". Based on a review of U.S. Natural Resources Conservation Service (NRCS) soil survey data for Sacramento County (NRCS 2022), approximately 26 acres of the project site consist of Xerarents-Urban Land-San Joaquin Complex. All of Area A and most of Area B are composed of this soil type. Xerarents are found in Mediterranean climates (like the Sacramento area), and they do not have soil horizons because they have been deeply mixed by plowing, spading, or other methods of moving by humans. Urban soils have been altered or obscured by urban works and structures; buildings and pavement cover more than 85 percent of the surface. Xerarents and Urban Land are not rated by NRCS in terms of soil characteristics.

Approximately 23 acres and 17 acres of the project site, respectively, consist of the Red Bluff Loam and Redding Gravelly Loam soils. These two soils are rated with a moderate water erosion hazard and a low wind erosion hazard (NRCS 2022). Earthwork would include soil removal; grading; limited trenching and pipe installation; installation of building, road, and parking lot foundations; and landscaping. Construction activities during the winter months would expose soils to rain events, which could mobilize loose soil and result in soil erosion. Subsequent soil transport during storm events could result in sedimentation both within and downstream of the project site. Furthermore, earthmoving activities during the summer months could result in wind erosion.

However, because the proposed project would disturb more than 1 acre of land, FORPD would be required by law to prepare a SWPPP and to implement associated BMPs that are specifically designed to reduce construction-related erosion. Construction techniques that could be implemented to reduce the potential for stormwater runoff may include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that could be implemented to reduce erosion may include silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, trench plugs, terraces, water bars, soil stabilizers and re-seeding and mulching to revegetate disturbed areas.

Furthermore, Sacramento County's Land Grading and Erosion Control Ordinance (Sacramento County Municipal Code, Title 16, Chapter 16.44) includes specific standards for project construction related to erosion control. This ordinance requires preparation and submittal of a grading plan along with erosion and sediment control plans that would be implemented both during and following the completion of construction activities. The plans must contain a list of all BMPs that would be used to reduce erosion and control stormwater runoff. Therefore, this impact would be ***less than significant***.

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

Less-than-Significant Impact. As described above, all of Area A and most of Area B consist of the Xerarents-Urban Land-San Joaquin Complex soil type, which is not rated by the NRCS in terms of soil characteristics (NRCS 2022). The Redding Gravelly Loam soil type, found in the northwestern and southwestern portions of the project site, has a shallow depth to a cemented hardpan and has tendency to exhibit ponding during the winter months (NRCS 2022). If construction requiring heavy equipment were to occur during the winter rainy season, soil disturbance combined with the weight of heavy equipment could result in localized subsidence. However, FORPD would require preparation of a site-specific geotechnical report, which would be submitted to the County for review and approval prior to issuance of building permits. The geotechnical report would contain site-specific recommendations for design and engineering of project components, as required by the CBC and the County, which would be specifically intended to reduce hazards from geologic conditions as determined by soil borings and associated laboratory analyses. In addition, compliance with Sacramento County (2018) Improvement Standards, Sacramento County Grading Permit requirements, and standard engineering practices, all of which would incorporate specific recommendations for construction in unstable soils (where necessary), would ensure that the proposed improvements are designed appropriately based on site-specific conditions. Therefore, this impact would be ***less than significant***.

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

Less-than-Significant Impact. Expansive soils are composed largely of clays, which greatly increase in volume when saturated with water and shrink when dried (referred to as "shrink-swell" potential). Soils with a moderate to high expansion potential can result in cracked foundations, structural distortions, and warping of doors and windows. Underground pipelines can also be damaged.

All of Area A and most of Area B consist of the Xerarents-Urban Land-San Joaquin Complex soil type, which is not rated by the NRCS in terms of soil characteristics. Approximately 23 acres and 17 acres of the project site, respectively, consist of the Red Bluff Loam and Redding Gravelly Loam soils. These two soils are rated with a moderate and low soil expansion potential, respectively (NRCS 2022).

FORPD would require preparation of a site-specific geotechnical report, which would be submitted to the County for review and approval prior to issuance of building permits. The geotechnical report would contain site-specific recommendations for design and engineering of project components, as required by the CBC and the County, which would be specifically intended to reduce hazards from geologic conditions as determined by soil borings and associated laboratory analyses. In addition, compliance with Sacramento County (2018) Improvement Standards, Sacramento County Grading Permit requirements, and standard engineering practices, all of which would incorporate specific recommendations for construction in unstable soils (where necessary), would ensure that the proposed improvements are designed appropriately based on site-specific conditions. Therefore, this impact would be ***less than significant.***

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

No Impact. Wastewater generated by the proposed new restrooms would be conveyed off-site via existing underground pipelines that already serve the rest of Phoenix Park, for treatment at the Sacramento Regional Wastewater Treatment Plant. The proposed improvements at the project site would include installation of new on-site connections to existing off-site underground conveyance lines operated by the Sacramento Area Sewer District. Because the proposed project would not require installation of a septic system or alternative waste water disposal system, there would be ***no impact***.

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

REGIONAL AND LOCAL GEOLOGY

The project site is located in the southeastern Sacramento Valley. The Sacramento Valley is part of the Great Valley Geomorphic Province, which is a forearc basin composed of thousands of feet of sedimentary deposits that has undergone periods of subsidence and uplift over millions of years. Alluvial deposits outcrop at the surface and extend to a depth of over 1,000 feet, overlying the deeply buried bedrock units in the mid-basin areas of the valley. At the project site, the alluvial deposits are composed of sediments from the Sierra Nevada to the east, which were carried by water and deposited on the valley floor. Based on a review of geologic mapping prepared by Gutierrez (2011), the project site is underlain by the Laguna Formation. This formation is of Pliocene age (approximately 5–2.6 million years Before Present), and is composed of interbedded arkosic, alluvial gravel, sand, and silt. The Laguna Formation was deposited by the ancestral west-flowing Feather, Yuba, Bear, and American Rivers. In the project area, the Laguna Formation likely extends to a depth of approximately 65–85 feet below the ground surface (Helley and Harwood 1985).

PALEONTOLOGICAL SENSITIVITY ASSESSMENT CRITERIA

A paleontologically sensitive geologic formation is one that is rated high for potential paleontological productivity (i.e., the recorded abundance and types of fossil specimens, and the number of previously recorded fossil sites) and is known to have produced unique, scientifically important fossils. Exposures of a specific geologic formation at any given project site are most likely to yield fossil remains representing particular species or quantities similar to those previously recorded from that geologic formation in other locations. Therefore, the paleontological sensitivity determination of a rock formation is based primarily on the types and numbers of fossils that have been previously recorded from that formation.

In its standard guidelines for assessment and mitigation of adverse impacts on paleontological resources, the Society of Vertebrate Paleontology (SVP 2010) established four categories of sensitivity for paleontological resources: high, low, no, and undetermined. Areas where fossils have been previously found are considered to have a high sensitivity and a high potential to produce fossils. Areas that are not sedimentary in origin and that have not been known to produce fossils in the past typically are considered to have low sensitivity. Areas consisting of high-grade metamorphic rocks (e.g., gneisses and schists) and plutonic igneous rocks (e.g., granites and diorites) are considered to have no sensitivity. Areas that have not had any previous paleontological resource surveys or fossil finds are considered to be of undetermined sensitivity until surveys are performed. After

reconnaissance surveys, a qualified paleontologist can determine whether the area of undetermined sensitivity should be categorized as having high, low, or no sensitivity. In keeping with the Society of Vertebrate Paleontology significance criteria, all vertebrate fossils are generally categorized as being of potentially significant scientific value.

PALEONTOLOGICAL SENSITIVITY ASSESSMENT

The results of paleontological resources records search conducted at the University of California, Berkeley Museum of Paleontology (UCMP) on June 27, 2023 indicate there are no recorded fossil localities within the Laguna Formation in California (UCMP 2023).

The results of a paleontological resources literature search indicate there is only one published reference to a vertebrate fossil specimen from the Laguna Formation in California: Stirton (1939) refers to a Pliocene-age fossil specimen of a horse tooth found in clayey silt, probably of the Laguna Formation although not definitely identified as such, in a well near the town of Galt, in Sacramento County. This fossil locality is approximately 25 miles south of the project site. Therefore, the Laguna Formation is considered to be of low paleontological sensitivity.

IMPACT ANALYSIS

Based on Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on paleontological resources if it would directly or indirectly destroy a unique paleontological resource or site. A "unique paleontological resource or site" is one that is considered significant under the following professional paleontological standards.

An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved, and it meets one of the following criteria:

- a type specimen (i.e., the individual from which a species or subspecies has been described);
- a member of a rare species;
- a species that is part of a diverse assemblage (i.e., a site where more than one fossil has been discovered) wherein other species are also identifiable, and important information regarding life history of individuals can be drawn;
- a skeletal element different from, or a specimen more complete than, those now available for its species; or
- a complete specimen (i.e., all or substantially all of the entire skeleton is present).

The value or importance of different fossil groups varies, depending on several factors: the age and depositional environment of the rock unit that contains the fossils; their rarity; the extent to which they have already been identified and documented; and the ability to recover similar materials under more controlled conditions (such as for a research project). Marine invertebrates generally are common, the fossil record is well developed and well documented, and they would generally not be considered a unique paleontological resource. Identifiable vertebrate marine and terrestrial fossils generally are considered scientifically important because they are relatively rare.

The project site is underlain by the Laguna Formation. As discussed above, only one vertebrate fossil has been recovered from a Pliocene-age formation near the town of Galt, that may be the Laguna Formation, throughout the state. Therefore, the Laguna Formation is considered to be of low paleontological sensitivity, and earth-moving activities in this formation would result in a ***less-than-significant impact***.

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3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 ENVIRONMENTAL SETTING

Certain gases in Earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by Earth's surface, and a smaller portion of this radiation is reflected toward space through the atmosphere. Infrared radiation is selectively absorbed by GHGs. As a result, infrared radiation released from Earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth. GHGs are present in the atmosphere naturally; are released by natural sources and anthropogenic sources (e.g., human caused); and are formed from secondary reactions taking place in the atmosphere. Natural sources of GHGs include the respiration of humans, animals, and plants; decomposition of organic matter; volcanic activity; and evaporation from the oceans. Anthropogenic sources include the combustion of fossil fuels by stationary and mobile sources, waste treatment, and agricultural processes. Anthropogenic sources lead to atmospheric levels of GHGs in excess of natural ambient concentrations and have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change that are relevant to the project:

- Carbon Dioxide (CO_2): Natural sources of CO_2 include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; and evaporation from oceans. Anthropogenic (human) sources include burning of coal, oil, natural gas, and wood.
- Methane (CH_4): CH_4 is emitted during the production and transport of coal, natural gas, and oil. CH_4 emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- Nitrous Oxide (N_2O): N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests.
- Fluorinated gases: These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes called High Global Warming Potential (High GWP) gases. GHGs are

not monitored at local air pollution monitoring stations and do not represent a direct impact to human health. Rather, GHGs generated locally contribute to global concentrations of GHGs, which result in changes to the climate and environment.

Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4 is the main component of natural gas and is associated with agricultural practices and landfills. N_2O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global Warming Potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2. Therefore, CO_2 has a GWP of 1. GHGs with lower emissions rates than CO_2 may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP). GHG emissions are typically measured in terms of metric tons of carbon dioxide equivalent (CO_2e) and are often expressed in MT CO_2e.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. GHGs typically persist in the atmosphere for extensive periods time, long enough to be dispersed throughout the globe and result in long-term global impacts. As such, the proposed project would not, by itself, contribute significantly to climate change; however, cumulative emissions from many projects and plans all contribute to global GHG concentrations and the climate system.

3.8.2 DISCUSSION

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

Less-than-Cumulatively Considerable Impact. Construction-related exhaust GHG emissions would be generated from a variety of sources during construction of the proposed project including, but not limited to, heavy-duty construction equipment, haul trucks, material delivery trucks, and construction worker vehicles.

Operational GHG emissions would be generated directly by motor vehicle trips generated by park users and exhaust from landscape maintenance equipment, and indirectly from electricity and water use and waste disposal associated with proposed improvements and any incremental increased use of park facilities. The proposed project park operations would include electricity to accommodate lighting and maintenance of the park but would be similar to existing operations. However, the proposed project would improve and renovate an existing park to enhance cohesion and usability of the park's facilities as a community-serving use and could attract additional park users to travel to and from the park. The proposed improvements would largely serve the same recreational uses that currently occur within Phoenix Park, with an incremental increase in visitation expected due to the upgraded bike park, new play areas, fitness court, and new shade structures/seating areas. There would be a minor net increase in operational mobile source emissions as a result of the proposed project. CalEEMod estimates

direct emissions associated with the proposed project's mobile (e.g., vehicle trips to and from the park by any incremental increase in park users) and area (e.g., landscape maintenance equipment) sources; and indirect emissions associated with energy (i.e., electricity), water (i.e., conveyance and distribution), and solid waste (i.e., decomposition) sources.

Construction-related and operational GHG emissions were modeled using the same methods and assumptions as those described in Section 3.3, "Air Quality," of this IS/MND. Appendix A provides detailed model inputs, assumptions, and outputs.

On April 23, 2020, the SMAQMD Board of Directors adopted the Update to the Recommended GHG Emissions Thresholds of Significance, which established thresholds of significance for GHG emissions designed to analyze a project's compliance with applicable State laws, including AB 32 and SB 32 (SMAQMD 2020a). In developing the thresholds, the SMAQMD developed the thresholds for Sacramento County based on determining Sacramento County's share of statewide 2030 GHG emissions by sector, determining the share of Sacramento County 2030 emissions from existing development versus new development, allocating 2030 GHG emissions from new development among land uses and place types to set numeric thresholds, and setting best management practices by land use and place types that achieve those numeric thresholds. Specifically, the SMAQMD adopted a mass emissions-based threshold for the construction phase of all project types of 1,100 MT CO_2e per year (SMAQMD 2021). For operational emissions, the SMAQMD has developed an operational screening table, which shows sizes of development projects at which 1,100 MT CO_2e would not be exceeded, including implementation of Tier 1 Best Management Practices. Tier 1 Best Management Practices requires that projects be designed and constructed without natural gas infrastructure (BMP 1), and that projects meet the current California Green Building Standards (CALGreen) Tier 2 standards and that all electric vehicle (EV) capable spaces shall instead be EV ready (BMP 2).

The proposed project does not propose any natural gas infrastructure, in alignment with SMAQMD BMP 1. The proposed project does not increase park capacity and would not result in an increase in maintenance and operations staff. The proposed improvements would largely serve the same recreational uses that currently occur within Phoenix Park, with an incremental increase in visitation expected due to the upgraded bike park, new play areas, fitness court, and new shade structures/seating areas. The proposed project is not anticipated to considerably increase park usership or related vehicle miles traveled. Since the proposed project's land use development type is not included in the SMAQMD operational screening level table, this analysis estimated the project's incremental increase in annual operational GHG emissions.

Table 3.8-1 presents a summary of the proposed project's potential annual construction-related and operational GHG emissions to compare with the applicable threshold of significance.

Table 3.8-1: Proposed Project's Greenhouse Gas Emissions Summary

Description	MT CO_2e
Total Construction Emissions	342
SMAQMD Threshold	1,100
Annual Operational Emissions	23
SMAQMD Threshold	1,100
Exceeds Thresholds?	No

Notes: CO_2e = carbon dioxide equivalents; MT = metric tons; SMAQMD = Sacramento Metropolitan Air Quality Management District.

As shown in Table 3.8-1, the proposed project's short-term construction and long-term operational GHG emissions would not exceed the SMAQMD thresholds of significance of 1,100 MT CO_2e per year. Therefore, GHG emissions that would be generated by the construction and operations of the proposed project would result in a ***less than cumulatively considerable*** contribution to the significant impact of climate change.

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

Less-than-Significant Impact. The proposed project has been analyzed to determine consistency with State of California's GHG reduction targets. This analysis is based on an evaluation of statewide plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

In accordance with State law, ARB developed the State's Climate Change Scoping Plan (2008) and Scoping Plan updates (2014, 2017, and 2022) to outline the State's strategy to reduce California's GHG emissions per AB 32, Senate Bill (SB) 32, and AB 1279. ARB's Scoping Plan updates include measures that would indirectly address GHG emissions from construction activities, including the phasing-in of cleaner technology for diesel engine fleets and the development of a Low Carbon Fuel Standard. Policies formulated under the mandate of AB 32 that apply to construction-related activity, either directly or indirectly, are assumed to be implemented statewide and would affect the project should those policies be implemented before construction begins.

ARB Advanced Clean Cars regulation for electric vehicle sales requirements is anticipated to reduce fossil-fuel powered passenger vehicles with an increase in electric vehicle, thereby reducing the GHG emissions associated with on-road passenger vehicles. While the proposed project does not influence the implementation of this regulation in any way, the mobile-source GHG emissions associated with long-term operational trips would be likely to decrease over time as the average passenger vehicle fleet mix becomes less carbon intensive. Similarly, California established a Renewables Portfolio Standard, which requires retail sellers of electricity to meet specific goals of providing their energy supply from renewable sources. Per SB 100, electricity retailers are required to provide at least 60 percent of their supply from renewable sources by 2030. SB 100 also added the requirement that all state's electricity must come from carbon-free resources by 2045. Although electricity for the proposed project is minor and limited to restrooms and lighting, SB 100 requirements would continue to reduce the carbon content of electricity generation and would reduce GHG emissions associated with the proposed project's electricity consumption over time.

Furthermore, the SMAQMD quantitative thresholds of significance for GHGs were developed with the intent to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to GHG emissions reductions goals set forth by AB 32 and SB 32. As explained in the discussion of Impact 'a)' above, the proposed project would also not exceed the SMAQMD construction GHG emissions threshold of 1,100 MT CO_2e per year for construction-related emissions. Additionally, the proposed project operations would not include natural gas infrastructure, consistent with the SMAQMD Tier 1 BMP 1. The project is a community park that primarily serves existing local recreational needs and would result in operational GHG emissions of less than 23 MT CO_2e per year. Therefore, the proposed project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions and this impact would be ***less than significant.***

3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

3.9.1 DISCUSSION

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

Less-than-Significant Impact. A search of publicly available databases maintained under Public Resources Code Section 65962.5 (i.e., the "Cortese List") was completed for the proposed project to determine whether any known hazardous materials are present on the project site. These searches included the EnviroStor database maintained by the California Department of Toxic Substances Control (DTSC 2023) and the GeoTracker database maintained by the State Water Resources Control Board (SWRCB 2023). In addition, a search was completed of the U.S. Environmental Protection Agency's National Priorities List (Superfund) database (USEPA 2023). These database searches were all negative, except for one Leaking Underground Storage Tank (LUST) site mapped on the site's northern border on Sunset Avenue. This site was listed as closed in 1988 by the SWRCB and would not

pose a hazard to the public or the environment during proposed project construction or operation due to its distance from work areas and closed status.

