

Draft

Dual Immersion K-5 Elementary School (Northpointe Site)
Initial Study/Mitigated Negative Declaration



Prepared for:

Natomas Unified School District

AECOM

April 2021

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Prepared for:

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Acronyms and Abbreviations

2017 Scoping Plan Update	Strategy for Achieving California's 2030 Greenhouse Gas Target
AB	Assembly Bill
ADA	Americans with Disabilities Act
AEP	annual exceedance probability
afy	acre feet per year
AMMS	avoidance and minimization measures
ANSI S1.4	American National Standards Institute for Class 1 sound-level meters
AQAP	air quality attainment plans
ARB	California Air Resources Board
B.P.	Before Present
BACT	best available control technology
Basin Plan	Water Quality Control Plan
BenMAP	Benefits Mapping and Analysis Program
BFEs	Base Flood Elevations
BMPs	best management practices
CAAQS	California ambient air quality standards
CalEEMod	California Emissions Estimator Model
CALFIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CCR	California Code of Regulations
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
cfs	cubic foot per second
cfs/acre	cubic feet per second per acre
CGS	California Geological Survey
CH ₄	methane
CHP	California Highway Patrol
City	City of Sacramento
City General Plan	Sacramento 2035 General Plan
CLOMR	Conditional Letter of Map Revision
CNPS	California Native Plant Society
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide-equivalents
Construction General Permit	NPDES Stormwater Permit for General Construction Activity (Order 2009-0009-DWQ as amended by Order No. 2012-0006-DWQ)
CRHR	California Native Plant Society
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
Drainage Manual	Sacramento City/County Drainage Manual Volume 2: Hydrology Standards
DSA	Division of the State Architect
DSH	diameter measured at standard height
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EnviroStor database	Hazardous Waste and Substances Site List
EOC	Emergency Operations Center
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESA	federal Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration's
FHWA-RD-77-108	Federal Highway Administration's traffic noise prediction model
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
g	a percentage of gravity
GHG	greenhouse gas
GSP	groundwater sustainability plan
GWh	gigawatt-hours
HFCs	hydrofluorocarbons
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I-	Interstate
IDs	identification numbers
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IS	initial study
Land Use Handbook	<i>Air Quality and Land Use Handbook: A Community Health Perspective</i>
LDL	Larson Davis Laboratories
L _{dn}	Day-Night Noise Level
LED	Light-emitting diode
L _{eq}	Equivalent sound level
L _{eq[h]}	1-hour, A-weighted equivalent sound level
LID	low impact development
L _{max}	Maximum sound level
L _n	Statistical Descriptor
MBTA	Migratory Bird Treaty Act

mgd	million gallons per day
MND	mitigated negative declaration
mph	miles per hour
MS4	Municipal Separate Storm Sewer System
MT	metric tons
MTP	Metropolitan Transportation Plan
N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NBHCP	Natomas Basin Habitat Conservation Plan
NFIP	National Flood Insurance Program
NLIP	Natomas Levee Improvement Program
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NUSD	Natomas Unified School District
NWI	National Wetlands Inventory
OEM	Office of Emergency Management
OPR	Governor's Office of Planning and Research
PA	public address
PCBs	polychlorinated biphenyls
PFCs	perfluorocarbons
PG&E	Pacific Gas and Electric Company
PGA	Peak horizontal ground acceleration
Phase II Small MS4 General Permit	Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems
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
proposed project	Dual Immersion K-5 Elementary School (Northpointe Site) Project
PUD	Planned Unit Development
R-1	Residential, Standard Single Family
RD	Reclamation District
Regional San	Sacramento Regional County Sanitation 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
SASD	Sacramento Area Sewer District
SB	Senate Bill
SCS	Sustainable Communities Strategy
SEL	sound exposure level
SF ₆	sulfur hexafluoride
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
SRWTP	Sacramento Regional Wastewater Treatment Plant
SVAB	Sacramento Valley Air Basin
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TCR	Tribal Cultural Resources
TMDLs	Total Maximum Daily Loads
tpd	tons per day
ULDC	Urban Levee Design Criteria
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration decibels
VMT	vehicle miles traveled
WDRs	Waste Discharge Requirements
WKA	Wallace Kuhl & Associates, Inc.
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 Dual Immersion K-5 Elementary School Project (Northpointe Site) (proposed project) in the city of Sacramento (City), California.

