

Draft

Inderkum High School Softball Fields
Initial Study/Mitigated Negative Declaration



Prepared for:

Natomas Unified School District

AECOM

April 2021

Draft

Inderkum High School Softball Fields Initial Study/Mitigated Negative Declaration

Prepared for:

Natomas Unified School District
1901 Arena Boulevard
Sacramento, CA 95834

Contact:

Jennifer Mellor
Director, Facilities & Strategic Planning
(916) 567-5468

Prepared by:

AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

Contact:

Matthew Gerken
Project Manager
916/414-5800

AECOM

April 2021

TABLE OF CONTENTS

Section		Page
1	INTRODUCTION.....	1-1
1.1	Overview	1-1
1.2	Project Background	1-1
1.3	Purpose of the Initial Study	1-1
1.4	Summary of Findings	1-2
1.5	Approvals	1-2
1.6	Document Organization	1-3
2	PROJECT DESCRIPTION	2-1
2.1	Project Location and Surrounding Land Uses	2-1
2.2	Project Site Characteristics	2-1
2.3	Project Components	2-1
2.4	Project Construction	2-2
2.5	Project Objective	2-2
3	ENVIRONMENTAL CHECKLIST	3-1
3.1	Aesthetics	3.1-1
3.2	Agriculture & Forestry Resources	3.2-1
3.3	Air Quality.....	3.3-1
3.4	Biological Resources	3.4-1
3.5	Cultural Resources	3.5-1
3.6	Energy	3.6-1
3.7	Geology and Soils	3.7-1
3.8	Greenhouse Gas Emissions	3.8-1
3.9	Hazards and Hazardous Materials	3.9-1
3.10	Hydrology and Water Quality	3.10-1
3.11	Land Use and Planning.....	3.11-1
3.12	Mineral Resources	3.12-1
3.13	Noise.....	3.13-1
3.14	Population and Housing	3.14-1
3.15	Public Services	3.15-1
3.16	Recreation.....	3.16-1
3.17	Transportation	3.17-1
3.18	Tribal Cultural Resources.....	3.18-1
3.19	Utilities and Service Systems	3.19-1
3.20	Wildfire	3.20-1
3.21	Mandatory Findings of Significance	3.21-1
4	SUMMARY OF MITIGATION MEASURES.....	4-1
4.1	Air Quality.....	4-1
4.2	Biological Resources	4-1
4.3	Cultural Resources	4-2
4.4	Geology and Soils	4-3
4.5	Tribal Cultural Resources.....	4-3
5	REFERENCES	5-1

Exhibits

Exhibit 2-1	Site Plan	2-3
Exhibit 3.4-1	Biological Study Area Map.....	3.4-2
Exhibit 3.4-2	Land Cover Types	3.4-6

Tables

Table 3.3-1	Summary of Modeled Maximum Daily and Annual Construction-Related Emissions of Criteria Air Pollutants and Precursors.....	3.3-3
Table 3.4-1	Special-Status Species.....	3.4-8
Table 3.8-1	Greenhouse Gas Emissions Estimates from Construction and Operations of the Proposed Project	3.8-2
Table 3.13-1	Predicted Traffic Noise Levels, Existing	3.13-3
Table 3.13-2	City of Sacramento Exterior Noise Level Standards	3.13-3
Table 3.13-3	Exterior Noise Compatibility Standards for Various Land Uses	3.13-4
Table 3.13-4a	Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses–Residences and Buildings Where People Normally Sleep.....	3.13-5
Table 3.13-4b	Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses–Institutional Land Uses with Primarily Daytime and Evening Uses	3.13-5
Table 3.13-5	Construction Phases, Equipment, and Calculated Noise Levels	3.13-6
Table 3.13-6	Ambient and Project Construction Noise Levels at Closest Sensitive Receptors	3.13-7
Table 3.13-7	Predicted Traffic Noise Levels, Existing and Construction	3.13-8
Table 3.13-8	Project Construction Vibration Levels at Closest Sensitive Receptors.....	3.13-9

ACRONYMS AND OTHER ABBREVIATIONS

2020 Final Rule	<i>Navigable Waters Protection Rule: Definition of “Waters of the United States”</i>
AB	Assembly Bill
ADA	Americans with Disabilities Act
AEP	annual exceedance probability
afy	acre feet per year
AMMs	avoidance and minimization measures
AMSL	above mean sea level
A-OS	Agriculture-Open Space
AQAP	air quality attainment plans
B.P.	Before Present
<i>Basin Plan</i>	<i>Water Quality Control Plan</i>
BMPs	best management practices
ca.	circa
CAAQS	California ambient air quality standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CALFIRE	California Department of Forestry and Fire Protection
CalGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CH ₄	methane
City	City of Sacramento
City General Plan	<i>Sacramento 2035 General Plan</i>
CNPS	California Native Plant Society
CO ₂	carbon dioxide
CO ₂ e	CO ₂ -equivalents
CRPRs	California Rare Plant Ranks
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DDT	dichlorodiphenyltrichloroethane
District	Natomas Unified School District

DOC	California Department of Conservation
DPM	diesel particulate matter
DSA	Division of the State Architect
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESA	Environmental Site Assessment
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FR	Federal Register
FTA	Federal Transit Administration
<i>g</i>	percentage of gravity
GHG	greenhouse gas
GSP	groundwater sustainability plan
GWh	gigawatt-hours
HSC	Health and Safety Code
Hz	hertz
I-	Interstate
in/sec	inches per second
IS	initial study
L_{dn}	Day-Night Noise Level
L_{eq}	Equivalent sound level
$L_{eq[h]}$	A-weighted equivalent sound level
L_{max}	Maximum sound level
L_n	Statistical Descriptor
LRCCD	Los Rios Community College District
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MND	mitigated negative declaration
mph	miles per hour
MRZ	mineral resource zone
MT	metric tons
N ₂ O	nitrous oxide

NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NBHCP	Natomas Basin Habitat Conservation Plan
NLIP	Natomas Levee Improvement Program
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NUSD	Natomas Unified School District
NWI	National Wetlands Inventory
OBL	obligate wetland
PCBs	polychlorinated biphenyls
PGA	Peak horizontal ground acceleration
PM	particulate matter
PM ₁₀	PM equal to or less than 10 micrometers in diameter
PM _{2.5}	PM equal to or less than 2.5 micrometers in diameter
PPV	peak particle velocity
PRC	Public Resources Code
RD	Reclamation District
RMS	root mean square
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SacRT	Sacramento Regional Transit District
SAFCA	Sacramento Area Flood Control Agency
SIP	State Implementation Plan
SLF	Sacred Land File
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SMUD	Sacramento Metropolitan Utility District
SRFCP	Sacramento River Flood Control Project
SSC	Species of Special Concern
SVAB	Sacramento Valley Air Basin
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TCR	Tribal Cultural Resources
TMDLs	Total Maximum Daily Loads
TNWs	Traditional Navigable Waters
tpd	tons per day
UPL	obligate upland

USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration decibel
VMT	vehicle miles traveled
WDRs	waste discharge requirements
μin/sec	microinch per second

1 INTRODUCTION

1.1 OVERVIEW

The Natomas Unified School District (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 Inderkum High School Softball Fields Project (proposed project) in the city of Sacramento (city), California.

The proposed project consists of construction and operation of two softball fields on approximately 3.5 acres of a District-owned 5.8-acre site, across from the existing Inderkum High School campus in the North Natomas area of Sacramento.

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 adoption of the proposed MND and a Mitigation Monitoring and Reporting Program, and will decide whether to proceed with the proposed project.

1.2 PROJECT BACKGROUND

The existing softball fields at the Inderkum High School campus is within close proximity to the baseball fields, creating conflicts when both types of sports fields need to be in use at the same time. Therefore, the District proposes to discontinue use of the softball fields at the existing campus, and install two new softball fields on District-owned property on the west side of Via Ingoglia, across the street (to the west) from the existing Inderkum High School campus.

1.3 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 EIR (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 as revised, 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.

1.4 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.

1.5 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.

The proposed project would also be reviewed by the Office of Public School Construction of the California Department of General Services, Division of the State Architect, and by the California Department of Education (CDE). The CDE is responsible for approving the proposed site of any public school-related facility in California (Education Code Section 17213) to ensure that the location meets certain specific standards for public health and safety. Major constraints to a school-related facility that could require additional investigation may include high-voltage power lines, railroad tracks, earthquake faults, pipelines, airport runways, wetlands, hazardous waste sites, and excessive noise levels (Title 5 California Code of Regulations Sections 14010–14011).

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

- ▶ California Department of Education/Division of State Architect – final site and design approval (per California Education Code Section 17213).

- ▶ California Department of Toxic Substances Control – review of preliminary endangerment assessment and Phase I Environmental Site Assessment (ESA).
- ▶ City of Sacramento Fire Department – site plan review for emergency access and water availability.
- ▶ Sacramento Metropolitan Air Quality Management District – authority to construct.
- ▶ City of Sacramento – domestic water supply and fire flow, approval of site plans within a 100-year floodplain per the City’s floodplain ordinance, approval of a grading permit.

1.6 DOCUMENT ORGANIZATION

This Initial Study is organized into five 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.
- ▶ **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, “Summary of Mitigation Measures,”** contains the proposed mitigation measures to reduce potentially significant effects of the proposed project.
- ▶ **Chapter 5, “References,”** identifies the information sources used in preparing this Initial Study.

This page intentionally left blank

2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SURROUNDING LAND USES

The proposed project would be situated on a District-owned property located at 2600 New Market Drive, in an urbanized area of North Natomas, in the city of Sacramento. The project site is southwest of the intersection of New Market Drive and Via Ingoglia, across the street from the existing Inderkum High School campus. The project site is currently vacant. The District-owned property comprises approximately 5.78 acres in total; approximately 3.5 acres of the property would be used for the proposed project.

Land surrounding the project site consists of the North Natomas Regional Park, including the North Natomas Community Center & Aquatics Complex, to the north, the existing Inderkum High School campus to the east, commercial and office uses to the south and west, and residential development to the northwest. The project site is zoned Agriculture-Open Space (A-OS) and is designated as a “Traditional Center” (for development with residential, retail, service, office, public, and quasi-public uses) in the City of Sacramento General Plan.

Public K–12 schools and outdoor recreational facilities are allowed (with a conditional use permit), in areas that are zoned A-OS under the City of Sacramento Zoning Code, Chapter 17.200, Article II.

2.2 PROJECT SITE CHARACTERISTICS

The western boundary of the property is approximately 20 feet higher in elevation than the rest of the site. Most of the project site is nearly flat; elevations range from approximately 16–18 feet above mean sea level, sloping gently towards the southwest.

The steep, linear slope along the western parcel boundary is bounded to the east (i.e., at the toe of the slope) by a manmade, approximately 5-foot-deep, earth-lined, channelized drainage ditch. The drainage ditch is dry throughout much of the year, but becomes inundated between February and April during heavy rainfall years. The ditch is not connected to any other aquatic features; there are no culverts or other conveyance features in or near the ditch. Based on a review of historical aerial imagery, it appears as though this ditch was previously part of a larger system of agricultural ditches and canals that bordered hay and row-crop fields throughout the now-developed north Natomas area. This ditch was cut off from its conveyance in 2002 to facilitate urban development to the west and north. Today, this remnant ditch collects runoff from the adjacent parcel through existing surface water flow patterns and dries out through natural percolation/evaporation. (For additional details, please see Initial Study Section 3.4, “Biological Resources.”)

2.3 PROJECT COMPONENTS

The existing softball fields at the Inderkum High School campus is within close proximity to the baseball fields, creating conflicts when both types of sports fields need to be in use at the same time. Therefore, the District proposes to discontinue use of the softball fields at the existing campus, and install two new softball fields on District-owned property on the west side of Via Ingoglia, across the street (to the west) from the existing Inderkum High School campus.

The proposed project involves installing two new softballs fields composed of turf grass, which would be surrounded by bark mulch with drought-tolerant landscape plantings (please see Exhibit 2-1). The perimeter of

the site would be fenced. In order to supply water for landscape irrigation, a small on-site water supply line would be installed that would tie-in to the existing water line located either in New Market Drive or Via Ingoglia.

The proposed softball fields would be installed on the east side of the drainage ditch, on flat ground. The drainage ditch would not be filled. Fencing would be installed around the east side of the drainage ditch to provide for the safety of students and staff.

The proposed project would not include development of parking or roads. The Los Rios Community College District (LRCCD) parking lot expansion project in the southern portion of the project property would include reserved parking stalls for use by the District at the softball fields. An approximately 480-square foot new restroom building with an adjacent storage area would be added near the southeastern boundary of the site, between the two softball fields. Additionally, moveable bleachers would be included. The softball fields would not be lighted and would not be used at night; however, they would be used during the daytime in the afternoons after classes are over. Project operation would involve occasional mowing of the turf softball fields with a commercial mower, along with maintenance of the landscape plantings. The softball fields would be designed to comply with the requirements of the Division of the State Architect (DSA) and the Americans with Disabilities Act (ADA).

2.4 PROJECT CONSTRUCTION

Project construction is anticipated to take approximately four months, construction is scheduled to occur August – December in 2021.

All construction equipment and vehicles would be staged on the project site, or in the Inderkum High School parking lot. Construction would be accomplished with the use of assorted earth moving and typical construction equipment. The construction contractor would be responsible for erecting a chain-link fence with fabric screening or webbing around the construction area, 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 site. Construction activities would be limited to the less-sensitive daytime hours between 6am and 8pm, Monday through Friday. Occasional daytime construction work on Saturdays and Sundays may be necessary and if this occurs, construction would be limited to the hours between 7am and 7pm.

2.5 PROJECT OBJECTIVE

The District is responsible for providing sufficient recreational capacity for the student body at Inderkum High School. The objective of the project is to eliminate use conflicts between the existing softball and baseball fields at the Inderkum High School campus, by providing two new softball fields at a separate location, and thereby continue to meet the recreational needs of students at the high school.

This page intentionally left blank

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

- | | |
|--|--|
| 1. Project Title: | Inderkum High School Softball Fields |
| 2. Lead Agency Name and Address: | Natomas Unified School District
1901 Arena Boulevard
Sacramento, CA 95834 |
| 3. Contact Person and Phone Number: | Jennifer Mellor, Director,
Facilities & Strategic Planning
(916) 567-5468 |
| 4. Project Location: | 2600 New Market Drive, City of Sacramento |
| 5. Project Sponsor's Name and Address: | Natomas Unified School District
1901 Arena Boulevard
Sacramento, CA 95834 |
| 6. General Plan Designation: | Traditional Center |
| 7. Zoning: | A-OS (Agriculture-Open Space) |
| 8. Description of Project: | The softball fields at the existing Inderkum High School campus is within close proximity to the baseball fields, creating conflicts when both types of sports fields need to be in use at the same time. Therefore, the District proposes to discontinue use of the softball fields at the existing campus, and install two new softball fields on District-owned property on the west side of Via Ingoglia, across the street (to the west) from the existing Inderkum High School campus. |
| 9. Surrounding Land Uses and Setting: | The project site is vacant. Surrounding land uses include the North Natomas Regional Park, Inderkum High School, and commercial, office, and residential uses. |
| 10. Other public agencies whose approval is required: | City of Sacramento |

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.

Y/N	Resource Area	Y/N	Resource Area	Y/N	Resource Area
	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Energy
	Greenhouse Gas Emissions		Geology / Soils		Hazards & Hazardous Materials
	Hydrology / Water Quality		Land Use / Planning		Mineral Resources
	Noise		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. **No**
- 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. **Yes**
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. **No**
- 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. **No**
- 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. **No**

Signature

Date

Printed Name

Title

Natomas Unified School District

Agency

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:
 - ▶ the significance criteria or threshold, if any, used to evaluate each question; and
 - ▶ the mitigation measure identified, if any, to reduce the impact to less than significance.
-

This page intentionally left blank

3.1 AESTHETICS

3.1.1 ENVIRONMENTAL SETTING

The western boundary of the property is approximately 20 feet higher in elevation than the rest of the site. Most of the project site is nearly flat; elevations range from approximately 16–18 feet above mean sea level, sloping gently towards the southwest. A drainage ditch that runs northwest to southeast is present at the base of the slope on the west side of the property. The approximately 3.5-acre project site is currently vacant. The ground surface is vegetated with low-growing annual and perennial grasses and weeds, which appear green in the spring and brown the rest of the year.

The approximately 212-acre North Natomas Regional Park is on the north side of New Market Drive. Portions of the Regional Park have been constructed, including a dog park and a baseball/softball complex. Construction equipment and vehicles are staged at the park immediately north of New Market Drive.

Via Ingoglia, which is a paved two-lane roadway, is present immediately adjacent to the east side of the project site. On the east side of Via Ingoglia, multi-story buildings associated with the existing Inderkum High School campus and North Natomas Library, along with associated parking lots to the north and south of the buildings, with landscaping surrounding the buildings and parking areas, are visible.

Vacant land planned for future urban development is present immediately south and west of the project site. The drainage ditch that is present on the project site continues southeast onto the vacant land. The appearance of the vacant land to the south and west is similar to the project site: covered with low-growing annual and perennial grasses and weeds, which appear green in the spring and brown the rest of the year. Del Paso Road, which is a 4-lane paved roadway with a landscaped center median, is visible to the south past the vacant land.

Middleground views from the project site to the south and west include multi-story commercial office buildings and retail buildings with associated urban landscaping and parking areas. An apartment complex with multi-story buildings and landscaping is visible in middleground views to the northwest.

3.1.2 DISCUSSION

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

No Impact. There are no scenic vistas at the project site or vicinity, which consist of vacant land covered with grasses and weeds, a public park that is under construction, a high school and public library, commercial and retail land uses, and an apartment complex, in the urbanized Natomas Park 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 project vicinity. Garden Highway, the closest locally-designated scenic highway, is approximately 2.5 miles to the southwest (Sacramento County 2020). State Route 160, the closest state-designated scenic highway, is approximately 13.5 miles to the south (California Department of Transportation [Caltrans] 2017). 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?**

Less-than-Significant Impact. The project site is situated on District-owned land at the southwest corner of New Market Drive and Via Ingoglia, in the urbanized North Natomas area of the City of Sacramento. The proposed project consists of two turf softball fields for use by existing Inderkum High School students. The softball fields would be surrounded by bark mulch, drought-tolerant landscaping, and a perimeter fence. The drainage ditch at the project site would not be filled, and the escarpment along the west side of the property would not be graded; rather, the softball fields would be placed on the flat portion of the project site east of the drainage ditch. Chain-link fencing, between approximately 8 feet high and 16 feet high, would be installed around the perimeter of the project site and along the east side of the drainage ditch to provide for the safety of students and staff. In addition, see-through green netting, approximately 30 feet high, would be installed along the northern portion of the project boundary to keep softballs from crossing over into New Market Drive and the North Natomas Regional Park.

The project site is zoned Agriculture-Open Space (A-OS), and is designated as a “Traditional Center” (for development with residential, retail, service, office, public, and quasi-public uses) in the City of Sacramento General Plan (City of Sacramento 2011, 2021). Public K–12 schools and outdoor recreational facilities are allowed (with a conditional use permit), in areas that are zoned A-OS under the City of Sacramento Zoning Code, Title 17, Chapter 17.200, Article II. The City Zoning Code does not include design guidelines that are specifically related to schools.

The project site is within the North Natomas Community Plan Area, which contains requirements for school locations and acreage criteria, but no design guidelines specific to schools (City of Sacramento 2015a). Neither the City of Sacramento General Plan (City of Sacramento 2015b) nor the Sacramento Citywide Design Guidelines (City of Sacramento Community Development 2019) contain standards or guidelines that are specific to school design. These North Natomas and Citywide 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 into site-specific design, the use of anti-reflective exterior coatings, and the need for shielding of nighttime lighting to reduce light pollution. City of Sacramento General Plan Policy LU 8.1.7 states that the City will “encourage school and utility districts and other government agencies that may be exempt from City land use control and approval to plan their properties and design buildings at a high level of visual and architectural quality that maintains the character of the district or neighborhood in which they are located.” The proposed project would be consistent with these types of General Plan policies and the City’s Design Guidelines because these policies and guidelines include basic design principles that form the foundation of both functional and aesthetically pleasing architectural design and land use planning.

The proposed project is required to conform to all CDE and DSA requirements, which are specific to schools. The chain-link fencing would be visible from New Market Drive, but the visual appearance of the fencing would be similar to existing fencing around the existing Inderkum High School facilities across the street. Because the 30-foot-high softball netting would be composed of see-through materials, and because there are no scenic views in the area, the softball netting would not substantially detract from the existing visual character or quality. Because the softball fields would be consistent with the visual appearance of existing recreational facilities at the adjacent

Inderkum High School and North Natomas Regional Park, and would generally be consistent with City design guidelines, the visual character and quality of the project site would not be degraded as compared to existing conditions (i.e., a vacant lot covered with grasses and weeds). Therefore, this impact is considered less than significant.

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

No Impact. Nighttime lighting at the softball fields would not be provided. Thus, the proposed project would not create a new source of substantial light or glare, and there would be no impact.

This page intentionally left blank

3.2 AGRICULTURE & FORESTRY RESOURCES

3.2.1 ENVIRONMENTAL SETTING

Based on a review of the Important Farmland Map for Sacramento County produced by the California Department of Conservation (DOC) under the Farmland Mapping and Monitoring Program (FMMP), the project site, along with the North Natomas Regional Park adjacent to the project site to the north, is designated as Farmland of Local Importance (DOC 2018). However, there is no Farmland at the project site or in the immediate project vicinity, which is located in the urbanized North Natomas area. The project site is zoned Agriculture-Open Space (A-OS) and is designated as a “Traditional Center” (for development with residential, retail, service, office, public, and quasi-public uses) (City of Sacramento 2011, 2013).

A narrow corridor of Farmland of Local Importance is also present west of the project site, along I-5 to the north (DOC 2018). However, this area is designated for future “Employment Center Mid-Rise District” land uses under the City of Sacramento General Plan (City of Sacramento 2011).

There are no Williamson Act contracts at the project site or in the project vicinity.

3.2.2 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?**

Less-than-Significant Impact. The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The project site is designated as Farmland of Local Importance (DOC 2018). However, there is no farmland at the project site or in the immediate project vicinity, which is located in the urbanized North Natomas area. Furthermore, the project site is designated for development with residential, retail, service, office, public, and quasi-public uses land uses under the City of Sacramento General Plan (City of Sacramento 2011), and therefore conversion of the Farmland at the project site was accounted for in the *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report* (City of Sacramento 2014). The North Natomas Regional Park is adjacent to the project site to the north, the existing Inderkum High School is adjacent to the project site to the east, commercial and office uses are present to the south and west, and residential development is present to the northwest. The impact is less than significant.

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

No Impact. There are no Williamson Act contracts at the project site (SACOG 2021), which is located in the urbanized North Natomas area. Thus, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and 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 consists of flat, vacant land with no trees, surrounded by open space (a public park), public/quasi-public, commercial, and residential land uses. The project site is not zoned or designated for forest land, timberland, or timberland production. Thus, 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 is located in the urbanized North Natomas area. Neither the project site nor the surrounding area contains any forest land. Thus, 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?**

Less-than-Significant Impact. The proposed project is an urban infill project to develop two high school softball fields on District-owned property on a vacant lot adjacent to the existing Inderkum High School. Although the project site is classified as Farmland of Local Importance by the DOC (2018), the site is designated for development with residential, retail, service, office, public, and quasi-public uses land uses under the City of Sacramento General Plan (City of Sacramento 2011).

As noted above, there is a narrow corridor of Farmland of Local Importance west of the project site along Interstate (I-)5 north of Del Paso Road; however, this corridor is designated by the City for future “Employment Center” land uses (City of Sacramento 2011). Thus, the proposed project would not result in unplanned conversion of Farmland to other uses, and this impact would be less than significant.

3.3 AIR QUALITY

3.3.1 ENVIRONMENTAL SETTING

The proposed project is located within the Sacramento Valley Air Basin (SVAB). The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the primary local agency responsible for monitoring air pollution within the SVAB and for developing and administering programs to reduce air pollution levels below the health-based standards established by the state and federal governments.

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 (CARB) 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 (PM₁₀) and PM equal to or less than 2.5 micrometers in diameter (PM_{2.5}). Ozone is not emitted directly into the air, but is formed through a series of reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight; therefore, ROG and NO_x are considered ozone precursors.