Relatively small amounts of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, adhesive materials, grease, and solvents would be used for equipment during construction. These materials are not considered extremely hazardous and are used routinely for construction projects. Construction areas would be enclosed with exclusionary fencing which would prevent contact with any stored hazardous materials by users of the park. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans), and use of these materials is regulated by DTSC, as outlined in California Code of Regulations (CCR) Title 22. Materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Once the proposed project is operational, there would be minimal use of hazardous materials, primarily limited to storage and use of cleaning materials in restrooms and other facilities. Use of these materials would not pose a significant hazard to the public or the environment. Therefore, this impact would be ***less than significant.***

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

Less-than-Significant Impact. As noted above, construction and operation of the proposed project would involve the use of small amounts of hazardous materials such as fuels, oils, grease, and solvents. The use of these materials is regulated at federal, state, and local levels, and adherence to existing regulations would minimize the risk of upset or accident conditions which could release these materials into the environment. Further, because the proposed project would disturb more than 1 acre of land, the District and/or its contractors are required by law to develop and implement a SWPPP, which will include appropriate BMPs for spill prevention and contingency measures. These measures that would reduce the potential for accidental spills and detail procedures for appropriate and timely cleanup if a spill does occur. Therefore, this impact would be ***less than significant.***

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

No Impact. The proposed project would be located within the perimeter of Phoenix Park, which is approximately 1.1 miles east of the nearest school (Earl Le Gette Elementary School). As noted above, all hazardous materials would be handled in accordance with federal, state, and local regulations and would pose minimal risk during construction and operation. Therefore, there would be ***no impact.***

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed project is not on the Cortese List. Thus, there would be ***no impact.***

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project

result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest airport is Mather Airport approximately 6.5 miles southwest of the project site. The project site is located within the Airport Influence Area (AIA) for Mather Airport, as shown in the draft Airport Land Use Compatibility Plan (ALUCP) (SACOG 2020). The existing land uses on the site would remain and the proposed project would not create an airport safety hazard. Therefore, there would be ***no impact***.

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

Less-than-Significant Impact. The proposed project would occur within Phoenix Park, which is accessible to emergency vehicles from the northern boundary on Sunset Avenue and from the western boundary on Kruitof Way. Construction materials, equipment, and personnel would be staged on-site during construction of the proposed project. The relatively limited amount of proposed redevelopment and associated construction would result in only minor increases in short-term, temporary, construction-related traffic on local roadways. Access would be retained for emergency vehicles and park users to minimize disruptions during construction. Once operational, the proposed project would result not change access routes in a manner that would interfere with emergency access to the site. Therefore, the impact would be ***less than significant.***

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

No Impact. The proposed project is not located in proximity to any high fire hazard areas (CAL FIRE 2023). Vegetation at the project site consists of turf grass, shade trees, and other landscaping. The proposed project includes the redevelopment of the existing park and would not directly or indirectly expose people or structures to wildland fire. Therefore, there would be ***no impact.***

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3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
X. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; or	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 DISCUSSION

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

Less-than-Significant Impact. The Sacramento County Department of Water Resources Drainage Division is the organization primarily responsible for stormwater drainage and flood control within the urbanized and urbanizing portions of unincorporated Sacramento County, including the project area. The drainage and flood control system operated and maintained by Sacramento County consists of 1,443 miles of storm drain pipe, 400 miles of creeks and open channels, 33 pump stations, and 18 detention basins (Sacramento County 2023). Sacramento County regulates stormwater discharge for new development through its Stormwater Ordinance (County Code Chapter 15.12), which applies to all public and private projects in Sacramento County. The Stormwater Ordinance prohibits non-stormwater discharge to the County storm drain system or directly to natural surface waters unless discharges are regulated by NPDES permits or if an exception is otherwise provided in the Stormwater Ordinance.

Stormwater discharges which cause or contribute to pollution in receiving waters are also prohibited under the Stormwater Ordinance. Additionally, erosion and sediment control is overseen by Sacramento County through issuance of grading permits in accordance with its Land Grading and Erosion Control Ordinance (County Code Chapter 16.44). To obtain a grading permit, project applicants must prepare and submit for approval an Erosion and Sediment Control Plan that will be implemented during construction to prevent sediment from leaving the site and entering the County's storm drain system or local receiving waters.

The proposed project site is located within the Sacramento River Basin. The Sacramento River Basin encompasses about 27,000 square miles and is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Sacramento River Delta to the southeast (NOAA 2023). The American River, the second largest tributary to the Sacramento River, is located approximately 0.5-mile south of the project site. Nimbus Dam is located on the American River just south of the project site. Nimbus Dam regulates water released from the upstream Folsom Reservoir hydroelectric facility and forms Lake Natoma. Stormwater runoff from the project site drains to the American River/Lake Natomas via stormwater inlets and conveyance pipelines located within the park and surrounding surface streets, or collects in the vernal pools located in the eastern portion of the park and naturally infiltrates into the soil.

As required by the Porter-Cologne Water Quality Control Act, the Central Valley RWQCB has designated beneficial uses for water body segments in its jurisdiction (including the American River), along with water quality criteria necessary to protect these uses, as contained in the Sacramento and San Joaquin River Basin Plan (Central Valley RWQCB 2019). Beneficial uses of the American River (from Folsom Dam to the Sacramento River, including Lake Natoma) include Municipal and Domestic Supply, Irrigation, Industrial Supply, Recreation, and Freshwater Habitat (including fish migration and spawning habitat).

In addition, the Clean Water Act (CWA) Section 303(d) requires states to identify impaired waters where the permit standards, any other enforceable limits, or adopted water quality standards are still unattained. The CWA also requires states to develop total maximum daily loads (TMDLs) to improve the water quality of impaired water bodies. TMDLs are the quantities of pollutants that can be safely assimilated by a water body without violating water quality standards. TMDLs are developed for impaired water bodies to maintain beneficial uses as designated in the applicable Basin Plan, achieve water quality objectives, and reduce the potential for future water quality degradation. NPDES permits for water discharges must consider the pollutants for which a water body is listed as impaired. Lake Natoma is listed on the Section 303(d) list for mercury. The Lower American River is listed on the Section 303(d) list for various pollutants, including pesticides, bacteria, mercury, polychlorinated biphenyls (PCBs), and toxics (SWRCB 2018).

During construction, the proposed project would result in approximately 8 acres of soil disturbance within the 65.9-acre site. Unless properly managed, soil disturbance during construction can result in stormwater pollutants leaving the site and entering the drainage system and nearby waterways. This can potentially degrade water quality and beneficial uses by altering the dissolved oxygen content, temperature, pH, suspended sediment and turbidity levels, and/or nutrient content of receiving waters such as the American River.

The proposed project would be required by law to comply with the provisions of the State Water Resources Control Board's (SWRCB) NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-009-DWQ as amended by Order 2012-0006-DWQ) (Construction General Permit) (SWRCB 2012). The Construction General Permit regulates stormwater discharges for

construction activities under the CWA and applies to all land-disturbing construction activities that would disturb 1 acre or more. The project applicant must submit a notice of intent to discharge to the RWQCB, and must prepare and implement a SWPPP that includes BMPs to minimize those discharges. All NPDES permits have inspection, monitoring, and reporting requirements. The RWQCB requires dischargers to implement construction and operational design features and BMPs that are intended to reduce the potential for downstream hydromodification. The Construction General Permit also requires implementation of BMPs that are designed to prevent accidental spills of hazardous materials during the construction phase to the maximum extent practicable, and the SWPPP must include procedures for immediate cleanup should any releases occur. Because the proposed project is required by law to comply with the provisions of the Construction General Permit, water quality impacts during construction would be avoided or minimized.

Once operational, the proposed project would add impervious surfaces to the project site through new paved parking areas, sidewalks, and seating areas. The additional impervious surfaces would generate more stormwater runoff leaving the site, which could add pollutants to the storm drain system and degrade water quality in receiving waters if not managed properly. However, the proposed project would include treatment control measures, consisting of biofiltration swales bordering new parking areas, to manage stormwater runoff in compliance with the County's Stormwater Ordinance. This would reduce the potential for stormwater runoff impacts from the proposed project. For these reasons, the proposed project would not violate any water quality standards or substantially degrade surface or groundwater quality. This impact would be ***less than significant.***

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

Less-than-Significant Impact. The proposed project is located within the Sacramento Valley groundwater basin in the North American subbasin (DWR 2023). The Sacramento Valley groundwater basin is managed by the Sacramento Groundwater Authority as the Groundwater Sustainability Agency (GSA) pursuant to the Sustainable Groundwater Management Act (SGMA). Groundwater management in the North American subbasin is directed by the adopted Groundwater Sustainability Plan (GSP) (Sacramento Groundwater Authority 2021).

There are no on-site groundwater wells and the proposed project would not interfere with groundwater production, treatment, or distribution. Water supply to the project site would continue to be provided via subsurface conveyance pipelines managed by the Fair Oaks Water District (see Section 3.19, "Utilities and Service Systems"). The proposed project would result in a reduction in pervious surface area on-site due to the conversion of the existing unpaved parking lot in Area A to a paved parking lot and installation of a new paved parking area in Area B. Although the pervious surfaces on-site make a minor contribution to groundwater supplies due to stormwater infiltration through the soil and into the groundwater table, the loss of these infiltration areas would not substantially interfere with groundwater recharge or reduce supplies. Project construction activities are not anticipated to require deep excavation which would require dewatering of groundwater or otherwise affect groundwater supplies. For these reasons, the proposed project would not substantially decrease groundwater supplies or interfere with groundwater recharge in the Sacramento Valley groundwater basin. This impact would be ***less than significant.***

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site?

Less-than-Significant Impact. The proposed project would result in exposed soil surfaces during construction which could result in erosion and siltation on and off the site, particularly during precipitation events. However, the proposed project would manage stormwater during construction through compliance with the NPDES Construction General Permit. As noted above, the Construction General Permit requires development of a SWPPP, which would include BMPs to minimize the volume and rate of stormwater runoff leaving the site. Typical BMPs include silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, trench plugs, terraces, water bars, soil stabilizers and re-seeding and mulching to revegetate disturbed areas. Final BMPs will be identified at the time the project applies for coverage under the Construction General Permit. Additionally, an Erosion and Sediment Control Plan will be prepared pursuant to the County's Grading and Erosion Control Ordinance. Compliance with these existing regulations will minimize erosion and siltation during construction.

Once operational, the proposed project would result in a minor increase in stormwater runoff due to the new impervious surfaces. However, the proposed project would include treatment control measures, consisting of biofiltration swales bordering new parking areas, to manage stormwater runoff in compliance with the County's Stormwater Ordinance. The County requires projects to utilize the Stormwater Quality Design Manual for the Sacramento Region when selecting and designing post-construction facilities to treat runoff from the project (City of Sacramento 2018). The selected treatment measures would slow the rate and volume of runoff leaving the site and minimize the potential for erosion or siltation. For these reasons, the proposed project would not result in substantial erosion or siltation on- or off-site, and the impact would be ***less than significant.***

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?

Less-than-Significant Impact. The proposed project would result in minor increases in surface runoff due to the additional impervious surface areas. The rate and volume would be reduced by treatment control measures located within the project site. The proposed biofiltration swales on the perimeter of the new paved parking areas would allow for runoff to slowly infiltrate through the soil and vegetation prior to entering the County's storm drain system. Stormwater control measures would be reviewed by the County for compliance with the Stormwater Quality Design Manual and to ensure that adequate capacity is available in the storm drain system to accommodate runoff increases without flooding. Additionally, the proposed project would make drainage improvements along walking pathways to address ongoing drainage issues and ponding within certain areas of the park. Drainage improvements would be implemented in accordance with the measures of the approved Phoenix Park Vernal Pools Management Plan (see Section 3.4, "Biological Resources") to ensure that any improvements do not adversely affect the seasonal wetlands present within the park. Therefore, the impact would be ***less than significant.***

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?

Less-than-Significant Impact. As noted above, construction of the proposed project would occur in compliance with the NPDES Construction General Permit, the County's Grading and Erosion Control Ordinance, and the County's Stormwater Control Ordinance. Compliance with these regulations and standards would ensure that the proposed project does not create runoff in excess of drainage system capacity or provide substantial sources of polluted runoff. Therefore, this impact would be ***less than significant*.**

iv) Impede or redirect flood flows?

No Impact. The project site is not located in a flood hazard zone mapped by the Federal Emergency Management Agency (FEMA) as shown on Flood Insurance Rate Map 06067C0113H (FEMA 2012). Therefore, the proposed project would not impede or redirect flood flows, and there would be ***no impact.***

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

No Impact. The project site is located a substantial distance from the coastline (nearly 100 miles) and would not be at risk of inundation from flood, tsunami, or seiche and subsequent pollutant release. Therefore, there would be ***no impact*.**

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less-than-Significant Impact. As described in criteria a) and b) above, the proposed project would not conflict with or obstruct implementation of the regional Basin Plan or the North American Subbasin GSP by complying with applicable regulations. Therefore, the impact would be ***less than significant.***

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3.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XI. Land Use and Planning. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.11.1 DISCUSSION

a) Physically divide an established community?

No impact. The proposed project would improve an existing park in an urbanized area of Fair Oaks in Sacramento County. The project site is surrounded by single-family residential neighborhoods on all sides. The proposed improvements would occur within the existing park boundaries. No infrastructure, such as new roads, bridges, or other barriers, would be constructed which could physically divide an established community. Therefore, there would be ***no impact***.

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?

No impact. The project site has a land use designation of LDR (Low Density Residential) in the *Sacramento County General Plan of 2005-2030* and is zoned O-Recreation (Sacramento County 2011, 2021). The LDR designation is intended for predominantly single-family housing with attached units at densities between 1 and 12 dwelling units per acre. The O - Recreation zoning district permits public park facilities and wildlife preserves. Additionally, the site is located within the *Fair Oaks Community Plan* and is designated as a recreation facility in this plan (Sacramento County 1975).

The District prepared its most recent *Master Plan for Parks, Facilities and Recreation Services* (2010 Master Plan) in 2010 (District 2010). Improvements to Phoenix Park were identified in the 2010 Master Plan, along with goals, strategies, and tactics to implement the 2010 Master Plan in alignment with the District's vision.

The project site would continue to be used as a park, consistent with existing land use and zoning designations. The proposed project would not conflict with policies or objectives adopted in the Sacramento County General Plan, Fair Oaks Community Plan, or District 2010 Master Plan. Therefore, there would be ***no impact.***

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3.12 MINERAL RESOURCES

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

3.12.1 DISCUSSION

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

No Impact. Under the Surface Mining and Reclamation Act (SMARA), the State Mining and Geology Board may designate certain mineral deposits as being regionally significant to satisfy future needs. The board's decision to designate an area is based on a classification report prepared by the California Geological Survey (CGS) and on input from agencies and the public.

The project site lies within the designated Sacramento-Fairfield Production-Consumption Region for Portland cement concrete aggregate. CGS has classified the entire project site as mineral resource zone (MRZ)-1: areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence (O'Neal and Gius 2018). The project site is not located in a designated regionally important area of known mineral resources (i.e., MRZ-2), and is not located within a designated locally important area of known mineral resources under the *Sacramento County General Plan of 2005-2030* (Sacramento County General Plan) (Sacramento County 2020). Thus, there would be ***no impact***.

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

No Impact. As described above, the project site is not located within a designated locally important mineral resource recovery site. There are no mineral resources present at the site or in the immediate project vicinity, which consists of single-family residential development, intermittent commercial uses, and lands used for recreation/open space. Therefore, there would be ***no impact.***

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3.13 NOISE AND VIBRATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XII. Noise. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within 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?	☐	☐	☒	☐

3.13.1 SETTING

The project site is located in the unincorporated community of Fair Oaks in Sacramento County. The project site is surrounded by residential uses. Primary existing sources of noise at the project site and in its vicinity consist of vehicular traffic on surrounding roadways and activities at the park complex, including sports games and other recreational uses. To a lesser extent, activities associated with surrounding residential and other developed properties also generate noise in the area.

SOUND, NOISE, AND ACOUSTICS

Sound is the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is defined as sound that is unwanted (i.e., loud, unexpected, or annoying). Acoustics is the physics of sound.

The amplitude of pressure waves generated by a sound source determines the perceived loudness of that source. A logarithmic scale is used to describe sound pressure level in terms of decibels (dB). The threshold of human hearing (near-total silence) is approximately 0 dB. A doubling of sound energy corresponds to an increase of 3 dB. In other words, when two sources at a given location are each producing sound of the same loudness, the resulting sound level at a given distance from that location is approximately 3 dB higher than the sound level produced by only one of the sources. For example, if one automobile produces a sound pressure level of 70 dB when it passes an observer, two cars passing simultaneously do not produce 140 dB; rather, they combine to produce 73 dB.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ears decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). All noise levels

reported in this section are in terms of A-weighting. There is a strong correlation between A-weighted sound levels and community response to noise. As discussed above, doubling sound energy results in a 3-dB increase in sound. In typical noisy environments, noise-level changes of 1 to 2 dB are generally not perceptible by the healthy human ear; however, people can begin to detect 3-dB increases in noise levels. An increase of 5 dB is generally perceived as distinctly noticeable and a 10-dB increase is generally perceived as a doubling of loudness. The following are the sound level descriptors commonly used in environmental noise analysis:

- Equivalent sound level (L_{eq}): An average of the sound energy occurring over a specified time period. In effect, the L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted equivalent sound level ($L_{eq[h]}$) is the energy average of A-weighted sound levels occurring during a 1-hour period.
- Maximum sound level (L_{max}): The highest instantaneous sound level measured during a specified period.
- L_{dn} (Day-Night Noise Level): The 24-hour L_{eq} with a 10 dB "penalty" applied during nighttime noise-sensitive hours, 10:00 p.m. through 7:00 a.m. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.
- L_n (Statistical Descriptor): The noise level exceeded n percent of a specific period of time, generally accepted as an hourly statistic. An L_{10} would be the noise level exceeded 10 percent of the measurement period.

Sound from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, and the sound level attenuates (decreases) at a rate of 6 dB (or 7.5 dB in soft ground) for each doubling of distance from a point/stationary source. Roadways and highways and, to some extent, moving trains consist of several localized noise sources on a defined path; these are treated as "line" sources, which approximate the effect of several point sources. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. Therefore, noise from a line source attenuates less with distance than noise from a point source with increased distance.

GROUNDBORNE VIBRATION

Groundborne vibration is energy transmitted in waves through the ground. Vibration attenuates at a rate of approximately 50 percent for each doubling of distance from the source. This approach considers only the attenuation from geometric spreading and tends to provide for a conservative assessment of vibration level at the receiver.

Vibration is an oscillatory motion that can be described in terms of the displacement, velocity, or acceleration. Vibration typically is described by its peak and root-mean-square (RMS) amplitudes. The RMS value can be considered an average value over a given time interval. The peak vibration velocity is the same as the "peak particle velocity" (PPV), generally presented in units of inches per second. PPV is the maximum instantaneous positive or negative peak of the vibration signal and is generally used to assess the potential for damage to buildings and structures. The RMS amplitude typically is used to assess human annoyance to vibration, and the abbreviation "VdB" is used in this document for vibration decibels to reduce the potential for confusion with sound decibels.

EXISTING NOISE ENVIRONMENT

The existing noise environment within the project area is primarily influenced by surface-transportation noise emanating from vehicular traffic on Hazel Avenue and Sunset Avenue. Existing park activities such as sports

games and other recreational uses also contribute to the noise environment in the area. Intermittent noise from outdoor activities at the surrounding residences (e.g., vocalizations, operation of landscaping equipment, car doors slamming, and dogs barking), also influences the existing noise environment.

An ambient noise survey was conducted in the vicinity of the project site from June 20 to June 21, 2023. The purpose of the survey was to establish existing noise conditions. Ambient noise measurements were conducted near existing noise-sensitive uses at various locations within the project area. The results of the noise survey are shown in Table 3.13-1.

Figure 3.13-1 shows the locations of the ambient noise measurement sites. One long-term (24-hour) measurement (LT-1,) was conducted at the western project site boundary by the nearest off-site noise-sensitive uses. As shown in Table 3.13-1, measured ambient noise levels at the noise-sensitive land uses closest to the project site range from 45 dBA to 51 dBA L_{eq}, and 54 dBA L_{dn}.[2]

Table 3.13-1: Summary of Ambient Noise Level Survey Results in the Vicinity of the Project Site

Site	Location	Date	Time	Duration	L_{eq} Measured	L_{max} Sound Level, dBA	L_{50} Daytime	L_{90} 7 a.m.– 7 p.m.	L_{dn} 7 a.m.– 7 p.m.
LT-1	Within Project Site (Western Boundary)	June 20/21, 2022	13:30	24 Hour	51	67	40	45	54
ST-1	Within Project Site (Southwestern Boundary)	June 20, 2022	13:29	15 Minutes	49	73	46	43	--
ST-2	Within Project Site (Southern)	June 20, 2022	13:51	15 Minutes	45	57	44	42	--
ST-3	Within Project Site (Southeastern)	June 20, 2022	14:11	15 Minutes	48	56	46	43	--
ST-4	Within Project Site (Eastern)	June 20, 2022	14:29	15 Minutes	49	72	44	40	--

Notes: dBA = A-weighted decibels; L_{eq} = equivalent sound level (the sound energy averaged over a continuous period of time); L_{max} = maximum instantaneous sound level; LT = Long-term measurement

Noise-level measurements were completed using a Larson Davis Laboratories (LDL) Model 824 precision integrating sound-level meter. The meter was calibrated before the measurements using an LDL Model CAL200 acoustical calibrator. The meter was programmed to recorded A-weighted sound levels using a "slow" response. The equipment used complies with all pertinent requirements of the American National Standards Institute for Class 1 sound-level meters (ANSI S1.4).

Source: Data compiled by AECOM in 2023

2 The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ears decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). All noise levels reported in this section are in terms of A-weighting. There is a strong correlation between A-weighted sound levels and community response to noise.

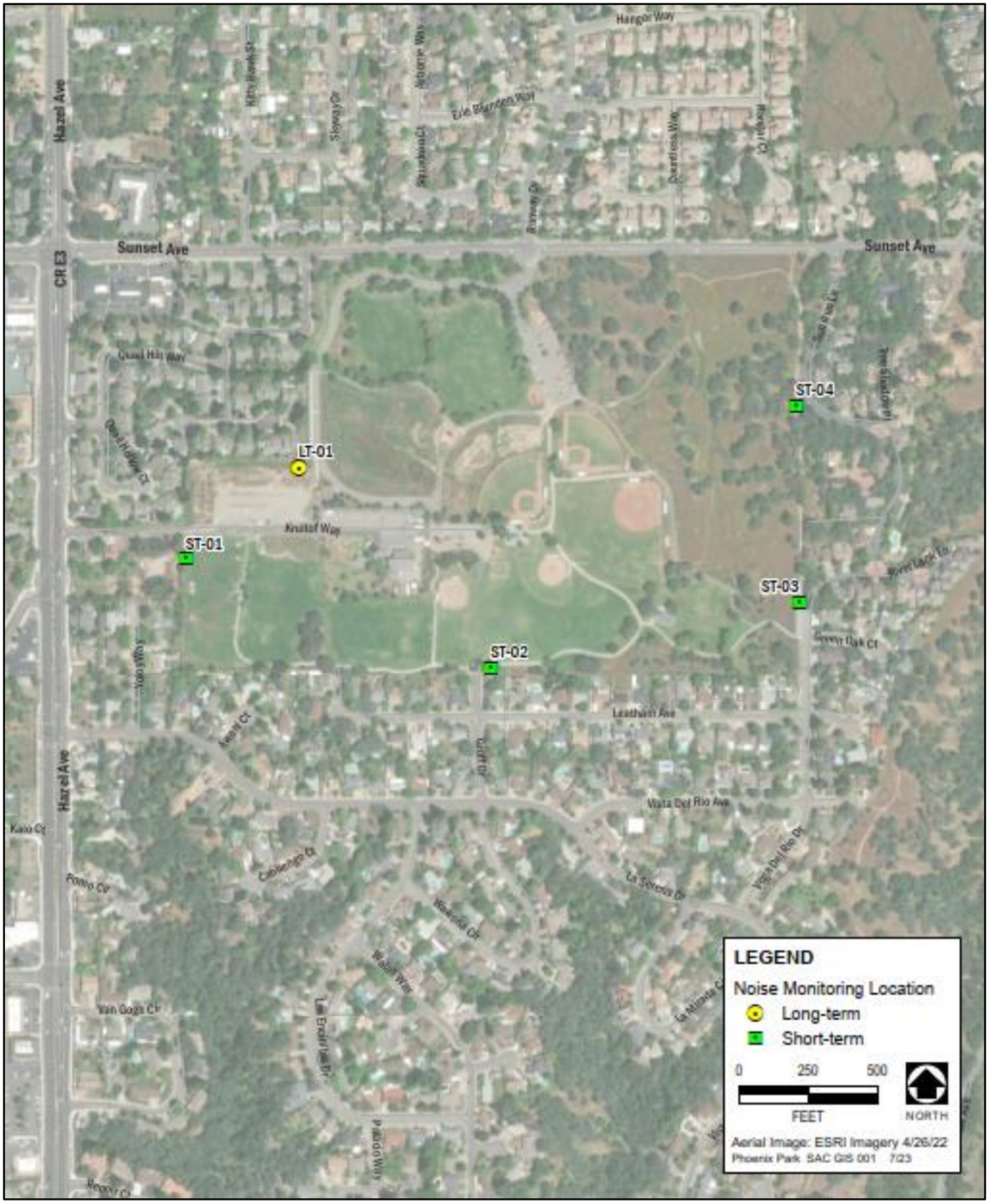

Figure 3.13-1: Ambient Noise Survey

3.13.2 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are based on the environmental checklist in Appendix G of the CEQA Guidelines, as amended. Implementing the project would result in a significant noise impact if it would result in:

- 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;
- generation of excessive groundborne vibration or groundborne noise levels; or
- for a project within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels.

The County of Sacramento General Plan Noise Element (County of Sacramento 2017) provides several policies related to land use and noise compatibility. While these policies do not directly apply to the project, they are presented for context. For non-transportation noise sources, the County has established interior and exterior noise standards for daytime and nighttime hours (Table 3.13-2).

Table 3.13-2: Non-Transportation Noise Standards, Sacramento County Noise Element

	Outdoor Area[1, 2]				Interior[3]	
	Daytime		Nighttime		Day & Night	
Receiving Land Use	Median L_{50}[6]	Maximum (L_{max})	Median L_{50}	Maximum (L_{max})	Median L_{50}	Maximum (L_{max})
All Residential	55	75	50	70	35	55
Churches, Meeting Halls, Schools, Libraries, etc.	55	75	-[5]	-[5]	35	60
Office Buildings	60	75	-[5]	-[5]	45	65
Commercial Buildings	-	-	-[5]	-[5]	45	65
Playgrounds, Parks, etc.	65	75	-[5]	-[5]	-	-
Industry	60	80	-[5]	-[5]	50	70

Notes:

dB = decibel; L_{max} - Maximum Noise Level

1 The standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds the standards, then the noise level standards shall be increased at 5 dB increments to encompass the ambient.

2 Sensitive areas are defined acoustic terminology section.

3 Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.

5 The outdoor activity areas of these uses (if any), are not typically utilized during nighttime hours.

6 Where median (L_{50}) noise level data is not available for a particular noise source, average (L_{eq}) values may be substituted for the standards of this table provided the noise source in question operates for at least 30 minutes of an hour. If the source in question operates less than 30 minutes per hour, then the maximum noise level standards shown would apply.

Source: Sacramento County 2017

The Sacramento County Code Noise Control Ordinance contains performance standards for the purpose of preventing unnecessary, excessive and offensive noise levels within the county. Section 6.68.090 of the Sacramento County Code establishes that noise associated with construction, repair, remodeling, demolition, paving, or grading is exempt from the Noise Ordinance, provided said activities do not take place between the

hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday; Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday; and on each Sunday after the hour of 8:00 p.m.

3.13.3 DISCUSSION

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?

SHORT-TERM PROJECT-GENERATED CONSTRUCTION SOURCE NOISE

Less-than-Significant Impact with Mitigation Incorporated. Construction of proposed structures would occur on the project site and include site preparation (e.g., excavation, and construction); material transport; construction of the new facilities, and related-support structures; and other miscellaneous activities (e.g., paving).

Site preparation generates the highest anticipated noise levels due to construction activities as the equipment mix would include earth-moving equipment such as scrapers, dozers, loaders, and a motor grader. The simultaneous operation of on-site construction equipment associated with the proposed project, as identified above, could result in combined noise levels up to approximately 86 dB L_{eq} at 50 feet from the center of construction activity.[3]

Based upon the equipment noise levels, usage factors, and a typical noise-attenuation rate of 7.5 dB for every doubling of distance in soft ground, exterior noise levels at noise-sensitive receptors located within 200 to 500 feet of the project site could be as high as 63 dB L_{eq} and 71 dB L_{eq}.[4] Table 3.13-3 summarizes modeled construction noise levels compared to existing noise levels at noise-sensitive locations measured during the ambient noise survey.

As shown in Table 3.13-3, daytime project construction noise levels at the closest noise sensitive backyard area, located approximately 200 to 500 feet from the acoustical center of proposed construction activities, could reach as high as 71 dB $L_{eq.}$ This peak, maximum construction noise level is based on a conservative assumption of all equipment operating at the same location and at the same time. However, not all equipment would operate at the same time. A more representative assumption would be that, at any given time, approximately 50 percent of the equipment would operate on-site simultaneously, which would reduce the maximum construction noise level by 3 dB compared to this peak, maximum noise level.

3 Equivalent sound level (L_{eq}): An average of the sound energy occurring over a specified time period. In effect, the L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted equivalent sound level ($L_{eq}[h]$) is the energy average of A-weighted sound levels occurring during a 1-hour period. Maximum sound level (L_{max}): The highest instantaneous sound level measured during a specified period. L_{dn} (Day-Night Noise Level): The 24-hour L_{eq} with a 10 dB "penalty" applied during nighttime noise-sensitive hours, 10:00 p.m. through 7:00 a.m. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.

4 Sound from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, and the sound level attenuates (decreases) at a rate of 7.5 dB (in soft ground) for each doubling of distance from a point/stationary source. Roadways and highways and, to some extent, moving trains consist of several localized noise sources on a defined path; these are treated as "line" sources, which approximate the effect of several point sources. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. Therefore, noise from a line source attenuates less with distance than noise from a point source with increased distance.

Table 3.13-3: Ambient and Project Construction Noise Levels at Closest Sensitive Receptors

Receiver	Distance (ft) From Acoustical Center Between Noise-Sensitive Receiver locations and Proposed Construction Areas	Existing Ambient Noise (Exterior Noise Level, dBA L_{eq})	Project Noise (Exterior Noise Level, dBA L_{eq})	Project Noise, Doors/Windows Open (Interior Noise Level, dBA L_{eq})	Project Noise, Doors/Windows Closed (EPA) (Interior Noise Level, dBA L_{eq})
Residences to the West	200	49 to 51	71	56	46
Residences to the South	500	45	63	48	38
Residences to the East	500	48 to 49	63	48	38

Notes:
dBA = A-weighted decibels
EPA = U.S. Environmental Protection Agency
ft = foot/feet
L_{eq} = Equivalent Noise Level
Sources: Modeled by AECOM 2023

The equipment anticipated to produce the highest levels of noise would be used during site preparation. The residential area to the south would be less impacted by this activity given the distance between these residences and the proposed construction activities. Residences to the east of the project site are set back by a driveway and parking area and the outdoor gathering spaces associated with these residences are located on the east of the first row of buildings, with the buildings providing some noise attenuation benefit for these outdoor gathering spaces during demolition and construction.

The Sacramento County Code Noise Control Ordinance contains performance standards for the purpose of preventing unnecessary, excessive and offensive noise levels within the county. Section 6.68.090 of the Sacramento County Code establishes that noise associated with construction, repair, remodeling, demolition, paving, or grading is exempt from the Noise Ordinance, provided said activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday; Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday, and on each Sunday after the hour of 8:00 p.m.

Nevertheless, if construction activities were to occur during the more noise-sensitive hours (e.g., evening, nighttime, and early morning) or construction equipment were not properly equipped with noise control devices, construction-generated source noise could result in annoyance and/or sleep disruption of occupants of the nearby existing noise-sensitive land uses (e.g., residences) and create a substantial temporary increase in ambient noise levels in the direct vicinity of the project site. Potential construction-related project impacts on existing noise-sensitive land uses are therefore considered ***potentially significant***.

Mitigation Measure NOI-1: Implement Measures to Reduce Short-Term, Construction-Related Noise.

The District and its contractor(s) shall implement the following measures during demolition and construction activities to minimize construction-related noise:

- Provide written notification to the residents within 500 feet[5] of construction areas at least three weeks prior to construction, identifying the type, duration, and frequency of construction activities. Notification materials shall also identify a mechanism for residents to contact regarding construction noise. Designate a "construction liaison" that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Post contact information in conspicuous locations adjacent to the site with contact information regarding construction noise and activities. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) shall be included in the notification.
- Prohibit the start-up of machines or equipment between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday; Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday and on each Sunday after the hour of 8:00 p.m.
- Restrict the use of bells, whistles, alarms, and horns for safety-warning purposes.
- Equip all construction equipment with noise-reduction devices, such as mufflers to minimize construction noise and operate all internal combustion engines with exhaust and intake silencers.
- All impact tools will be shrouded or shielded, and all intake and exhaust ports on power equipment will be muffled or shielded.
- Locate fixed construction equipment (e.g., compressors and generators), construction staging and stockpiling areas, and construction vehicle routes as far as feasible from noise-sensitive receptors.
- Avoid the use of hand jackhammers within 200 feet of the outdoor activity areas of occupied noise-sensitive receptors during demolition activities.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure NOI-1 would reduce the potentially significant impact resulting from construction activities by another 5 to 10 dB, because it would ensure that construction activities would avoid noise-sensitive hours, reduce equipment noise levels, and reduce other sources of noise on-site. With implementation of the measures described above, construction noise impacts would be ***less than significant with mitigation incorporated***.

LONG-TERM PROJECT-GENERATED STATIONARY SOURCE NOISE

Parking Lot Activities

Less-than-Significant Impact. The proposed project would introduce 318 new parking spaces spread throughout the site, including Americans with Disabilities Act (ADA) accessible stalls approximately 100 feet from adjacent

5 Building rows located within 500 feet of the construction site would shield construction noise. Therefore, construction noise would be attenuated to the ambient level beyond this distance.

noise-sensitive residential uses to the east. Based upon previous noise measurements, the sound exposure level (SEL) associated with a parking event is approximately 71 dB SEL at 50 feet. Assuming that each parking stall adjacent to residential uses were to fill and empty (318 parking events total) within an hour, the noise level is predicted to be 50 dBA L_{eq} at 100 feet. Existing ambient noise levels at the residential uses to the west of the project site range between 49 to 51 dBA L_{eq}. Therefore, noise levels associated with parking would not be distinguishable from the existing ambient noise levels. As a result, this impact would be ***less than significant.***

Traffic

Less-than-Significant Impact. The proposed project is anticipated to result in minor increases in traffic volumes to the project site, given the availability of new or upgraded features such as shaded seating areas and a new bike track, which may bring additional biking enthusiasts to Phoenix Park. Typically, traffic volumes have to double before the associated increase in noise levels is noticeable (3 dBA L_{dn}) along roadways (Caltrans 2013). The incremental addition of proposed project traffic would not cause a doubling of those volumes. Consequently, construction of the proposed project would not result in a noticeable change in the traffic noise contours of area roadways. Long-term, off-site operational traffic source noise would not result in a substantial permanent increase in ambient noise levels in the project vicinity above existing levels. As a result, this impact would be ***less than significant***.

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

Less-than-Significant Impact. Groundborne vibration is energy transmitted in waves through the ground. Vibration attenuates at a rate of approximately 50 percent for each doubling of distance from the source. This approach considers only the attenuation from geometric spreading and tends to provide for a conservative assessment of vibration levels at the receiver.

Vibration is an oscillatory motion that can be described in terms of the displacement, velocity, or acceleration. Vibration typically is described by its peak and RMS amplitudes. The RMS value can be considered an average value over a given time interval. The peak vibration velocity is the same as the PPV, generally presented in units of inches per second. PPV is the maximum instantaneous positive or negative peak of the vibration signal and is generally used to assess the potential for damage to buildings and structures. The RMS amplitude typically is used to assess human annoyance to vibration, and the abbreviation "VdB" is used in this document for vibration decibels to reduce the potential for confusion with sound decibels.

Construction activities have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

As discussed above, on-site construction equipment could include scrapers, dozers, loaders, and a motor grader. According to Federal Transit Administration (FTA 2018), vibration level associated with the use of a large dozer is 0.089 inches per second (in/sec) PPV and 87 vibration decibels (VdB referenced to 1 micro inch per second [µin/sec] and based on the RMS) velocity amplitude) at 25 feet. Table 3.13-4 summarizes modeled construction vibration levels at noise-sensitive locations.

Table 3.13-4: Project Construction Vibration Levels at Closest Sensitive Receptors

Receiver	Location	Shortest Distance (ft) Between Noise-Sensitive Uses and Proposed Construction Areas	PPV Vibration Levels	VdB Vibration Levels
Off-site	Off-site, residences to the west	200	0.004	60
Off-site	Off-site, residences to the south	500	0.001	48
Off-site	Off-site, residences to the east	500	0.001	48

Source: FTA, Transit Noise and Vibration Impact Assessment, September 2018.
ft = feet
PPV = peak particle velocity
VdB = vibration decibels
Modeled by AECOM 2023.

Using FTA's recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels of approximately 0.004 in/sec PPV and 60 VdB at the closest existing sensitive receptor could occur during construction. These vibration levels would not exceed Caltrans's recommended standard of 0.2 in/sec PPV (Caltrans 2020) with respect to the prevention of structural damage for normal buildings or the FTA's maximum-acceptable vibration standard of 80 VdB (Federal Transit Administration 2018) with respect to human annoyance for residential uses. The long-term operation of the proposed project would not include any perceptible vibration sources, and short-term construction would not result in the exposure of persons or structures to or generation of excessive groundborne vibration or groundborne noise levels. As a result, this impact would be ***less than significant***.

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

No Impact. The project site is not located within 2 nautical miles of an airport. The closest airport is Mather Air Force Base (AFB), which is located approximately 6.5 miles to the southwest of the project site. The proposed project would improve an existing park and would not expose people residing or working in the project area to excessive noise levels from airport activities. Thus, there would be ***no impact.***

3.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. Population and Housing. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 DISCUSSION

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

No Impact. The proposed project would improve Phoenix Park in Fair Oaks in unincorporated Sacramento County. No additional housing would be constructed as part of the project, and the park would continue to serve the existing neighborhood once the proposed project is implemented. No new roads or other infrastructure would be included which could induce population growth. Therefore, the proposed project would not induce substantial unplanned population growth and there would be ***no impact.***

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

No Impact. The proposed project would improve Phoenix Park within its existing boundaries. The park would not be expanded, and no housing would be removed as a result. No displacement of people would occur and replacement housing would not need to be constructed due to the proposed park improvements. Therefore, there would be ***no impact***.

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3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☒	☐	☐
Other public facilities?	☐	☐	☒	☐

3.15.1 DISCUSSION

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

Fire protection?

Less-than-Significant Impact. The proposed project area is currently served by the Sacramento Metropolitan Fire District. The Sacramento Metropolitan Fire District serves a population of over 745,000 people in a 359-square-mile service area. The Operations Branch (firefighting and emergency medical technicians [EMT]) oversees all aspects of the Fire District's emergency services, which are delivered from 41 stations with daily shift staffing of 160 personnel (Metro Fire 2023). The closest fire station to the project site is Station No. 32, located approximately 0.3-mile northwest.