Health-based air quality standards have been established for these pollutants by EPA at the national level and by CARB 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.” The SMAQMD region, including Sacramento County, is currently designated as nonattainment for the NAAQS for ozone and 24-hour PM_{2.5}, and nonattainment for the CAAQS for ozone and PM₁₀ (SMAQMD 2021).

3.3.2 DISCUSSION

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

Less than Significant with Mitigation Incorporated. Air quality plans describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain the NAAQS and CAAQS into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act.

The SMAQMD is responsible for preparing air quality attainment plans (AQAP) for each criteria pollutant that does not meet the standard. AQAP documents are transmitted to the CARB and the EPA for incorporation into the State Implementation Plan (SIP), a comprehensive plan that describes how an area will attain and maintain the NAAQS for complying with the federal Clean Air Act.

The AQAPs present comprehensive strategies to reduce emissions from stationary, area, mobile, and indirect sources. The SMAQMD *Guide to Air Quality Assessment in Sacramento County* (2020) is intended to provide a

tool to identify proposed development projects that may have a significant adverse effect on air quality. According to the Guide, projects whose emissions are expected to meet or exceed the recommended significance criteria will have a potentially significant adverse impact on air quality and will therefore potentially conflict with or obstruct implementation of the SMAQMD air quality plans. Project emissions that do not meet or exceed these thresholds would not impact SMAQMD's ability to reach attainment.

As discussed in detail below in item b), modeled project construction and operational emissions would not exceed the SMAQMD thresholds of significance. However, although construction emissions would not exceed SMAQMD thresholds, due to the nonattainment status of the SVAB with respect to ozone, PM₁₀, and PM_{2.5}, SMAQMD recommends that all construction projects implement the SMAQMD Basic Construction Emission Control Practices (SMAQMD 2019). SMAQMD's Basic Construction Emission Control Practices include such measures as watering the construction site twice daily, minimizing vehicle idling, covering haul trucks transporting soil, and cleaning paved roads. Without incorporation of SMAQMD's Basic Construction Control Practices, the project construction activities would be considered to potentially conflict with or obstruct implementation of the SMAQMD's air quality plans for PM and the impact is considered to be potentially significant.

Mitigation Measure 3.3-1: Implement the SMAQMD Basic Construction Emission Control Practices.

Comply with Basic Construction Emission Control Practices identified by the SMAQMD and listed below or as they may be updated in the future:

- 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

With implementation of Mitigation Measure 3.3-1, the proposed project would not conflict with or obstruct an applicable air quality plan. This impact would be less than significant.

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

Less than Significant 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, but could be cumulatively considerable when considered in combination with past, present, and future emissions sources within the air basin. The SMAQMD has established project-level construction and operational emissions thresholds of significance for ROG, NO_x, PM₁₀, 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 2020).

CONSTRUCTION

Construction-related activities would result in temporary emissions of criteria air pollutants and ozone precursors from ground disturbing activities (e.g., excavation, grading, and clearing), use of off-road equipment, material delivery, and construction worker commutes.

Construction emissions were modeled using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Construction would occur over approximately four months and would not include the construction of any parking or roads. Emissions estimates are based upon CalEEMod default construction equipment for site preparation, grading, building and other construction, and architectural coating activities. Table 3.3-1 summarizes the maximum daily and total emissions of ROG, NO_x, PM₁₀, and PM_{2.5} that may result from project construction. Refer to AECOM 2021 for model output files and assumptions.

Table 3.3-1 Summary of Modeled Maximum Daily and Annual Construction-Related Emissions of Criteria Air Pollutants and Precursors

Emissions and Thresholds	ROG (pounds per day)	NO _x (pounds per day)	PM ₁₀ (pounds per day)	PM _{2.5} (pounds per day)	PM ₁₀ (tons per year)	PM _{2.5} (tons per year)
Emissions Estimate	3.96	40.75	20.26	11.85	0.3	0.17
SMAQMD Significance Threshold ¹	None	85	80	82	14.6	15
Exceeds Threshold?	Not Applicable	No	No	No	No	No

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = 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; SMAQMD = Sacramento Metropolitan Air Quality Management District.

¹ Significance thresholds listed for PM₁₀ and PM_{2.5} represent thresholds with application of all feasible best available control technology /BMPs; without such application, thresholds are zero (0).

Source: Modeled by AECOM in 2021; See AECOM 2021 for detailed modeling assumptions, outputs, and results.

As shown in Table 3.3-1, the modeled emissions generated by construction would not exceed the SMAQMD-recommended thresholds of significance. However, as discussed above under item a), although construction emissions would not exceed SMAQMD thresholds, SMAQMD recommends that all construction projects implement SMAQMD's Basic Construction Emission Control Practices (SMAQMD 2019). This impact would be less than significant.

OPERATIONS

Operational emissions sources associated with the proposed project would be minimal, including direct emissions from small equipment for intermittent landscaping and maintenance of the site, and indirect emissions from electricity requirements associated with the water demand for the site. The proposed project does not include parking or roads, and is not anticipated to result in additional traffic. The only building operational emissions sources would be minor off-site emissions associated with the minor increase in water use to serve the restroom facility. Thus, there would be no long-term increase in mobile-source emissions, and only minor emissions associated with building operations (the restroom facility) and maintenance activities. Therefore, the proposed project's long-term operational emissions would be below the SMAQMD-recommended thresholds of significance. This impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less-than-Significant Impact. Sensitive receptors are generally considered to include those land uses for which exposure to air pollutants could result in health-related risks due to the types of activities involved or population groups, such as children, pregnant women, the elderly, and those with existing health conditions. 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 pollutants present.

Land uses surrounding the project site include the North Natomas Regional Park to the north, the existing Inderkum High School campus to the east, commercial and office uses to the south and west, and residential development to the northwest. The closest of these is the Inderkum High School campus, of which the nearest building is approximately 200 feet east of the most eastern perimeter of the project site, followed by the North Natomas Regional Park that is approximately 300 feet north of the project site, and nearest residence at approximately 480 feet from the northwest corner of the project site.

Construction would require the use of off-road diesel-powered equipment and haul trucks for construction activities. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as diesel particulate matter (DPM), the primary toxic air contaminant of concern. Construction activities may expose nearby receptors to DPM, including residents to the northwest and students at the Inderkum High School. More than 90 percent of DPM is less than 1 μm in diameter (about 1/70th the diameter of a human hair), and thus is a subset of $\text{PM}_{2.5}$ (CARB 2021). Therefore, $\text{PM}_{2.5}$ from exhaust represents the upper limit for DPM emissions associated with construction of the proposed project.

Health risk is a function of the concentration of contaminants in the environment and the duration of exposure to those contaminants. As shown above in Table 3.3-1, construction-related activities would not exceed the SMAQMD-recommended thresholds. Furthermore, Table 3.3-1 represents total $\text{PM}_{2.5}$ emissions; when only

considering PM_{2.5} from exhaust, these emissions are estimated to be less than 2 pounds per day and less than 0.06 tons over the entire construction period (see AECOM 2021). Additionally, construction activities would be temporary and occur over a limited duration of 4 months, or approximately 1 percent of the total exposure period used for typical health risk calculations (i.e., 30 years) (OEHHA 2019). As noted above, construction would vary in activity and equipment intensity over that time, and would take place throughout 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. Therefore, short-term construction would not expose sensitive receptors to DPM emission levels that would result in a health hazard. The project would also not generate substantial emissions during project operations, primarily limited to intermittent use of maintenance equipment. As a result, this impact would be less than significant.

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

CONSTRUCTION ACTIVITIES

Less-than-Significant Impact. The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines and emissions associated with asphalt paving and the application of architectural coatings may be considered offensive to some individuals. Residents surrounding the project site may be exposed to odors from diesel exhaust associated with equipment use for construction, as well as odors associated with asphalt paving activities. However, because odors would be temporary and disperse rapidly with distance from the source, construction-generated odors would not result in the frequent exposure of receptors to objectionable odor emissions. Furthermore, Natomas Unified School District (NUSD) is required to comply with SMAQMD Rules 402 (Nuisance) and 442 (Architectural Coatings), which would ensure that odors generated by short-term construction would not affect a substantial number of people. Therefore, this impact would be less than significant.

OPERATIONAL ACTIVITIES

Less-than-Significant Impact. 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. Minor sources of odor that could be generated during operations of the softball fields include landscaping equipment. These activities would take place intermittently each day and would not be of substantial scale for fields of this size, are consistent with maintenance activities of the park land use to the north and existing outdoor fields of the Inderkum High School to the east, and typical of outdoor recreational facilities. As a result, this impact would be less than significant.

This page intentionally left blank

3.4 BIOLOGICAL RESOURCES

3.4.1 ENVIRONMENTAL SETTING

The project site includes approximately 3.5 acres south of New Market Drive, west of Via Ingoglia, and north of Del Paso Boulevard in the North Natomas neighborhood of the City of Sacramento.

REGIONAL SETTING AND DESCRIPTION OF BIOLOGICAL STUDY AREA

The Natomas region has undergone extensive development. Most of the region is privately owned and developed or developing for industrial, residential, transportation, and agricultural uses.

Based on review of historical aerial photos, prior to development of the North Natomas area in the early 2000s, the project site was farmed for hay and row crops. The site is a vacant parcel bounded by roads to the north and south, Inderkum High School, the North Natomas Library, and the American River College Natomas Center to the east, and an open space parcel to the west.

A biological survey was conducted by an AECOM biologist on behalf of NUSD on April 7, 2020, within and adjacent to the subject parcel for vegetation type, wetlands/other waters, riparian habitat, wildlife habitats, and general observations of wildlife usage. The work included mapping land cover types and vegetation in the project site and assessing habitat conditions for potential to support special-status species, including Natomas Basin Habitat Conservation Plan (NBHCP) covered species, within the project site and various survey buffers (i.e., the study area) as required by the NBHCP Pre-Construction Survey Protocols (City of Sacramento, et al. 2003) (Exhibit 3.4-1). These survey buffers are listed below:

- ▶ 1,000-foot buffer for valley elderberry longhorn beetle habitat (i.e., elderberry shrubs);
- ▶ 500-foot buffer for suitable nesting tricolored blackbird habitat (e.g., blackberry thickets, emergent marsh);
- ▶ 300-foot buffer for western burrowing owl habitat (i.e., burrow sites);
- ▶ 250-foot buffer for vernal pool and seasonal wetland habitat;
- ▶ 200-foot buffer for giant garter snake habitat (i.e., ditches and canals with hydrology at least part of the year between May and October); and
- ▶ 100-foot buffer for nesting loggerhead shrike.

The specific location of the biological study area is shown on Exhibit 3.4-1. The project site is in a developed setting and is part of a highly disturbed and managed landscape with little to no remaining natural vegetation.

The topography of the project site is indicative of past farming and grading activities. There is a steep, linear slope along the western parcel boundary that is bounded to the east (i.e., at the slope's toe) by an excavated ditch. The western boundary and southwestern corner of the project site are approximately 20 feet higher in elevation than the rest of the site. Elevations range from approximately 35 feet above mean sea level (AMSL) at the top of the slope in the southwestern corner of the project site to 9 feet AMSL in the center of the excavated ditch. To the east of the ditch, the project site is situated in a topographical "low spot" that ranges from 16 to 18 feet AMSL.



Exhibit 3.4-1 Biological Study Area Map¹

¹ The project property boundary includes the proposed Inderkum High School Softball Fields project site, in addition to an area in the southern portion of the property that is not part of the proposed project and is not analyzed in this document.

Most of the soils on the project site are characterized by Jacktane clay, drained, 0 to 2 percent slopes (87%), except for the southwestern portion, which is comprised of San Joaquin silt loam, 0 to 3 percent slopes (NRCS 2020). Both soil types are underlain by a restrictive (duripan) layer at depths ranging from 23 to 52 inches (NRCS 2020). The Jacktane clay series can range from nonsaline to very slightly saline, while San Joaquin silt loam is never saline (NRCS 2020). Jacktane clays are neutral to moderately alkaline above 15 inches (NRCS 1997) and San Joaquin soils are neutral to moderately acid above 15 inches (NRCS 1999).

The project site is within the NBHCP coverage area, which lies interior to the toe of levees surrounding the Natomas Basin and encompasses 53,537 acres in northern Sacramento County and southern Sutter County (City of Sacramento, et al. 2003). The purpose of the NBHCP is to promote biological conservation in conjunction with development. The NBHCP covers 22 wildlife and plant species (i.e., Covered Species) that have potential to occur in the Natomas Basin that are currently listed as threatened or endangered under the federal Endangered Species Act (ESA) or California state ESA (California Endangered Species Act [CESA]), or that have potential to become listed during the life of the NBHCP. The NBCHP allows Plan Permittees (i.e., the City of Sacramento, Sutter County, Reclamation District No. 1000, Natomas Central Mutual Water Company, and the Natomas Basin Conservancy) to receive incidental take permits under the ESA and CESA for activities and projects they conduct and those under their jurisdiction. NBHCP Covered Activities include development, water facility maintenance, and reserve management activities.

LAND COVER TYPES

There are four land cover types in the project site—developed, ruderal, grassland, and ditch (Exhibit 3.4-2). The sections below describe the dominant vegetation present in each land cover type, if present, and wildlife species usage observed during the biological survey.

Developed

Developed land cover is defined as areas developed by humans and generally lacking in vegetation (i.e., barren). Developed areas within the project site encompass approximately 0.16 acres, including a concrete sidewalk along the eastern boundary and a rutted, barren area in the northeastern corner. In addition, a row of highly maintained street trees exists immediately outside of the eastern project site boundary between the sidewalk and the adjacent Via Ingoglia road. These are small (i.e., less than 15 feet tall) ginkgo (*Ginkgo biloba*) trees in concrete planters, spaced at approximately 40-foot intervals between managed and irrigated turf grass.

Wildlife species observed utilizing developed areas during the biological survey consisted of various birds perched temporarily on fences and light poles surrounding the project site, including American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), house finch (*Haemorrhous mexicanus*), and northern mockingbird (*Mimus polyglottos*).

Ruderal

Ruderal land cover is dominated by introduced, non-native weedy forbs characteristic of disturbed places. Ruderal vegetation covers approximately 1.09 acres of the project site in locations that were previously filled and graded, such as along the northern boundary adjacent to the active road construction site and along the banks of the excavated ditch. The ruderal land cover type can be best described as a *Brassica nigra-Raphanus* Herbaceous Semi-Natural Alliance, according to the Manual of California Vegetation (CNPS 2020a). This vegetation alliance

typically is dominated by nonnative mustard species (i.e., *Brassica nigra*, *Hirschfeldia incana*, *Raphanus* spp.). In the study area, ruderal areas are dominated by black mustard (*Brassica nigra*) and other weedy forbs, including yellow star thistle (*Centaurea solstitialis*), bur clover (*Medicago polymorpha*), Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), winter vetch (*Vicia villosa*), stinkwort (*Dittrichia graveolens*), wild radish (*Raphanus* sp.), and sow thistle (*Sonchus asper*) intermixed with annual wild oat grasses (*Avena barbata*).

Wildlife species observed to be using ruderal habitat during the survey included black-tailed jackrabbit (*Lepus californicus*), ring-necked pheasant (*Phasianus colchicus*), red-winged blackbird (*Agelaius phoeniceus*), house finch, and white-crowned sparrow (*Zonotrichia leucophrys*).

Grassland

Grassland is the most prevalent land cover type in the project site, covering approximately 4.54 acres, or 77 percent, of the site. The grassland land cover type can be best described as an *Avena-Bromus* Herbaceous Semi-Natural Alliance, according to the Manual of California Vegetation (CNPS 2020b). This vegetation alliance typically is dominated by wild oats (*Avena barbata* and/or *Avena fatua*). The annual grassland vegetation in the study area is composed primarily of slender wild oat (*Avena barbata*) and other nonnative annual grasses, including foxtail barley (*Hordeum murinum*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), and rattail six weeks fescue (*Festuca myuros*). Slight depressions in the grassland are dominated by patches of Italian rye grass (*Festuca perennis*) and Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*) intermixed with yellow star thistle and curly dock (*Rumex crispus*), indicating slightly more saturated soils in these areas. Ruderal forbs are scattered throughout the grassland and include wild radish, black mustard, winter vetch, milk thistle, bur clover, yellow star thistle, sow thistle, whitestem filaree (*Erodium moschatum*), wild geranium (*Geranium dissectum*), cheeseweed (*Malva parviflora*), and purple salsify (*Tragopogon porrifolius*).

The project site is not mowed or grazed, resulting in dense vegetation growth that would be suitable for birds that nest on or near the ground, such as ring-necked pheasant, savannah sparrow (*Passerculus sandwichensis*), red-winged blackbird (*Agelaius phoeniceus*), and wild turkey (*Meleagris gallopavo*). Wildlife species observed utilizing grassland habitat at the time of the survey include wild turkey, red-winged blackbird, savannah sparrow, and Brewer's blackbird (*Euphagus cyanocephalus*). There are three subspecies of savannah sparrow considered to be special-status species but whose ranges do not overlap with the study area: Bryant's (*P. sandwichensis alaudinus*), a California Department of Fish and Wildlife (CDFW) Species of Special Concern (SSC), is found in tidal marshes and grasslands of the north coast; Belding's (*P. sandwichensis beldingi*), listed as endangered under the CESA, is found in a few scattered saline emergent wetlands in southern California; and the large-billed savannah sparrow (*P. sandwichensis rostratus*), a CDFW SSC that is a winter visitor to saline emergent wetlands at the Salton Sea and southern coast (CDFW 2021).

Other wildlife that may be found in this habitat include small mammals such as western harvest mouse (*Reithrodontomys megalotis*), California ground squirrel (*Otospermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae*). However, no signs of ground squirrel or gopher activity (i.e., burrows, holes, soil mounds, scat, or individuals) were found during the biological survey. It is possible that soil on the site is too clayey and dense to provide good burrowing habitat for these fossorial mammals, and/or previous agricultural and urban development have eliminated these species from the area. Grassland habitats often provide important foraging habitat for raptors, including American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), white-

tailed kite (*Elanus leucurus*), and Swainson's hawk (*Buteo swainsonii*). During the biological survey, one adult red-tailed hawk was seen soaring high above the study area, and an adult American kestrel was actively foraging within the grassland habitat.

Ditch

According to the National Wetlands Inventory (NWI), an excavated riverine feature crosses the southwestern corner of the parcel, entering from the southeast and exiting the site to the northwest (USFWS 2021b) (Exhibit 3.4-2). At the time of the survey, the location of the NWI excavated riverine feature was verified and mapped within the project site boundaries. Although the NWI data show this feature as extending beyond the project site boundaries to the southeast and northwest, the biological survey determined that the feature is much reduced due to urban development since the NWI data were compiled. This feature can be characterized as an approximately 5-foot deep, highly disturbed, earth-lined, channelized, manmade ditch. The ditch was dry at the time of the survey. Based on a review of aerial imagery, the ditch appears to be dry throughout much of the year but becomes inundated between February and April during heavy rainfall years. The ditch is not connected to any other aquatic features; there are no culverts or other conveyance features in or near the ditch. Based on a review of historical aerial imagery, this ditch was previously part of a larger system of agricultural ditches and canals that bordered hay and row-crop fields throughout the now-developed north Natomas area. This ditch was cut off from its conveyance in 2002 to facilitate urban development to the west and north. Today, this remnant ditch feature appears to function as an on-site detention basin, collecting runoff from the adjacent parcel and drying out through natural percolation/evaporation.

All plants observed in and adjacent to the ditch were evaluated for their wetland indicator status (Lichvar, et al. 2016). Hydrophytic plants are those that are considered obligate wetland (OBL), facultative wetland (FACW) and facultative (FAC); non-hydrophytic plants are those with an indicator status of facultative upland (FACU) or obligate upland (UPL) (Lichvar et al. 2016). The ditch banks are generally devoid of woody vegetation, except for two small (i.e., less than 10 feet tall) isolated Fremont cottonwood (*Populus fremontii*) (UPL) trees along the western bank. No riparian or scrub habitats are present. The ditch channel and banks are densely vegetated by nonnative, ruderal forbs dominated by star thistle (UPL), prickly lettuce (*Lactuca serriola*) (FACU), common groundsel (*Senecio vulgaris*) (FACU), stinkwort (*Dittrichia graveolens*) (UPL), and field mustard (*Hirschfeldia incana*) (UPL). A few native arroyo lupine (*Lupinus succulentus*) (UPL) are also present along ditch edges. Scattered, non-native facultative plants occur in the ditch center, indicating regular disturbance and somewhat more saturated soils. These include Mediterranean barley (FAC), bristly ox-tongue (*Helminthotheca echioides*) (FAC), perennial pepperweed (*Lepidium latifolium*) (FAC), cocklebur (*Xanthium strumarium*) (FAC), and neckweed (*Veronica peregrina*) (FAC).

No indicators of seasonal wetlands, swales, and/or vernal pools (e.g., topographic depressions exhibiting hydrology and/or saturated soil, obligate wetland plants, vernal-pool endemic plant species) were observed within the project site or a 250-foot survey buffer. No seasonal wetlands or vernal pools are mapped in the NWI within the parcel or surrounding area (USFWS 2021b).



Exhibit 3.4-2 Land Cover Types²

² The project property boundary includes the proposed Inderkum High School Softball Fields project site, in addition to an area in the southern portion of the property that is not part of the proposed project and is not analyzed in this document.

SPECIAL STATUS SPECIES

Two raptors (American kestrel and red-tailed hawk) and other migratory birds were the only special-status species observed on the study area during the reconnaissance survey in April 2020. For this analysis, special-status species are plants and wildlife that fall within any of the following categories:

- ▶ Species that are listed under the federal Endangered Species Act and/or California Endangered Species Act as rare, threatened, or endangered;
- ▶ Species considered as candidates and proposed for federal or State listing as threatened or endangered;
- ▶ Wildlife designated by the CDFW as fully protected and/or species of special concern;
- ▶ Birds protected under the Migratory Bird Treaty Act (MBTA) and Fish and Game Code Sections 3503, 3503.5, 3800(a), and 3513;
- ▶ Covered Species under the NBHCP; or
- ▶ Plants ranked by California Native Plant Society to be rare, threatened, or endangered in California. CDFW recommends, and local governments may require, that CEQA reviews of proposed projects address plants on Lists 1A, 1B, and 2 of the California Native Plant Society (CNPS) California Rare Plant Ranks (CRPRs), defined as follows:
 - List 1A—Plants presumed to be extinct in California,
 - List 1B—Plant species considered rare, threatened, or endangered in California and elsewhere,
 - List 2—Plant species considered rare, threatened, or endangered in California but more common elsewhere.

Before the biological resources survey, an AECOM biologist searched the California Native Plant Society Rare Plant Inventory (CNPS 2021) and California Natural Diversity Database (CDFW 2021) for records of special-status species occurring within a nine-quadrangle area containing and surrounding the project site, including Taylor Monument, Knights Landing, Verona, Pleasant Grove, Grays Bend, Rio Linda, Davis, Sacramento West, and Sacramento East U.S. Geological Survey (USGS) 7.5-minute quadrangles (USGS 2018a–i). In addition, the biologist reviewed the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation project planning tool (USFWS 2021a), USFWS NWI (USFWS 2021b), USFWS Critical Habitat Mapper (USFWS 2021c), and the most recent biological monitoring report for the NBHCP (ICF 2019). Table 3.4-1 summarizes the results of the database searches and lists all special-status species with potential to occur in the project region, along with their regulatory status, current known distribution, habitat requirements, and an analysis of their potential to occur in or near the project site.