The proposed project would improve an existing park and would not increase the population in the area. No additional fire services or expansion of service areas would be required due to the proposed project. Therefore, the impact would be ***less than significant.***

Police protection?

Less-than-Significant Impact. The North Division of the Sacramento County Sheriff's Department provides patrol services for approximately 415,000 people living in the communities of Arden-Arcade, Carmichael, Fair

Oaks, Gold River, Orangevale, Foothill Farms, Antelope, North Highlands, Rio Linda, Elverta, and the Garden Highway. The North Division is currently staffed with 134 sworn officers and a support staff of 19. The patrol officers serving the above areas work out of the Garfield Station, located at 5510 Garfield Avenue, approximately 6.3 miles west of the project site (Sacramento County Sheriff's Office, North Division 2023).

The proposed project would improve an existing park and would not require additional police protection services. The hours of operation of the park would not change and no new uses would be introduced which could trigger a substantial increase in police responses or the need for expanded patrols. Therefore, the impact would be ***less than significant.***

Schools?

Less-than-Significant Impact. The proposed project is in the San Juan Unified School District. The nearest schools to the project site include Summit Christian School and Orangevale Open kindergarten through 8th grade (K-8) School, located approximately 0.3-mile and 1.2 miles northwest of the site, respectively. The proposed project would not physically alter either of these schools or add population to the area which would place a new demand on any schools. Therefore, the impact would be ***less than significant.***

Parks?

Less than Significant with Mitigation Incorporated. The proposed project would improve an existing park. With implementation of mitigation measures described throughout this document, the proposed project would not result in any significant impacts due to construction of new park facilities. Therefore, the impact would be ***less than significant with mitigation incorporated.***

Other public facilities?

Less-than-Significant Impact. The proposed project would improve an existing park. No new housing is included in the project which would increase the population in the area and place a new demand on other public facilities, such as community centers, plazas, or trails (see Section 3.16, "Recreation"). Therefore, the impact would be ***less than significant.***

3.16 RECREATION

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

3.16.1 DISCUSSION

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?

Less-than-Significant Impact. The proposed project includes improvements to the existing Phoenix Park, an approximately 65.9-acre park located within the unincorporated community of Fair Oaks in Sacramento County. Phoenix Park currently offers a variety of recreational opportunities, and the proposed project would improve or enhance the existing facilities and recreational opportunities within the park. The proposed improvements are anticipated to result in a minor increase in use of Phoenix Park due to the availability of various features, including a new bike park/pump track in place of the existing Fair Oaks Bike Park, new shade structures, play areas, and walking trails. However, the proposed improvements would not increase use of Phoenix Park to the extent that substantial physical deterioration would occur. It is anticipated that with the proposed improvements the park would continue to adequately serve nearby neighborhoods. Therefore, this impact would be ***less than significant.***

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less-than-Significant with Mitigation Incorporated. The proposed project includes recreational facilities and would require the construction of recreational facilities which have potential for adverse physical effects on the environment. With implementation of the mitigation measures described in other sections of this document (Sections 3.3, "Air Quality", 3.4, "Biological Resources" 3.13, "Noise and Vibration" and 3.18, "Tribal Cultural Resources), the proposed recreational facilities would not cause adverse physical effects on the environment. Therefore, this impact would be ***less than significant with mitigation incorporated.***

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3.17 TRANSPORTATION

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

3.17.1 SETTING

The project site is located in the community of Fair Oaks in unincorporated Sacramento County. The project site is in an area that has primarily low-density residential development, as well as recreation, commercial services, and public services. The mix of uses provides the possibility of making some trips on foot or by bicycle. Streets in the vicinity are relatively narrow, so intersections have relatively short and safe crossing distances, although bike lanes are generally not present in the area. Streets in the vicinity of the project site have extensive shade from a mature tree canopy, which creates more pleasant walking conditions in the summer, as well as relatively low speeds, which also creates a more pedestrian-friendly environment. There is on-street parking in the area surrounding the project site, which serves as a barrier between pedestrians and vehicular movements, creating additional sense of safety for pedestrians visiting the project site.

Sacramento Regional Transit's 109 bus line uses Hazel Boulevard in the vicinity of the project site. There is a bus stop on Fair Oaks Boulevard adjacent to the project site, both providing connections to the Gold Line light rail, which services stops between Folsom and downtown Sacramento.

The project site is bordered by Hazel Avenue and Sunset Avenue on the west and north, respectively. Hazel Avenue is located approximately 400 feet west of the project site. Hazel Avenue is a six-lane arterial roadway divided by a median. Sunset Avenue is located along the northern boundary of the park. Sunset Boulevard is a two-lane roadway in the vicinity of the project site.

Primary access to the park is provided from the northern and western boundaries at Sunset Avenue and Kruitof Way, respectively. Both roads connect to Maya Street, an internal road providing direct access to two centrally located surface parking lots and other park amenities. Secondary access to the park is provided from pedestrian entrances at surrounding residential streets, including Groff Drive, Vega Del Rio Drive, and Rigler Street.

3.17.2 DISCUSSION

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

No Impact. Project construction would require hauling of equipment and materials, as well as worker commute trips to and from the project area along local roadways. Construction worker commute trips would come from the greater Sacramento area. While construction-related trips would occur on regional and local roadways, given the scale of the project, this would not substantially increase traffic congestion compared to existing conditions, particularly considering the temporary nature of project construction. No long-term street closures are planned or anticipated; however, limited, temporary lane closures may be necessary during construction, and public access to the project site would be temporarily restricted in active construction areas.

Once constructed, daily activities associated with current use and operations of the park complex would continue. The project would improve and renovate an existing park complex to enhance cohesion and usability of the park's facilities. The project is also designed to enhance accessibility.

The park complex currently shares parking with the existing community garden users. Improvements would reconfigure the existing dirt parking lot and add 318 additional parking spaces spread throughout the site. The improvements would increase surface of asphalt for parking to approximately 50,000 square feet in Area A and 90,000 square feet in Area B. These improvements would allow more visitors to the park complex to use on-site parking, including ADA stalls, rather than using on-street parking in the vicinity of the project site.

The proposed park improvements may result in a minor increase in park visitors due to the availability of new features. However, this would not create any conflict with any relevant plan, ordinance, or policy addressing the circulation system that would lead to an adverse physical environmental impact. The project does not propose changes to any travel ways in the vicinity of the project site that would conflict with the County's Circulation Element (Sacramento County 2022a). The construction and operation of the project would not conflict with any applicable transportation policy, plan, or ordinance; therefore, there would be ***no impact***.

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

Less-than-Significant Impact. As discussed in CEQA Guidelines Section 15064.3(b.3), increased travel demand (normally measured according to additional vehicle miles traveled or "VMT") can be an indicator of potential adverse physical environmental effects. The actual adverse physical environmental effects associated with VMT are analyzed in other sections of this document, including Air Quality, Greenhouse Gas Emissions, Noise and Vibration, and Energy. The proposed project would continue to serve park users from surrounding neighborhoods and would not result in a substantial increase in VMT. No large-scale events or facilities would be added to the park which would induce substantial travel beyond what currently occurs at the park. Further, as detailed in the Sacramento County Transportation Analysis Guidelines (Sacramento County 2020), local-serving public facilities (including neighborhood parks) are assumed to result in less than significant VMT impacts based on their characteristics.

As discussed, temporary construction worker commute trips would be from the greater Sacramento area. Truck trips associated with materials and equipment deliveries are also expected to originate from the greater

Sacramento area. Construction truck trips would be temporary and limited to the volumes necessary to deliver equipment and materials to the site. Upon completion of construction, all worker commute trips and truck trips would cease. There is no adverse physical environmental impact associated with VMT that is not addressed fully in other relevant technical sections of this Initial Study. The impact would be ***less than significant***.

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

No Impact. The project would improve access to the park by adding parking, ramps, and new all-weather pathways within and around the perimeter of the park that would connect the park complex to create cohesion and safe access for all park users. Enhanced connectivity of the park complex and expanded parking on-site would improve circulation around the park complex. The project does not include street/roadway changes, and therefore would not add dangerous curves or intersections, or otherwise increase any hazards. Therefore, there would be ***no impac****t*.

d) Result in inadequate emergency access?

No Impact. The proposed project would improve an existing park. The project site would maintain the same emergency access as under existing conditions and emergency access would be retained throughout construction; therefore, there would be ***no impact***. See Sections 3.8, "Hazards and Hazardous Materials", and 3.13, "Public Services" for more details regarding emergency response and access to the project site.

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3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. Tribal Cultural Resources. Would the project:				
a) 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:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒
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?	☐	☒	☐	☐

3.18.1 ENVIRONMENTAL SETTING

NATIVE AMERICAN CONSULTATION

On June 19, 2023, on behalf of the District, AECOM consulted with the NAHC pursuant to SB 18, California Government Code sections 65352.3 and 65352.4, AB 52, and Public Resources Code sections 21080.1, 21080.3.1, and 21080.3.2. A response from the NAHC dated July 7, 2023 stated that the results of the sacred lands search were negative. The NAHC also provided a list of Native American contacts that may have additional information.

In accordance with AB 52, pursuant to Public Resources Code Section 21080.3.1 and on behalf of the District AECOM prepared and distributed requests for consultation letters to the United Auburn Indian Community, Ione Band of Miwok Indians, Shingle Springs Band of Miwok Indians, Buena Vista Rancheria of Mewuk Indians, Tsi Akim Maidu, Wilton Rancheria, and Colfax-Todds Valley Consolidated Tribe on June 30, 2023. To date no responses have been received.

3.18.2 DISCUSSION

a) 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:

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

No Impact. There is no information suggesting that there are any tribal cultural resources (TCR) in the vicinity of the project site. Consultation with local Native American tribes and individuals did not identify tribal cultural resources in the vicinity of the project site and the NAHC Sacred Lands File search was negative. Therefore, there would be ***no impact.***

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?

Less-than-Significant Impact with Mitigation Incorporated. There is no information suggesting that there are any tribal cultural resources in the vicinity of the project site. Consultation with local Native American tribes and individuals did not identify tribal cultural resources in the vicinity of the project site and the NAHC Sacred Lands File search was negative. The following mitigation measure was added to limit the potential for a significant impact.

Mitigation Measure TCR-1: Unanticipated Discoveries

The District and its contractor(s) shall implement the following measures during demolition and construction activities to minimize impacts to unanticipated tribal cultural resources.

- If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (Public Resources Code Section 21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

- When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by the California Native American Tribe that is traditionally and culturally affiliated with the project area.

- The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not

limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

- Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, have been satisfied.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure TCR-1 provides appropriate actions for inadvertent discovery of TCRs, archaeological, or cultural resources. Implementation of Mitigation Measure TCR-1 would reduce potential impacts on tribal cultural resources to a less than significant level because compliance with the above-listed procedures would address concerns regarding loss of, or substantial adverse changes to, tribal cultural resources. Therefore, the impact would be ***less than significant with mitigation incorporated***.

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3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIX. Utilities and Service Systems. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

3.19.1 DISCUSSION

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

Less-than-Significant Impact. The proposed project consists of improvements to the existing Phoenix Park and would occur in an urbanized area with existing utility connections. There are existing water, wastewater, storm drain, and electric power utility connections within the park. Specific utility locations would be investigated prior to construction and avoided to the maximum extent feasible, or minor relocations would occur within the park boundaries where conflicts are unavoidable. Any relocations are anticipated to occur within existing developed areas and would occur in conformance with the mitigation measures specified in this document. The proposed project includes drainage improvements in localized areas to recontour existing drainage facilities or otherwise modify storm drains to improve drainage within the site. Drainage improvements would occur adjacent to existing walking paths or within paved parking areas and would avoid sensitive vernal pool areas within the park. The proposed project would result in minimal new demand on utilities from the proposed park improvements, primarily due to new lateral connections for restrooms and drinking fountains. These demands would be similar to

what currently occurs due to regular park use and would not require construction of new facilities with potential to cause significant environmental impacts. Therefore, this impact would be ***less than significant.***

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

Less-than-Significant Impact. Phoenix Park is currently served potable water by the Fair Oaks Water District (FOWD). FOWD meets customer demands of approximately 37,000 people with purchases of surface water from the San Juan Water District, which sources water from Folsom Lake, and delivers this water to residential and non-residential service connections through 180 miles of pipe (FOWD 2021). As noted in FOWD's 2020 Urban Water Management Plan, there is adequate water supply to meet projected demands in the service area through 2040 during normal, single-dry, and multiple dry years.

The proposed park improvements would not result in new facilities with a substantial new water demand. The primary new demand for water would come from the new restroom facilities, drinking fountains, small water play feature, and landscape irrigation. These demands would be minimal and would not be a substantial departure from what currently occurs on the project site. The proposed project would make an incremental contribution to demand increases and there would be sufficient water supply available to meet its needs. Therefore, the impact would be ***less than significant.***

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

Less-than-Significant Impact. Wastewater from the project site is conveyed through below-grade sewer lines maintained at the local level by the Sacramento Area Sewer District (SASD). SASD's local conveyance lines tie in to larger regional conveyance interceptor lines that are owned and operated by the Sacramento Regional County Sanitation District (Regional San). Ultimately, wastewater is conveyed to the Sacramento Regional Wastewater Treatment Plant (WWTP), located east of the Sacramento River near Elk Grove. The WWTP is permitted to discharge an average dry-weather flow of 181 million gallons per day (mgd) of treated wastewater to the Sacramento River (Central Valley Regional Water Quality Control Board 2021). Regional San expects that with water conservation measures throughout its service area, the existing 181 mgd average dry-weather flow capacity would be adequate for at least 40 years (Regional San 2014).

The proposed park improvements would not result in new facilities with a substantial demand for wastewater treatment. The new restroom facilities on-site would be the main source of new wastewater treatment needs; however, there would be no increase in special events or other park uses which would generate substantial wastewater increases at the site. Wastewater treatment needs are anticipated to be similar to the existing conditions. The proposed project would make an incremental contribution to wastewater treatment needs at the WWTP. Therefore, the impact would be ***less than significant.***

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

Less-than-Significant Impact. The Sacramento County Department of Waste Management & Recycling (DWMR) manages the operations, maintenance, and development of the solid waste management system within

unincorporated Sacramento County, including the project area. DWMR operates and manages the North Area Recovery Station and the Kiefer Landfill. The North Area Recovery Station in North accepts business and household waste (Sacramento County Waste Management and Recycling 2023a). Waste from the North Area Recovery Station is ultimately transported to Kiefer Landfill, southeast of Sacramento near Sloughhouse. Standard refuse collection service in the project area is provided by Sacramento County Waste Management. Collection of recycling and organics recycling materials is available from a variety of locally licensed franchise service providers.

The Florin Perkins Public Disposal Center is a certified facility that handles recycling of construction and demolition debris (GreenWaste 2023). Any materials that Florin Perkins is not able to recycle are transported to the North Area Recovery Station. The L&D Landfill is another certified facility in the area that handles recycling of construction and demolition debris (Sacramento County Waste Management and Recycling 2023b).

The North Area Recovery Station is permitted to receive up to 2,400 tons per day (California Department of Resources Recycling and Recovery [CalRecycle] 2019a). Kiefer Landfill is permitted to accept a maximum of 10,815 tons per day, has a remaining capacity of 112,900,000 cubic yards, and an estimated closure date of 2064 (CalRecycle 2019b). The Florin Perkins Public Disposal Center is permitted to receive up to 1,000 tons per day (CalRecycle 2019c). The L&D Landfill is permitted to receive 4,125 tons per day, and the remaining maximum landfill capacity is 3,115,900 cubic yards, with an estimated landfill closure date of December 2030 (CalRecycle 2019d).

The proposed construction activities would not include demolition of any structures whose materials would require disposal at areawide disposal centers or otherwise place a substantial new demand on solid waste disposal infrastructure. Minor disposal of ancillary waste during construction may be needed, including pavement materials, trash from workers on-site, and use of portable restroom facilities; however, the demand for solid waste disposal during this phase would be negligible and temporary. The proposed park improvements would not result in new facilities with a substantial demand for solid waste disposal. Solid waste would be disposed of at facilities with adequate capacity to service the minor increase in demand which may occur due to the new restroom facilities on-site. Therefore, the proposed project would not generate solid waste in excess of State or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. This impact would be ***less than significant.***

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

No Impact. As mentioned above, project construction would not result in demolition of any structures which would require disposal. The minimal amount of construction waste generated by the proposed project would be recycled at local facilities, which may include the Florin Perkins Public Disposal Center of the L&D Landfill, or other permitted facilities at the discretion of the contractor. The California Green Building Code requires that at least 65 percent of construction and demolition waste be diverted from landfills. A Waste Management Plan must be approved that identifies a waste hauler and a construction and demolition sorting facility and waste log must document the 65 percent diversion requirement. The District would continue to implement recycling programs during the proposed project's operational phase. Therefore, the proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste, and there would be ***no impact***.

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3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XX. Wildfire. Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

3.20.1 DISCUSSION

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

No Impact. The proposed project site is located in a developed area. The project site is not within or adjacent to a mapped wildlife hazard zone identified by the California Department of Forestry and Fire Protection (CAL FIRE) pursuant to Public Resources Code Sections 4201-4204 (CAL FIRE 2023). The nearest fire hazard zone is an area of Moderate Fire Hazard located approximately 4 miles southeast of the project site and separated from the site by other urban development. Additionally, Sacramento County has not designated any additional areas of very high fire hazard severity other than those already classified by CAL FIRE (Sacramento County 2017). The proposed project would maintain emergency vehicle ingress and egress throughout construction and operation. No roadway improvements on surrounding local roads are proposed which could impair emergency response to nearby areas. Therefore, there would be ***no impact***.

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

No Impact. As noted above, the proposed project is not located within a mapped wildfire hazard zone. The project proposes to improve the existing Phoenix Park and would not introduce new residents to the area nor result in new uses of the park which could contribute to wildfire risks. Therefore, wildfire risk would not be exacerbated by the proposed project and there would be ***no impact.***

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

No Impact. The proposed project would not require the installation of infrastructure which could exacerbate fire risk. Therefore, there would be ***no impact.***

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The project site is exposed to low fire risk. The proposed park improvements would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Therefore, there would be ***no impact***.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XXI.	**Mandatory Findings of Significance.**				
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?	☐	☒	☐	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Authority: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.

Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21083, 21083.3, 21083.5, 21093, 21094, 21095, 21151; Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

3.21.1 DISCUSSION

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?

The analysis conducted in this Initial Study concludes that the proposed project would not have a significant adverse effect on the physical environment and would not result in any of the impacts defined in a) above.

As evaluated in Section 3.4, "Biological Resources," the project site consists of gravel lots, developed roadways, multiple managed fields/open spaces, naturalized nonnative annual/perennial grassland, a gravel and dirt bike park, baseball diamonds, and other recreational infrastructure used by the public. Land uses surrounding the project site are primarily residential, with pockets of commercial and industrial land uses located along Sunset Avenue and Hazel Ave to the west and southwest of the site, respectively. Land cover for areas affected by the proposed project include urban (developed), managed recreational fields and open spaces, disturbed-ruderal areas,

and naturalized annual/perennial grassland. The proposed project would occur in the vicinity of sensitive habitat (vernal pools) which is managed as an approximately 17-acre preserve within Phoenix Park. With implementation of existing management actions pursuant to the Phoenix Vernal Pools Management Plan and additional protective measures set forth in Mitigation Measures BIO-2 and BIO-3, the proposed project would have a less than significant impact on this resource. Further, the proposed project would implement Mitigation Measure BIO-1 to reduce potential impacts to nesting birds during construction.

As evaluated in Section 3.5, "Cultural Resources," Phoenix Park does not contain any historical resources and there would be no impact on historical resources from project construction activities. There is possibility that archaeological features could be discovered on the project site during project development. Therefore, Mitigation Measure CUL-1 is included to reduce potential impacts to a less-than-significant level.

As described in Section 3.18, "Tribal Cultural Resources," there is no information suggesting that there are any tribal cultural resources in the vicinity of the project site. Consultation with local Native American tribes and individuals did not identify tribal cultural resources in the vicinity of the project site and the NAHC Sacred Lands File search was negative. However, Mitigation Measure TCR-1 is included to further limit the potential for any impact.

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.)

Construction of the proposed project would result in temporary and short-term impacts that would be limited to the project site and immediate vicinity. Although impacts related to resources such as air quality, greenhouse gas emissions, and traffic would contribute to regional impacts, these impacts would not make a cumulatively considerable incremental contribution to any significant cumulative impact resulting from other past, present, and reasonably foreseeable future projects in the project vicinity. This is due to the small size of the proposed project, limited nature of construction-related impacts over a relatively short construction period, and mitigation measures that are proposed to avoid, minimize, rectify, reduce, eliminate, and/or compensate for any potentially significant impacts.

As discussed in this Initial Study the proposed project would result in less-than-significant impacts or no impacts on the following resource areas: aesthetics, agriculture and forestry resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire. Furthermore, mitigation measures have been included in this Initial Study that would reduce impacts to a less than significant level in the following areas: air quality, biological resources, cultural resources, noise and vibration, and tribal cultural resources. Therefore, all impacts would be less than significant or would be reduced to a less-than-significant level through implementation of required mitigation measures, and the proposed project would not make a cumulatively considerable incremental contribution to significant cumulative adverse impacts on those resource areas. The incremental effects of the proposed project would not be cumulatively considerable when viewed in connection with the effects of past, present, and reasonably foreseeable future projects. This impact would be less than significant.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

The analysis conducted in this Initial Study concludes that the proposed project with mitigation would not have a significant adverse effect on human beings.

As evaluated in Section 3.3, "Air Quality," project-related construction activities could conflict with or obstruct implementation of SMAQMD's air quality plans for particulate matter. However, with implementation of Mitigation Measure AQ-1 (Implement the SMAQMD Basic Construction Emission Control Practices) included in Section 3.3, this impact would be reduced to a less-than-significant level. As also evaluated in Section 3.3, "Air Quality," although modeled project construction and operational emissions would not exceed SMAQMD thresholds of significance, SMAQMD recommends implementation of basic construction emission control measures to address regional air quality impacts. With implementation of Mitigation Measure AQ-1 (Implement the SMAQMD Basic Construction Emission Control Practices) included in Section 3.3, this impact would also be reduced to a less-than-significant level.

As evaluated in Section 3.13, "Noise and Vibration," construction activities could result in a substantial temporary increase in ambient noise levels at nearby noise-sensitive receptors if not properly controlled. With implementation of Mitigation Measure NOI-1, construction noise impacts would be reduced to a less than a significant level by ensuring that construction activities avoid noise-sensitive hours, reduce equipment noise levels, reduce other sources of noise on-site, coordinate with nearby residents during construction, and provide opportunities to further reduce temporary noise exposure effects during construction, if necessary.

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4 REFERENCES

1. INTRODUCTION

None.

2 PROJECT DESCRIPTION

District. *See* Fair Oaks Recreation and Park District.

Fair Oaks Recreation and Park District. 2010. *Master Plan for Parks, Facilities, & Recreation Services.* Available: https://www.forpd.org/DocumentCenter/View/1799/Fair-Oaks-Recreation-Park-District-FINAL-Report. Accessed June 19, 2023.

Sacramento County. 2011. *2030 General Plan*. Available: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed June 19, 2023.

Sacramento County. 2021. *Sacramento County Zoning Code.* Available: https://planning.saccounty.gov/LandUseRegulationDocuments/Documents/Zoning-Code/Chapter_2_9.9.22.pdf.pdf. Accessed June 19, 2023.

3 ENVIRONMENTAL IMPACT CHECKLIST

None.

3.1 AESTHETICS

California Department of Transportation. 2023. California State Scenic Highways. Available: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed June 28, 2023.

Caltrans. *See* California Department of Transportation.

Google Earth. 2020. Accessed June 30, 2023.

Pros Consulting, Inc. 2010. *Master Plan for Parks, Facilities & Recreation Services.* Prepared for: Fair Oaks Recreation and Parks District.

Sacramento County. 1975. *Fair Oaks Community Plan.* Available: https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/FairOaksCommunityPlan.aspx. Accessed June 30, 2023.

———. 2020. *Sacramento County General Plan of 2005–2030, Land Use Element*. Adopted in 2011, amended in 2020. Available: https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed June 30, 2023.

———. 2022a. *Sacramento County General Plan of 2005–2030, Circulation Element*. Adopted in 2011, amended in 2022. Available: https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed June 28, 2023.

———. 2022b. *Countywide Design Guidelines and Case Studies.* Adopted 2015, Amended 2022. Available: https://planning.saccounty.net/applicants/Pages/DesignReviewProgram.aspx. Accessed June 28, 2023.

———. 2023a. Sacramento County Online Map Viewer: Land Use Designation, Zoning. Available: https://generalmap.gis.saccounty.gov/JSViewer/county_portal.html. Accessed June 30, 2023.

———. 2023b. *Sacramento County Zoning Code.* Adopted 2015, Amended 2023. Available: https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/Sacramento%20County%20Zoning%20Code.aspx. Accessed June 28, 2023.

3.2 AGRICULTURE AND FORESTRY RESOURCES

California Department of Conservation. 2023a. Farmland Mapping and Monitoring Program. Available: https://www.conservation.ca.gov/dlrp/fmmp. Accessed July 3, 2023.

———. 2023b. DLRP Important Farmland Finder – Williamson Act. Available: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/. Accessed July 3, 2023.

3.3 AIR QUALITY

ARB. *See* California Air Resources Board.

California Air Resources Board. 2005 (April). Air Quality and Land Use Handbook: A Community Health Perspective. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf. Accessed August 5, 2022.

———. 2013. *The California Almanac of Emissions and Air Quality*. 2013 Edition. Air Quality Planning and Science Division. Sacramento, CA.

EPA. *See* U.S. Environmental Protection Agency.

OEHHA. *See* Office of Environmental Health Hazard Assessment.

Office of Environmental Health Hazard Assessment. 2015 (February). Air Toxics Hot Spots Program: Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed June 26, 2023.

Sacramento Metropolitan Air Quality Management District. 2010. PM_{10} Implementation/Maintenance Plan and Redesignation Request for Sacramento County. October 2010. Available: http://www.airquality.org/ProgramCoordination/Documents/10)%20%20PM10%20Imp%20and%20MP%202010.pdf. Accessed June 26, 2023.

_____. 2013. $PM_{2.5}$ Implementation/Maintenance Plan and Redesignation Request for Sacramento $PM_{2.5}$ Nonattainment Area. Available: https://www.airquality.org/ProgramCoordination/Documents/PM2.5%20Imp%20and%20Redesignation%202013.pdf. Accessed June 26, 2023.

_____. 2015. California Environmental Air Quality Act Guidelines Update. Available: http://www.airquality.org/LandUseTransportation/Documents/ParticulateMatterThresholdsUpdateMay2015AgendaItemAttachment.pdf. Accessed June 26, 2023.

_____. 2017. 2017 Sacramento Regional 2008 8-Hour Ozone Attainment and Further Reasonable Progress Plan. Accessed June 28, 2023. Available: https://ww2.arb.ca.gov/resources/documents/2017-sacramento-regional-2008-8-hour-ozone-attainment-and-further-reasonable. Accessed June 26, 2023.

_____. 2017. Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan. July 2017. Available: http://www.airquality.org/ProgramCoordination/Documents/Sac%20Regional%202008%20NAAQS%20Attainment%20and%20RFP%20Plan.pdf. Accessed August 8, 2022.

_____. 2019. Basic Construction Emission Control Practices. Available: http://www.airquality.org/LandUseTransportation/Documents/Ch3BasicEmissionControlPracticesBMPSFinal7-2019.pdf. Accessed August 5, 2022.

_____. 2020. Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District. October 2020. Available: https://www.airquality.org/LandUseTransportation/Documents/SMAQMDFriantRanchFinalOct2020.pdf. Accessed August 8, 2022.

_____. 2021. Guide to Air Quality Assessment in Sacramento County (CEQA Guide). November 2021. Available: https://www.airquality.org/residents/ceqa-land-use-planning/ceqa-guidance-tools. Accessed June 26, 2023.

Sacramento County. 2019. Sacramento County Open Data Traffic Count. Available: https://data.saccounty.gov/datasets/traffic-count-data/explore?filters=eyJPTl9TVFJFRVQiOlsiU1VOU0VUIEFWRSJdfQ%3D%3D. Accessed June 23, 2023.

SCAQMD. *See* South Coast Air Quality Management District.

SMAQMD. *See* Sacramento Metropolitan Air Quality Management District.

South Coast Air Quality Management District. 2015. Application of the South Coast Air Quality Management District for leave to file brief of amicus curiae in support of neither party and (proposed) brief of amicus curie. Filed April 13.

U.S. Department of Agriculture. 2023. 6.3 Air Quality Buffers. Available: https://www.fs.usda.gov/nac/buffers/guidelines/6_aesthetics/3.html. Accessed June 23, 2023.

U.S. Environmental Protection Agency. 2022. Ozone Pollution and Your Patients' Health: Patient Exposure and the Air Quality Index. Available: https://www.epa.gov/ozone-pollution-and-your-patients-health/patient-exposure-and-air-quality-index. Accessed June 2023.

USDA. *See* U.S. Department of Agriculture.

WHO. *See* World Health Organization.

World Health Organization. 2016. Ambient (Outdoor) Air Quality and Health. Available: http://www.who.int/mediacentre/factsheets/fs313/en/. Accessed June 26, 2023.

Zhu, Yifang; William C. Hinds, Seongheon Kim & Constantinos Sioutas. 2002. Concentration and Size Distribution of Ultrafine Particles Near a Major Highway, Journal of the Air & Waste Management Association, 52:9, 1032-1042, DOI: 10.1080/10473289.2002.10470842. Available: http://dx.doi.org/10.1080/10473289.2002.10470842. Accessed June 23, 2023.

3.4 BIOLOGICAL RESOURCES

California Department of Fish and Wildlife. 2006. Phoenix Vernal Pools Land Management Plan. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=23333. Accessed June 30, 2023.

3.5 CULTURAL RESOURCES

AECOM. 2023. Cultural Resources Report for Phoenix Park Improvements.

3.6 ENERGY RESOURCES

California Energy Commission. 2021a. Electricity Consumption by County. Available: http://www.ecdms.energy.ca.gov/elecbycounty.aspx. Accessed June 28, 2023.

———. 2021b. Gas Consumption by County. Available: http://www.ecdms.energy.ca.gov/gasbyplan.aspx. Accessed June 28, 2023.

———. 2021c. Gas Consumption by County. Available: http://www.ecdms.energy.ca.gov/gasbycounty.aspx. Accessed June 28, 2023.

———. 2021d. 2018 California Annual Retail Fuel Outlet Report Results (CEC-A15). Available: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting. Accessed June 28, 2023.

CEC. *See* California Energy Commission.

Pacific Gas & Electric Company. 2021. Available: https://www.pgecorp.com/corp_responsibility/reports/2021/pf01_pge_overview.html. Accessed June 28, 2023.

PG&E. *See* Pacific Gas & Electric Company.

Sacramento Metropolitan Air Quality Management District. 2019. Resource Planning Report. Available: https://www.smud.org/-/media/Documents/Corporate/Environmental-Leadership/Integrated-Resource-Plan.ashx. Accessed June 28, 2023.

Sacramento Municipal Utilities District. 2019. Integrated Resource Report. Available: https://www.smud.org/-/media/Documents/Corporate/Environmental-Leadership/Integrated-Resource-Plan.ashx. Accessed July 6, 2023.

Sacramento Municipal Utilities District. 2021. 2030 Zero Carbon Plan Executive Summary. Available: https://www.smud.org/-/media/Documents/Corporate/Environmental-Leadership/ZeroCarbon/2030-Zero-Carbon-Plan-Executive-Summary.ashx. Accessed June 28, 2023.

Sacramento Municipal Utilities District. 2023. Our Service Area. Available: https://www.smud.org/en/Corporate/About-us/SMUDs-Territory-Map. Accessed June 28, 2023.

SMAQMD. *See* Sacramento Metropolitan Air Quality Management District.

SMUD. *See* Sacramento Municipal Utilities District.

U.S. Energy Information Administration. 2023. California State Energy Profile. Available: https://www.eia.gov/state/print.php?sid=CA. Accessed July 6, 2023.

3.7 GEOLOGY AND SOILS

Branum, D., R. Chen, M. Petersen, and C. Wills. 2016. Earthquake Shaking Potential for California. California Geological Survey and U.S. Geological Survey. Map Sheet 48. Sacramento, CA.

California Department of Water Resources. 2023. SGMA Data Viewer. Groundwater Levels, Depth Contours. Available: https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels. Accessed June 26, 2023.

California Geological Survey. 2022. CGS Seismic Hazards Program: Alquist-Priolo Fault Hazard Zones, ArcGIS. Available: https://www.arcgis.com/apps/mapviewer/index.html?layers=ee92a5f9f4ee4ec5aa731d3245ed9f53. Accessed June 26, 2023.

CGS. *See* California Geological Survey.

DWR. *See* California Department of Water Resources.

Gutierrez, C.I. 2011. Preliminary Geologic Map of the Sacramento 30' x 60' Quadrangle, California. California Geological Survey. Sacramento, CA.

Helley, E.J. and D.S. Harwood. 1985. Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills, California. U.S. Geological Survey, Miscellaneous Field Studies MF-1790. Reston, VA.

Jennings, C.W. and W.A. Bryant. 2010. *2010 Fault Activity Map of California*. Available: http://maps.conservation.ca.gov/cgs/fam/. Accessed June 22, 2023.

Natural Resources Conservation Service. 2022. Web Soil Survey. Available: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed June 26, 2023.

NRCS. *See* Natural Resources Conservation Service.

Sacramento County. *See* Sacramento County Engineering Department.

Sacramento County Engineering Department. 2018. *Improvement Standards*. Available: https://engineering.saccounty.gov/Pages/ImprovementStandards.aspx. Accessed June 27, 2023.

Society of Vertebrate Paleontology. 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.

Stirton, R.A. 1939. *Cenozoic Mammal Remains from the San Francisco Bay Region.* University of California Publications, Bulletin of the Department of Geological Sciences. Volume 24, No. 13, pp. 339–410.

SVP. *See* Society of Vertebrate Paleontology.

UCMP. *See* University of California Museum of Paleontology.

University of California Museum of Paleontology. 2023. Paleontological Collections Database. Available: https://ucmp.berkeley.edu/collections/databases/. Accessed June 27, 2023.

3.8 GREENHOUSE GAS EMISSIONS

Sacramento Metropolitan Air Quality Management District. 2020a. Greenhouse Gas Thresholds for Sacramento County SMAQMD Sacramento, California. Available: https://www.airquality.org/LandUseTransportation/Documents/SMAQMDGHGThresholds2020-03-04v2.pdf. Accessed June 28, 2023.

Sacramento Metropolitan Air Quality Management District. 2021. Justification for Greenhouse Gas Emissions Thresholds of Significance. Available: https://www.airquality.org/LandUseTransportation/Documents/GHGThresholdsJustificationSept2014.pdf. Accessed June 28, 2023.

SMAQMD. *See* Sacramento Metropolitan Air Quality Management District.

3.9 HAZARDS AND HAZARDOUS MATERIALS

CAL FIRE. *See* California Department of Forestry and Fire Protection.

California Department of Forestry and Fire Protection. 2023. Fire Hazard Severity Zone Viewer. Available: https://egis.fire.ca.gov/FHSZ/. Accessed June 20, 2023.

California Department of Toxic Substances Control. 2023. EnviroStor. Available: https://www.envirostor.dtsc.ca.gov/public/. Accessed June 20, 2023.

DTSC. *See* California Department of Toxic Substances Control.

SACOG. *See* Sacramento County Association of Governments.

Sacramento County Association of Governments. 2020. Mather Airport – Airport Land Use Compatibility Plan. Available: https://www.sacog.org/sites/main/files/file-attachments/mather_draft_alucp.pdf?1601659275. Accessed June 20, 2023.

State Water Resources Control Board. 2023. GeoTracker. Available: https://geotracker.waterboards.ca.gov/. Accessed June 20, 2023.

SWRCB. *See* State Water Resources Control Board.

U.S. Environmental Protection Agency. 2023. Search for Superfund Sites Where You Live. Available: https://www.epa.gov/superfund/search-superfund-sites-where-you-live. Accessed June 20, 2023.

3.10 HYDROLOGY AND WATER QUALITY

California Department of Water Resources. 2023. Groundwater Basin Boundary Assessment Tool. Available: https://gis.water.ca.gov/app/bbat/. Accessed June 26, 2023.

Central Valley Regional Water Quality Control Board. 2019. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region. Fifth Edition. Available: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201902.pdf

City of Sacramento. 2018. Stormwater Quality Design Manual for the Sacramento Region. Available: https://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Specs-Drawings/SWQ_Design_Manual_FINAL2018.pdf?la=en. Accessed June 26, 2023.

DWR. See California Department of Water Resources.

Federal Emergency Management Act. 2012. Flood Insurance Rate Map 06067C0113H. Available: https://www.fema.gov/flood-maps. Accessed June 27, 2023.

FEMA. *See* Federal Emergency Management Act.

National Oceanic and Atmospheric Administration. 2023. Sacramento River Basin, California. Available: https://www.fisheries.noaa.gov/west-coast/about-us/sacramento-river-basin-california. Accessed June 23, 2023.

NOAA. *See* National Oceanic and Atmospheric Administration.

Sacramento County Department of Water Resources. 2023. Stormwater Utility (Drainage). Available: https://waterresources.saccounty.gov/Pages/StormwaterUtility%28Drainage%29.aspx. Accessed June 21, 2023.

Sacramento Groundwater Authority. 2021. North American Subbasin – Groundwater Sustainability Plan. Available: https://www.sgah2o.org/management/. Accessed June 26, 2023.

State Water Resources Control Board. 2012. NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Available: https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_complete.pdf. Accessed June 26, 2023.

State Water Resources Control Board. 2018. 2019 California Integrated Report. Available: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report.html. Accessed June 23, 2023.

3.11 LAND USE AND PLANNING

District. *See* Fair Oaks Recreation and Park District.

Fair Oaks Recreation and Park District. 2010. *Master Plan for Parks, Facilities, & Recreation Services.* Available: https://www.forpd.org/DocumentCenter/View/1799/Fair-Oaks-Recreation-Park-District-FINAL-Report.

Sacramento County. 1975. Fair Oaks Community Plan. Available: https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/FairOaksCommunityPlan.aspx.

Sacramento County. 2011. *2030 General Plan*. Available: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx.

Sacramento County. 2021. *Sacramento County Zoning Code.* Available: https://planning.saccounty.gov/LandUseRegulationDocuments/Documents/Zoning-Code/Chapter_2_9.9.22.pdf.pdf.