Table 3.4-1 Special-Status Species

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	Federally threatened; Covered Species under the NBHCP	Occurs in California in the Central Valley grasslands, Central Coast mountains, and South Coast mountains in astatic rain-filled pools. Small, clear-watered sandstone depression pools, vernal pools, alkali pools (CDFW 2021).	No potential to occur; there are no suitable habitats (vernal pools or seasonal wetlands) in or within 250 feet of the proposed project site.
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	Federally threatened; Covered Species under the NBHCP	Occurs only in the Central Valley of California. Host plant is the elderberry shrub (<i>Sambucus nigra</i>). Prefers to lay eggs in elderberries 2–8 inches in diameter; some preference shown for “stressed” elderberries (CDFW 2021).	No potential to occur; there are no suitable habitats (elderberry shrubs) in or within 1,000 feet of the proposed project site.
<i>Lepidurus packardii</i>	vernal pool tadpole shrimp	Federally endangered; Covered Species under the NBHCP	Occurs in the California Central Valley and coast ranges, and Jackson County of southern Oregon. Pools in grass-bottomed swales of unplowed grasslands, occasionally mud-bottomed and highly turbid (CDFW 2021).	No potential to occur; there are no suitable habitats (vernal pools or seasonal wetlands) in or within 250 feet of the proposed project site.
<i>Branchinecta mesovallensis</i>	midvalley fairy shrimp	Covered Species under the NBHCP	Occurs in the Sacramento Valley from Glenn County to Santa Clara County along the Coast Range, the San Joaquin Valley, and the Sierra foothills from Yuba County to Kern County. Shallow vernal pools in grasslands and lower elevation foothills.	No potential to occur; there are no suitable habitats (vernal pools or seasonal wetlands) in or within 250 feet of the proposed project site.
<i>Spea hammondi</i>	western spadefoot	CDFW Species of Special Concern; Covered Species under the NBHCP	Range includes the Central Valley and adjacent foothills. In the Coast Ranges it is found from Point Conception, Santa Barbara Co., south to the Mexican border.	No potential to occur; there are no suitable habitats (vernal pools or seasonal wetlands) in or within 250 feet of the proposed project site.
<i>Agelaius tricolor</i> (nesting colony)	tricolored blackbird	State threatened; CDFW Species of Special Concern; Covered Species under the NBHCP	Most numerous in California’s Central Valley. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony (CDFW 2021).	No potential to occur; there is no suitable nesting habitat present in or within 500 feet of the proposed project site. The nearest record of the species is from 1992, to the northeast of the project site, in an area that has since been developed (CDFW 2021).

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Buteo swainsoni</i> (nesting)	Swainson's hawk	State threatened; Covered Species under the NBHCP	Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations (CDFW 2021).	Not likely to nest but could forage in the project site; there is no suitable nesting habitat in the project site. Suitable nest trees and open foraging habitats are present within 0.75 mile of the proposed project site, and the species could forage in the project site. There are ten records of this species nesting within 3 miles (CDFW 2021), mostly along the Sacramento River and other riparian areas. The nearest nesting record is approximately 0.5 mile to the northwest, in a willow tree adjacent to an expansive open grassland (CDFW 2021).
<i>Branta hutchinsii leucopareia</i> (wintering)	cackling goose	Federal delisted; CDFW Watchlist species; Covered Species under the NBHCP	Habitats include lacustrine, fresh emergent wetlands, and moist grasslands, croplands, pastures, and meadows. This species occurs mainly in these habitats during winter in Del Norte county, the San Francisco bay-delta, and southern Central Valley.	No potential to occur; there is no suitable habitat (lacustrine, wetlands, or moist grassland/cropland) in or near the project site.
<i>Elanus leucurus</i> (nesting)	white-tailed kite	CDFW fully protected species	Yearlong resident in coastal and valley lowlands; rarely found away from agricultural areas. Inhabits herbaceous and open stages of most habitats mostly in cismontane California. Forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Uses trees with dense canopies for cover, and nests in dense oak, willow, or other tree stand, near open foraging area.	Not likely to nest but could forage in the project site; there are no dense-topped trees in or adjacent to the proposed project site. There are suitable nest trees and foraging habitat present within 500 feet north of the proposed project site, and the species could forage in the project site. There are four records of this species within 3 miles (CDFW 2021), all of which are along Dry Creek and the Natomas East Main Drainage Canal west of the project site.
<i>Coccyzus americanus occidentalis</i> (nesting)	western yellow-billed cuckoo	Federally threatened, state endangered	The northern limit of breeding in the coastal states is in the Sacramento Valley. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape (CDFW 2021).	No potential to occur; there is no suitable habitat (riparian forest) in or near the proposed project site.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Laterallus jamaicensis coturniculus</i> (year-round)	California black rail	State threatened	Found in the Pacific coast of California and along the lower Colorado River. During the breeding season, found in the northern reaches of the San Francisco Bay estuary, and Morro Bay. They have also been found year-round in the northern Sierra Nevada foothills. Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	No potential to occur; there are no suitable habitats (marshes, meadows, or swamps) in or near the proposed project site.
<i>Plegadis chihi</i> (nesting colony)	white-faced ibis	CDFW Watchlist species; Covered Species under the NBHCP	Uncommon summer resident in sections of southern California and a rare visitor in the Central Valley. Nests in dense, fresh emergent wetland. Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands.	No potential to occur; no suitable nesting or breeding habitat in or near the project site.
<i>Riparia</i> (nesting)	bank swallow	State threatened; Covered Species under the NBHCP	Migratory populations occur throughout the western United States, with some breeding populations in northern Central California. Nests in colonies in unvegetated vertical banks or cliffs with fine-textured, sandy soils, typically next to streams, rivers, or lakes, but also can be found in gravel pits and highway cuts.	No potential to occur; there are no suitable habitats (vertical banks) in or near the proposed project site.
<i>Vireo bellii pusillus</i> (nesting)	least Bell's vireo	Federally endangered and state endangered	Distributed along the California Coast from San Jose to San Diego, with isolated pockets in the Central Valley. Nests are placed along margins of bushes or on twigs projecting into pathways, usually in willow, Baccharis, and mesquite.	No potential to occur; there are no suitable habitats (brush or scrub) in or near the proposed project site.
<i>Athene cunicularia</i> (burrow sites and some wintering sites)	western burrowing owl	CDFW Species of Special Concern; Covered Species under the NBHCP	Yearlong resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Uses rodent or other burrow for roosting and nesting cover. Usually nests in old burrow of ground squirrel, or other small mammal; pipes, culverts, and nest boxes used where burrows are scarce.	No potential to occur; there are no suitable roosting or nesting habitats (i.e., burrow sites) in or within 300 feet of the proposed project site. Furthermore, burrowing owl require low/sparse herbaceous cover to scan for predators and for foraging, which is not present in the proposed project site.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Lanius ludovicianus</i> (nesting)	loggerhead shrike	CDFW Species of Special Concern; Covered Species under the NBHCP	Common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Occurs only rarely in heavily urbanized areas. Often found in open cropland.	Not likely occur; loggerhead shrike requires low/sparse herbaceous cover and a variety of perch sites, neither of which are available in or within a 100-foot buffer of the proposed project site.
<i>Thamnophis gigas</i>	giant gartersnake	Federally threatened, and state threatened; Covered Species under the NBHCP	Current range includes Glenn County, to the southern edge of the San Francisco Bay Delta, and from Merced County to Fresno County. Associated with slow-moving streams, sloughs, ponds, marshes, inundated floodplains, rice fields, and irrigation/drainage ditches within the Central Valley; also requires emergent herbaceous wetland vegetation for escape and foraging habitat, grassy banks and openings in waterside vegetation for basking, and higher elevation upland habitat (burrows) for cover and refuge from flooding during the snake's inactive season.	No potential to occur; there are no suitable habitats (open water, marsh or ditch) in or within 200 feet of the proposed project site.
<i>Emys marmorata</i>	western pond turtle	CDFW Species of Special Concern; Covered Species under the NBHCP	Associated with permanent or nearly permanent water in a wide variety of habitat types throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Nests in uplands, females may move up to 325 feet to find suitable nest sites for egg-laying.	No potential to occur; there are no suitable aquatic habitats in or within 200 feet of the proposed project site.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Ambystoma californiense</i>	California tiger salamander	Federally threatened, and state threatened; Covered Species under the NBHCP	Occurs from Sonoma County east through the Central Valley to Yolo and Sacramento Counties and south to Tulare County; and from the vicinity of San Francisco Bay south to Santa Barbara County, at elevations from 10 feet up to 3,200 feet. Found in vernal pools and other seasonal wetlands, including stock ponds, with adequate inundation period and adjacent uplands, primarily grasslands, with burrows and other belowground refugia. Will travel up to 1 mile between upland refugia and wetland habitat.	No potential to occur; there are no suitable habitats (vernal pools or seasonal wetlands) in or within 250 feet of the proposed project site.
<i>Rana draytonii</i>	California red-legged frog	Federally threatened	Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 3,936 feet. Inhabits quiet pools of streams, marshes, and occasionally ponds.	No potential to occur; there are no suitable habitats (pond, marsh or stream) in the proposed project site.
<i>Hypomesus transpacificus</i>	Delta smelt	Federally threatened, state endangered	Aquatic; generally found in brackish water below 25 degrees Celsius.	No potential to occur; no suitable habitat (open water) present.
<i>Oncorhynchus mykiss irideus</i> pop. 11	steelhead - Central Valley DPS	Federally threatened	Aquatic; found in cool, clear streams with abundant cover and well-vegetated banks, with relatively stable flows. Requires pool and riffle complexes and cold gravelly streambeds for spawning.	No potential to occur; no suitable habitat (open water) present.
<i>Oncorhynchus tshawytscha</i> pop. 11	chinook salmon - Central Valley spring-run ESU	Federally threatened, state threatened	Aquatic; requires clean, cold water over gravel beds with water temperatures between 6 and 14 degrees Celsius for spawning.	No potential to occur; no suitable habitat (open water) present.
<i>Oncorhynchus tshawytscha</i> pop. 7	chinook salmon - Sacramento River winter-run ESU	Federally endangered, and state endangered	Aquatic; requires clean, cold water over gravel beds with water temperatures between 6 and 14 degrees Celsius for spawning.	No potential to occur; no suitable habitat (open water) present.
<i>Spirinchus thaleichthys</i>	longfin smelt	Federal candidate, and state threatened	Aquatic; found in open waters of estuaries, mostly in the middle or bottom of the water column. Prefers salinities of 15-30 parts per trillion but can be found in completely freshwater to almost pure seawater.	No potential to occur; no suitable habitat (open water) present.
<i>Astragalus tener</i> var. <i>ferrisiae</i>	Ferris' milk-vetch	California Rare Plant Rank 1B.1	Vernally mesic meadows and seeps and subalkaline flats in valley and foothill grassland. Elevation range is 5 to 245 feet. Blooms April through May.	No potential to occur; no suitable habitat (meadows, seeps, or subalkaline flats) present.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	California Rare Plant Rank 1B.2	Alkaline playas, vernal pools, and adobe clay in valley and foothill grassland. Elevation range is 3 to 197 feet. Blooms March through June.	No potential to occur; no suitable habitat (alkaline playas, vernal pools, or adobe clay soil) present.
<i>Atriplex cordulata</i> var. <i>cordulata</i>	heartscale	California Rare Plant Rank 1B.1	Saline or alkaline soils in chenopod scrub, meadows, seeps, and valley and foothill grassland. Elevation range is 0 to 1,838 feet. Blooms April through October.	Not likely to occur; although most of the site consists of Jacktone clay soils that can be slightly alkaline at the surface, the site was historically developed for row-crop agriculture and is now dominated by nonnative plants.
<i>Atriplex depressa</i>	brittscale	California Rare Plant Rank 1B.2	Alkaline clay soils in chenopod scrub, meadows, seeps, playas, vernal pools, and valley and foothill grassland. Elevation range is 3 to 1,050 feet. Blooms April through October.	Not likely to occur; although most of the site consists of Jacktone clay soils that can be slightly alkaline at the surface, the site was historically developed for row-crop agriculture and is now dominated by nonnative plants.
<i>Centromadia parryi</i> ssp. <i>parryi</i>	pappose tarplant	California Rare Plant Rank 1B.2	Chaparral, coastal prairie, meadows and seeps, coastal saltmarshes, coastal salt swamps, and vernal mesic valley and foothill grassland on alkaline soils. Elevation range is 0 to 1,380 feet. Blooms March through November.	Not likely to occur; although most of the site consists of Jacktone clay soils that can be slightly alkaline at the surface, the site was historically developed for row-crop agriculture and is now dominated by nonnative plants.
<i>Chloropyron palmatum</i>	palmate-bracted bird's-beak	California Rare Plant Rank 1B.1	Alkaline soils in chenopod scrub and valley and foothill grassland. Elevation range 16 to 510 feet. Blooms May through October.	Not likely to occur; although most of the site consists of Jacktone clay soils that can be slightly alkaline at the surface, the site was historically developed for row-crop agriculture and is now dominated by nonnative plants.
<i>Downingia pusilla</i>	dwarf downingia	California Rare Plant Rank 2B.2	Mesic sites in valley and foothill grassland, and vernal pools. Elevation range is 0 to 1,460 feet. Blooms March through May.	No potential to occur; no suitable habitat (vernal pools or vernal mesic soil) present.
<i>Extriplex joaquiniana</i>	San Joaquin spearscale	California Rare Plant Rank 1B.2	Alkaline soils in chenopod scrub, meadows, seeps, playas, and valley and foothill grassland. Elevation range is 3 to 2,740 feet. Blooms April through October.	Not likely to occur; although most of the site consists of Jacktone clay soils that can be slightly alkaline at the surface, the site was historically developed for row-crop agriculture and is now dominated by nonnative plants.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	State endangered; California Rare Plant Rank 1B.2; Covered Species under the NBHCP	Marshes and swamps along lake margins, and vernal pools, often in clay soil. Elevation range is 30 to 7,790 feet. Blooms April through August.	No potential to occur; no suitable habitat (marsh, swamp or vernal pools) present.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose-mallow	California Rare Plant Rank 1B.2	Freshwater marshes and swamps. Often in riprap on sides of levees. Elevation range is 0 to 395 feet. Blooms June through September.	No potential to occur; no suitable habitat (marsh or swamp) present.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tule pea	Covered Species under the NBHCP	Freshwater and brackish marshes and swamps. Elevation range is 0 to 17 feet. Blooms from May through July, and sometimes into August and September.	No potential to occur; no suitable habitat (marsh or swamp) present.
<i>Legenere limosa</i>	legenere	California Rare Plant Rank 1B.1; Covered Species under the NBHCP	Wet areas, vernal pools, and ponds. Elevation range is 0 to 3,300 feet. Blooms Apr through June.	No potential to occur; no suitable habitat (wet areas, vernal pools or ponds) present.
<i>Lepidium latipes</i> var. <i>heckardii</i>	Heckard's pepper-grass	California Rare Plant Rank 1B.2	Standing or slow-moving water in freshwater ponds, marshes, swamps, or ditches. Elevation range is 0 to 2,000 feet. Blooms May through October, sometimes November.	No potential to occur; no suitable habitat (pond, marsh, swamp or ditch) present.
<i>Neostapfia colusana</i>	Colusa grass	Covered Species under the NBHCP	Large vernal pools with adobe soils. Elevation range is 16 to 657 feet. Blooms from May through August.	No potential to occur; no suitable habitat (vernal pools) present.
<i>Orcuttia tenuis</i>	slender Orcutt grass	Federally threatened, State endangered; and California Rare Plant Rank 1B.1; Covered Species under the NBHCP	Vernal pools, often with gravel. Elevation range is 110 to 5,775 feet. Blooms May through September, sometimes October.	No potential to occur; no suitable habitat (vernal pools) present.
<i>Orcuttia viscida</i>	Sacramento Orcutt grass	Federally endangered, state endangered; and California Rare Plant Rank 1B.1; Covered Species under the NBHCP	Vernal pools. Elevation range is 95 to 330 feet. Blooms April through July, sometimes through September (CDFW 2021).	No potential to occur; no suitable habitat (vernal pools) present.
<i>Puccinellia simplex</i>	California alkali grass	California Rare Plant Rank 1B.2	Vernally mesic sites with alkaline soils, such as sinks, flats, vernal pools, and lake margins in chenopod scrub, meadows, and valley and foothill grassland. Elevation range is 6 to 3,052 feet. Blooms March through May (CNPS 2021).	No potential to occur; no suitable habitat (vernally mesic sites) present.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	California Rare Plant Rank 1B.2; Covered Species under the NBHCP	Assorted shallow freshwater marshes and swamps. Elevation range is 0 to 2,135 feet. Blooms May through October, sometimes November (CDFW 2021).	No potential to occur; no suitable habitat (marsh or swamp) present.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	California Rare Plant Rank 1B.2	Brackish and freshwater marshes and swamps. Elevation range is 0 to 10 feet. Blooms as early as April, but usually May through June (CDFW 2021).	No potential to occur; no suitable habitat (marsh or swamp) present.
<i>Trifolium hydrophilum</i>	saline clover	California Rare Plant Rank 1B.2	Marshes and swamps, vernal pools, and mesic alkaline sites in valley and foothill grassland. Elevation range is 0 to 985 feet. Blooms April through June (CDFW 2021).	No potential to occur; no suitable habitat (marsh, swamp, vernal pools, or vernal mesic sites) present.

Notes: CDFW = California Department of Fish and Wildlife; CNDDDB = California Natural Diversity Database; NBHCP = Natomas Basin Habitat Conservation Plan.

California Rare Plant Ranks:

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

CRPR Extensions:

.1 Seriously endangered in California (>80% of occurrences are threatened and/or high degree and immediacy of threat)

.2 Fairly endangered in California (20 to 80% of occurrences are threatened)

Sources: CDFW 2021; Natomas Basin Conservancy, No Date.

Special-Status Plant Species

The database searches resulted in 20 special-status plant species being evaluated for their potential to occur in the project site or vicinity, including the 7 plant species covered by the NBHCP: Colusa grass (*Neostapfia colusana*), Sacramento Orcutt grass (*Orcuttia viscida*), slender Orcutt grass (*Orcuttia tenuis*), legenere (*Legenere limosa*), Bogg's Lake hedge hyssop (*Gratiola heterosepala*), Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*), and Sanford's arrowhead (*Sagittaria sanfordii*) (Table 3.4-1). Based on the results of the biological reconnaissance survey and database searches, there are no special status plant species with potential to occur in the study area due to a lack of suitable habitat. No special-status plant species were observed in the study area during the reconnaissance survey.

There are only two records of special-status plants within a 3-mile radius of the project site, consisting of one record of woolly rose mallow (*Hibiscus lasiocarpus* var. *occidentalis*) (a CRPR List 1B.2 plant) and one of Sanford's arrowhead (*Sagittaria sanfordii*) (CDFW 2021). The woolly rose mallow record is from a drainage ditch near the American River, and the Sanford's arrowhead record is from a large vernal pool near Hansen Ranch in Rio Linda, approximately 2.5 miles east of the project site (CDFW 2021).

There are no vernal pools, swales, or other seasonal wetlands capable of supporting the five vernal pool associated plant species covered by the NBHCP (i.e., Colusa grass, Sacramento Orcutt grass, slender Orcutt grass, legenere, or Bogg's lake hedge hyssop) within the project site or a 250-foot buffer. Due to a lack of hydrology and emergent habitat, the excavated ditch within the study area does not provide suitable habitat for the two marsh-associated plant species covered by the NBHCP (i.e., Delta tule pea and Sanford's arrowhead).

Special-Status Wildlife Species

The database searches resulted in 39 special-status wildlife species being evaluated for their potential to occur in the project site or vicinity, including the 15 species covered by the NBHCP: vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), midvalley fairy shrimp (*Branchinecta mesovallensis*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), western spadefoot (*Spea hammondi*), California tiger salamander (*Ambystoma californiense*), western pond turtle (*Emys marmorata*), giant garter snake (*Thamnophis gigas*), tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), cackling goose (*Branta hutchinsii leucopareia*), Swainson's hawk (*Buteo swainsoni*), loggerhead shrike (*Lanius ludovicianus*), white-faced ibis (*Plegadis chihi*), and bank swallow (*Riparia riparia*) (Table 3.4-1).

The results of the biological survey determined that suitable foraging habitat is present in the project site and adjacent areas for three species of special-status birds – tricolored blackbird, Swainson's hawk, and white-tailed kite (*Elanus leucurus*), of which two species (i.e., tricolored blackbird and Swainson's hawk) are Covered Species under the NBHCP (City of Sacramento, et al. 2003). Most wildlife species were eliminated from further consideration because of a lack of suitable habitat, or because the study area is outside the species' known geographical range. Except for migratory birds, no special status wildlife species were observed in the study area during the biological survey.

There are no elderberry (*Sambucus nigra*) shrubs within 1,000 feet of the project site, so there is no habitat in or near the project site for the valley elderberry longhorn beetle. There are no vernal pools, swales, or other seasonal wetlands capable of supporting the four vernal pool associated wildlife species covered by the NBHCP (i.e., vernal pool fairy shrimp, vernal pool tadpole shrimp, midvalley fairy shrimp, western spadefoot, and California tiger salamander) within the project site or a 250-foot buffer. The only aquatic feature within the project site is a

highly disturbed ditch that is dry throughout most of the year and completely isolated from other aquatic features in the region. Due to a lack of suitable habitat for giant garter snake within or adjacent to this ditch, and its lack of connectivity to suitable habitat, this species is not expected to occur in the project site. Furthermore, there is no giant garter snake habitat within 200 feet of the parcel boundaries. The western pond turtle has similar habitat requirements to the giant garter snake, and due to a lack of suitable aquatic habitat within the study area as described above, is also not considered to occur in the project site.

No suitable burrowing owl habitat (i.e., burrow sites) is within 300 feet of the project site. There are no ground squirrels, burrows, or sign of other fossorial mammals within the project site or a 300-foot buffer. Other suitable burrowing owl refugia, such as culvert pipes and rock piles, are also absent from the project site and surrounding areas. Furthermore, burrowing owl require low/sparse herbaceous cover to scan for predators and for foraging, which is not present in the study area.

The CNDDDB lists 14 occurrences of Swainson's hawk within 3 miles of the project site, with nests in riparian and drainage habitats placed in tall willow (*Salix* sp.) and cottonwood trees, or in large oak trees (*Quercus* sp.) or eucalyptus groves in urban areas, adjacent to grassland or pasture foraging habitat (CDFW 2021). Swainson's hawk usually forage within a 0.5 mile of a nest site. The nearest occurrence is a nest recorded in 2002 approximately 0.25 mile to the west, in a willow tree along the north side of Del Paso Road (CDFW 2021). This location has since been developed and there are no longer any suitable nest trees in this area. More recent occurrences of nesting Swainson's hawks in the region were recorded between 2013 and 2016 within 3 miles to the north and west of the study area near the Sacramento International Airport and Sacramento River, respectively, where there are groves of large trees and extensive areas of adjacent foraging habitat (CDFW 2021). However, suitable nest trees may be present in the North Natomas Regional Park within 0.5 mile to the north and the species may forage in the grassland habitat present within and surrounding the project site.

The numerous medium-sized, densely topped trees approximately 500 feet to the north of the project site planted as landscape trees along the peripheries of the North Natomas Regional Park could provide nesting substrate for white-tailed kite (*Elanus leucurus*) (a CDFW fully protected species). Since white-tailed kites will forage in grassland areas near nest locations, there is potential for the species to forage in the project site during the nesting season. There are four records of white-tailed kite nests within 3 miles, in valley oak (*Quercus lobata*) and ornamental trees in rural residential areas in proximity to annual grassland foraging habitat (CDFW 2021).

There are no tricolored blackbird nests or suitable nesting habitat within 500 feet of the project site. The nearest known occurrence of nesting tricolored blackbird is within 3 miles to the north in dense willow scrub along an agricultural irrigation ditch (CDFW 2021). Tricolored blackbirds may travel up to 4 miles from nesting areas to forage in agricultural and grassland habitats (Beedy et al. 2018). Therefore, the project site could support foraging tricolored blackbird.

The dense herbaceous cover and small cottonwood trees in the study area could provide suitable nesting substrate for migratory birds covered by the MBTA. The MBTA prohibits the killing, possessing, or trading of migratory birds, and essentially all native bird species in California are covered by the MBTA. Migratory bird and raptor nests are protected further by Sections 3503 and 3503.5, respectively, of the California Fish and Game Code.

3.4.2 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 the U.S. Fish and Wildlife Service?**

Less than Significant with Mitigation Incorporated. No special-status plant species were observed in the proposed project site during the reconnaissance-level survey. No suitable habitat for special-status plants is present within or adjacent to the biological study area. Two raptors (red-tailed hawk and American kestrel) and numerous migratory birds were observed utilizing the project site and/or adjacent areas for roosting and foraging during the reconnaissance-level survey.