3.12 MINERALS

O'Neal, M.D. and F.W. Gius. 2018. *Mineral Land Classification: Concrete Aggregate in the Greater Sacramento Area Production-Consumption Region*. Special Report 245. California Geological Survey. Sacramento, CA.

Sacramento County. 2020. *Sacramento County General Plan of 2005-2030, Conservation Element*. Sacramento, CA. Available: http://www.per.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed June 30, 2023.

3.13 NOISE AND VIBRATION

California Department of Transportation. 2013. *Technical Noise Supplement*. Sacramento, CA. Prepared by IFC Jones & Stokes, Sacramento, CA.

———. 2020. *Transportation and Construction Vibration Guidance Manual*. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office, Sacramento, CA.

Caltrans. *See* California Department of Transportation.

County of Sacramento. 2017. General Plan Noise Element. Available: https://planning.saccounty.net/LandUseRegulationDocuments/Documents/General-Plan/Noise%20Element%20-%20Amended%2012-13-17.pdf. Accessed July 6, 2023.

Federal Transit Administration (FTA). 2018 (September). *Transit Noise and Vibration Impact Assessment*. FTA Report No. 0123.

FTA. *See* Federal Transit Administration.

3.14 POPULATION AND HOUSING

None.

3.15 PUBLIC SERVICES

Metro Fire. 2023. Operations. Available: https://metrofire.ca.gov/operations. Accessed June 27, 2023.

Sacramento County Sheriff's Office, North Division. 2023. Available: https://www.sacsheriff.com/pages/north_division.php. Accessed June 27, 2023.

3.16 RECREATION

None.

3.17 TRANSPORTATION

Sacramento County. 1975. Fair Oaks Community Plan. Available: https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/FairOaksCommunityPlan.aspx. Accessed July 3, 2023.

———. 2020. Transportation Analysis Guidelines. Available: https://sacdot.saccounty.net/Documents/A%20to%20Z%20Folder/Traffic%20Analysis/Transportation%20Analysis%20Guidelines%2009.10.20.pdf. Accessed July 3, 2023.

———. 2022a. *Sacramento County General Plan of 2005–2030, Circulation Element*. Adopted in 2011, amended in 2022. Available: https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed June 28, 2023.

3.18 TRIBAL CULTURAL RESOURCES

None.

3.19 UTILITIES AND SERVICE SYSTEMS

California Department of Resources Recycling and Recovery. 2019a. SWIS Facility/Site Activity Details: North Area Transfer Station. Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2071?siteID=2508. Accessed June 28, 2023.

_____. 2019b. SWIS Facility/Site Activity Details: Sacramento County Landfill (Kiefer). Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2070?siteID=2507. Accessed June 28, 2023.

_____. 2019c. SWIS Facility/Site Activity Details: Florin Perkins Public Disposal Site. Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/242?siteID=4721. Accessed June 28, 2023.

_____. 2019d. SWIS Facility/Site Activity Details: L&D Landfill. Available: https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/2524. Accessed June 28, 2023.

CalRecycle. *See* California Department of Resources Recycling and Recovery.

Central Valley Regional Water Quality Control Board. 2021. *Waste Discharge Requirements for the Sacramento Regional County Sanitation District Sacramento Regional Wastewater Treatment Plant, Sacramento County. NPDES Permit No. CA0077682, Order R5-2021-0019.* Available: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/sacramento/r5-2021-0019_npdes.pdf. Accessed June 27, 2023.

Fair Oaks Water District. 2021. 2020 Urban Water Management Plan. Available: https://www.fowd.com/files/b2161c5ba/FOWD+2020+UWMP_FINAL.pdf. Accessed June 28, 2023.

FOWD. *See* Fair Oaks Water District.

GreenWaste. 2023. Florin Perkins Resource Recovery Facility. Available: https://www.greenwaste.com/facilities/sacramento-c-and-d-recycling/. Accessed June 27, 2023.

Regional San. *See* Sacramento County Regional Sanitation District

Sacramento County Regional Sanitation District. 2014. *Final Environmental Impact Report for the Sacramento Regional County Sanitation District EchoWater Project*. Available:

https://www.regionalsan.com/sites/main/files/file-attachments/echowater_feir_09.12.14.pdf. Accessed June 28, 2023.

Sacramento County Waste Management and Recycling. 2023a. North Area Recovery Station. Available: https://wmr.saccounty.gov/Pages/NARS.aspx. Accessed June 27, 2023.

Sacramento County Waste Management and Recycling. 2023b. Certified Construction Demolition & Debris Sorting Facilities. Available: https://wmr.saccounty.gov/Pages/CDDebrisSortingFacilities.aspx. Accessed June 28, 2023.

3.20 WILDFIRE

CAL FIRE. *See* California Department of Forestry and Fire Protection.

California Department of Forestry and Fire Protection. 2023. Fire Hazard Severity Zones Maps. Available: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/. Accessed June 28, 2023.

Sacramento County. 2017 (as amended). *General Plan of 2005-2030, Safety Element and Safety Element Background*. Available: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed June 28, 2023.

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APPENDIX A

Air Quality/Greenhouse Gas Model Results

Phoenix Park Improvement Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Phoenix Park Improvement
Construction Start Date	1/2/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	23.6
Location	Jim David Park, 9050 Sunset Ave, Fair Oaks, CA 95628, USA
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	663
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.14

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

City Park	1.00	Acre	4.75	0.00	65,340	65,340	—	—
Parking Lot	1.00	Acre	3.20	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.33	1.96	18.3	19.8	0.03	0.84	7.23	8.07	0.77	3.46	4.23	—	3,132	3,132	0.13	0.03	0.83	3,145
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.74	5.67	54.3	53.3	0.08	2.44	27.1	29.5	2.24	13.6	15.8	—	8,588	8,588	0.34	0.08	0.04	8,621
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.45	1.25	11.3	12.3	0.02	0.51	3.75	4.26	0.47	1.86	2.33	—	2,055	2,055	0.08	0.02	0.24	2,064
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.27	0.23	2.07	2.25	< 0.005	0.09	0.68	0.78	0.09	0.34	0.42	—	340	340	0.01	< 0.005	0.04	342

2.2. Construction Emissions by Year, Unmitigated

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

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.33	1.96	18.3	19.8	0.03	0.84	7.23	8.07	0.77	3.46	4.23	—	3,132	3,132	0.13	0.03	0.83	3,145
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.74	5.67	54.3	53.3	0.08	2.44	27.1	29.5	2.24	13.6	15.8	—	8,588	8,588	0.34	0.08	0.04	8,621
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.45	1.25	11.3	12.3	0.02	0.51	3.75	4.26	0.47	1.86	2.33	—	2,055	2,055	0.08	0.02	0.24	2,064
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.27	0.23	2.07	2.25	< 0.005	0.09	0.68	0.78	0.09	0.34	0.42	—	340	340	0.01	< 0.005	0.04	342

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.06	0.01	0.08	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.05	146	146	0.01	< 0.005	0.07	147
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.06	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.05	145	145	0.01	< 0.005	< 0.005	146
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.05	< 0.005	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.05	137	137	0.01	< 0.005	0.01	138
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	0.01	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	22.7	22.8	< 0.005	< 0.005	< 0.005	22.8

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.08	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.07	18.0
Area	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	125	125	< 0.005	< 0.005	—	126
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	3.36	3.36	< 0.005	< 0.005	—	3.37
Waste	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	—	0.16
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.01	0.06	0.01	0.08	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.05	146	146	0.01	< 0.005	0.07	147
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	< 0.005	16.4
Area	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	125	125	< 0.005	< 0.005	—	126
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	3.36	3.36	< 0.005	< 0.005	—	3.37
Waste	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	—	0.16
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.01	0.06	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.05	145	145	0.01	< 0.005	< 0.005	146
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	< 0.005	< 0.005	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	8.65	8.65	< 0.005	< 0.005	0.01	8.80
Area	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	125	125	< 0.005	< 0.005	—	126
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	3.36	3.36	< 0.005	< 0.005	—	3.37

Waste	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	—	0.16
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.01	0.05	< 0.005	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.05	137	137	0.01	< 0.005	0.01	138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.46
Area	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	20.8	20.8	< 0.005	< 0.005	—	20.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.56	0.56	< 0.005	< 0.005	—	0.56
Waste	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.03
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	< 0.005	0.01	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	22.7	22.8	< 0.005	< 0.005	< 0.005	22.8

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	4.24	3.88	0.01	0.19	—	0.19	0.17	—	0.17	—	624	624	0.03	0.01	—	626
Dust From Material Movement	—	—	—	—	—	—	2.32	2.32	—	1.19	1.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.77	0.71	< 0.005	0.03	—	0.03	0.03	—	0.03	—	103	103	< 0.005	< 0.005	—	104
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	180	180	< 0.005	0.01	0.02	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.7	21.7	< 0.005	< 0.005	0.04	22.0

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.60	3.60	< 0.005	< 0.005	0.01	3.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.40	3.51	0.01	0.16	—	0.16	0.14	—	0.14	—	551	551	0.02	< 0.005	—	553
Dust From Material Movement	—	—	—	—	—	—	1.32	1.32	—	0.64	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.62	0.64	< 0.005	0.03	—	0.03	0.03	—	0.03	—	91.3	91.3	< 0.005	< 0.005	—	91.6
Dust From Material Movement	—	—	—	—	—	—	0.24	0.24	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.97	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	174	174	0.01	0.01	0.71	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.5	29.5	< 0.005	< 0.005	0.06	29.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.88	4.88	< 0.005	< 0.005	0.01	4.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.34	0.29	2.67	3.13	0.01	0.12	—	0.12	0.11	—	0.11	—	571	571	0.02	< 0.005	—	573
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.49	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	—	94.6	94.6	< 0.005	< 0.005	—	94.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.14	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	203	203	0.01	0.01	0.83	206
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	180	180	< 0.005	0.01	0.02	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	44.0	44.0	< 0.005	< 0.005	0.09	44.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.28	7.28	< 0.005	< 0.005	0.01	7.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.92	1.18	< 0.005	0.05	—	0.05	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.5	29.5	< 0.005	< 0.005	—	29.6
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.6	18.6	< 0.005	< 0.005	0.04	18.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	0.01	3.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.68	7.68	< 0.005	< 0.005	—	7.71
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.27	1.27	< 0.005	< 0.005	—	1.28
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.10	9.10	< 0.005	< 0.005	0.02	9.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.51	1.51	< 0.005	< 0.005	< 0.005	1.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.01	0.01	0.01	0.08	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.07	18.0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.01	0.01	0.08	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.07	18.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.01	0.01	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	< 0.005	16.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.01	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	< 0.005	16.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.46
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.46

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	125	125	< 0.005	< 0.005	—	126
Total	—	—	—	—	—	—	—	—	—	—	—	—	125	125	< 0.005	< 0.005	—	126
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	125	125	< 0.005	< 0.005	—	126
Total	—	—	—	—	—	—	—	—	—	—	—	—	125	125	< 0.005	< 0.005	—	126
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	20.8	20.8	< 0.005	< 0.005	—	20.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	20.8	20.8	< 0.005	< 0.005	—	20.8

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	3.36	3.36	< 0.005	< 0.005	—	3.37
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	3.36	3.36	< 0.005	< 0.005	—	3.37
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	3.36	3.36	< 0.005	< 0.005	—	3.37
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	3.36	3.36	< 0.005	< 0.005	—	3.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.56	0.56	< 0.005	< 0.005	—	0.56

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.56	0.56	< 0.005	< 0.005	—	0.56

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	—	0.16
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	—	0.16
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	—	0.16
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	< 0.005	0.00	—	0.16
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.03
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.03

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/2/2024	2/29/2024	5.00	43.0	—
Grading	Grading	2/28/2024	5/31/2024	5.00	68.0	—

Building Construction	Building Construction	6/1/2024	10/1/2024	5.00	87.0	—
Paving	Paving	10/2/2024	11/30/2024	5.00	43.0	—
Architectural Coating	Architectural Coating	12/3/2024	12/31/2024	5.00	21.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	17.5	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	15.0	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	64.5	0.00	—
Grading	—	—	68.0	0.00	—
Paving	0.00	0.00	0.00	0.00	6.45

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
City Park	3.25	0%
Parking Lot	3.20	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2024	0.00	375	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	0.78	1.96	2.19	420	7.11	17.9	20.0	3,824
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
—	—	—	—	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

City Park	0.00	375	0.0129	0.0017	0.00
Parking Lot	122,107	375	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	2,027,913
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	0.09	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	25.9	annual days of extreme heat
Extreme Precipitation	5.80	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	69.3
AQ-PM	15.2
AQ-DPM	8.09
Drinking Water	8.77
Lead Risk Housing	8.10
Pesticides	0.00
Toxic Releases	17.9
Traffic	59.2
Effect Indicators	—
CleanUp Sites	68.9
Groundwater	47.4
Haz Waste Facilities/Generators	85.2
Impaired Water Bodies	58.7
Solid Waste	0.00
Sensitive Population	—
Asthma	44.6
Cardio-vascular	36.9
Low Birth Weights	32.5
Socioeconomic Factor Indicators	—
Education	27.6
Housing	9.81

Linguistic	13.3
Poverty	33.2
Unemployment	47.0

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	87.95072501
Employed	59.16848454
Median HI	85.48697549
Education	—
Bachelor's or higher	82.68959322
High school enrollment	100
Preschool enrollment	11.35634544
Transportation	—
Auto Access	50.17323239
Active commuting	44.24483511
Social	—
2-parent households	80.41832414
Voting	96.95880919
Neighborhood	—
Alcohol availability	83.08738612
Park access	81.35506224
Retail density	21.26267163
Supermarket access	45.28422944
Tree canopy	95.12382908

Housing	—
Homeownership	93.09636854
Housing habitability	95.09816502
Low-inc homeowner severe housing cost burden	67.39381496
Low-inc renter severe housing cost burden	90.2219941
Uncrowded housing	96.93314513
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	59.3
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	37.8
Cognitively Disabled	7.9
Physically Disabled	22.7
Heart Attack ER Admissions	58.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	87.9
Elderly	7.3
English Speaking	82.4
Foreign-born	7.6
Outdoor Workers	55.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	82.4
Traffic Density	59.9
Traffic Access	23.0
Other Indices	—
Hardship	14.4
Other Decision Support	—
2016 Voting	93.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	21.0
Healthy Places Index Score for Project Location (b)	82.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project-specific phases and schedule.
Construction: Off-Road Equipment	—
Land Use	Project-specific sizes.
Construction: Trips and VMT	Added # One-Way Trips/day for Building Construction and Architectural Coating phases.
Construction: Paving	Project to include approximately 3.25 acres of paved recreational areas.

CalEEMod Assumptions and Inputs

Project Name	Phoenix Park Improvement
Project Location	9050 Sunset Avenue (Sacramento County)
Climate Zone	13
Land Use Setting	Suburban
Operational Year	2025
Utility	Sacramento Municipal Utility District (SMUD)
Construction Workdays	5 days/week - No weekend work

Construction Start Date: 1/2/2024

Land Use

		Acreage	Square Feet	Notes	Source
Type - Subtype	Recrational - City Park	4.75	206,911	For landcaped area: 4.75 acres-3.22 acres= 1.5 acres/65340sqft	Email from DeBrito dated 6/20/23
Parking	Asphalt	3.22	140,000	Area A – 50,000 sq ft parking area = 1.15 acres Area B – 90,000 sq ft parking area = 2.07 acres Total parking = 3.22 acres Total improvements NOT parking = 8 – 3.22 = 4.75	Email confirming info dated 6/28/23
Total Distrubance		7.97	347,175		Email from DeBrito dated 6/22/23

Construction Schedule

Phase Name	Phase Type	Days	Equipment	Quantity	Hrs/Day	Start	End	Workers	Notes
Site Preparation	Site Preparation	43	Rubber tired dozers	3	8	1/2/2024	2/29/2024		**CalEEMod defaults for equipment, qty and workers**
			Tractors/loaders/backhoes	4	8				
Grading	Grading	68	Excavators	1	8	2/28/2024	5/31/2024		
			Graders	1	8				
			Rubber tired dozers	1	8				
			Tractors/loaders/backhoes	3	8				
Building Construction	Building Construction	87	Cranes	1	7	6/1/2024	10/1/2024		
			Forklifts	3	8				
			Generator Sets	1	8				
			Tractors/loaders/backhoes	3	7				
			Welders	1	8				
Paving	Paving	43	Pavers	2	8	10/2/2024	11/30/2024		
			Paving Equipment	2	8				
			Rollers	2	8				
Archetectural Coating	Archetectural Coating	21	Air compressors	1	6	12/3/2024	12/31/2024		

APPENDIX B

Cultural Resources Report

Cultural Resources Report for Phoenix Park Improvements

Fair Oaks Parks and Recreation District

AECOM Project number: 60618427

July 2023

Prepared for:

Fair Oaks Recreation and Parks District
2020 L Street, 5th Floor
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Prepared by:

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Appendix

Figures

Tables

Acronyms and Abbreviations

AB	Assembly Bill
APE	Area of Potential Effect
APN	Assessor Parcel Number
ARD	Archaeology Resource Database
B.P.	before present
BERD	Built Environment Resource Database
ca.	circa
CFR	Code of Federal Regulations
CRHR	California Register of Historical Resources
District	Fair Oaks Recreation and Park District
Master Plan	Phoenix Park Master Plan
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PRC	California Public Resources Code
PRC	Public Resources Code
SLF	Sacred Lands File
TCRs	tribal cultural resource
UCSB	University of California, Santa Barbara
USGS	U.S. Geological Survey
VFW	Veterans of Foreign Wars

1. Project Description

The following project information is adapted from data provided by Fair Oaks Recreation and Park District to AECOM in 2023.

Project Location

The proposed project site is located at the existing Phoenix Park at 9050 Sunset Avenue in the unincorporated community of Fair Oaks in Sacramento County (Figures 1 and 2). Phoenix Park is approximately 65.9 acres in total land area and comprised of five parcels (Assessor Parcel Number [APN] 248-0052-039, 248-0052-027, 248-0064-017, 248-0036-027, 248-0048-054), owned and managed by Fair Oaks Recreation and Park District (District). The project site also serves as the CEQA Study Area for this report. The Veterans of Foreign Wars (VFW) Center, a gathering space for veterans and community events (APN 248-0052-048) is an inholding within Phoenix Park but is not part of the park or the proposed project.

Project Description

The proposed project would implement the Phoenix Park Master Plan (Master Plan) by making improvements to accommodate existing and future users of the park. The proposed improvements consist of additional recreational facilities and parking areas, along with ancillary improvements to improve operation and maintenance. Each of the proposed improvements are described below by location and/or category of use and are depicted in Figure 3.

Area A- Parking Lot

Area A consists of an existing dirt parking lot located to the south and east of the existing community gardens. Area A is proposed for development with an approximately 50,000-square-foot paved surface parking lot providing 129 vehicle spaces. The footprint of the existing parking lot would not change. Five-foot-wide concrete pathways would be constructed along the perimeter to connect the proposed parking lot to the interior of the park. A concrete garden entry plaza with space for seating, a drinking fountain, and materials storage would be installed in the northwest corner of Area A, along with a trellis at the main garden entrance gates. Biofiltration swales would buffer the parking lot from the roadway and the community garden and treat stormwater runoff from the new impervious surfaces

Area B- Open Space

Area B consists of Fair Oaks Bike Park, a playground, and a large undeveloped open space area covered by grass and ruderal vegetation in the central/western portions of the park. This area is bordered on the west by Maya Street and on the north and east by existing pedestrian pathways and ball fields. Area B is proposed for development with a new bike park/pump track , play area, open green space, picnic tables, shade structures, and two surface parking lots totaling 289 vehicle spaces and approximately 90,000 square feet. The proposed eastern parking lot would replace the existing Fair Oaks Bike Park in its current location, with the new bike park/pump track to be located to the immediate west. Both parking lots would be directly accessible from new access points on Maya Street. The proposed project would replace the existing playground in Area B in its current location with a new playground with a small water play feature. Pockets of green space would be interspersed throughout Area B, separating the parking lots from the play areas. Five- to six-foot-wide concrete pathways would be constructed along the perimeter of the parking lots to connect to other park facilities

Figure 1: Project Location Map

Figure 2: Aerial View of Project Site

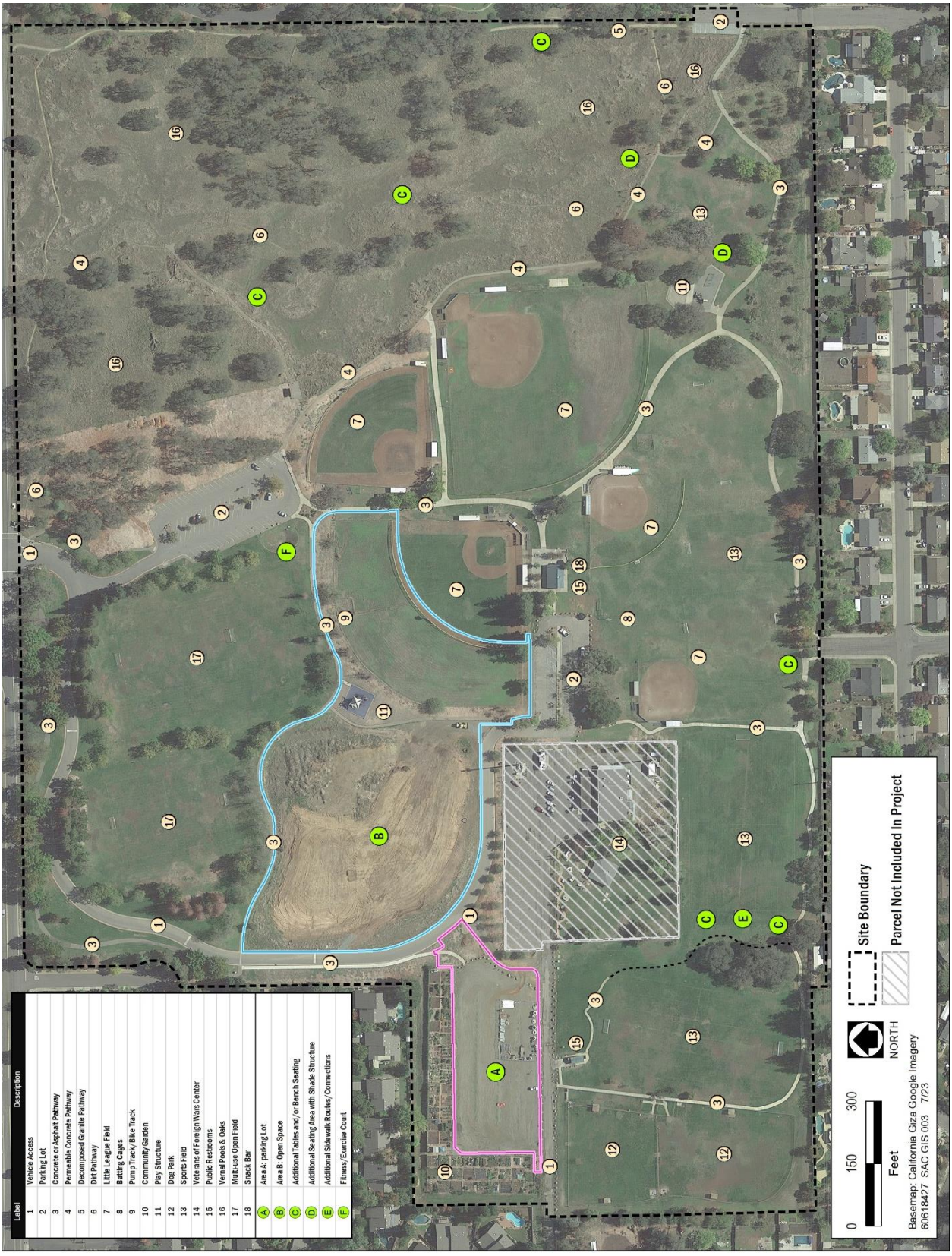

Figure 3: Proposed Master Plan Overview

Other Recreational Facilities and Ancillary Park Improvements

Various recreational facilities would be added in select locations throughout Phoenix Park, including a new fitness/exercise court adjacent to the proposed Area B east parking lot, additional tables and bench seating, shade structures, and a sidewalk connecting existing pathways from Kruitof Way to the southern edge of the park. New seating areas and shade structures would primarily be installed adjacent to existing pathways in the eastern and southern areas of the park. Ancillary park improvements would also be implemented, including improving drainage around pathways and paved parking areas, improving the park irrigation system, upgrading existing restrooms, improving signage and installing low voltage bollard lighting.

2. Literature Review

Records Search

A cultural records search was conducted by the North Central Information Center (NCIC), of the California Historical Resources Information System, California State University, Sacramento on June 20, 2023 (File No. SAC-23-119). The NCIC, an affiliate of the California Office of Historic Preservation (OHP), is the official state repository of cultural resource records and studies for Sacramento County. A copy of the records search results is provided in Appendix A.

The search included the project site and a 0.25-mile radius. The results were used to determine whether known cultural resources have been recorded at or adjacent to the project site, and to assess the cultural sensitivity of the area. The records search included reviews of maps listing previously conducted cultural resource studies in the area. Other resources reviewed included the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), the California Inventory of Historic Resources (1976), California Historical Landmarks (1996), California Points of Historical Interest (1992 and updates), the Archaeology Resource Database (ARD), and the Built Environment Resource Database (BERD).

Site records and previous studies were accessed for the project Area of Potential Effect (APE) and a 0.25-mile radius in the *Folsom*, *California* U.S. Geological Survey (USGS) 7.5-minute quadrangle. The following additional references also were reviewed:

- OHP Five Views: An Ethnic Historic Site Survey for California (OHP 1988)
- California State Historical Landmarks (OHP 1996)
- California Inventory of Historic Resources (California Department of Parks and Recreation 1976)
- California Points of Historical Interest (OHP 1992)
- University of California, Santa Barbara (UCSB) Aerial Photography Collection

The records search showed that no resources have been documented within the project site; however, a review of the records search site forms reveal that of the seven resources were identified outside of the project within the 0.25-mile search radius. Three previous cultural resource studies were undertaken within the project site, and eight cultural resources studies were recorded within a quarter-mile radius of the project area. Those within the project site consist of an intensive survey of the eastern undeveloped portion of the project site and two studies for microwave communications facilities near the existing VFW hall, which is within the project site, but is not part of the Master Plan. Resources documented outside of the project site consist of 11 historic-age buildings, the Folsom Mining District, and dredge tailings located at Mississippi Bar. The results of the records search have been summarized in Tables 1 through 3. See Appendix A for records search results summary and NCIC-generated maps of the reports and resource locations depicted in Appendix B.

Table 1. Previous Cultural Resources Reports in the Project Site

NCIC Report Number	Report Title	Author
S-3652	Fourteen SureWest Tower Sites in Sacramento, Placer, and El Dorado Counties	Peak, Ann (2002)
6626	Cultural Resources Study; Phoenix Park Project	Analytical Environmental Service (2005)
13120	Surewest VFW/SC-35011B	Billat, Lorna (2007)

NCIC = North Central Information Center
Source: NCIC 2023; data compiled by AECOM in 2023

Table 2. Previously Recorded Cultural Resources Outside of the Project Site within 0.25 Mile

NCIC Primary Number	Resource Name	Resource Type	Previous Evaluation Status
P-34-00335	Folsom Mining District	Historic-era mining	Portions eligible
P-34-000695	Streeter House	Historic Building	Unevaluated
P-34-001181		Historic Building	Unevaluated
P-34-001637		Historic Building	Unevaluated
P-34-001638		Historic Building	Unevaluated
P-34-001639		Historic Building	Unevaluated
P-34-001640		Historic Building	Unevaluated
P-34-001641		Historic Building	Unevaluated
P-34-001642		Historic Building	Unevaluated
P-34-001643		Historic Building	Unevaluated
P-34-001644		Historic Building	Unevaluated
P-34-001645		Historic Building	Unevaluated
P-34-002269	Mississippi Bar	Dredge Tailings	NRHP Eligible

NCIC = North Central Information Center
NRHP = National Register of Historic Places
Source: NCIC 2023; Data compiled by AECOM in 2023

Table 3. Previous Cultural Resources Reports Outside of the Project Site within 0.25 Mile

NCIC Report Number	Report Title	Author
1949	The Uplands Tentative Subdivision Map and Special Development Permit	Derr, Eleanor (2000)
3038	Draft Environmental Impact Report, Hazel Avenue and Sunset Avenue Intersection Modification	Warner, Laurie (1995)
3763	Clover Meadow Subdivision Special Development Permit	Dept. Environmental Review & Assessment (1991)
6077	Cultural Resources Assessment of the Sunset Avenue/Main Avenue Bikeway Project	PAR Environmental Services (2005)
6738	Cultural Resources Inventory and Site Assessment for the Lake Natomas State Recreation Area, Sacramento County, CA	AECOM formerly EDAW, (2003)
8064	Historic Property Survey Report for the Hazel Avenue Widening Project from Madison Avenue to United States Highway 50	Dougherty, John (2004)
9188	Cultural Resources Survey for Right-of-Way Maintenance Along the Western Area Power Administration Transmission Lines Volumes I, II, and III	Nelson, Wendy J. and Kimberly Carpenter (2002)
9188A	Cultural Resources Survey for Right of Way Maintenance Along the Western Area Power Administration Transmission Lines in Sacramento, Placer, and Sutter Counties, California. Volume III Historic Properties Report	Herbert, Rand F., and Amanda Blosser

NCIC = North Central Information Center; all reports are on file at the North Central Information Center
Source: NCIC 2023; data compiled by AECOM 2023

Other Sources of Information

AECOM also reviewed other pertinent material including historic topographical maps, historic aerial photographs, historic newspapers, and other materials available online, and gray literature and reports on file in the AECOM cultural resources library.

Environmental Context

The following is an overview of the project area that includes the precontact, ethnographic, and historical contexts provided by the literature review.

Precontact Context

In an attempt to unify the various hypothesized cultural periods in California, Fredrickson (1994) proposed an all-encompassing scheme for cultural development, while acknowledging that these general trends may manifest themselves differently and some variation may exist between sub-regions. These general cultural periods (i.e., Paleo-Indian; Early, Middle and Late Archaic; and Emergent periods) are used in this document in connection with the North-Central Sierra Nevada chronology because of their relevancy to the lower foothill region of the project area, in the vicinity of Folsom.

The Late Pleistocene, Paleo-Indian Period pattern and period (greater than 10,000 before present [B.P.]) is practically non-existent in the foothill and eastern Sacramento Valley. Sites CA-SAC-370 and CA-SAC-379, located near Rancho Murieta, produced numerous bifaces, cores, and raw materials from gravel strata estimated to be between 12,000 and 18,000 years in age. The early Holocene pattern and period (circa [ca.] 10,000–7,000 B.P.) was first defined by Bedwell (1970) as a human adaptation to lake, marsh, and grassland environments that were prevalent at this time. Appearing after 11,000 years B.P., the tradition slowly disappeared ca. 8,000–7,000 B.P.

During the Early Archaic pattern and period (ca. 7,000–3,200 B.P.), the climate in the valleys and foothills of Central California became warmer and dryer, and millingstones are found in abundance.

The Early, Middle, and Late Archaic periods (ca. 3,200–600 B.P.) evidence an expansion in the use of obsidian, which is interpreted with reservation to indicate an increase in regional land use, and the regular use of certain locales. During this time, a much heavier reliance on acorns as a staple food was developed, supporting large, dense populations.

During the Late Emergent period (ca. 600–150 B.P.), archaeological village sites generally correspond to those identified in the ethnographic literature. Diagnostic artifacts include small contracting-stem points, clam shell disk beads, and trade beads that were introduced near the end of the period, marking the arrival of European groups (Beardsley 1954:77–79; Elsasser 1978:44; Fredrickson 1994).

Ethnographic Context

The project area is situated within the traditional territory of the Nisenan. The language of the Nisenan, which includes several dialects, is classified within the Maiduan family of the Penutian linguistic stock. Kroeber (1925) recognized three Nisenan dialects: Northern Hill, Southern Hill, and Valley. The Nisenan territory included the drainages of the Yuba, Bear, and American Rivers, and the lower drainages of the Feather River, extending from the crest of the Sierra Nevada to the banks of the Sacramento River. According to Bennyhoff (1961:204–209), the southern boundary with the Miwok was probably a few miles south of the American River, bordering a shared area used by both Miwok and Nisenan groups that extended to the Cosumnes River. It appears that the foothills Nisenan distrusted the valley peoples but had a mostly friendly relationship with the Washoe to the east. Elders recall intergroup marriage and trade, primarily involving the exchange of acorns for fish procured by the Washoe (Wilson 1972:33). The northern boundary has not been clearly established due to similarities in language with neighboring tribes (Wilson and Towne 1978:387–389).

Nisenan settlement locations depended primarily on elevation, exposure, and proximity to water and other resources. Permanent villages were usually located on low rises along major watercourses. Houses were domed structures measuring 10 to 15 feet in diameter and covered with earth and tule reeds or grass. Brush shelters were used in the summer and at temporary camps during food-gathering rounds. Larger villages often had semi-subterranean dance houses that were covered in earth and tule reeds or brush, with a central hole at the top to allow the escape of smoke, and an east-facing entrance. Another common village structure was the granary, which was used for storing acorns.

Several political divisions in the Nisenan territory, constituting tribelets, had headmen in the larger villages. However, the relative levels of influence in these larger population centers are unknown. All of these larger villages were located in the foothills. More substantial and permanent Nisenan villages generally were not established on the valley plain between the Sacramento River and the foothills, although this area was used as a rich hunting and gathering ground. One tribelet consisted of people occupying the territory between the Bear River and the Middle Fork American River (Wilson and Towne 1978). According to Kroeber (1925:831), the larger villages could have had populations exceeding 500 individuals, although small settlements consisting of 15 to 25 people and extended families were common.

The Nisenan occupied permanent settlements from which specific task groups set out to harvest the seasonal bounty of flora and fauna provided by the rich valley environment. The Valley Nisenan economy involved riparian resources, in contrast to the Hill Nisenan, whose resource base consisted primarily of acorn and game procurement. The only domestic plant was native tobacco (*Nicotiana* sp.), but many wild species were closely husbanded. The acorn crops from

the blue oak (*Quercus douglasii*) and black oak (*Q. kelloggii*) were carefully managed resources. Acorns were stored in granaries in anticipation of winter. Deer, rabbit, and salmon were the chief sources of animal protein in the aboriginal diet, but many insect and other animal species were taken when available (Wilson and Towne 1978:389).

The decimation of the Nisenan culture in the nineteenth century as a result of European colonization, coupled with a reluctance to discuss Nisenan spiritual beliefs and practices, makes it difficult to describe these practices in any detail. However, historic records document a number of observances and dances, some of which are still performed today, that were important ceremonies in early historic times. The Kuksu Cult, the basic religious system noted throughout Central California, appeared among the Nisenan. Cult membership was restricted to those initiated in its spirit and deity-impersonating rites. However, the Kuksu Cult was only one of several levels of religious practice among the Nisenan. Various dances associated with mourning and the change of seasons were also important. One of the last major additions to Nisenan spiritual life occurred sometime shortly after 1872 with a revival of the Kuksu Cult as an adaptation to the Ghost Dance religion (Wilson and Towne 1978). Today, Nisenan descendants are reinvesting in their traditions and represent a growing and thriving community.

Following documentation by the Department of Interior for the existence of a separate, cohesive band of Maidu and Miwok Indians, occupying a village on the outskirts of the City of Auburn in Placer County, the United States acquired land in trust for the Auburn Band in 1917 near the City of Auburn and formally established a reservation, known as the Auburn Rancheria. Tribal members continued to live on the reservation as a community despite great adversity (UAIC 2023)

However, in 1967, the United States terminated federal recognition of the Auburn Band, and, in 1970, President Nixon declared the policy of termination a failure. In 1976, both the United States Senate and House of Representatives expressly repudiated this policy in favor of a new federal policy entitled Indian Self-Determination (UAIC 2023).

In 1991, surviving members of the Auburn Band reorganized their tribal government as the United Auburn Indian Community and requested that the United States formally restore their federal recognition. In 1994, Congress passed the Auburn Indian Restoration Act, which restored the Tribe's federal recognition. The Act provided that the Tribe may acquire land in Placer County to establish a new reservation (UAIC 2023).

Today, Nisenan descendants and other tribes are reinvesting in their traditions and represent a growing and thriving community that is actively involved in defining their role as stewards of their ancestor's sites including the identification of tribal cultural resources (TCRs). TCRs provide the backdrop to religious understanding, traditional stories, knowledge of resources such as varying landscapes, bodies of water, animals and plants, and self-identity. Knowledge of place is central to the continuation and persistence of culture, even if former Nisenan and Miwok occupants live removed from their traditional homeland. Consulting tribes view these interconnected sites and places as living entities; their associations and feeling persist and connect with descendant communities (UAIC 2023).

Contemporary Native American Setting

Archaeologists routinely focus on traditional Native American culture and ignore current and vibrant Native American culture. This approach is not sufficient to provide a context or set of values maintained by the current Native American community related to their history and the landscape. Tribes view themselves as contemporary stewards of their culture and the landscape, representing a continuum from the past to the present. They are resilient, vibrant, and active in the community. Tribes maintain their connection to their history and ongoing culture by practicing traditional ceremonies, engaging in traditional practices (e.g., basketry),

and conducting public education and interpretation. The acknowledgement of Native American history and the persistence of Tribes cannot be overlooked and should be recognized. (JCC 2020:6.7).

Historical Context

The historical era in California began with Spanish colonization and is often divided into three distinctive chronological and historical periods: the Spanish or Mission Period (1542–1821), the Mexican or Rancho Period (1821–1848), and the American Period (1848–present). After Mexican independence in 1821, Spain transferred its lands to the newly established country of Mexico. The Mexican government issued rancho land grants to reward soldiers, promote settlement in California, and encourage agricultural and ranching enterprises. More than 800 rancho grants were bestowed during the Mexican Period throughout California. The project is located in what was historically the southwest corner of Rancho Del Paso (granted 1844, patented 1858) in present-day Sacramento on the north side of the American River. There are no extant built environment features from the Spanish or Mission Period or the Mexican or Rancho Period within the project area (Cowan 1956).

The United States took control of California after the Mexican-American War in 1848 with the signing of the Treaty of Guadalupe Hidalgo. California became a state in 1850, and the development patterns in California during the late nineteenth and early twentieth centuries were characterized by agricultural ventures, ranching, mining, and settlement.

Fair Oaks

The community of Fair Oaks was originally part of the original 1844 Mexican Land Grant, Rancho San Juan. Through a series of purchases, the land speculation company Howard-Wilson Publishing Company of Chicago acquired enough land to plat Fair Oaks as one of the company's "Sunset Colonies." The Howard-Wilson Publishing Company of Chicago created and promoted other "Sunset Colonies" in the Los Angeles area as well in Louisiana and North Carolina. Advertised as a citrus growing colony and the promise of an irrigation system and railroad, a train from Chicago with 165 perspective land buyers arrived in Sacramento in October 1895. Upon arrival in Fair Oaks the following day, many purchased lots, offered between 5 and 20 acres, and started new lives in California (Simpson and Sandul 2005: 7-9).