Three special-status bird species could use the site for foraging (tricolored blackbird, Swainson's hawk, and white-tailed kite). There is no suitable nesting substrate for tricolored blackbird in or near the project site. Neither of the special-status raptors (Swainson's hawk and white-tailed kite) that could forage in the site are expected to use the site, or adjacent areas, for nesting, due to the highly disturbed and developed nature of the project area, which is surrounded by roadway development, and the scarcity of available prey in the project site. Instead, these species are expected to nest in trees in less-disturbed areas and adjacent to more expansive and productive foraging habitat, such as in oaks and eucalyptus trees scattered along the open grasslands approximately 1.5 mile to the east, or in undeveloped portions of the Natomas Regional Park to the north. CDFW guidelines recommend implementation of a 0.25-mile-wide buffer for Swainson's hawk, and the size of the buffer may be adjusted if such an adjustment would not be likely to adversely affect the nest. Potential nesting areas for Swainson's hawks are more than 0.25 mile away, and those for white-tailed kite are more than 500 feet to the north. Since there are busy roadways that would act as visual and acoustic barriers to project construction between potential nesting areas and the proposed project site, no significant impacts on nesting Swainson's hawks or white-tailed kites are expected to occur as a result of project construction.

The ruderal vegetation in the project area could provide suitable nesting substrate for ground-nesting raptors and birds, such as northern harrier and western meadowlark, and the small trees along the project boundaries could provide suitable nesting substrate for migratory birds. Project-related disruption or destruction of migratory bird nests would be a violation of the Migratory Bird Treaty Act and California Fish and Game Code Section 3503 of the. Disruption or destruction of active raptor nests would be a violation of California Fish and Game Code Section 3503.5.

Mitigation Measure 3.4-1: Conduct Preconstruction Surveys for Migratory Birds and Raptors

Vegetation must be removed only outside the nesting season, September 1 through January 31. If construction occurs between February 1 and September 15, NUSD must conduct preconstruction surveys for active nests of migratory nesting birds and raptors within 14 days before the start of any construction-related activities.

If active nests are found, NUSD must consult with a qualified biologist to establish avoidance buffers around nests that will be sufficient so that breeding will not be likely to be disrupted or adversely affected by project activities. An avoidance buffer will consist of an area where project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur. Typical avoidance buffers during the

nesting season will be a radius of 100 feet for nesting passerine birds and 500 feet for nesting raptors, unless a qualified biologist determines that smaller buffers will be enough to avoid impacts on nesting raptors and/or other birds. Factors to be considered for determining buffer size will include the presence of existing buffers provided by vegetation, topography, and infrastructure; nest height; locations of foraging territory; and baseline levels of noise and human activity. The buffer zone must be delineated by highly visible temporary construction fencing. A qualified biologist must monitor active nests during construction, so that the species is not harmed or harassed by the noise or activity resulting from project-related activities. The buffers must be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival.

Significance after Mitigation

The above mitigation measure would reduce the impact to migratory birds and raptors that may be present in the vicinity of the project-related construction activities. Mitigation Measure 3.4-1 would require preconstruction surveys to identify whether active nests are present and delineate no-construction buffer zones to avoid impacts on nesting raptors and/or other birds. As a result, the potentially significant impacts to protected wildlife species would be reduced to 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, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

No Impact. No riparian habitat or other sensitive natural communities are present in the study area. No impact on a sensitive natural community would occur as a result of the proposed project.

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

Less than Significant with Mitigation Incorporated. There is an approximately 0.10-acre ditch in the project site, along the southwestern boundary of the site characterized as an approximately 5-foot deep, highly disturbed, earth-lined, channelized, manmade ditch that appears to function as an on-site detention basin, collecting runoff from the adjacent parcel and drying out through natural percolation and evaporation. It is not connected to any other aquatic features, and there are no other aquatic features on the project site.

The Navigable Waters Protection Rule: Definition of “Waters of the United States” (2020 Final Rule) (85 Federal Register [FR] 22250) outlines four clear jurisdictional categories of waters considered “waters of the United States.” These four categories are defined as follows:

- ▶ *Territorial Seas and Traditional Navigable Waters (TNWs)*—all waters subject to the ebb and flow of the tide, or waters that are presently used, have been used in the past, or may be used in the future to transport interstate or foreign commerce, and all waters that are navigable in fact under federal law for any purpose;
- ▶ *Tributaries*—rivers, streams, or similar naturally occurring surface water channels that contribute surface water flow in a typical year either directly or indirectly through another water, including an impoundment or adjacent wetlands, to a TNW, interstate waters or wetlands, or a territorial sea. A tributary must be perennial or intermittent in a typical year;

- ▶ *Lakes and Ponds, and impoundments of jurisdictional waters* - standing bodies of open water that contribute surface water flow in a typical year either directly or indirectly through another water to a TNW, interstate waters or wetlands, or a territorial sea.
- ▶ *Adjacent Wetlands*—waters bordering, contiguous with, or neighboring jurisdictional waters, including waters separated by natural river berms, banks, dunes or similar natural feature, or constructed dikes or barriers or the like, so long as that structure allows for a direct hydrologic surface connection between the wetlands and the waters in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature. An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The 0.10-acre isolated ditch on the project site does not meet the definition of a Water of the United States under any criteria listed above. It is not subject to the ebb and flow of the tide and is not a TNW. It is also not tributary to TNW, as it is not connected to any surface water channels. It also does not contribute surface water flow indirectly through another water to a TNW or other jurisdictional waters. Therefore, the ditch on the project site would not be considered a federally protected wetland and there would be no impact to federally protected waters.

According to California state Water Code Section 13050(e), waters of the State are considered any surface water or groundwater, including saline waters, within the boundaries of the state. This includes all waters within the state's boundaries, whether public or private, including waters in both natural and artificial channels. The California State Water Boards define an area as wetland as if, under normal circumstances, it meets the following criteria: (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation (SWRCB 2019). The ditch has recurrent saturation, but it is unknown if the upper substrate of the ditch soils have anaerobic features, since a wetland delineation has not been completed for the project site. The vegetation in the ditch is dominated by FAC plants, which are considered hydrophytic plants (Lichvar et al. 2016). Therefore, if anaerobic soils are present, the ditch could meet all three of the State's criteria for a wetland and would be a state-protected wetland.

The proposed softball fields would be installed on the east side of the drainage ditch, on flat ground. The drainage ditch would not be filled (See Section 2, Project Description). After construction, fencing would be installed around the east side of the drainage ditch to provide for the safety of students and staff. No direct impacts (i.e., fill) of the ditch would occur as a result of the proposed project. However, construction of the project could result in indirect impacts from generation of fugitive dust, erosion and sedimentation, and/or pollution from accidental spills, that could adversely affect state-protected wetlands.

Mitigation Measure 3.4-2: Avoid and Minimize Indirect Impacts to State-protected Wetlands During Construction Activities

- During final project design and siting, minimize the temporary project footprint to the areas necessary for construction, and select locations that are already disturbed or developed to the greatest extent feasible.

- A 50-foot setback buffer to the ditch shall be flagged and orange exclusionary fencing shall be erected prior to the start of construction activities. The exclusionary fencing shall establish a 50-foot buffer from the ditch boundary.
- The project applicant shall obtain a Construction General Stormwater Permit from the Central Valley Regional Water Quality Control Board (RWQCB), prepare a stormwater pollution prevention plan (SWPPP), and implement best management practices (BMPs) to reduce water quality effects during construction.

Significance after Mitigation

The above mitigation measure would reduce the potential for indirect impact to state-protected wetlands that may be present in the project site. Mitigation Measure 3.4-2 would require NUSD to avoid and minimize indirect impacts to waters of the state through the establishment of a 50-foot construction setback to the ditch, preparation of a SWPPP, and implementation of BMPs. As a result, the potentially significant impacts to state-protected wetlands would be reduced to 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?

Less-than-Significant Impact. Wildlife movement corridors in the region typically are associated with rivers and creeks supporting riparian vegetation, which do not occur in the project site and are available elsewhere, including the Natomas East Main Drainage Canal to the east, the American River to the south, and the Sacramento River to the west, as well as the numerous open-water habitats associated with rice fields to the north. Project implementation temporarily would impede wildlife use of the project site; however, these project effects would be localized and would not substantially affect wildlife movements. No wildlife nursery sites are in the project site. The impact on wildlife movement and native wildlife nurseries would be less than significant.

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

No Impact. There are no trees rooted in the project area, no adjacent street trees are proposed for removal, and all construction equipment and vehicles would be staged on the project site and would not enter or travel through neighboring private properties. Since there are no trees proposed for removal, Chapter 12.56 of Sacramento City code does not apply and 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?

No Impact. The NBHCP includes avoidance and minimization measures (AMMs) in Chapter 7 to guide development within the Natomas Basin (City of Sacramento, et al. 2003). Since there are no elderberry shrubs or other suitable habitats in or within 500 feet of the proposed project site for species covered by the NBHCP, there are no AMMs listed in Chapter 7 of the NBHCP that would apply to the proposed project.

Swainson's hawk, an NBHCP covered species, may utilize the site for foraging habitat. Development of the proposed project would reduce the availability of foraging habitat for any Swainson's hawk that may nest within a

mile of the project site. NUSD has the option to pay a per-acre Habitat Conservation Fee for loss of habitat for Covered Species that could utilize the project site (i.e., Swainson's hawk), in accordance with Chapter 18.40 of Sacramento City Code. The amount of the Fee, which NUSD may voluntarily select as the preferred alternative to mitigate for adverse impacts of development on biological resources, for property located within the Permit Area is set at the rate of \$40,032 per gross acre, and if the land dedication option is utilized, the fee is set at \$25,032 per gross acre (City of Sacramento 2020). Land dedication is required for any project over 50 acres. The ruderal, grassland and ditch habitat mapped in the property, totaling approximately 5.8 acres of habitat, would require mitigation. NUSD paid a per-acre Habitat Conservation Fee for the project site in April 2020. Therefore, there would be no impact.

3.5 CULTURAL RESOURCES

3.5.1 ENVIRONMENTAL SETTING

GEOLOGICAL SETTING

The geology of the Natomas area consists of Pleistocene (2.6 million years ago to 11,700 years ago) Riverbank and Holocene basin deposits (11,700 years ago to present) (Gutierrez 2011).

PREHISTORIC SETTING

In an attempt to unify the various hypothesized cultural periods in California, Fredrickson proposed an all-encompassing scheme for cultural development, while acknowledging that these general trends may manifest themselves differently and there may be some variation between sub-regions. The Late Pleistocene Pattern and Period (>10,000 Before Present [B.P.]) in the foothill and eastern Sacramento Valley is practically non-existent. 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. Early Holocene Pattern and Period (circa [ca.] 10,000–7000 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. 8000–7000 B.P.

During the Archaic Pattern and Period – (ca. 7000–3200 B.P.), the climate in the valleys and foothills of Central California becomes warmer and dryer, and millingstones are found in abundance.

The Early and Middle Sierran Pattern (ca. 3200–600 B.P.) evidences an expansion in 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 develops, and supports large, dense populations.

During the Late Sierran Period (ca. 600–150 B.P.), archaeological village sites generally correspond to those identified in the ethnographic literature. Diagnostic artifacts are small contracting-stem points, clam shell disk beads, and trade beads introduced near the end of the period, marking the arrival of European groups (Elsasser 1978:44; Fredrickson 1973).

ETHNOGRAPHIC SETTING

Ethnographically, the project site is situated in the Nisenan (sometimes referred to as the Southern Maidu) sphere of influence. 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. In the Nisenan territory, several political divisions, constituting tribelets, each had their own respective headmen who lived in the larger villages. However, it is not known which of these larger population centers wielded more influence than others, although they were all located in the foothill areas. In general, more substantial and permanent Nisenan villages 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.

PREVIOUS CULTURAL STUDIES

A records search conducted by the North Central Information Center of the California Historical Resources Information System indicated one previously recorded cultural resource within the project area, the historic Reclamation District 1000 (P-34-5251). Reclamation District 1000 is described as a Rural Historic Landscape District and significant at the state level for the period from 1911 to 1939. It was among the first and largest of the major reclamation districts in California and was determined eligible for the National Register of Historic Places (NRHP) in 1994. None of the NRHP contributing features associated with the district are within the project area. There were two previously recorded cultural resources within a 0.25-mile radius of the project area. The first is Del Paso Road (P-34-741). The second is the Natomas Drainage Ditch an historic water conveyance system.

Two previous reports were conducted within the project area according to the North Central Information Center record search report number 11138 (Denise Bradley and Michael Corbett 1995, *Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California*) and report number 12840 (Rachel Hennessy and Eileen Barrow 2018, *Cultural Resources Study for the Natomas Town Center Project, Sacramento, Sacramento County, California*).

Within a 0.25-mile radius of the project site, nine previous reports have been filed with the North Central Information Center.³³ Report number 356 is *Cultural Resource Assessment for a Feasibility Study of Three 200 acre sites in Sacramento County, California* by Peak & Associates 1981. Report number 1729 is *Letter Report for the Adams Farms Project* by Wohlgemuth 1989. Report number 1732 is *Cultural Resource Inventory and Evaluation for the Proposed Kensington Square Development Sacramento County, California* by PAR Environmental in 1997. Report number 3440 is *A Preliminary Cultural Resource Evaluation of the Sacramento Regional Transit Systems Planning Study Downtown Sacramento/Natomas/Airport Route: EIR* by Susan Lindstrom in 1990. Report number 3441 is *Cultural Resources Survey of the Sacramento Power Project* by Ebasco Environmental in 1992. Report number 3489 is *Report on the First Phase of Archaeological Survey For the Proposed SMUD Gas Pipeline Between Winters and Sacramento, Yolo and Sacramento Counties* by Sharon Waechter in 1993. Report number 3489 sub-design B is *Addendum to the Report on the Archaeological Survey for the Proposed SMUD Gas Pipeline Between Winters and Sacramento, Yolo and Sacramento Counties* by Sharon Waechter in 1993. Report number 4189 is *Historic Property Assessment of RCS Wireless Proposed Telecommunications Facility, Site No. 091-C* by the Office of Historic Preservation in 2000. Report 4194 is *Cultural Resources Evaluation for the North Natomas Community Plan Study Area, Sacramento California* by Chavez 1985. The last report within a quarter-mile radius of the project site is *New Tower Submission Packet, Arco-Del Paso, SAC-197A* by Lorna Billat in 2007.

3.5.2 DISCUSSION

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

Less-than-Significant Impact. The proposed project would not cause any substantial adverse changes to historical resources, including Reclamation District 1000. As detailed above, none of the NRHP contributing features associated with the Reclamation District 1000 are within the project area. In addition, much of the

³³ This includes North Central Information Center report numbers 356, 1729, 1732, 3440, 3441, 3489, 4189, 4194, and 8614.

original district has been developed previously, including the existing Inderkum High School site. Therefore, impacts to historical resources would be less than significant.

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

Less than Significant with Mitigation Incorporated. Given the developed nature of much of the historic Reclamation District 1000, the fact that the project site is surrounded on all sides by existing development, and the fact that none of the contributing features associated with the district are within the project area, the project would not cause a substantial adverse change in the condition of Reclamation District 1000. However, it is possible that earth-disturbing project construction activities could inadvertently discover previously unrecorded subsurface archaeological resources. The possibility that project construction could damage or destroy such resources would be a potentially significant impact, and Mitigation Measure 3.5-1 would be required. Impacts to archaeological resources would be reduced to less than significant with implementation of Mitigation Measure 3.5-1, which includes stop work measures, in the event of an unanticipated discovery, until materials are evaluated by a qualified archaeologist.

Mitigation Measure 3.5-1: Unanticipated Discovery of Archaeological Resources

If cultural resources are encountered during ground-disturbing activities:

- Work in the immediate area shall halt and NUSD shall be notified.
- A qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology shall be contacted immediately to assess the nature, extent, and potential significance of any cultural remains.
- If the resources are determined to be Native American in origin, the archaeologist shall consult with NUSD to begin Native American consultation procedures, as appropriate.
- If the discovery is determined to be not significant, work would be permitted to continue in the area. Potentially significant resources may require subsurface testing program to determine the resource boundaries within the project site, assess the integrity of the resource, and evaluate the site's significance through a study of its features and artifacts.
- If, in consultation with the NUSD, a discovery is determined to be significant, a mitigation plan would be prepared and carried out in accordance with CEQA guidelines.
- If the resource cannot be avoided, a data recovery plan would be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions
- Unless otherwise agreed upon with consulting Native American representatives, any cultural material collected as part of an assessment or data recovery effort would be property of the NUSD and curated at a qualified facility as directed by NUSD.

Significance after Mitigation

Implementation of Mitigation Measure 3.5-1 would reduce potentially significant impacts to archaeological resources to a less-than-significant level by requiring implementation of appropriate measures in the unlikely event that a cultural resource is discovered to minimize potential impacts.

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

Less-than-Significant Impact. While there is little likelihood that human remains would be disturbed by the proposed project, the possibility would remain that ground-disturbing activities during construction could uncover previously unknown human remains. If human remains are found within the project site, the California Health and Safety Code (HSC) requires that excavation be halted in the immediate area and that the county coroner be notified to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (HSC. 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by telephone within 24 hours of making that determination (HSC 7050.5[c]).

The responsibilities of the NAHC for acting upon notification of a discovery of Native American human remains are identified within the California Public Resources Code (Public Resources Code Section 5097.9). The NAHC is responsible for immediately notifying the person it believes is the Most Likely Descendant (MLD) of the Native American remains. With permission of the legal landowner(s), the MLD may visit the site and make recommendations regarding the treatment and disposition of the human remains and any associated grave goods. This should be conducted within 24 hours of their notification by the NAHC (Public Resources Code Section 5097.98[a]). If an agreement for treatment of the remains cannot be resolved satisfactorily, any of the parties may request mediation by the NAHC (Public Resources Code Section 5097.94[k]). Should mediation fail, the landowner or the landowner's representative must re-inter the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance (Public Resources Code Section 5097.98[b]). Adherence to this existing regulation regarding the treatment of human remain would ensure a less-than-significant impact.

3.6 ENERGY

3.6.1 ENVIRONMENTAL SETTING

PETROLEUM

Among the various types of energy sources, petroleum (diesel fuel) is the primary fuel consumed, in terms of construction and operational energy demand. The transportation end-use sector consumes the largest share of energy in California. In 2018, 39 percent of California's energy consumption resulted from the transport of goods and people (U.S. Energy Information Administration 2020). In Sacramento County, it is estimated that 600 million gallons of gasoline and 41 million gallons of diesel were sold in 2019 (CEC 2020b). The 2005 Renewable Fuel Standard Program and 2007 Energy Independence and Security Act establish requirements for renewable fuel use to replace petroleum-based fuels.

ELECTRICAL SERVICES

Electrical service in the project area is provided by the Sacramento Metropolitan Utility District (SMUD). In 2019, SMUD delivered approximately 10,214 gigawatt-hours (GWh) of electricity to its customers (California Energy Commission [CEC] 2020a). 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).

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. The proposed project would not have a substantial impact on energy consumption or conservation. The proposed project would not substantially increase energy consumption or result in inefficient energy use. The proposed project consists of installing two new softball fields and perimeter fencing. Construction equipment would be used to trench for the new irrigation line and construct the new restroom and storage building. These activities would consume fuel during the construction process; however, the proposed project's small size and the previous grading that has already occurred at the site would minimize the energy consumed. The project site consists of a vacant, flat field. The proposed project would not include unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites. The only energy used during project operation would be a gasoline-powered commercial lawn mower to maintain the turf grass at the softball fields. Furthermore, the proposed project would be designed with an energy efficient building that would comply with the current version of the CalGreen Code. Therefore, the proposed project would not result in an inefficient, wasteful, or unnecessary consumption of energy resources during project construction or operation 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 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. There are no relevant local or state plans for renewable energy facilities that would conflict with development of the site for softball fields. The proposed 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

3.7.1 ENVIRONMENTAL SETTING

GEOLOGY, SEISMICITY, AND SOILS

The project site is located in the southern Sacramento Valley, on a flat alluvial plain composed of Pleistocene (2.6 million years B.P. to 11,700 years B.P.) and Holocene (11,700 years B.P. and younger) age deposits. These sediments overlie the thick sequence of sedimentary rock units that form the deeply buried bedrock units in the mid-basin areas of the valley. Elevations at the project site range from approximately 17–19 feet above mean sea level, sloping gently from north to south.

The Sacramento Valley has historically experienced a very low level of seismic activity. The nearest potentially active faults are located approximately 22 miles east in the Foothills Fault System, and active faults are located approximately 40–50 miles north near Lake Oroville and west in the Coast Ranges (Jennings and Bryant 2010).

Based on a review of Natural Resources Conservation Service (NRCS 2020) soil survey data, the project site consists almost entirely of Jacktone clay, drained, 0–2 percent slopes. The westernmost approximately 0.25 acres of the project site consists of San Joaquin silt loam, 0–3 percent slopes. The Jacktone clay soil type has a high shrink-swell potential, is somewhat poorly drained, has a moderately low permeability, and a low wind and water erosion hazard (NRCS 2020).

PALEONTOLOGICAL RESOURCES

Based on geologic mapping prepared by Gutierrez (2011), the project site is located in Holocene-age Basin Deposits, consisting of fine-grained sediments with horizontal stratification deposited by standing or slow moving water in topographic lows. An outcrop of the Pleistocene-age Riverbank Formation is mapped adjacent to the project site, on the west side of the drainage canal; therefore, the Riverbank Formation is likely present at a shallow depth underneath the ground surface at the project site.

3.7.2 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. The project site is not located within or adjacent to a fault zoned under the Alquist-Priolo Earthquake Fault Zone Act, or any other known fault. The nearest fault zoned under the Alquist-Priolo Act is the Cleveland Hill Fault south of Lake Oroville, approximately 50 miles to the north (California Geological Survey 2017). Thus, there would be no impact.

ii) Strong seismic ground shaking?

Less-than-Significant Impact. The nearest active faults are located approximately 40–50 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 (PGA), 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 Geological Survey (CGS) Probabilistic Seismic Hazards Assessment Model (CGS 2008) indicates there is a 1-in-10 probability that an earthquake within 50 years would result in a peak horizontal ground acceleration of 0.195g (where g is a percentage of gravity) at the project site, which indicates that a low level of seismic shaking is anticipated.

All project-related facilities would be designed and constructed in accordance with standard engineering practices and CDE requirements, including California Code of Regulations Title 5, Division, Chapter 14, Sections 14001-14036, which requires preparation of a site-specific geotechnical and engineering report that contains recommendations to reduce seismic, geologic, and soils hazards. Furthermore, the new restroom and storage building would be required by law to be designed and constructed in accordance with the current edition 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 depth to groundwater ranged from 20–30 feet below the ground surface in the spring of 2020 (DWR 2021), and active seismic sources are located a relatively long distance away (Jennings and Bryant 2010). Therefore, liquefaction is unlikely to occur at the project site. Thus, there would be no impact.

iv) Landslides?

No Impact. The project site is located on a nearly flat alluvial plain in the central Sacramento Valley. There are no steep slopes at the project site or in the project vicinity where landslides could occur. 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 installation of two softball fields and a new restroom and storage building on an approximately 3-acre site; high-mast light standards would not be included. The project site is flat, and consists primarily of the Jacktone Clay soil type, which has a low wind and water erosion hazard. Project related earth-moving activities could expose soils to wind and rain events, which could mobilize loose soil and result soil erosion. However, all project-related facilities would be designed and constructed in accordance with standard engineering practices and CDE requirements, including California Code of Regulations Title 5, Division, Chapter 14, Sections 14001–14036, which requires preparation of a site-specific

geotechnical and engineering report that contains recommendations to reduce seismic, geologic, and soils hazards, including soil erosion. Compliance with CDE requirements would result in a less-than-significant impact.

- 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?**

No Impact. As discussed in a) iii) above, the project site is composed primarily of the Jacktone Clay soil type (NRCS 2020). The project site is not underlain by a restrictive layer of low permeability at a shallow depth (NRCS 2020), which might otherwise result in liquefaction hazards from the weight of construction equipment during the winter rainy season. The depth to groundwater ranged from 20–30 feet below the ground surface in the spring of 2020 (DWR 2021), and active seismic sources are located a relatively long distance away (Jennings and Bryant 2010). Therefore, liquefaction and lateral spreading would not pose a hazard at the project site. Furthermore, compliance with the CBC and CDE requirements would ensure that project features are designed appropriately based on site-specific conditions. Thus, there would be no impact.

- 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. The top 2–3 feet of soil at the project site are composed primarily of the Jacktone Clay soil type, which is highly expansive (NRCS 2020). Expansive soils are composed largely of clays, which greatly increase in volume when saturated with water and shrink when dried. Because of this shrink-swell effect, structural foundations may rise during the rainy season and fall during the dry season. If this expansive movement varies beneath different parts of a structure, the foundation may crack and portions of the structure may become distorted. However, the CBC and CDE require preparation of geotechnical engineering reports that include specific recommendations for construction in expansive soil, which would ensure that project features are designed appropriately based on site-specific conditions. Thus, 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. The proposed project would not require installation of a septic system or an alternative wastewater disposal system. Thus, there would be no impact.

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

Less than Significant with Mitigation Incorporated. The top 2–3 feet of soil at the project site is composed of Holocene-age Basin Deposits (Gutierrez 2011). An outcrop of the Pleistocene-age Riverbank Formation (which is paleontologically sensitive due to the number of vertebrate fossils recovered throughout the Central Valley) is mapped adjacent to the project site, on the west side of the drainage canal; therefore, the Riverbank Formation is likely present at a shallow depth underneath the ground surface at the project site. Holocene-age rock formations contain only the remains of extant, modern taxa (if any resources are present), which are not considered “unique” paleontological resources under CEQA. Thus, the Holocene-age rock formations are not paleontologically sensitive. Furthermore, the project site does not contain any unique geologic features, such as a canyon, waterfall, or unique rock outcroppings.

However, it is possible that earth-disturbing project construction activities could inadvertently damage or destroy previously unrecorded paleontological resources. Implementation of Mitigation Measure 3.7-1 would mitigate potentially significant impacts on paleontological resources in the event of an unanticipated discovery to a less-than-significant level.

Mitigation Measure 3.7-1: Unanticipated Discovery of Paleontological Resources

Prior to the start of earthmoving activities at the project site, inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. This worker training may either be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources or prepared and presented separately by a qualified paleontologist.

If paleontological resources are discovered during earthmoving activities, immediately cease work in the vicinity of the find and notify the City. The District will retain a qualified paleontologist to evaluate the resource and prepare a recovery plan based on Society of Vertebrate Paleontology (SVP) Guidelines (SVP 1996). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the District, as the CEQA lead agency, to be necessary and feasible will be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-1 would reduce potentially significant impacts to paleontological resources to a less-than-significant level by requiring implementation of appropriate measures in the unlikely event that a paleontological resource is discovered to minimize potential impacts.

3.8 GREENHOUSE GAS EMISSIONS

3.8.1 ENVIRONMENTAL SETTING

Certain gases in the 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 the earth's surface, and a smaller portion of this radiation is reflected toward space through the atmosphere. However, infrared radiation is selectively absorbed by GHGs in the atmosphere. As a result, infrared radiation released from the 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. Anthropogenic (e.g., human caused) emissions of these GHGs lead to atmospheric levels 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.

Emissions of GHGs contribute, on a cumulative basis, to global climate change. The proposed project would not contribute significantly to climate change by itself. However, cumulative emissions from many projects and plans would all contribute to global GHG concentrations and the climate system. This section considers the proposed project's cumulative contribution to the significant cumulative impact of climate change.

GHGs are present in the atmosphere naturally, are released by natural and anthropogenic (human-caused) sources, and are formed from secondary reactions taking place in the atmosphere. The following are GHGs that are widely seen as the principal contributors to human-induced global climate change that are relevant to the project: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O). Emissions of CO₂ are byproducts of fossil fuel combustion. CH₄ is the main component of natural gas and is also associated with agricultural practices and landfills. N₂O typically results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO₂. The global warming potential of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime"). The global warming potential of each gas is measured relative to CO₂, the most abundant GHG. GHGs with lower emissions rates than CO₂ may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO₂ (i.e., high global warming potential). The concept of CO₂-equivalents (CO₂e) is used to account for the different global warming potential potentials of GHGs to absorb infrared radiation.

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, no single project alone is expected to measurably contribute to a noticeable incremental change in the global average temperature, or to a global, local, or micro climate. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies evaluate the cumulative impacts of GHGs, even relatively small additions.

3.8.2 DISCUSSION

- a) b) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment or conflict with an applicable plan, policy, or**

regulation adopted for the purposes of reducing emissions of greenhouse gas emissions?

Less-than-Significant Impact. Construction of the proposed project would generate GHG emissions over the short-term as a result of the use of construction equipment and construction-related vehicles (worker, vendor, and haul trips). Construction would occur over approximately four months and would not include the construction of any parking or roads. Operational emissions sources associated with the proposed project would be minimal, including direct emissions from small equipment for intermittent landscaping and maintenance of the site, and indirect emissions from electricity requirements associated with the water demand for the site. The proposed project does not include new parking or roads, and is not anticipated to result in additional traffic to the campus. Thus, there would be no long-term increase in mobile-source emissions, and only minor emissions associated with building operations (the restroom facility) and maintenance activities.

For the purposes of determining whether the proposed project's construction related GHG emissions may result in a cumulatively considerable contribution to the cumulative impact of climate change, for land development and construction projects, SMAQMD considers a project's construction-generated emissions to exceed GHG emission thresholds if annual emissions exceed 1,100 metric tons (MT) CO₂e per year. For operational GHG emissions, in April 2020, the SMAQMD adopted an updated land development GHG threshold, requiring projects to demonstrate consistency with the Climate Change Scoping Plan; SMAQMD's *Greenhouse Gas Thresholds/Best Management Practices Applicability* (2020) identifies BMPs that should be applied to project operations in order to demonstrate consistency with the Climate Change Scoping Plan. These BMPs include designing and construction the project without natural gas infrastructure (BMP 1) and meeting current California Green Building Standards Code (CalGreen) Tier 2 standards, except making all electric vehicle spaces to be electric vehicle ready. Projects that meet these criteria and do not exceed the screening threshold of 1,100 metric tons CO₂e per year, would be considered to result in a less than significant level of GHG emissions.

Construction-related and operational emissions were modeled using the CalEEMod, Version 2016.3.2. Emissions estimates are based on construction occurring in the year 2021, complete for operations in 2022. Table 3.8-1 presents a summary of the proposed project's maximum annual construction related GHG emissions and annual operational emissions by emissions source.

Table 3.8-1 Greenhouse Gas Emissions Estimates from Construction and Operations of the Proposed Project

Construction GHG Emissions Source	Greenhouse Gas Emissions (MT CO ₂ e per year)
2021	142
Operational GHG Emissions Source	Greenhouse Gas Emissions (MT CO ₂ e per year)
Area	0.0001
Energy	0.00
Mobile	0.00
Waste	0.15
Water	3.92
Total Annual Operational Emissions 1	4.08

Notes: MT CO₂e = metric tons carbon dioxide equivalents

¹ Totals do not add due to rounding.

Source: Modeled by AECOM in 2021

Construction of the proposed project would result in GHG emissions substantially less than the SMAQMD-recommended threshold of significance of 1,100 MT CO₂e per year. In addition, as noted, operations would not

generate any increase in energy or mobile emissions sources, does not include any new parking or roads, and total emissions are estimated to be approximately 4 metric tons of CO₂e per year. Therefore, project-generated GHG emissions from construction and operations would be well below SMAQMD-recommended thresholds of significance. This impact would be less than significant.

This page intentionally left blank

3.9 HAZARDS AND HAZARDOUS MATERIALS

3.9.1 ENVIRONMENTAL SETTING

KNOWN HAZARDOUS MATERIALS

AECOM performed a search of publicly available databases maintained under Public Resources Code Section 65962.5 (i.e., the “Cortese List”) to determine whether any known hazardous materials are present either on or within 0.25 mile of the project site. The Hazardous Waste and Substances Site List (the “EnviroStor” database) is maintained by the California Department of Toxic Substances Control (DTSC) as part of the requirements of Public Resources Code Section 65962.5. The State Water Resources Control Board (SWRCB) maintains the GeoTracker database, an information management system for cases involving groundwater contamination. There are no open or closed hazardous materials sites within 1.1 miles of the project site (DTSC 2021, SWRCB 2021).

There are no active Superfund sites in the project vicinity; the nearest Superfund site is approximately 5.5 miles east, at the former McClellan Air Force Base (U.S. Environmental Protection Agency [EPA] 2021).

SCHOOLS

The existing Inderkum High School Campus is across the street (approximately 45 feet) from the project site, on the east side of Via Ingoglia.

AIRPORTS

The Sacramento International Airport is approximately 3.6 miles northwest and Rio Linda Airport is approximately 4 miles east of the project site. The project site is not located within any of Sacramento International’s or Rio Linda Airport’s designated safety zones (Sacramento Area Council of Governments [SACOG] Airport Land Use Commission 2021), or the Sacramento International Airport Policy Planning Area (SACOG 2013).

WILDLAND FIRE

The project site is located in the urbanized area of north Natomas. The project site and surrounding area have been designated by the California Department of Forestry and Fire Protection (CALFIRE) as a Local Responsibility Area, and there are no moderate, high, or very high fire hazard severity zones at the project site or in the project area (CALFIRE 2020). Fire services to the project site would be provided by the City of Sacramento Fire Department. The nearest fire station, No. 30, is approximately 1.2 miles northeast of the project site, at 1901 Club Center Drive.

3.9.2 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. The proposed project, which involves installing two high school softball fields and a new restroom and storage building using typical earthmoving and construction equipment, could result in the transport, use, or disposal of hazardous materials. However, the proposed project would be required to

implement and comply with existing hazardous material regulations. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated, quicker response to emergencies. Thus, 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. Construction activities to install the two new softball fields and restroom and storage building would entail the use of small amounts of hazardous materials such as fuel, oil, paints, and solvents. However, the handling and use of these materials is heavily regulated at both the federal and State level, and it is unlikely that a spill would occur, particularly given the small amount of construction equipment that would be necessary. Thus, 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?

Less-than-Significant Impact. The existing Inderkum High School campus is across the street from the proposed softball fields. Construction of the proposed project would entail the use of small amounts of hazardous materials such as fuel, oils, paints, and solvents, and gasoline would be used in a lawnmower during project operation. However, the handling and use of these materials is heavily regulated at both the federal and State level and would not result in hazardous emissions that could harm school children. Thus, this impact would be less than significant.

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. In 2021, AECOM performed an updated search of publicly available databases maintained under Public Resources Code Section 65962.5 (i.e., the “Cortese List”) to determine whether any known hazardous materials are present either on or within 0.25 mile of the project site. The results of these records searches indicated that the project site is not located on or near a known hazardous materials site (DTSC 2021, SWRCB 2021, EPA 2021). Therefore, the proposed project would not result in a significant hazard to the public or the environment, and 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 Sacramento International Airport is approximately 3.6 miles northwest and Rio Linda Airport is approximately 4 miles east of the project site. The project site is not located within any of Sacramento International’s or Rio Linda Airport’s designated safety zones, noise contours, or airport planning areas. Thus, the proposed project would not result in a safety hazard or excessive noise for construction workers, students, or employees, and there would be no impact.

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

No Impact. All construction materials and equipment would be staged on the project site, and no street closures would be necessary. The proposed project consists of installing two new Inderkum High School softball fields on a vacant parcel of land, which would have no impact on emergency response plans or emergency evacuation plans.

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

No Impact. The project site is located in the urbanized area of North Natomas. The site is flat and is covered with annual and perennial grasses and weeds. The surrounding area consists of residential and commercial development, the Inderkum High School campus, and the North Natomas Regional Park. The project site and the surrounding area are located in a Local Responsibility Area (as opposed to a State Responsibility Area), and there are no moderate, high, or very high fire hazard severity zones at the project site or in the project area (CALFIRE 2020). Fire services to the project site would be provided by the City of Sacramento Fire Department. The nearest fire station, No. 30, is approximately 1.2 miles northeast of the project site, at 1901 Club Center Drive. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and there would be no impact.

This page intentionally left blank

3.10 HYDROLOGY AND WATER QUALITY

3.10.1 ENVIRONMENTAL SETTING

SURFACE WATER HYDROLOGY AND STORM DRAINAGE

The project site is located in the northeastern portion of the Natomas Basin, within the Sacramento River Hydrologic Basin. The Natomas Basin is a low-lying area that is east of the Sacramento River and north (upstream) of its confluence with the American River.

A manmade, approximately 5-foot-deep, earth-lined, channelized drainage ditch is present near the western boundary of the project site. The drainage ditch is dry throughout much of the year, but becomes inundated between February and April during heavy rainfall years. The ditch is not connected to any other aquatic features; there are no culverts or other conveyance features in or near the ditch. Based on a review of historical aerial imagery, this ditch was previously part of a larger system of agricultural ditches and canals that bordered hay and row-crop fields throughout the now-developed north Natomas area. This ditch was cut off from its conveyance in 2002 to facilitate urban development to the west and north. Today, this remnant ditch collects runoff from the adjacent parcel through existing surface water flow patterns and dries out through natural percolation/evaporation (AECOM 2020).

The Natomas Basin is surrounded by levees. The project site lies within the Reclamation District (RD) 1000 service area. RD 1000 provides agricultural drainage, flood control, and levee maintenance in the Natomas Basin. RD 1000 operates and maintains a drainage system consisting of 30 miles of main drainage canals, approximately 150 miles of drainage ditches, and seven main pumping stations in the Natomas Basin. This drainage system collects stormwater runoff from both agricultural and municipal dischargers, as well as irrigation return water, and delivers the water via pumping plants for disposal in the Sacramento River.

The City is responsible for maintenance of internal conveyance, detention basins, and pump stations that discharge into the RD 1000 system; RD 1000 is responsible for maintenance of the canal system. The North Natomas Comprehensive Drainage Plan identifies various basin areas including detention basins and pumping facilities to convey discharge to the existing RD 1000 system within the North Natomas Community Plan area. Runoff from the project site drains north to North Natomas Basin No. 1, which is approximately 0.5 mile to the northeast within North Natomas Regional Park (City of Sacramento Department of Finance 2011). Basin No. 1 discharges to RD 1000's East Drainage Canal, which conveys water to its confluence with the Main Drainage Canal northwest of the I-80/I-5 interchange approximately 2.5 miles south of the project site. The Main Drainage Canal discharges into the Sacramento River through RD 1000 Pumping Plant No. 1.

SURFACE WATER QUALITY

Water quality in the Sacramento area is regulated by the Central Valley RWQCB through the *Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins* (Central Valley RWQCB 2018). Section 303(d) of the Federal Clean Water Act (CWA) requires states to adopt water quality standards for all surface waters of the U.S.; these standards are based on the designated beneficial use(s) of the surface water body, which are listed in the relevant Basin Plan.

The on-site drainage channel, along with RD 1000's East Drainage Canal, West Drainage Canal, and Main Drainage Canal, are considered agricultural drainages and therefore are not included in the CWA Section 303(d) list of impaired waterbodies. However, municipal stormwater discharges into RD 1000's facilities are regulated by RD 1000, and are also regulated by the City and County of Sacramento under the Sacramento Areawide National Pollutant Discharge Elimination System (NPDES) MS4 permit.

The Sacramento River is the receiving water body for drainage from most of the Natomas Basin, including the Main Drainage Canal. "Receiving waters" is a general term typically used to describe any surface water body, such as a creek, river, lake, bay, or ocean that receives runoff. The Sacramento River from Knight's Landing to the Delta is on the CWA Section 303(d) list of impaired water bodies for chlordane, dichlorodiphenyltrichloroethane (DDT), dieldrin, mercury, polychlorinated biphenyls (PCBs), and toxicity. Total Maximum Daily Loads (TMDLs) are in the process of being developed (SWRCB 2018).

FLOODING

In the Natomas area, flood control facilities are maintained by RD 1000, the Sacramento Area Flood Control Agency (SAFCA), and the U.S. Army Corps of Engineers (USACE). The Natomas Basin covers 81 square miles and includes 42 miles of levees maintained by RD 1000. The levees are inspected, maintained, and repaired by RD 1000 on a regular basis throughout the year and are patrolled continuously during periods of high water to safeguard against failure.

The project site and surrounding area are classified by the Federal Emergency Management Agency (FEMA) as A99 (FEMA 2015). Zone A99 corresponds to areas within the 1-percent annual chance floodplain that will be protected by a Federal flood protection system when construction has reached specified statutory milestones. The SAFCA and the USACE Sacramento District are continuing to make improvements to levees in the Natomas Basin. The A99 Zone designation means that FEMA has made an adequate progress determination, allowing permitting and construction of new structures in advance of the completion of flood protection improvements.

The project site and the surrounding area are also within the 200-year floodplain (0.005 annual exceedance probability [AEP]) (California Department of Water Resources [DWR] 2008). SAFCA is continuing to work with the USACE's Sacramento District and the Central Valley Flood Protection Board to provide areas protected by the Sacramento River Flood Control Project (SRFCP), including North Natomas, with protection against the 200-year storm. As part of this effort, SAFCA continues to implement the Natomas Levee Improvement Program (NLIP), most of which has been completed.

GROUNDWATER

The project site is located within the Sacramento Valley Groundwater Basin, North American Groundwater Subbasin (No. 5-21.64), which has been designated by DWR as a High Priority Basin under the Sustainable Groundwater Management Act (DWR 2019). A groundwater sustainability plan (GSP) is the process of being prepared, and completion is anticipated by mid-2021 (Sacramento Groundwater Authority GSA 2020).

Groundwater levels in the vicinity of the project site ranged from 20 to 30 feet below the ground surface in the spring of 2020 (DWR 2021).

3.10.2 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 proposed project involves installation of two new softball fields, a new restroom and storage building, fencing, and an irrigation system on an existing flat, vacant site. Project-related activities are not anticipated to encounter groundwater. The proposed project would result in minor increases in the amount of impervious surfaces. However, majority of the project site would be vegetated with turf grass. The on-site drainage ditch does not connect to any other surface water features. The ditch would not be filled as part of the proposed project. Overland stormwater flows would not change as part of the proposed project, and would continue to flow to the southwest into the drainage ditch (where they would evaporate naturally) and would also percolate into the groundwater aquifer throughout the project site.

Construction activities that are implemented without stormwater BMPs could violate water quality standards or cause direct harm to aquatic organisms. Nonetheless, the District is required by law to obtain coverage under the SWRCB's NPDES Stormwater Permit for General Construction Activity (Order 2009-0009-DWQ as amended by Order No. 2012-0006-DWQ) (Construction General Permit). Compliance with the NPDES Construction General Permit requires the District (or its construction contractor) to prepare a Stormwater Pollution Prevention Plan (SWPPP) and implement associated Best Management Practices (BMPs) that are specifically designed to reduce the potential for runoff and the release, mobilization, and exposure of pollutants.

In addition, project operation is not anticipated to generate additional wastewater. The new restroom is expected to serve existing students at Inderkum High School and there would be no net increase in the demand for wastewater treatment within a given service area. The proposed project would connect to existing wastewater infrastructure; therefore, all wastewater produced at the site would be required to meet discharge standards. Thus, the proposed project would not violate water quality standards or waste discharge requirements (WDRs) or otherwise substantially degrade surface or ground water quality, and 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 would not require the construction of new groundwater wells. The existing Inderkum High School receives water from the City of Sacramento through an existing underground water supply line located in New Market Drive. The District would install a new water supply line for the proposed restroom building and a secondary irrigation line to supply the minor amount of additional water necessary for turf grass irrigation at the project site, via a new tie-in to the existing water main line in either New Market Drive or Via Ingoglia. The proposed project includes the addition of a new 480 square-foot restroom and storage building, which would result in minor increases in the amount of impervious surfaces on-site. However the minor addition of impervious surfaces would not substantially impede groundwater recharge. Additionally, the softball fields would be vegetated with turf grass and the remainder of the site would be covered with bark mulch and drought-tolerant landscape plantings that would provide infiltration. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere with groundwater recharge, and 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. As discussed in a) above, the proposed project involves installation of two new turf softball fields, a new 480 square-foot restroom and storage building, perimeter fencing, and irrigation line. The District would prepare and implement a SWPPP with associated BMPs specifically designed to reduce erosion and siltation during the construction process. Furthermore, the District would comply with the requirements of the City's MS4 Permit during the project's operational phase to reduce off-site transport of sediment and other pollutants. Therefore, the proposed project would not result in substantial erosion or siltation on- or off-site, and this 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 offsite;

Less-than-Significant Impact. The proposed project includes the addition of a new 480 square-foot restroom building and storage area, which would result in minor increases in the amount of impervious surfaces on-site. However, proposed turf areas would provide infiltration of stormwater and reduce the volume of stormwater flowing off-site. The proposed two new turf softball fields would require minimal water usage for irrigation. The irrigation system would be designed to apply water only at a rate and at times of the year necessary to support the turf grass. Any excess irrigation water would be minor, and would percolate through the soil into the groundwater table. Therefore, the proposed project is not anticipated to substantially increase the potential for on-site and off-site flooding by increasing the amount of surface runoff through minor additions of impervious surfaces. Additionally, the proposed project would adhere to, and be designed in accordance with, State and local regulations and Sacramento City and County hydrology standards, as applicable. Thus, this 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; or

Less-than-Significant Impact. For the same reasons described in c) i) and ii) above, the proposed project would result in a minor increase in the amount of impervious surfaces. However, the proposed project is not anticipated to substantially increase surface runoff through additions of impervious surfaces that would exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff. Additionally, the proposed project would adhere to, and be designed in accordance with, State and local regulations and Sacramento City and County hydrology standards, as applicable. Thus, this impact would be less than significant.

iv) Impede or redirect flood flows.

Less-than-Significant Impact. The project site is designated by FEMA (2015) as flood zone A99, which refers to areas that are subject to inundation by the 1-percent-annual-chance (0.01 AEP) flood event, but which will ultimately be protected upon completion of an under-construction federal flood protection system. These are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as

dikes, dams, and levees, to consider it complete for insurance rating purposes (Flood Insurance Rate Map [FIRM]).

The proposed project would adhere to, and be designed in accordance with, State and local regulations and Sacramento City and County hydrology standards, as applicable. Therefore, the two new turf softball fields and 480 square foot restroom and storage building would not impede flood flows. Additionally, the perimeter fencing would be open, allowing water to flow through. The proposed project is not anticipated to substantially impede or redirect flood flows; thus, this impact would be less than significant.

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

No Impact. Installation of the two new softball fields and restroom and storage building would require construction equipment for activities such as grading and the use of a backhoe for minor trenching of the new water line. Construction and operation of the proposed project would entail the use of small amounts of hazardous materials such as fuel, oils, paints, and solvents. However, the handling and use of these materials is heavily regulated at both the federal and State level, and the small amount of materials used on-site during construction and operation will be required to be used and stored in compliance with applicable regulations designed to avoid public health impacts. No acutely hazardous materials would be needed for construction or operations. There would be no risk for release of pollutants due to project inundation, and there would be no impact.

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

No Impact. For the reasons described in a) and b) above, the proposed project would not conflict with or obstruct implementation of the *Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins* (Central Valley RWQCB 2018), and would not interfere with GSP planning efforts for the North American Groundwater Subbasin that are ongoing and expected to be completed in mid-2021. Thus, there would be no impact.

This page intentionally left blank

3.11 LAND USE AND PLANNING

3.11.1 ENVIRONMENTAL SETTING

The project site is located in the North Natomas area of the city of Sacramento. The site is vacant, and is surrounded by the North Natomas Regional Park to the north, the existing Inderkum High School campus to the east, commercial and office uses to the south and west, and residential development to the northwest.

The *Sacramento 2035 General Plan*, adopted in 2015, includes various community plans covering locations throughout the city. The project site is located within the North Natomas Community Plan (City of Sacramento 2015a). These plans identify the need for public facilities and services in the city and provide the basis for county zoning and approvals, as well as other regulatory actions.

The project site is zoned Agriculture-Open Space (A-OS) and is designated as a “Traditional Center” (for development with residential, retail, service, office, public, and quasi-public uses) (City of Sacramento 2011, 2021). Public K–12 schools and outdoor recreational facilities are allowed (with a conditional use permit), in areas that are zoned A-OS under the City of Sacramento Zoning Code, Chapter 17.200, Article II.

3.11.2 DISCUSSION

a) Physically divide an established community?