The Howard-Wilson Publishing Company of Chicago failed to fulfill their promise of building an irrigation system and railroad, but local investors took over the colony and were able to bring water and the railroad to the community in 1901. Railroad service was the catalyst that brought new interest to the community. New residents flooded to the area and established citrus and nut orchards and grain crops, a commercial district with a hotel and bank, a school, and gold dredging companies sought gold in the American River at the southern boundary of the town (Simpson and Sandul 2005: 7-9, 16, 19).

A hard freeze in the winter of 1932 devastated the citrus crop in Fair Oaks and other nearby citrus growing communities. Though some crops survived, the community slowly transitioned from an agricultural community to more residential. This transition was sped up with improved connections to Highway 50 in the postwar years with new residents moving to Fair Oaks, but commuting to jobs elsewhere. Today, the unincorporated community boasts a population of nearly 32,000, is part of the San Juan Unified School District, and provides park facilities through the Fair Oaks Recreation & Park District (Simpson and Sandul 2005: 7-8).

Fair Oaks Recreation & Park District and Phoenix Park

The District was formed in 1945 to create more, and varied sizes of parks for community residents. Early acquisitions of the District occurred in 1949 when they purchased the small

Plaza Park at the center of the commercial district and the adjacent Village Park. Larger parks like the 7-acre Montview Park on Minnesota Avenue was secured as a donation in 1954. The district grew exponentially in 1957 when it secured the 10-acre Bannister Park on Bannister Road from the County in 1957, the 10-acre Miller Park at Sunset and Kenneth avenues, and 4-acres near the southeast intersection of Sunset and Hazel avenues that would be developed with three T-ball fields and called Jim David Park (since integrated into the southwest corner of Phoenix Park) (FORPD 2020 September 30).

Also in 1957, the County gave the local VFW chapter two acres next to the proposed Jim David Park to build a new lodge that would replace their current facility that they had been using since 1946 that was located on a hill near the intersection of Fair Oaks and Sunrise boulevards (see Plate 1). A rendering of the proposed lodge for VFW Post 6158 was published in the newspaper with two parallel, gable roof wings, and a flat roof connector at one end, but the plan was modified into the extant design with and a flat roof and tall shed roof that was completed in 1958 (Photograph 1) (*Sacramento Bee* 1957 May 25). The VFW parcel has expanded to 2.73-acres to include a dedicated paved parking lot on the north side of Kruitof Way. This parcel is not under the ownership of the District and is separate from Phoenix Park (*Sacramento Bee* 1966 March 14; *Sacramento Bee* 1957 June 19)

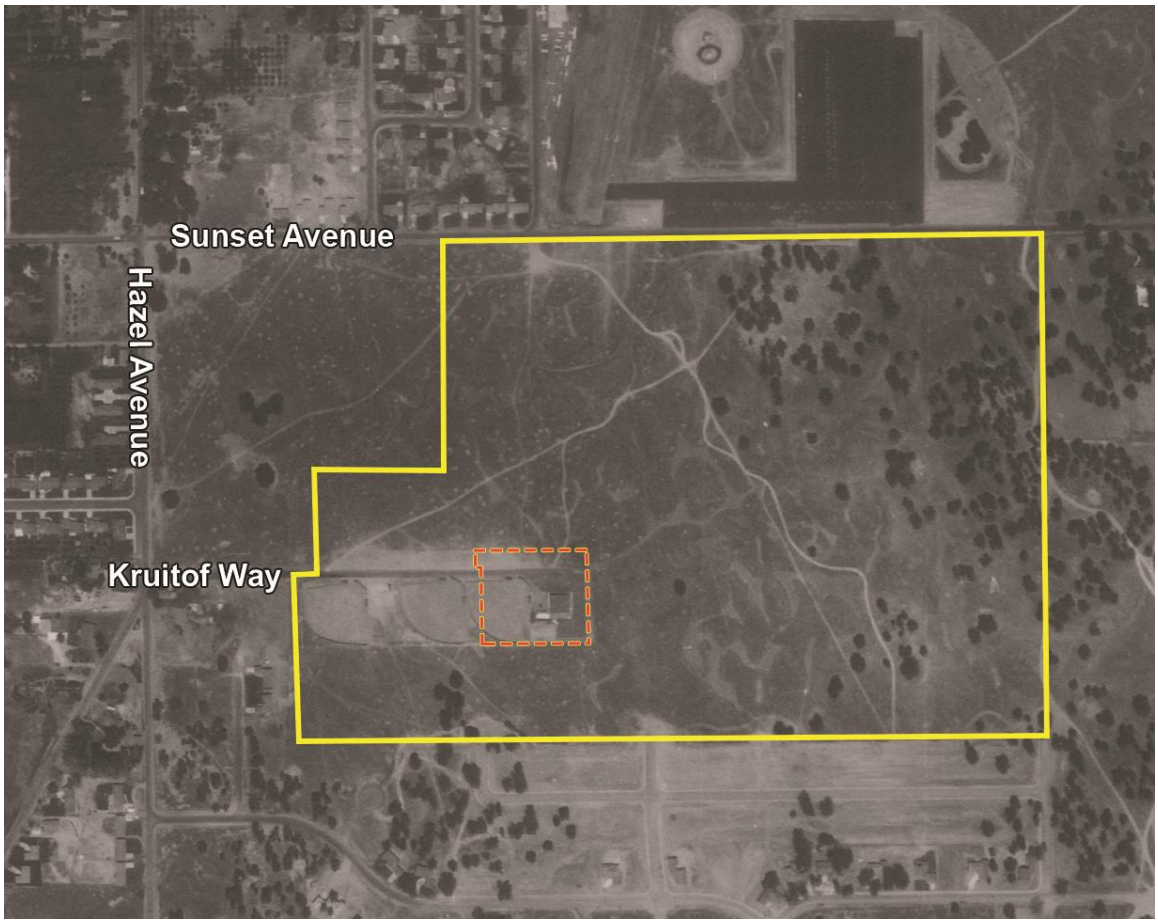

Plate 1. 1961 aerial showing Jim David T-ball fields and the VFW lodge. The solid line depicts the approximate boundary of Phoenix Park and the dashed line depicts the current VFW lodge parcel boundary. Note the airplanes at Phoenix Field airport on the north side of Sunset Avenue (Source: UCSB 1961, Notes added by AECOM)

Photograph 1. View of VFW Post 6158 on a separate parcel in Phoenix Park

The land that would become Phoenix Park was secured in 1972 in a land trade between the District and the County. The District owned the Sailor Bar gold dredging tailings area on the bank of the American River that was traded to the County to integrate into the American River Parkway system and the District received a 30-acre parcel at the southeast corner of the intersection of Sunset and Hazel avenues, immediately south of a small airport called Phoenix Field. The 30-acre property included 17-acres of vernal pools on the east end, and abutted the Jim David Park at the southwest corner which was integrated into the new Phoenix Park (FORPD 2020 September 30).

Development of additional park facilities at the property was slow. Finally, between 1978 and 1979 construction began on baseball fields, a playground, and picnic area. The park was advertised in newspapers in the summer of 1979 and contained three large baseball fields near the center of the park with a main access driveway and parking lot off of Sunset Avenue and small playground at the southeast corner (see Plate 2). By 1981, the T-ball field part of Jim David Park closest to the VFW hall was removed. Between 1981 and 1984 a new parking lot, a softball field, and combination concession stand and restroom building was added just south of the three large baseball fields near the center of the park. In the 1990s a kickball field was added just east of the VFW hall and covered dugouts were erected at all of the baseball and softball fields. The last vestiges of the 1957-built Jim David Park at Phoenix Park were removed in 2003 when the last two T-ball fields next to the VFW hall were cleared, planted with grass, and a dog park was officially opened at the site in 2006 with an adjacent restroom building. The Phoenix Park Community Gardens and an adjacent dirt parking area was created in 2005 on the north side of Kruitof Way. More recently, a dirt pump track called the Fair Oaks Bike Park was created in 2018 near the center of the park (see Plate 2) (USGS 1977; *Sacramento Bee* 1978 May 21; *Sacramento Bee* 1979 August 26; UCSB 1981; *Sacramento Bee* 1982 November 4; HistoricAerials.com 1984, Google Earth Pro 1993, 1998, 2003; FORPD 2020 September 30).

Plate 2. 1981 aerial showing early configuration of Phoenix Park with the baseball fields near the center of the park and the parking lot off of Sunset Avenue. The yellow line depicts the approximate boundary of Phoenix Park and the red dashed line depicts the current VFW lodge parcel boundary. (Source: UCSB 1981, Notes added by AECOM)

Today, Phoenix Park contains three large ball diamonds; three small ball diamonds; a dog park; horseshoe pit; two playground areas; two restroom buildings; bike pump track; four large multipurpose fields; three small multipurpose fields; a community garden, 4,772 feet of soft surface trails; 6,679 feet of hard surface trails; and a 17-acre vernal pool preservation area on the east side (see Plate 3). The oldest components at Phoenix Park are the three large baseball fields near the center of the park, the main access driveway and parking lot off of Sunset Avenue, and small playground area at the southeast corner that were all constructed in 1979 (44 years ago) and are not considered of historic age for historical evaluation.

Plate 3. Aerial showing current configuration of Phoenix Park. The yellow line depicts the approximate boundary of Phoenix Park and the red dashed line depicts the current VFW lodge parcel boundary. (Source: Google Earth Pro 2023, Notes added by AECOM)

3. Field Methodology

On June 22, 2023 AECOM cultural resource senior archaeologist Richard Deis conducted pedestrian survey of the project site. Mr. Deis meets the Secretary of the Interior's Professional Qualification Standards as defined in 36 Code of Federal Regulations (CFR) Part 61 for work in archaeology. The survey consisted of surface investigations that focused on non-developed areas without grass, asphalt and other developments that obscured the ground surface. Photographs 2 through 7 depict the current condition of the project site.

Although the majority of the project site has been subjected to various forms of recreational development, the eastern portion (Photograph 2), with the exception of narrow trails is an undeveloped Pleistocene age surface with vernal pools. However, dense ground cover obscured the entire ground surface.

The oldest components at Phoenix Park are the three large baseball fields near the center of the park, the main access driveway and parking lot off of Sunset Avenue, and small playground area at the southeast corner that were all constructed in 1979 (44 years ago). There are no historic-age (50 years or older) built environment resources located at Phoenix Park.

Photograph 2. View of Undeveloped Area with Vernal Pools

Photograph 3. View of Ball Field

Photograph 4. View of Soccer Field

Photograph 5. View of Lawn Area South of Sunset Avenue

Photograph 6. View of Existing Parking Area

Photograph 7. View of Bicycle Pump Track

4. Native American Coordination

The following section summarizes the CEQA regulations regarding Native American consultation conducted in accordance with Assembly Bill (AB) 52, and the results conducted by AECOM on behalf of Fair Oaks Recreation and Parks District.

Assembly Bill 52

Assembly Bill (AB) 52, passed in 2014, amends sections of CEQA relating to Native Americans. AB 52 establishes a new category of cultural resources, named TCRs, and states that a project that may cause a substantial adverse change in the significance of a TCR may have a significant effect on the environment. Section 21074 was added to the California Public Resources Code (PRC) to define TCRs, as follows:

(a) "TCRs" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Per AB 52, the lead agency must begin consultation with any tribe that traditionally or culturally is affiliated with the geographic area. In addition, AB 52 includes time limits for certain responses regarding consultation, as follows:

- Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice;
- after provision of the formal notification by the public agency, the California Native American tribe has 30 days to request consultation; and
- the lead agency must begin consultation process within 30 days of receiving a California Native American tribe's request for consultation.

Results of Consultation

On June 19, 2023, on behalf of the District, AECOM contacted the Native American Heritage Commission (NAHC), requesting a review of the Sacred Lands File (SLF) and a list of Tribes and individuals who may have information regarding the project area. The request contained location details, project map, and a general description of the project. A response from the NAHC dated July 7, 2023 reported that a search of the SLF was negative. This letter along with a list of tribes that should be contacted for additional information is presented in Appendix C.

In accordance with AB 52, pursuant to Public Resources Code (PRC) section 21080.3.1 and on behalf of the District AECOM prepared and distributed requests for consultation letters to the United Auburn Indian Community, Ione Band of Miwok Indians, Shingle Springs Band of Miwok Indians, Buena Vista Rancheria of Mewuk Indians, Tsi Akim Maidu, Wilton Rancheria, and Colfax-Todds Valley Consolidated Tribe on June 30, 2023. To date no responses have been received.

All consultation documents are located in Appendix C.

5. Findings & Conclusions

As a result of the literature review and field survey by cultural resources staff, no previously undocumented precontact or historic-era archaeological cultural resources or historic-age built environment resources were identified at the project site. Therefore, there are no known historical resources at the project site.

Although the project presumably would have no potential effects on historical resources, the potential exists for the unanticipated discovery of potentially significant cultural resources during project implementation.

If precontact or historic-era materials are encountered during project implementation/ construction, all work in the vicinity would stop until a qualified archaeologist could evaluate the discovery and make recommendations, pursuant to 36 CFR 800.13(b). Prehistoric materials most likely would include obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), tool-making debris, or milling equipment, such as mortars and pestles. Historic-era materials may include deposits of metal, glass, and/or ceramic refuse.

Although an extremely low potential exists, the possibility of encountering human remains cannot be discounted. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human burial. If human remains are encountered, project work would stop in the vicinity of the remains and, as required by law, the Sacramento County Coroner would be notified immediately. An archaeologist also would be contacted to evaluate the find. If the human remains were determined to be of Native American origin, the coroner would need to notify the NAHC within 24 hours of that determination. Pursuant to PRC 5097.98, the NAHC, in turn, would immediately contact a Most Likely Descendant (MLD). The MLD would have 48 hours to inspect the site and recommend the treatment of the remains. The landowner would be obligated to work with the MLD in good faith, to find a respectful resolution to the situation and entertain all reasonable options regarding the descendants' preferences for treatment.

6. Professional Qualifications

This project has been carried out by consultant Principal Investigators meeting the Secretary of the Interior's Standards Professional Qualifications for Archaeology and History, (36 CFR Part 61, 48 FR 44738-44739).

Richard Deis, RPA (Register of Professional Archaeologists), Senior Archaeologist for AECOM, provided guidance and input for this study. He has an M.A. degree in Anthropology from CSU Sacramento and more than 28 years of professional archaeological experience in California and Nevada. Mr. Deis specializes in lithic technology and shell bead and ornament analyses, and he has an interest in studies related to ethnic boundaries and population replacement, acculturation, and determining ethnicity and recreating cultural history from historic remains. He meets the Secretary of the Interior's Professional Qualification Standards as defined in 36 CFR Part 61 for work in archaeology.

Heather Miller, architectural historian was the primary author of the built-environment component of this report. Ms. Miller has a M.A. degree in Public History (with a Cultural Resource Management emphasis) from CSU Sacramento and has more than 14 years of experience in conducting cultural resources investigations in California. Ms. Miller meets and exceeds the requirements as both a historian and architectural historian under the Secretary of the Interior's Professional Qualification Standards as defined in 36 CFR 800.2 (a) (1).

7. References

Beardsley, R. K. 1954. Temporal and Areal Relationships in Central California Archaeology. University of California Archaeological Survey Reports 24 and 25. University of California Department of Anthropology: Berkeley, CA.

Bedwell, S. F. 1970. *Prehistory and Environment of the Pluvial Fort Rock Lake Area of Southcentral Oregon.* Unpublished Ph.D. dissertation in anthropology. University of Oregon: Eugene, OR.

Bennyhoff, James Allan. 1961. *Ethnogeography of the Plains Miwok.* University of California, Davis: Davis, CA.

California Department of Parks and Recreation. 1976. *California Inventory of Historic Resources.*

Cowan, R. G. 1956. *Ranchos of California*. Academy Library Guild: Fresno, CA.

Elsasser, A. B. 1978. Development of Regional Prehistoric Cultures. *Handbook of North American Indians, Volume 8*. Smithsonian Institution: Washington, DC.

Fair Oaks Recration & Park District (FORPD). 2020 September 30. “Fair Oaks Recration & Park District – Through the Years.” Available: https://www.forpd.org/DocumentCenter/View/1925/Fair-Oaks-Recreation-and-Park-District-History---Through-the-Years?bidId=/. Accessed June 2023.

Fredrickson, D. A. 1994. Archaeological Taxonomy in Central California Reconsidered. In *Toward a New Taxonomic Framework for Central California Archaeology*, ed. R. Hughes, 91–103. Berkeley, CA: Contributions of the University of California Archaeological Research Facility, Vol. 52.

Google Earth Pro. Various years 2003-2023. “Phoenix Park, Fair Oaks, CA.” Aerial imagery.

HistoricAerials.com. 1984. “Phoenix Park, Fair Oaks, CA.” Aerial imagery.

Judicial Council of California (JCC). 2020. *Archaeological Mitigation Plan and Tribal Cultural Resources Treatment Plan for the New Sacramento Courthouse Project*, City of Sacramento, Sacramento County, California. Prepared by John Nadolski, Stantec.

Kroeber, A. L. [1925] 1976. *Handbook of the Indians of California*. Reprint. Dover Publications: New York.

North Central Information Center (NCIC). 2023. Record Search Results File No. SAC-23-119. June 20.

Office of Historic Preservation (OHP). 1988. *Five Views: An Ethnic Historic Site Survey for California*. California State Parks: Sacramento, CA.

———1992 (May). *California Points of Historical Interest*. Sacramento, CA: California State Parks.

———1996. *California Historical Landmarks*. Sacramento, CA: California State Parks.

Sacramento Bee. 1957 June 19. “Center Township VFW Wins Land Use Okeh.” E-1.

———1957 May 25. “VFW Hall.” C-30.

———1996 March 14. “Veterans Salute 50th Anniversary: Fair Oaks Post Remains Constant Over Decades.” P. 3 and 7.

———1978 May 21. “Public Notice No. 786.” B-10.

———1979 August 26. “To Play.” 67.

———1982 November 4. “Community Has Pride in its Parks.” 15A.

Simpson, Lee and Paul J.P. Sandul. 2005. *Fair Oaks.* Arcadia Publishing: San Francisco, CA.

United Auburn Indian Community (UAIC). 2023. “Our History.” Available: https://www.auburnrancheria.com/about-us/our-history-1/. Accessed June 2023.

United States Geological Survey (USGS). 1977. AR1VEMK00010013 [aerial imagery]. Available: https://earthexplorer.usgs.gov/. Accessed June 2023.

University of California Santa Barbara Library (UCSB). 1961. Flight ID CAS-SAC, Frame 1-163. Available: http://mil.library.ucsb.edu/ap_indexes/FrameFinder/. Accessed June 2023.

———1981. Flight ID CAS-81081, Frame 6-121. Available: http://mil.library.ucsb.edu/ap_indexes/FrameFinder/. Accessed June 2023.

Wilson, Norman L. 1972. “Notes on Traditional Foothill Nisean Food Technology” in Papers on Nisenan Environment and Subsistence, 32-38. Center for Archaeological Research at Davis Publication No. 3. University of California, Davis: Davis, CA.

Wilson, N. L., and A. H. Towne. 1978. “Nisenan.” In *Handbook of North American Indians*, Volume 8, R. F. Heizer, editor. Smithsonian Institution Press, Washington, DC.

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Appendix A - Records Search

Appendix B – Previously Documented Resources

Appendix C – Native American Heritage Commission Sacred Land Files Search