No Impact. The approximately 3.5-acre project site is currently vacant, and is adjacent to the existing Inderkum High School Campus. The site is also adjacent to the North Natomas Regional Park, and commercial, office, and residential land uses. The North Natomas Community Plan (City of Sacramento 2015a) provides for inclusion of schools and recreational facilities to serve the residents of North Natomas. Therefore, the proposed project would not physically divide an established community, and 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. Use of the project site as a school is allowed (with a conditional use permit) under the existing zoning and land use designations, and the project site is planned for urban development under the City of Sacramento General Plan (City of Sacramento 2015b). The proposed project would not conflict with policies or objectives adopted in the City’s General Plan or the North Natomas Community Plan. Thus, there would be no impact.

This page intentionally left blank

3.12 MINERAL RESOURCES

3.12.1 ENVIRONMENTAL SETTING

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 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)-3: areas containing mineral deposits, the significance of which cannot be evaluated from available data (Dupras 1999). 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 locally-designated important area of known mineral resources under the Sacramento County General Plan (Sacramento County 2017).

3.12.2 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. Active aggregate mineral resource production in Sacramento County is located along ancestral channels of the American River (south of U.S. Highway 50) and the Cosumnes River (near Rancho Murieta). Kaolin clay deposits are present in the Sierra Nevada foothills. The project site is located in the developed and urbanized North Natomas area and is not classified as an area containing regionally significant mineral deposits (i.e., MRZ-2) (Dupras 1999). Furthermore, the area surrounding the project site is developed with urban land uses, and the project site is planned for urban development in the Sacramento County General Plan (Sacramento County 2013). 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. The Sacramento County General Plan (Sacramento County 2017) indicates that the only locally important mineral resource recovery sites in the County are those designated by CGS as MRZ-2. In the project region, these MRZ-2 areas for aggregate minerals are located along the active and ancestral channels of the American and Cosumnes Rivers. Additional MRZ-2 areas for kaolin clay are located in the Sierra Nevada foothills. As described in a) above, there are no known mineral resources at the project site or in the immediate project vicinity, which consists of a public park, high school, and commercial and residential development. Thus, there would be no impact.

This page intentionally left blank

3.13 NOISE

3.13.1 ENVIRONMENTAL SETTING

This section evaluates the potential effects of noise and vibration associated with school construction and operation. It summarizes the applicable noise regulations and describes ambient noise conditions near the project site. The environmental effects evaluation analyzes the noise impacts associated with the proposed project, including short-term impacts of construction of the softball field and long-term impacts from the operation of the field.

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 an unwanted sound (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. 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 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.

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 between 10:00 p.m. and 7:00 a.m. The L_{dn} attempts to account for the fact that noise during noise-sensitive hours 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% 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 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.

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 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 Via Ingoglia Drive, Town Center Drive, Del Paso Road, New Market Drive, and distant vehicular traffic on Interstate 5. Existing park activities (North Natomas Regional Park) and people walking and talking contribute to the noise environment in the area. Intermittent noise from outdoor activities (e.g., people talking, operation of landscaping equipment, car doors slamming, and dogs barking) also influence the existing noise environment.

The nearest noise-sensitive uses to the project site are the Inderkum High School and the residential property to the northwest of the project site. Existing noise levels in the project area were estimated using the existing traffic volumes along Del Paso Road and New Market Drive. Traffic noise was predicted using the Federal Highway Administration’s (FHWA 1978) traffic noise prediction model (FHWA-RD-77-108) for the major roadway segments. As shown in Table 3.13-1, the estimated ambient noise level in the project area would be 61 dBA, L_{eq} at the noise-sensitive use that is closest to the project site.

Table 3.13-1 Predicted Traffic Noise Levels, Existing

Roadway	Segment From	Segment To	Existing	Combined
Del Paso Road	Truxel Road	East Commerce Way	57 dB L_{dn} at 850 Feet	61 dB L_{dn} at Nearest Sensitive Use to Project Site
New Market Drive	Town Center Drive	East Commerce Way	58 dB L_{dn} at 850 Feet	61 dB L_{dn} at Nearest Sensitive Use to Project Site

Notes: dB = A-weighted decibels; L_{dn} = day-night average noise level.

Source: Data modeled by AECOM in 2021; See AECOM 2021

3.13.2 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?**

Less-than-Significant Impact. The Sacramento City Code Noise Control Ordinance contains performance standards to prevent unnecessary, excessive and offensive noise levels within the city. Section 8.68.060 of the City of Sacramento's Noise Control Ordinance establishes that noise associated with erection (including excavation), demolition, alteration, or repair of any building or structure is exempt from the Noise Ordinance, provided said activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. on weekdays and Saturday; and on each Sunday between the hours of 6:00 p.m. and 9:00 a.m.

The City's Noise Control Ordinance also establishes exterior noise level standards for noise-sensitive land uses. These are shown in Table 3.13-2. The ordinance states that noise shall not exceed 55 dB during any cumulative 30-minute period in any hour during the day (7:00 a.m. to 10:00 p.m.), and 50 dBA during any cumulative 30-minute period in any hour during the night (10:00 p.m. to 7:00 a.m.). The ordinance sets somewhat higher noise limits for noise of shorter duration; however, noise shall never exceed 75 dB in the day and 70 dB at night.

Table 3.13-2 City of Sacramento Exterior Noise Level Standards

Maximum Time of Exposure	Noise Metric	7 a.m. to 10 p.m. (Daytime)	10 p.m. to 7 a.m. (Nighttime)
30 Minutes/Hour	L_{50}	55 dBA	50 dBA
15 Minutes/Hour	L_{25}	60 dBA	55 dBA
5 Minutes/Hour	$L_{8.3}$	65 dBA	60 dBA
1 Minute/Hour	$L_{1.7}$	70 dBA	65 dBA
Any Period of Time	L_{max}	75 dBA	70 dBA

Source: City of Sacramento Noise Ordinance.

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

If the ambient noise level exceeds that permitted by any of the first four noise-limit categories listed in [Table 3.13-2], the allowable noise limit shall be increased in five dBA increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the allowable L_{max} , the maximum ambient noise level shall be the noise level limit for that category.

The “Noise” section within the Environmental Constraints Element of the *Sacramento 2035 General Plan* (City General Plan) (City of Sacramento 2014) includes policies for evaluating land use/noise compatibility, including the following.

- **Policy EC 3.1.1: Exterior Noise Standards.** The City shall require noise mitigation for all development where the projected exterior noise levels exceed those shown in Table EC 1 [Table 3.13-3 of this IS/MND], to the extent feasible.

Table 3.13-3 Exterior Noise Compatibility Standards for Various Land Uses

Land Use Type	Highest Level of Noise Exposure that is Regarded as “Normally Acceptable” ^a (L _{dn} ^a or CNEL ^c)
Residential - Low Density ^d Single Family, Duplex, Mobile Homes	60 dBA ^{e, f}
Residential - Multi-family ^g	65 dBA
Urban Residential Infill ^h and Mixed-Use Projects ^{i, j}	70 dBA
Transient Lodging - Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dBA
Office Buildings - Business, Commercial and Professional	70 dBA
Industrial, Manufacturing, Utilities, Agriculture	75 dBA

Notes: CNEL = Community Noise Equivalent Level; dBA = A-weighted decibels; L_{dn} = day-night average noise level.

- ^a As defined in the Guidelines, “Normally Acceptable” means that the “specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.”
- ^b L_{dn} or Day-Night Average Level is an average 24-hour noise measurement that factors in day and night noise levels.
- ^c CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.
- ^d Applies to the primary open space area of a detached single-family home, duplex, or mobile home, which is typically the backyard or fenced side yard, as measured from the center of the primary open space area (not the property line). This standard does not apply to secondary open space areas, such as front yards, balconies, stoops, and porches.
- ^e dBA or A-weighted decibel scale is a measurement of noise levels.
- ^f The exterior noise standard for the residential area west of McClellan Airport known as McClellan Heights/Parker Homes is 65 dBA.
- ^g Applies to the primary open space areas of townhomes and multi-family apartments or condominiums (private rear yards for townhomes; common courtyards, roof gardens, or gathering spaces for multi-family developments). These standards shall not apply to balconies or small attached patios in multistoried multi-family structures.
- ^h With land use designations of Central Business District, Urban Neighborhood (Low, Medium, or High) Urban Center (Low or High), Urban Corridor (Low or High).
- ⁱ All mixed-use projects located anywhere in the City of Sacramento

See notes d and g above for definition of primary open space areas for single-family and multi-family developments.

Source: OPR 2003, cited in City of Sacramento 2015: Table EC 1.

- **Policy EC 3.1.2: Exterior Incremental Noise Standards.** The City shall require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in Table EC 2 [Table 3.13-4a and b of this IS/MND], to the extent feasible.

Table 3.13-4a Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses (dBA)–Residences and Buildings Where People Normally Sleep^a

Existing L _{dn}	Allowable Noise Increment
45	8
50	5
55	3
60	2
65	1
70	1
75	0
80	0

Table 3.13-4b Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses (dBA)–Institutional Land Uses with Primarily Daytime and Evening Uses^b

Existing Peak-Hour L _{eq}	Allowable Noise Increment
45	12
50	9
55	6
60	5
65	3
70	3
75	1
80	0

Notes: dBA= A-weighted decibels; L_{dn} = day-night average noise level; L_{eq} = energy-equivalent noise level.

^a This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.

^b This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

Source: City of Sacramento 2015: Table EC 2.

- **Policy EC 3.1.3: Interior Noise Standards.** The City shall require new development to include noise mitigation to assure acceptable interior noise levels appropriate to the land use type: 45 dBA L_{dn} for residential, transient lodging, hospital, nursing homes, and other uses where people normally sleep; and 45 dBA L_{eq} (peak hour) for office buildings and similar uses.
- **Policy EC 3.1.8: Operational Noise.** The City shall require mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses when operational noise thresholds are exceeded.
- **Policy EC 3.1.10: Construction Noise.** The City shall require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

Short-Term Project-Generated Construction Source Noise

Construction noise levels would fluctuate depending on the type, number, and duration of use for the various pieces of equipment. The effects of construction noise largely depend on the type of construction activities

occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete stages, with each stage requiring different equipment that has varied noise characteristics. These stages alter the characteristics of the noise environment generated on the project site and in the surrounding community during the construction process.

Table 3.13-5 depicts the noise levels generated by phases and various types of construction equipment. Construction equipment can be either mobile or stationary. Mobile equipment (e.g., loaders, graders, dozers) moves around a construction site performing tasks in a recurring manner. Stationary equipment (e.g., air compressor, generator, concrete saw) operates in a given location for an extended period of time to perform continuous or periodic operations. Thus, determining the location of stationary sources during specific phases, or the effective acoustical center of operations for mobile equipment, during various phases of the construction process is necessary.

Table 3.13-5 Construction Phases, Equipment, and Calculated Noise Levels, dB

Construction Phase	Anticipated Type of Equipment that May Be Utilized by the Contractor*	Noise Level at 50 Feet from Equipment– L _{max} , dBA	Noise Level at 50 Feet from Equipment– L _{eq} , dBA	Noise Level at 500 Feet from Equipment– L _{max} , dBA	Noise Level at 500 Feet from Equipment– L _{eq} , dBA
(Site Preparation)	Backhoe	85	81	85	57
(Site Preparation)	Front End Loader	80	76	85	57
Max. and Combined Noise Level	Site Preparation Total	85	82	85	57
Grading	Excavator	85	81	85	61
Grading	Dozer	85	81	85	61
Grading	Grader	85	81	85	61
Grading	Front End Loader	80	76	85	61
Max. and Combined Noise Level	Grading Total	85	84	85	61
Building Structure	Crane	85	77	85	59
Building Structure	Man Lift	85	78	85	59
Building Structure	Generator	82	79	85	59
Building Structure	Backhoe	80	76	85	59
Building Structure	Front End Loader	73	60	85	59
Max. and Combined Noise Level	Building Structure Total	85	84	85	59
Combined Predicted Noise Level (L_{max} dBA at 50 feet)	Total	85	--	85	--
Maximum Predicted Noise Level (L_{eq} dBA at 50 feet)	Total	--	84	--	61

Notes: dBA = A-weighted decibels

Noise levels are for equipment fitted with properly maintained and operational noise control devices, per manufacturer specifications.

Source: FHWA 2006, data compiled by AECOM in 2021; See AECOM 2021

As indicated in Table 3.13-5, project-related construction activities would generate noise levels ranging from 60 to 81 dB L_{eq} at a distance of 50 feet from the equipment. Accounting for the use factor of individual pieces of equipment, continuous and combined noise levels generated by the simultaneous operation of the loudest pieces of equipment would result in noise levels of 84 dB L_{eq} at 50 feet. The nearest off-site noise-sensitive land uses in the vicinity of the project site are multi-family residences located approximately 500 feet northwest of the project

site boundary. The project-related construction activities would result in a noise level of 61 dBA, L_{eq} at 500 feet. However, as described above, Section 8.68.060 of the City of Sacramento's Noise Control Ordinance establishes that noise associated with erection (including excavation), demolition, alteration, or repair of any building or structure is exempt from the Noise Ordinance, provided said activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. on weekdays and Saturday; and on each Sunday between the hours of 6:00 p.m. and 9:00 a.m.

With respect to the increase above ambient noise condition, in general, a 1-dB increase in noise level is imperceptible, a 3-dB increase is barely perceptible, and a change of 5 dB generally fosters a noticeable change in human response. Construction of the proposed project would be during the daytime only. As shown in Table 3.13-2, above, that noise shall not exceed 55 dB during any cumulative 30-minute period in any hour during the day (7:00 a.m. to 10:00 p.m.). If the ambient noise level exceeds that permitted by any of the first four noise-limit categories listed in [Table 3.13-2], the allowable noise limit shall be increased in five dBA increments in each category to encompass the ambient noise level. As a result, by increasing the threshold by 5 dB, the criteria would be 60 dB. Project noise level of 61 dB L_{eq} at the nearest off-site sensitive receptors would only exceed the thresholds established by the City (Tables 3.13-2 through 3.13-4) by 1 dB. Table 3.13-6 summarizes modeled construction noise levels compared to existing noise levels at noise-sensitive locations measured during the ambient noise survey. As shown, project construction would result in an increase of 3 dB at the nearest noise-sensitive uses. A 3-dB increase would be barely perceptible. Therefore, this impact is less than significant.

Table 3.13-6 Ambient and Project Construction Noise Levels at Closest Sensitive Receptors

Receiver	Distance from Acoustical Center Between Noise-Sensitive Receiver locations and Proposed Construction Areas	Exterior Noise Level– Ambient Noise	Exterior Noise Level– Project Noise Plus Ambient Level	Interior Noise Level –Project Noise, Doors/ Windows Open (EPA)	Interior Noise Level–Project Noise, Doors/ Windows Closed (EPA)
Multi-family residences northwest of the project site boundary	500 ft	61 dBA L_{eq}	64 dBA L_{eq}	49 dBA L_{eq}	39 dBA L_{eq}

Notes:

dBA = A-weighted decibels

EPA = U.S. Environmental Protection Agency, Standard construction practices would produce a 15-dBA exterior-to-interior reduction with doors/windows open, and a 25-dBA exterior-to-interior reduction with doors/windows closed (U.S. EPA 1974).

ft = foot/feet

L_{eq} = Equivalent Noise Level

LT = Long-Term (24-hour) Measurement

ST = Short-Term (15-30 minutes) Measurement

Sources: Modeled by AECOM 2021; See AECOM 2021

Project-related construction would involve approximately 64 daily worker trips and 25 delivery trips over the peak construction period (fencing and other construction), which would occur over approximately 24 working days. The construction truck delivery trips would be spread over the construction period and the resulting daily trips would be less than one trip and would result in one truck trip per day and 64 worker trips per hour (64 trip to the site in the mornings and 64 trips from the site at the end of the work day, a total of 65 trips per hour).

Traffic noise was predicted using the FHWA's traffic noise prediction model (FHWA-RD-77-108) for the major roadway segments. The construction-related traffic noise would be up to 53 dBA, L_{eq} (See AECOM 2021 for Project Noise Calculations) along Del Paso Road or New Market Drive, assuming all construction trips would use one of these roads. Construction-related workers' trips would be spread over all area roadways beyond the project site area. Therefore, construction-related traffic noise at other roadways would be lower compared to these two

roadways. Existing traffic noise levels along Del Paso Road and New Market Drive were measured at 58 dBA, L_{eq} and 57 dBA, L_{eq} , respectively, as shown in Table 3.13-1.

With respect to the increase above ambient noise condition, in general, a 1-dB increase in noise level is imperceptible, a 3-dB increase is barely perceptible, and a change of 5 dB generally fosters a noticeable change in human response. Typically, traffic volumes would need to double before the associated increase in noise levels is noticeable (3 dBA) along roadways (Caltrans 2013). The dominant traffic noise source in the project area is Del Paso Road or New Market Drive. The incremental addition of the proposed project construction-related traffic would not cause a doubling of the volumes along Del Paso Road or New Market Drive. As shown in Table 3.13-7, predicted construction traffic noise levels in the project vicinity would not exceed the exterior noise standards established in the City's General Plan and would not cause a substantial increase above the existing traffic noise. Also, the construction of the proposed project would not result in a noticeable change in the traffic noise of area roadways. trips during the peak construction phase (fence and other construction). As a result, this impact would be less than significant.

Table 3.13-7 Predicted Traffic Noise Levels, Existing and Construction

Roadway	Segment From	Segment To	Existing	Allowable Noise Incrementa	Plus Project Construction	Increase above Existing	Significant Impact?
Del Paso Road	Truxel Road	East Commerce Way	58 dB L_{eq} at 850 Feet	3dB L_{eq} at 50 Feet	53 L_{eq} at 50 Feet, dB	1 dB	No
New Market Drive	Town Center Drive	East Commerce Way	59 dB L_{eq} at 850 Feet	3dB L_{eq} at 50 Feet	53 L_{eq} at 50 Feet, dB	1 dB	No

Notes: dB = A-weighted decibels; L_{dn} = day-night average noise level.

^a Policy EC 3.1.2 references Table EC 2. Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses (dBA).

Traffic noise levels are predicted at a standard distance of 50 feet from the roadway centerline and do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

Source: Data modeled by AECOM in 2021; See AECOM 2021

Long-Term Project-Generated Stationary Source Noise

The project would introduce a new source of noise associated with the new playfields.

Playfields

As estimated above, the ambient noise at the project site would be 61 dBA L_{eq} . Based on the proposed site design, the proposed playfields activities would be located at a distance of approximately 500 feet from the nearest residences to the project site. Children at play generate noise. Generally, case studies have found that children are the loudest when first entering the playground and reduce volume as they separate and engage in play. There is a broad range of noise measurements of school playgrounds presented in published studies. The loudest reading is 71 dB at 10 feet and an average reading is 64 dB at 25 feet. The resulting noise level is predicted to be 42 dBA L_{eq} at 100 feet from the center of the nearest playground.

At a distance of 100 feet from an elementary school playground being used by 100 students, an average noise level of 60 dB L_{eq} can be expected (Sacramento County 2017). The existing ambient noise level at the residential uses to the northwest of the project site was estimated to be 61 dBA L_{eq} . Assuming no other source of noise, the resulting noise level at the nearest noise-sensitive receptors would be 46 dB L_{eq} , and would not exceed the City of Sacramento's performance standard of 55 dB L_{eq} (Table 3.13-2). Furthermore, Section 8.68.000 of the

Sacramento City Code exempts noise from parks, public playgrounds, and school grounds, provided they are owned and operated by a public entity (such as NUSD) or by a private school. Therefore, playfield activities would not substantially increase ambient noise levels, and would not result in a substantial permanent increase (more than 3–5 dB) in ambient noise levels in the project vicinity above levels existing without the project (Table 3.13-1). As a result, this impact is considered less than significant.

The proposed project would not introduce any new parking stalls, would not add any daily trips on adjacent roadways, and there would be no other noise sources associated with the project operation. Therefore, long-term, off-site operational noise would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As a result, this impact would be less than significant.

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

Less-than-Significant Impact. Construction activities have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. According to Federal Transit Administration (FTA 2018), vibration levels associated with the use of a large dozer is 0.089 inches per second (in/sec) PPV and 87 [VdB referenced to 1 microinch per second (μ in/sec) and based on the RMS velocity amplitude] at 25 feet. Table 3.13-8 summarizes modeled construction vibration levels at noise-sensitive locations.

Table 3.13-8 Project Construction Vibration Levels at Closest Sensitive Receptors

Receiver	Location	Shortest Distance (ft) Between Noise-Sensitive Uses and Proposed Construction Areas	Vibration Levels PPV	Vibration Levels VdB
Nearest Buildings	To the west	500	0.001	48
Nearest Buildings	To the east	250	0.003	57

Source: FTA, Transit Noise and Vibration Impact Assessment, September 2018.

PPV = peak particle velocity

VdB = vibration decibels

Modeled by AECOM 2021; See AECOM 2021

Using FTA’s recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels of approximately 0.001 to 0.003 in/sec PPV and 48 to 57 VdB at the closest existing sensitive receptor could occur. 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 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?**

Less-than-Significant Impact. The project site is not located within 2 miles of a public airport or a private airstrip. The nearest airport, Sacramento International Airport is located approximately 3.7 miles northwest of the project site, and Rio Linda Airport is located approximately 4.0 miles to the east of the project site. Because all project activities would be located outside of the Airport Comprehensive Land Use Plan area and the proposed project would not involve any aircraft uses for construction or operations, the proposed project would not affect any airport operations; and would not expose people on- or off-site to excessive aircraft noise levels, no impact would occur.

3.14 POPULATION AND HOUSING

3.14.1 ENVIRONMENTAL SETTING

The project site is located in an urbanized area of North Natomas, in the City of Sacramento. In 2016, based on American Community Survey Data from the U.S. Census Bureau, the population in the North Natomas Community Plan area was approximately 54,665 (Cedar Lake Ventures 2018). The District serves North and South Natomas; as well as unincorporated Sacramento County between the Sacramento River and the city of Sacramento, from I-80 north to the County line. In 2016, the total population served by the District was 76,045. Approximately 32.7 percent of the District population was white, 25.4 percent was Hispanic, 19.5 percent was Asian, and 14.5 percent was black. The median household income in the District was approximately \$69,600. Unemployment in Natomas (as reported in 2016) was approximately 5.9 percent. (Cedar Lake Ventures 2018.)

3.14.2 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 existing Inderkum High School Campus is adjacent to the project site to the east. The remaining area around the project site has recently been developed with urban uses, including the 212-acre North Natomas Regional Park to the north, commercial and office uses to the south and west, and residential uses to the northwest. The project site is owned by the District, and developing two new softball fields at the site for use by existing Inderkum High School students would be consistent with existing land uses, including the North Natomas Regional Park to the north and the Inderkum High School Campus to the east. The proposed project would not involve constructing new homes or businesses that would generate new population growth. The source of the construction labor force would be from the local labor pool, since the District has a local hiring policy. Students would access the proposed new softball fields by crossing west over Via Ingoglia; no new roads are proposed as part of the project. Water for the new restroom building and landscape irrigation for the proposed project would be supplied by tie-ins to existing water lines that are already present in New Market Drive or Via Ingoglia. Therefore, the proposed project would not include the extension of roads or other infrastructure that could facilitate substantial development. The on-site water line would be sized and designed to meet the needs of the new restroom building and landscape irrigation for the proposed softball fields only. 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. Because there are no existing residences within the project site, the proposed project would not result in displacement or relocation of any residents. Therefore, the proposed project would not displace substantial numbers of people or existing housing that would necessitate the construction of replacement housing elsewhere. Thus, there would be no impact.

This page intentionally left blank

3.15 PUBLIC SERVICES

3.15.1 ENVIRONMENTAL SETTING

Fire services at the project site would be provided by the City of Sacramento Fire Department. The nearest fire station, No. 30, is approximately 1.2 miles northeast of the project site, at 1901 Club Center Drive (City of Sacramento Fire Department 2021).

Police protection services at the project site would be provided by the City of Sacramento Police Department. The project site is within police District 1, which is served by the William J. Kinney Policy Facility (North Command), located at 3550 Marysville Boulevard, approximately 5.2 miles to the southeast (City of Sacramento Police Department 2021).

The project consists of recreational facilities (i.e., two new softballs) on District-owned property that would serve students at the existing Inderkum High School.

The 212-acre North Natomas Regional Park is adjacent to the project site, on the north side of New Market Drive, and includes a baseball/softball complex, two dog parks, a lake and detention basin, an amphitheater, farmer's market, children's playgrounds, group picnic area, restrooms, and paved walking paths (City of Sacramento Parks and Recreation Department 2021).

3.15.2 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 consists of two new turf softball fields and a new restroom building with associated storage area. A new water supply line for the new restroom building and landscape irrigation and fire flow would be installed from existing water lines in either New Market Drive or Via Ingoglia. The project site is located southwest of the intersection of New Market Drive and Via Ingoglia, and therefore is accessible to fire-fighting equipment and personnel from both roadways. The District would be required to incorporate California Fire Code and California Education Code requirements into project designs. These standards address access road length, dimensions, and finished surfaces for firefighting equipment; fire hydrant placement; fire flow availability and requirements; and plan submittal requirements. Incorporation these requirements into project designs would reduce the dependence on fire department equipment and personnel by reducing fire hazards. Therefore, the proposed project would not affect City of Sacramento Fire Department response times or other performance objectives and would not result in the construction of new or expansion of existing fire protection facilities. Impacts associated with increased demand for fire protection facilities and services would be less than significant.

Police protection?

No Impact. The proposed project would not increase the population as a result of new housing; therefore, the project would not require additional City of Sacramento Police Department staffing. Given that the proposed project consists solely of installation of two new softball fields to serve the existing student population at Inderkum High School, the proposed project would not increase the Police Department calls for service. Operation of the proposed project would not affect the City of Sacramento Police Department performance objectives and would not result in the construction of new or expansion of existing police protection facilities that would result in environmental effects. Thus, there would be no impact.

Schools?

Less-than-Significant Impact. The proposed project is a school/recreational project. Two new softball fields would be installed to meet the needs of the existing student population at Inderkum High School. The project site is currently vacant and owned by the District. The proposed project would enable the District to continue meeting the needs of students at Inderkum High School, by eliminating the close proximity of the existing softball fields with the baseball fields at the Inderkum High School campus, which results in conflicts when both types of sports fields need to be in use at the same time. Adverse physical environmental effects associated with development of the new softball fields for Inderkum High School students at the project site are evaluated in the individual topic areas throughout this Initial Study. Where necessary, mitigation measures are included as part of each topic area analysis to reduce all project impacts to a less-than-significant level.

Parks?

Less-than-Significant Impact. The proposed project involves installation of two new softball fields for Inderkum High School students on District-owned property. The project does not include new housing that would result in a demand for additional off-campus park facilities. Adverse physical environmental effects associated with development of the new softball fields for Inderkum High School students at the project site are evaluated in the individual topic areas throughout this Initial Study. Where necessary, mitigation measures are included as part of each topic area analysis to reduce all project impacts to a less-than-significant level.

Other public facilities?

No Impact. The proposed project involves installation of two new softball fields for Inderkum High School students on District-owned property. The new softball fields would have no effect on other public facilities. Thus, there would be no impact.

3.16 RECREATION

3.16.1 ENVIRONMENTAL SETTING

The project site is located in an urbanized area of North Natomas, in the City of Sacramento. There are 223 parks and parkways totaling approximately 4,255 acres in the City of Sacramento; 46 of these parks are located in North Natomas (City of Sacramento 2020). The 212-acre North Natomas Regional Park is adjacent to the project site, on the north side of New Market Drive, and includes a baseball/softball complex, two dog parks, a lake and detention basin, an amphitheater, Farmer's Market, children's playgrounds, group picnic area, restrooms, and paved walking paths. The 7-acre Kokomo Park is approximately 1,900 feet northwest of the project site, and includes a basketball court, play area with shade canopy, group picnic area with shelter, two soccer fields, and two turf volleyball courts (City of Sacramento 2020).

3.16.2 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?**

No Impact. The proposed project would not involve the construction of any new housing that would generate new residents who would increase the use of existing recreational facilities. The proposed project is a recreational project, which is intended to provide necessary softball facilities for the student body at the adjacent existing Inderkum High School campus. Therefore, the proposed project would not increase the use of existing neighborhood or regional parks or other recreational facilities, and no impact would occur.

- 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 Impact. The proposed project is a recreational project intended to provide necessary softball facilities for the student body at the adjacent existing Inderkum High School campus. Adverse physical environmental effects associated with construction of the proposed recreational facilities are evaluated throughout this Initial Study. Where necessary, mitigation measures are included as part of each topic area analysis to reduce all project impacts to a less-than-significant level.

This page intentionally left blank

3.17 TRANSPORTATION

3.17.1 ENVIRONMENTAL SETTING

CIRCULATION SYSTEM

The project site is in the community of Natomas in the northwestern portion of Sacramento, at 2600 New Market Drive, southwest of the intersection of New Market Drive and Via Ingoglia. Site access is currently provided by New Market Drive to the north and Via Ingoglia to the east. The site is surrounded by the North Natomas Regional Park to the north, the existing Inderkum High School campus to the east, commercial and office uses to the south and west, and residential development to the northwest.

Local roadway access for the site is provided by Del Paso Road Via Ingoglia and by Natomas Boulevard via New Market Drive. Via Ingoglia is a small local roadway extending for just over 0.20 miles and provides access to Inderkum High School, North Natomas Regional Park, North Natomas Library, and the project site. New Market Drive is a two-way roadway with one lane in each direction that extends approximately 0.40 miles from the intersection at Natomas Boulevard and terminates at the intersection at Via Ingoglia, adjacent to the project site. New Market Drive also extends approximately 0.25 miles from East Commerce Way and terminates at the roundabout at Town Center Drive, approximately 0.10 miles west of the project site. In 2019, the District and the City entered into agreement to extend New Market Drive between Via Ingoglia Street and Town Center Drive for the New Market Drive Project. The New Market Drive Project is a separate undertaking by the District and the City and is not analyzed in this document. Regional access to the project site is provided by I-5 to the west and I-80 to the south.

PUBLIC TRANSPORTATION

The project area is served by routes operated by the Sacramento Regional Transit District (SacRT). The nearest bus stop to the project site is Town Center Drive and Del Paso Road via Route 13, approximately 0.4 miles to the west.

PEDESTRIAN AND BICYCLE FACILITIES

Existing pedestrian facilities in the area are composed of sidewalks and are available on all streets in the project area. The project site can be accessed by sidewalks from New Market Drive and Via Ingoglia Street. Via Ingoglia Street adjacent to the project site is an identified bike lane, with a striped lane for one-way bike travel on both sides of the road (City of Sacramento 2020).

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. The proposed project would not affect existing transportation facilities for motorists, pedestrians, or bicyclists, nor would it propose development that would change the availability of the transit system. The number of vehicles in the project vicinity would increase during the four-month construction period, however this would be temporary and intermittent. Additionally, proposed project operation is not expected to result in substantial trip generation that would result in increased traffic on roadways leading to the project site. Therefore, construction

and operation of the proposed project would not conflict with adopted program plans, ordinances, or policies addressing the circulation system. There would be no impact.

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

No Impact. Section 15064.3 (b)(3) of the CEQA Guidelines allows a qualitative analysis of potential impacts related to vehicle miles traveled (VMT). The proposed project includes discontinuing the use of the close proximity of the existing softball fields with the baseball fields at the existing Inderkum High School campus and installing two new softball fields across the street (to the west) from the existing campus. Therefore, the proposed project is not anticipated to generate additional vehicle trips that would result in substantial increases in VMT. There would be no impact.

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

Less-than-Significant Impact. The proposed project would not change the existing design features of roads in the project vicinity. New Market Drive adjacent to the project site provides another ingress/egress point for the new softball fields. If site access changes are needed, the District would be required to obtain an encroachment permit from the City and comply with applicable access and circulation requirements of the City's Street Design Standards (2009), which are designed to avoid hazardous design features. A traffic signal would be incorporated at the existing crosswalk on Via Ingoglia to allow for safe student travel between the main Inderkum High School campus and new softball fields.

During construction activities, heavy truck vehicles, such as haul trucks or flatbed trailers, would access the project site via Ingoglia. Slow-moving trucks entering and exiting at this location could pose a hazard to other vehicles traveling on area roadways. The District will post signage warning of the construction site and slow-moving equipment, in addition to moving equipment outside of peak travel times. Because construction activities would occur for only a short time, project construction would not substantially increase hazards because of a design feature or incompatible use. In addition, no unusual angles or other hazardous design elements would exist in the proposed circulation and access. The impact would be less than significant.

d) Result in inadequate emergency access?

Less-than-Significant Impact. Adequate emergency access would be provided with multiple access points to the project site. Site access will be available from Via Ingoglia and New Market Drive. Slow-moving trucks entering and exiting the project site or Inderkum High School parking lot could slightly delay the movement of emergency vehicles. However, the trucks would typically pull to the side of the road on hearing an emergency vehicle siren. In addition, truck traffic would be temporary and intermittent during the construction period of four months. Construction staging would occur on-site and no public roads would require closure during project construction. Project construction and operation would not pose a significant obstacle to emergency response vehicles. This impact would be less than significant.

3.18 TRIBAL CULTURAL RESOURCES

3.18.1 ENVIRONMENTAL SETTING

Tribal cultural resources are defined in CEQA as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe, which may include non-unique archaeological resources previously subject to limited review under CEQA. Tribal Cultural Resources 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. Consulting tribes view these interconnected sites and places as living entities; their associations and feeling persist and connect with descendant communities.

On March 5, 2021, AECOM contacted the NAHC and requested a Sacred Land File (SLF) search and a contact list of individuals or groups who may have an interest in the project or information regarding cultural sites in or near the project site. In their response dated April 1, 2021, the NAHC stated that a search of the SLF database of the project area did not identify any Tribal Cultural Resources/Traditional Cultural Properties at or near the project site (AECOM 2021).

On April 5, 2021, an AECOM archaeologist conducted a pedestrian survey of the project area. The pedestrian survey consisted of 12 to 15 yard transects across the project area, and no cultural artifacts were observed during the site survey.

3.18.2 SUMMARY OF CONSULTATION

A list of 8 Native American organizations and individuals who may have knowledge of any Tribal Cultural Resources (TCR) within or adjacent to the project site was also provided by the NAHC.

Pursuant to AB 52, the District notified the Buena Vista Rancheria of Me-Wuk Indians, Ione Band of Miwok Indians, Nashville Enterprise Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community of the Auburn Rancheria, Wilton Rancheria, and Colfax-Todds Valley Consolidated Tribe from the NAHC list of the project and provided project information during the CEQA process. The District received responses from the Buena Vista Rancheria of Me-Wuk Indians on April 1, 2021 and United Auburn Indian Community of the Auburn Rancheria (UAIC) on April 5, 2021.

The Buena Vista Rancheria of Me-Wuk Indians inquired if any cultural resource investigations by the District resulted in findings for cultural resources at the project site. On April 13, 2021, the District provided the results of the cultural survey indicating that no cultural artifacts were observed at the project site.

On April 5, 2021, the UAIC requested additional mapping information to assist with database searches. The District responded to UAIC on April 5, 2021 with additional electronic mapping information.

3.18.3 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 geologically 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 listed 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?**

Less than Significant with Mitigation Incorporated. No Tribal Cultural Resources were identified in the project site at the time of this report preparation based on the pedestrian survey. However, the potential exists for unknown buried resources to be encountered during ground-disturbing work. Therefore, this impact is considered potentially significant.

Mitigation Measure 3.18-1: Worker Training

Before the start of ground disturbing activities, NUSD will retain a qualified archaeologist to provide training for the identification of federal- or State-eligible cultural resources, including sensitive Tribal Cultural Resources, and that the construction crews are aware of the potential for previously undiscovered archaeological resources on-site; of the laws protecting these resources, and associated penalties; and of the procedures to follow in the case that resources are discovered during project-related work. NUSD will extend an invitation to Native American Tribes that are traditionally and culturally affiliated with resources in the project area to identify a tribal monitor or a representative that would provide the construction worker awareness training during a scheduled window of up to four hours prior to ground disturbance with compensation by the NUSD according to the established hourly rate.

Mitigation Measure 3.18-2: Procedures for Inadvertent Discovery of Cultural or Tribal Cultural Resources

If unanticipated Tribal Cultural Resources, archaeological resources, or cultural resources are encountered during ground-disturbing activities, work will be halted temporarily in the vicinity of the discovered materials until a qualified archaeologist and a Native American monitor have evaluated, recorded, and determined appropriate treatment of the resource, in consultation with the District. Ground-disturbing activities will be restricted within a 100-foot radius of the find or a distance determined by a qualified professional archaeologist to be appropriate based on the potential for disturbance of additional cultural resource materials. If the proposed development is determined to possibly damage a unique cultural resource, mitigation will be implemented in accordance with Section 21083.2 of the California Public Resources Code and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. A qualified archaeologist will identify the materials, determine their potential to meet the definition of a significant cultural resource in Section 15064.5 or a Tribal Cultural Resource, and formulate

appropriate measures for their treatment. Potential treatment methods for significant and potentially significant resources may include, but would not be limited to, no action (i.e., resources determined not to be significant), avoidance of the resource through changes in construction methods or project design, or testing and data recovery, in accordance with applicable State requirements and/or in consultation with affiliated Native American Tribal representative/s.

Significance after Mitigation

Implementation of Mitigation Measure 3.18-1 and Mitigation Measure 3.18-2 would reduce potentially significant impacts to Tribal Cultural Resources to a less-than-significant level by requiring worker training, in addition to implementing appropriate measures in the unlikely event that a Tribal Cultural Resource is discovered to minimize potential impacts.

This page intentionally left blank

3.19 UTILITIES AND SERVICE SYSTEMS

3.19.1 ENVIRONMENTAL SETTING

WATER SUPPLY

Water supply for the new restroom building, minor landscaping around the softball fields, and fire flow requirements would be provided by the City of Sacramento from an existing underground line in either New Market Drive or Via Ingoglia. The City's water supply is obtained from groundwater from the North American and South American Subbasins and surface water from the American and Sacramento Rivers. The City's Urban Water Management Plan (UWMP) (West Yost Associates 2016) addresses water supply and demand issues, water supply reliability, water conservation, water shortage contingencies, and recycled-water usage for the areas within served by the City. The UWMP identifies surface water and groundwater supply and demand within the City's service area from 2020 to 2040 in normal, single dry, and multiple dry years. As discussed in the UWMP, the City would have water supplies that exceed demands in all water years.

WASTEWATER

The Sacramento Area Sewer District (SASD) provides local wastewater collection and conveyance services and infrastructure throughout the Sacramento region, including the project site and vicinity. Regional San conveys wastewater for treatment at the Sacramento Regional Wastewater Treatment Plant (SRWTP) in Elk Grove.

The SRWTP is permitted for treatment and discharge of up to 181 million gallons per day (mgd) average dry-weather flow of treated effluent into the Sacramento River. Despite substantial growth in its service area, Regional San determined that water conservation measures and a reduction in water-using industries reversed the previous growth in wastewater capacity use. Regional San expects per-capita consumption to fall 25 percent over the next 20 or more years through the ongoing installation and use of water meters, as well as compliance with conservation mandates such as the state Water Conservation Act of 2009 (Senate Bill [SB] x7- 7). Because substantial additional conservation is expected throughout its service area, Regional San anticipates that the existing 181 mgd average dry-weather flow capacity will be adequate for at least 20 years (Regional San 2014:6-2).

SOLID WASTE

For garbage, recycling, and landscaping waste services, the District would contract with one of the franchised haulers authorized by the Sacramento Solid Waste Authority to collect commercial garbage and commingled recycling. Depending on the selected hauler, solid waste would be transported either to the North Area Recovery Station approximately 7 miles east of the project site, or directly to the Kiefer Landfill east of Rancho Cordova. All wastes from the North Area Recovery Station are transported to the Kiefer Landfill.

Kiefer Landfill has a maximum permitted throughput of 10,815 tons per day (tpd), a total maximum permitted capacity of 117.4 million cubic yards, a remaining capacity of approximately 112.9 million cubic yards, and an anticipated closure date of January 1, 2064 (CalRecycle 2019).

3.19.2 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 would require construction of a small on-site water supply conveyance line for the new restroom building, landscape irrigation, and fire flow. Water supply to the project site is available to the school by connecting to existing infrastructure in either New Market Drive or Via Ingoglia. Off-site water conveyance facilities have the capacity to provide the minor amount of water necessary to serve the project site, and no new off-site water conveyance infrastructure would be required. The District would be required to submit a water conveyance infrastructure improvement plan that depicts the locations and appropriate sizes of all required conveyance infrastructure, in conjunction with other site-specific improvement plans. Proposed on-site water facilities would be designed and sized to provide adequate service to the project site for the softball fields and associated landscaping, based on the City's Standards and Specifications for Public Works Construction (City of Sacramento Procurement Services 2020), or the most current versions of this plan. A final water conveyance infrastructure improvement plan must be approved by the City Department of Utilities. In addition, the District would be required to pay applicable water connection fees as determined by the City Department of Utilities.

The proposed project would also require construction of on-site wastewater collection and conveyance facilities. SASD's off-site sewer line in Via Ingoglia or New Market Drive was designed to provide service to development in the project vicinity, including the project site, and would be connected via the main access road. The District would prepare and submit a detailed wastewater infrastructure improvement plan that depicts the locations and appropriate sizes of all required conveyance infrastructure. Proposed on-site wastewater facilities must be designed and sized to provide adequate service to the project site for the amount of wastewater generated by the softball fields based on SASD's Standards and Specifications. The proposed project is required to pay applicable SASD wastewater connection fees before building permits are issued.

The proposed project would not require electrical facilities or stormwater drainage facilities.

Adverse physical environmental effects associated with construction of utilities to serve the proposed project are evaluated throughout this IS/MND. There are no additional significant impacts beyond those comprehensively considered throughout the other sections of this IS/MND. The 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. Development of the proposed project would result in a minor increase in the demand for water supply, for the new restroom building, irrigation of the turf softball fields, drought-tolerant landscaping, and fire flow. The City estimates water demand for landscape irrigation as approximately 6.6 acre feet per year (afy) per acre. The landscaped portion of the project site would be approximately 3.5 acres; therefore the water demand for landscape irrigation would be 23.1 afy (3.5 acres x 6.6 afy per acre). The proposed project would be required to implement measures described in the CALGreen Code (Title 24, Part 11 of the California Code of Regulations) to reduce indoor demand for potable water by 20 percent and to reduce landscape water usage by 50 percent.

The project site is within the City of Sacramento's service area, and water supply demands for the proposed project were accounted for in water demand projections contained in the City's UWMP as part of the North Natomas Community Plan area. Furthermore, as discussed in the UWMP (West Yost Associates 2016), the City would have water supplies that exceed the demands of existing and future development in all water years through 2040. Therefore, the City's water supply would be sufficient to meet the water demands of the proposed project (23.1 afy) in all water years. This 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. The SRWTP has a design capacity of 181 mgd. Regional San expects that substantial water conservation measures throughout the service area would allow the existing 181 mgd average dry-weather flow capacity to be adequate for at least 20 years (Regional San 2014:6-2). The small amount of wastewater created from the new restroom building could be accommodated by wastewater treatment facilities within the project area. Additionally, since the new softball fields is expected to serve the students from Inderkum High School, there would be no net increase in the demand for wastewater treatment within a given service area. The anticipated increased wastewater generation at the project site would not substantially alter the SRWTP's operational capacity. This 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 project site consists of vacant land, and therefore demolition activities that could generate solid waste would not be required. The construction process would generate minor amounts of solid wastes, including various scrap metals, soil, and vegetative materials (i.e., weeds). The CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requires all construction contractors to reduce construction waste and demolition debris by 65 percent.

Operation of the proposed project would result in a minor increase in long-term generation of solid waste from small trash cans at the softball fields. The District would participate in City recycling programs, such as recycling of paper, plastics, and bottles, to reduce the volume of solid waste transported to landfills. In addition, the proposed project would comply with Assembly Bill (AB) 1826, which requires recycling of organic waste. The minor amount of solid waste generated by project construction and operation would be less than one tenth of one percent of the maximum tpd that could be received at Kiefer Landfill. Therefore, sufficient landfill capacity would be available to accommodate solid-waste disposal needs for the proposed project, and this impact is considered less than significant.

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

No Impact. During the construction phase, construction debris would be recycled at local facilities. The District would implement recycling programs during the project's operational phase. The proposed project would comply with AB 1826, which requires recycling of organic waste, during construction and operation. The CALGreen Code (Title 24, Part 11 of the California Code of Regulations) 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 proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste, including the CalGreen Code, AB 1826, and other applicable requirements. Thus, there would be no impact.

3.20 WILDFIRE

3.20.1 ENVIRONMENTAL SETTING

The project site is located in an urbanized area of North Natomas. The project site and surrounding area have been designated by the California Department of Forestry and Fire Protection (CAL FIRE) as a Local Responsibility Area, and there are no moderate, high, or very high fire hazard severity zones at the project site or in the project area (CAL FIRE 2020). Fire services to the project site would be provided by the City of Sacramento Fire Department. The nearest fire station, No. 30, is approximately 1.2 miles northeast of the project site, at 1901 Club Center Drive.

3.20.2 DISCUSSION

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

No Impact. The proposed project is accessible from multiple public streets and would not be located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and therefore would have no effect on an emergency response plan or emergency evacuation plan. Compliance with CDE and City of Sacramento Fire Department requirements would ensure that appropriate emergency access is provided. Thus, 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. The proposed project would not be located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The project site is not located on a steep slope or exposed to prevailing winds that could exacerbate wildfire risks. The proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, 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 be located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The proposed project consists of two new turf softball fields. Fire services to the project site would be provided by the City of Sacramento Fire Department. The nearest fire station, No. 30, is approximately 1.2 miles northeast of the project site, at 1901 Club Center Drive. Thus, 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 located in the flat Sacramento Valley area. The site currently consists of a vacant 5.8-acre parcel surrounded by a 212-acre public park (composed primarily of dirt and turf grass), the Inderkum High School Campus, commercial and office development, and residential development. The proposed project would not be located in or near state responsibility areas or lands classified as very high fire hazard severity

zones, and would not expose people or structures to significant risks from wildfires. Thus, there would be no impact.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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?**

Less than Significant with Mitigation Incorporated. Based on background research, site visits, and the analysis presented herein, the project would not have the potential to 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; or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 3.4, Biological Resources, with implementation of Mitigation Measures 3.4-1 and 3.4-2 impacts to migratory birds and raptors and state-protected wetlands would be less than significant. As concluded in Section 3.5, Cultural Resources, the project would implement Mitigation Measure 3.5-1, requiring procedures in the event of unanticipated discovery of archaeological resources to lessen any potential impacts. As discussed in Section 3.18, Tribal Cultural Resources, with implementation of Mitigation Measures 3.18-1 and 3.18-2, impacts to tribal cultural resources would be less than significant. With implementation of these mitigation measures, impacts would be less than significant.

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

Less-than-Significant Impact. The project would comply with all applicable regulations, as outlined in this document. The project would not result in any significant impacts; therefore, the potential for project cumulative effects in combination with other planned or anticipated improvements is low. In general, individual GHG emissions do not have a large impact on climate change. However, once added with all other GHG emissions in the past and present, they combine to create a perceptible change to climate. Because of the extended length of time that GHGs remain in the atmosphere, any amount of GHG emissions can be reasonably expected to contribute to future climate change impacts. The amount of project GHG emissions, although measurable, would be minor. On a global scale, the project would contribute a negligible amount to global cumulative effects to climate change. Additionally, there are no other planned school developments or expansions in the project area that, when taken together with the Inderkum High School Softball Fields project, would result in significantly cumulative impacts.

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

Less than Significant Impact. Based on background research, site visits, and the analysis presented herein, project implementation would not cause substantial adverse effects on human beings. With compliance with applicable regulations and implementation of the recommended mitigation measures, the project’s impact would be less than significant, or no impact would occur on all resource areas, as outlined in this document. Therefore, the overall impact would be less than significant.

This page intentionally left blank

4 SUMMARY OF MITIGATION MEASURES

The following is a summary of the proposed mitigation measures for both the construction and operational phases of the proposed Inderkum High School Softball Fields Project. All impacts of the proposed project will be reduced to a less-than-significant level by mitigation measures identified in this section.

4.1 AIR QUALITY

Mitigation Measure 3.3-1: Implement the SMAQMD Basic Construction Emission Control Practices.

Comply with Basic Construction Emission Control Practices identified by the SMAQMD and listed below or as they may be updated in the future:

- 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 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.

4.2 BIOLOGICAL RESOURCES

Mitigation Measure 3.4-1: Conduct Preconstruction Surveys for Migratory Birds and Raptors

Vegetation must be removed only outside the nesting season, September 1 through January 31. If construction occurs between February 1 and September 15, NUSD must conduct preconstruction surveys for active nests of migratory nesting birds and raptors within 14 days before the start of any construction-related activities.

If active nests are found, NUSD must consult with a qualified biologist to establish avoidance buffers around nests that will be sufficient so that breeding will not be likely to be disrupted or adversely affected by project activities. An avoidance buffer will consist of an area where project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur. Typical avoidance buffers during the nesting season will be a radius of 100 feet for nesting passerine birds and 500 feet for nesting raptors, unless a qualified biologist determines that smaller buffers will be enough to avoid impacts on nesting raptors and/or other birds. Factors to be considered for determining buffer size will include the presence of existing buffers provided by vegetation, topography, and infrastructure; nest height; locations of foraging territory; and baseline levels of noise and human activity. The buffer zone must be delineated by highly visible temporary construction fencing. A qualified biologist must monitor active nests during construction, so that the species is not harmed or harassed by the noise or activity resulting from project-related activities. The buffers must be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival.

Mitigation Measure 3.4-2: Avoid and Minimize Indirect Impacts to State-protected Wetlands During Construction Activities

- During final project design and siting, minimize the temporary project footprint to the areas necessary for construction, and select locations that are already disturbed or developed to the greatest extent feasible.
- A 50-foot setback buffer to the ditch shall be flagged and orange exclusionary fencing shall be erected prior to the start of construction activities. The exclusionary fencing shall establish a 50-foot buffer from the ditch boundary
- The project applicant shall obtain a Construction General Stormwater Permit from the Central Valley RWQCB, prepare a SWPPP, and implement BMPs to reduce water quality effects during construction.

4.3 CULTURAL RESOURCES

Mitigation Measure 3.5-1: Unanticipated Discovery of Archaeological Resources

If cultural resources are encountered during ground-disturbing activities:

- Work in the immediate area shall halt and NUSD shall be notified.
- A qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology shall be contacted immediately to assess the nature, extent, and potential significance of any cultural remains.
- If the resources are determined to be Native American in origin, the archaeologist shall consult with NUSD to begin Native American consultation procedures, as appropriate.
- If the discovery is determined to be not significant, work would be permitted to continue in the area. Potentially significant resources may require subsurface testing program to determine the resource

boundaries within the project site, assess the integrity of the resource, and evaluate the site's significance through a study of its features and artifacts.

- If, in consultation with the NUSD, a discovery is determined to be significant, a mitigation plan would be prepared and carried out in accordance with CEQA guidelines.
- If the resource cannot be avoided, a data recovery plan would be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions

Unless otherwise agreed upon with consulting Native American representatives, any cultural material collected as part of an assessment or data recovery effort would be property of the NUSD and curated at a qualified facility as directed by NUSD.

4.4 GEOLOGY AND SOILS

Mitigation Measure 3.7-1: Unanticipated Discovery of Paleontological Resources

Prior to the start of earthmoving activities at the project site, inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. This worker training may either be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources or prepared and presented separately by a qualified paleontologist.

If paleontological resources are discovered during earthmoving activities, immediately cease work in the vicinity of the find and notify the City. The District will retain a qualified paleontologist to evaluate the resource and prepare a recovery plan based on Society of Vertebrate Paleontology (SVP) Guidelines (SVP 1996). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the District, as the CEQA lead agency, to be necessary and feasible will be implemented before construction activities can resume at the site where the paleontological resources were discovered.

4.5 TRIBAL CULTURAL RESOURCES

Mitigation Measure 3.18-1: Worker Training

Before the start of ground disturbing activities, NUSD will retain a qualified archaeologist to provide training for the identification of federal- or State-eligible cultural resources, including sensitive Tribal Cultural Resources, and that the construction crews are aware of the potential for previously undiscovered archaeological resources on-site; of the laws protecting these resources, and associated penalties; and of the procedures to follow in the case that resources are discovered during project-related work. NUSD will extend an invitation to Native American Tribes that are traditionally and culturally affiliated with resources in the project area to identify a tribal monitor or a representative that would provide the

construction worker awareness training during a scheduled window of up to four hours prior to ground disturbance with compensation by the NUSD according to the established hourly rate.

Mitigation Measure 3.18-2: Procedures for Inadvertent Discovery of Cultural or Tribal Cultural Resources

If unanticipated Tribal Cultural Resources, archaeological resources, or cultural resources are encountered during ground-disturbing activities, work will be halted temporarily in the vicinity of the discovered materials until a qualified archaeologist and a Native American monitor have evaluated, recorded, and determined appropriate treatment of the resource, in consultation with the District. Ground-disturbing activities will be restricted within a 100-foot radius of the find or a distance determined by a qualified professional archaeologist to be appropriate based on the potential for disturbance of additional cultural resource materials. If the proposed development is determined to possibly damage a unique cultural resource, mitigation will be implemented in accordance with Section 21083.2 of the California Public Resources Code and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. A qualified archaeologist will identify the materials, determine their potential to meet the definition of a significant cultural resource in Section 15064.5 or a Tribal Cultural Resource, and formulate appropriate measures for their treatment. Potential treatment methods for significant and potentially significant resources may include, but would not be limited to, no action (i.e., resources determined not to be significant), avoidance of the resource through changes in construction methods or project design, or testing and data recovery, in accordance with applicable State requirements and/or in consultation with affiliated Native American Tribal representative/s.

5 REFERENCES

5.1 INTRODUCTION

None.

5.2 PROJECT DESCRIPTION

None.

5.3 ENVIRONMENTAL CHECKLIST

None.

5.3.1 AESTHETICS

California Department of Transportation. 2017. Scenic Highway System Lists. Available:

<https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed December 30, 2020.

Caltrans. *See* California Department of Transportation.

City of Sacramento. 2011. General Plan Land Use Map. Available: <https://www.cityofsacramento.org/economic-development/community-engagement/Maps>. Accessed January 26, 2021.

———. 2015a. *North Natomas Community Plan*. Available: <http://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>. Accessed January 26, 2021.

———. 2015b. *Sacramento 2035 General Plan*. Available: <http://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>. Accessed January 26, 2021.

———. 2021. City of Sacramento Planning, Open Data Portal. Available: <https://www.arcgis.com/apps/webappviewer/index.html?id=6f8e021cb286482b9a649e33ac6e67ea>. Accessed January 26, 2021.

City of Sacramento Community Development. 2019. Citywide Design Guidelines. Available:

<https://www.cityofsacramento.org/Community-Development/Planning/Urban-Design/Design-Review/Design-Guidelines>. Accessed January 26, 2021.

Sacramento County. 2020. *2030 General Plan—Circulation Element*. Available:

<https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx>. Accessed December 30, 2020.

5.3.2 AGRICULTURE & FORESTRY RESOURCES

California Department of Conservation. 2018. California Important Farmland Finder. Available:

<https://maps.conservation.ca.gov/dlrp/ciff/app/>. Accessed January 18, 2021.

City of Sacramento. 2011. General Plan Land Use Map. Available: <https://www.cityofsacramento.org/economic-development/community-engagement/Maps>. Accessed January 18, 2021.

———. 2014. *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report*. State Clearinghouse No. 2012122006. Available: <http://www.cityofsacramento.org/community-development/planning/environmental/impact-reports>. Accessed January 19, 2021.

———. 2021. Online Map. Available: <https://planning.saccounty.net/Pages/PlanningandCommunityMaps.aspx>. Accessed December January 18, 2021.

DOC. *See* California Department of Conservation.

Sacramento Area Council of Governments. 2021. Open Data Portal – Williamson Act Contracts. Available: https://data.sacog.org/datasets/199810930ef9465a9a1ae0315e5a7535_0?geometry=-123.529%2C38.001%2C-119.310%2C38.755. Accessed January 18, 2021.

SACOG. *See* Sacramento Area Council of Governments.

5.3.3 AIR QUALITY

California Air Resources Board. 2021. *Overview: Diesel Exhaust & Health*. Available: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed February 22, 2021.

CARB. *See* California Air Resources Board.

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 at <http://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>. Accessed November 2019.

Sacramento Metropolitan Air Quality Management District. 2019. *Basic Construction Emission Control Practices*. Available: <http://www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools>. Accessed February 12, 2021.

———. 2020. *Guide to Air Quality Assessment in Sacramento County (CEQA Guide)*. Available: <http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/CEQA-Guidance-Tools>. Accessed February 12, 2021.

———. 2021. Air Quality Pollutants and Standards. Available: <http://www.airquality.org/air-quality-health/air-quality-pollutants-and-standards>. Accessed February 12, 2021.

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

5.3.4 BIOLOGICAL RESOURCES

- Beedy, E.C., Hamilton, W.J. III, Meese, R.J., Airola, D.A., Pyle, P. 2018. Tricolored Blackbird (*Agelaius tricolor*) version 3.1 In: The Birds of North America (P.G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology.
- California Department of Fish and Wildlife, Biogeographic Data Branch. 2021. California Natural Diversity Database Maps and Data, Rarefind 5, version 5.2.14. Website <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed 09 March 2021.
- California Native Plant Society. 2020a. *Brassica nigra-Raphanus* spp. Alliance–Ruderal Mustards and Other Forbs. A Manual of California Vegetation, online edition. Available: <http://www.cnps.org/cnps/vegetation/>. Accessed 08 April 2020.
- . 2020b. *Avena* spp.-*Bromus* spp. Herbaceous Semi-Natural Alliance–Wild Oats and Annual Brome Grasslands. A Manual of California Vegetation, online edition. Available: <http://www.cnps.org/cnps/vegetation/>. Accessed 08 April 2020.
- . Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org>. Accessed 09 March 2021.
- CDFW. See California Department of Fish and Wildlife.
- City of Sacramento, Sutter County, Natomas Basin Conservancy, Reclamation District No. 1000 Natomas Central Mutual Water Company. 2003. Final Natomas Basin Habitat Conservation Plan. Prepared for United States Fish and Wildlife Service and California Department of Fish and Game. 15 April 2003. Sacramento, CA.
- City of Sacramento. 2020. Resolution No. 2020-0062, Adopted by the Sacramento City Council February 25, 2020, Adjusting the Amount of the Habitat Conservation Fee Established Pursuant to Chapter 18.40 of Title 18 of the City Code.
- CNPS. See California Native Plant Society.
- ICF. 2019. Biological Effectiveness Monitoring for the Natomas Basin Habitat Conservation Plan Area 2018 Annual Survey Results. April. Final. (ICF 00662.17.) Sacramento, CA. Prepared for the Natomas Basin Conservancy, Sacramento, CA.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *The National Wetland Plant List: 2016 wetland ratings*. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.
- Natomas Basin Conservancy. No Date. Covered Species – Natomas Basin Habitat Conservation Plan, Metro Air Park Habitat Conservation Plan. Plan Operator, the Natomas Basin Conservancy. Sacramento, CA. <https://www.natomasbasin.org/articles/hcp-covered-species-catalog-available/>.
- Natural Resources Conservation Service. 1997. Official Soil Series Description – Jacktone Series. May 1997.

- . 1999. Official Soil Series Description – San Joaquin Series. September 1999.
- . 2020 (March). Web Soil Survey, Version 3.3.2. Available: <https://websoilsurvey.sc.egov.usda.gov/>. Accessed 03 April 2020.

NRCS. *See* Natural Resources Conservation Service.

State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. California Water Boards. Adopted April 2, 2019.

SWRCB. *See* State Water Resources Control Board.

U.S. Fish and Wildlife Service (USFWS). 2021a. IPaC Resource List. Sacramento County, California. Sacramento Fish and Wildlife Office. Available at: <https://ecos.fws.gov/ipac/>. Accessed 09 March 2021.

———. 2021b. National Wetlands Inventory Map, produced by the NWI Mapper. Available at <https://www.fws.gov/wetlands/data/mapper.html>. Accessed on 09 March 2021.

———. 2021c. USFWS Threatened and Endangered Species Active Critical Habitat Report. Available at: <https://ecos.fws.gov/ecp/report/critical-habitat.html>. Accessed on 09 March 2021.

U.S. Geological Survey. 2018a. Taylor Monument Quadrangle, California, 7.5-minute series.

———. 2018b. Knights Landing Quadrangle, California, 7.5-minute series.

———. 2018c. Verona Quadrangle, California, 7.5-minute series.

———. 2018d. Pleasant Grove Quadrangle, California, 7.5-minute series.

———. 2018e. Grays Bend Quadrangle, California, 7.5-minute series.

———. 2018f. Rio Linda Quadrangle, California, 7.5-minute series.

———. 2018g. Davis Quadrangle, California, 7.5-minute series.

———. 2018h. Sacramento West Quadrangle, California, 7.5-minute series.

———. 2018i. Sacramento East, California, 7.5-minute series.

USFWS. *See* U.S. Fish and Wildlife Service.

USGS. *See* U.S. Geological Survey.

5.3.5 CULTURAL RESOURCES

Bedwell, Stephen 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.

- Billat, L. 2007. New Tower (“NT”) Submission Packet. Document #8614 on file at the North Central Information Center, Sacramento State University, Sacramento.
- Bradley, Denise and Michael Corbett. 1995. *Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California.*
- Chavez, D. 1985 Cultural Resources Evaluation for the North Natomas Community Plan Study Area, Sacramento California. Document #4194 on file at the North Central Information Center, Sacramento State University, Sacramento, CA.
- Ebasco Environmental. 1992 Cultural Resources Survey of the Sacramento Power Project Sacramento County, California. Document #3441 on file at the North Central Information Center, Sacramento State University, Sacramento, CA.
- Elsasser, Albert B. 1978. Development of regional Prehistoric Cultures. In *Handbook of North American Indians*, Volume 8. Smithsonian Institution, Washington, DC.
- Fredrickson, David A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis, CA.
- Hennessy, Rachel and Eileen Barrow 2018. Cultural Resources Study for the Natomas Town Center Project, Sacramento, Sacramento County, CA.
- Lindstrom, S. 1990. A Preliminary Cultural Resource Evaluation of the Sacramento Regional Transit Systems Planning Study Downtown Sacramento/Natomas/Airport Route Environmental Impact Report, Sacramento County. Document #3440 on file at the North Central Information Center, Sacramento State University, Sacramento, CA.
- R Waechter, S. 1993. Report on the First Phase of Archaeological Survey for the Proposed SMUD Gas Pipeline Between Winters and Sacramento, Yolo and Sacramento Counties, California. Document #3489 on file at the North Central Information Center, Sacramento State University, Sacramento, CA.
- Wohlgemuth, E. 1989. Letter report regarding archaeological investigations at the Adams Farms. Document #1729 on file at the North Central Information Center, Sacramento State University, Sacramento, CA.

5.3.6 ENERGY

- California Energy Commission. 2020a. Electricity Consumption by Entity. Available: <https://ecdms.energy.ca.gov/elecbyutil.aspx>. Accessed January 18, 2021.
- . 2020b. California Retail Fuel Outlet Annual Reports (CEC-A15). Available: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>. Accessed January 18, 2021.
- CEC. See California Energy Commission.

Sacramento Metropolitan Utility District. 2019. *Resource Planning Report*. Available: <https://www.smud.org/-/media/Documents/Corporate/Environmental-Leadership/Integrated-Resource-Plan.ashx>. Accessed January 18, 2021.

SMUD. *See* Sacramento Metropolitan Utility District.

U.S. Energy Information Administration. 2020. California Energy Consumption by End-Use Sector. Available: <https://www.eia.gov/state/?sid=CA#tabs-2>. Accessed January 4, 2021.

5.3.7 GEOLOGY AND SOILS

California Department of Water Resources. 2021. SGMA Data Viewer, Groundwater Levels, Spring 2020. Available: <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>. Accessed January 12, 2021.

California Geological Survey. 2008. Ground Motion Interpolator. Available: <https://www.conservation.ca.gov/cgs/ground-motion-interpolator>. Accessed January 12, 2021.

———. 2017. Alquist-Priolo Earthquake Fault Zone Maps. Available: <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>. Accessed January 12, 2021.

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.

Jennings, C.W. and W.A. Bryant. 2010. *2010 Fault Activity Map of California*. Available: <http://maps.conservation.ca.gov/cgs/fam/>. Accessed January 12, 2021.

Natural Resources Conservation Service . 2020. Web Soil Survey. Available: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed January 12, 2021.

NRCS. *See* Natural Resources Conservation Service.

5.3.8 GREENHOUSE GAS EMISSIONS

None.

5.3.9 HAZARDS AND HAZARDOUS MATERIALS

CALFIRE. *See* California Department of Forestry and Fire Protection.

California Department of Forestry and Fire Protection. 2020. Fire Hazard Severity Zone (FHSZ) Viewer. Available: <https://egis.fire.ca.gov/FHSZ/>. Accessed January 14, 2021.

California Department of Toxic Substances Control. 2021. EnviroStor. Available: <https://www.envirostor.dtsc.ca.gov/public/>. January 14, 2021.

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

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

SACOG. *See* Sacramento Area Council of Governments.

Sacramento Area Council of Governments. 2013. *Sacramento International Airport Land Use Compatibility Plan*. Available: <https://www.sacog.org/post/sacramento-county>. Accessed January 14, 2021.

———. 2021. Airport Land Use Commission. Available: <https://www.sacog.org/post/airport-land-use-commission>. Accessed January 14, 2021.

State Water Resources Control Board. 2018. 2021. GeoTracker. Available: <https://geotracker.waterboards.ca.gov/>. Accessed January 14, 2021.

SWRCB. *See* State Water Resources Control Board.

U.S. Environmental Protection Agency. 2021. Search Superfund Where You Live. Available: <https://www.epa.gov/superfund/search-superfund-sites-where-you-live>. Accessed January 14, 2021.

5.3.10 HYDROLOGY AND WATER QUALITY

AECOM. 2020. Biological Resources Reconnaissance Survey Report for Natomas Unified School District, Assessor Parcel Number 225-00400-089, Sacramento County, CA.

California Department of Water Resources. 2008. Best Available Maps. Available: <https://gis.bam.water.ca.gov/bam/>. Accessed January 15, 2021.

———. 2019. SGMA Basin Prioritization Dashboard. Available: <https://gis.water.ca.gov/app/bp-dashboard/final/#>. Accessed January 15, 2021.

———. 2021. SGMA Data Viewer, Groundwater Levels, Spring 2020. Available: <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>. Accessed January 18, 2021.

Central Valley Regional Water Quality Control Board. 2018. *The Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins*. Available: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/#basinplans. Accessed January 15, 2021.

City of Sacramento Department of Finance. 2011. North Natomas Drainage Basins. Available: https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Natomas/Natomas_Drainage_Basins.pdf?la=en. Accessed January 15, 2021.

DWR. *See* California Department of Water Resources.

Federal Emergency Management Agency. 2015. FEMA Flood Map. Available: <https://msc.fema.gov/portal/home>. Accessed January 15, 2021.

FEMA. *See* Federal Emergency Management Agency.

RWQCB. *See* Central Valley Regional Water Quality Control Board.

Sacramento Groundwater Authority GSA. 2020. North American Subbasin Groundwater Sustainability Planning. Available: <https://nasbgroundwater.org/>. Accessed January 15, 2021.

State Water Resources Control Board. 2018. 2014-2016 California Integrated Report (Clean Water Act Section 303(d) List/Section 305(b) List). Available: https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/impaired_waters_list/#intrpt2014_2016. Accessed January 6, 2021.

SWRCB. *See* State Water Resources Control Board.

5.3.11 LAND USE AND PLANNING

City of Sacramento. 2011. General Plan Land Use Map. Available: <https://www.cityofsacramento.org/economic-development/community-engagement/Maps>. Accessed January 18, 2021.

———. 2015a. *North Natomas Community Plan*. Available: <http://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>. Accessed January 20, 2021.

———. 2015b. *Sacramento 2035 General Plan*. Available: <http://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>. Accessed January 20, 2021.

———. 2021. City of Sacramento Planning, Open Data Portal. Available: <https://www.arcgis.com/apps/webappviewer/index.html?id=6f8e021cb286482b9a649e33ac6e67ea>. Accessed January 18, 2021.

5.3.12 MINERAL RESOURCES

Dupras, D. 1999. *Mineral Land Classification: Portland Cement Concrete-Grade Aggregate and Kaolin Clay Resources in Sacramento, County, California*. California Division of Mines and Geology, Open-File Report 99-09. Sacramento, CA.

Sacramento County. 2013. General Plan Land Use Map. Available: https://planning.saccounty.net/Documents/Maps/GPLU_2030_UPDATED_FINAL_120613_sm.pdf. Accessed January 18, 2021.

———. 2017. *General Plan—Conservation Element*. Available: <https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx>. Accessed January 18, 2021.

5.3.13 NOISE

AECOM. 2021. Noise Modeling Report. March 2021.

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

———. 2020 (April). *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.

City of Sacramento. 2014. (March). *Environmental Constraints*. Sacramento 2035 General Plan. Sacramento, CA.

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

Federal Highway Administration. 1978 (December). Highway Traffic Noise Prediction Model. FHWA-RD-77-108. Washington, DC: Office of Research, Office of Environmental Policy.

———. 2006 (January). *Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. Washington, DC.

FHWA. *See* Federal Highway Administration.

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

FTA. *See* Federal Transit Administration.

Sacramento County. 2017. Noise Element of the *County of Sacramento General Plan*. *County of Sacramento, Office of Planning and Environmental Review*. Sacramento, CA.

U.S. Environmental Protection Agency. 1974 (March). *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. Washington, DC.

5.3.14 POPULATION AND HOUSING

Cedar Lake Ventures. 2018. Statistical Demographic Atlas of the U.S. Available:

<https://statisticalatlas.com/neighborhood/California/Sacramento/Natomas-Park/Population>. Accessed January 22, 2021.

5.3.15 PUBLIC SERVICES

City of Sacramento Fire Department. 2020. Engine Company First-In Districts and Response Zones. Available:

<https://www.cityofsacramento.org/Fire/About/Station-Information>. Accessed January 25, 2021.

City of Sacramento Parks and Recreation Department. 2020. City Park Directory. Available: <https://www.cityofsacramento.org/ParksandRec/Parks/Park-Directory>. Accessed January 25, 2021.

City of Sacramento Police Department. 2020. Districts and Facilities. Available: <https://www.cityofsacramento.org/Police/Contact/Police-Facilities/William-J-Kinney-Police-Facility>. Accessed January 25, 2021.

5.3.16 RECREATION

City of Sacramento Parks Department. 2020. City Park Directory. Available: <https://www.cityofsacramento.org/ParksandRec/Parks/Park-Directory>. Accessed January 21, 2021.

5.3.17 TRANSPORTATION

City of Sacramento. 2020. Sacramento Bikeway User Map. Available: <https://www.cityofsacramento.org/-/media/Corporate/Files/Public-Works/Transportation/Active-Transportation/2020-Sacramento-Bikeways-Map.pdf?la=en>. Accessed March 2021.

5.3.18 TRIBAL CULTURAL RESOURCES

None.

5.3.19 UTILITIES AND SERVICE SYSTEMS

California Department of Resources Recycling and Recovery. 2019. SWIS Facility/Site Activity Details: Sacramento County Landfill (Kiefer) (34-AA-0001). Available: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2070?siteID=2507>. Accessed January 25, 2021.

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

City of Sacramento Procurement Services. 2020. *Standard Specifications for Public Construction*. Available: <https://www.cityofsacramento.org/Finance/Procurement/Construction-Specifications>. Accessed January 25, 2021.

West Yost Associates. 2016. *City of Sacramento 2015 Urban Water Management Plan*. Available: <https://www.cityofsacramento.org/~media/Corporate/Files/DOU/2015%20UWMP%20June%202016Appendices.pdf>. Accessed January 25, 2021.

5.3.20 WILDFIRE

CALFIRE. *See* California Department of Forestry and Fire Protection.

California Department of Forestry and Fire Protection (CALFIRE). 2020. Fire Hazard Severity Zone (FHSZ) Viewer. Available: <https://egis.fire.ca.gov/FHSZ/>. Accessed January 25, 2021.

5.4 MANDATORY FINDINGS OF SIGNIFICANCE

None.

This page intentionally left blank