The proposed project consists of construction and operation of a new K-5 elementary school, with the potential to serve middle school grades 6-8 in the future, on an approximately 20-acre site south of Club Center Drive and north of Nantucket Way in Natomas Park.

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

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

1.2 PROJECT BACKGROUND

In 2000, the District prepared an Initial Study and adopted a Mitigated Negative Declaration for the Northpointe Middle School. That project consisted of a new middle school campus that would allow for 900–1,000 students and 50 full-time employees, to be constructed and operated on the same 20-acre project site that is the subject of this IS/MND. Since that time, the District has determined that an elementary school, which would include a larger administration building and parking to accommodate middle school students in the future, would better serve the needs of the current student population in the project area.

The CEQA Guidelines Section 15163 provides that a lead agency may choose to prepare a Supplemental MND if:

- 1) Any of the conditions described in Section 15162 would require the preparation of a subsequent Environmental Impact Report (EIR) [or MND], and
- 2) Only minor additions or changes would be necessary to make the previous EIR [or MND] adequately apply to the project in the changed situation.

Section 15162(3)(A) of the CEQA Guidelines states that a subsequent EIR [or MND] should be prepared if new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows that the project will have one or more significant effects not discussed in the previous EIR or negative declaration.

Because the school campus would be slightly larger than what was evaluated in 2000, and due to the outdated nature of some of the information presented in the previous IS/MND, the District has determined that a new IS/MND should be prepared.

1.3 PURPOSE OF THE INITIAL STUDY

This document is a 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 EIR (State CEQA Guidelines, Section 15064[a]). If the IS concludes that impacts would be less than significant, or that mitigation measures committed to by the applicant would clearly reduce impacts to a less-than-significant level, a negative declaration or MND can be prepared.

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

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

The District has analyzed the potential environmental impacts of the proposed project 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. As such, further environmental review is not required by

CEQA. The District will prepare and adopt a Mitigation Monitoring and Reporting Program to ensure that all required mitigation measures are implemented.

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 in California (Education Code Section 17213) to ensure that the location meets certain specific standards for public health and safety. Major constraints to selecting a given school site 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 school include, but are not necessarily limited to:

- ▶ California Department of Education/Division of State Architect – final school 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).
- ▶ Regional Water Quality Control Board – Stormwater General Permit.
- ▶ City of Sacramento Fire Department – site plan review for emergency access and water availability.
- ▶ Sacramento Metropolitan Air Quality Management District – authority to Construct, permit to operate.
- ▶ Sacramento Area Sewer District and Sacramento Regional County Sanitation District – approval of plans for providing sewer service.
- ▶ City of Sacramento – storm drain connection and stormwater runoff treatment, domestic water supply and fire flow, encroachment permit(s) if changes to transportation access are required, 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 and phasing.

- ▶ **Chapter 3, “Environmental Checklist,”** contains the completed initial study checklist. The checklist contains an assessment and discussion of impacts associated with each particular environmental issue. When the evaluation identifies potentially significant effects, as identified in the checklist, mitigation measures are provided to reduce such impacts to less-than-significant levels.
- ▶ **Chapter 4, “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.

2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SURROUNDING LAND USES

The proposed project would be situated at an existing District school property located in the city of Sacramento, approximately 0.4 miles east of Natomas Boulevard, in an urbanized area of northeast Natomas. The property comprises approximately 20 acres on the south side of Club Center Drive and the north side of Nantucket Way, in Natomas Park (see Exhibit 2-1). The project site is currently vacant.

Land surrounding the project site consists of residential uses, along with the approximately 3-acre California Lilac Park (across from the northeastern corner of the project site). The project site is zoned R-1 (Residential, Standard Single Family) with a Northpointe Park Planned Unit Development (PUD) overlay. The City of Sacramento General Plan land use designation is Public/Quasi-Public. Schools are allowed, with a conditional use permit, in areas that are zoned residential under the City of Sacramento County Zoning Code, Title 17, Chapter 17.204.

2.2 PROJECT CHARACTERISTICS

The proposed project involves constructing a new K–5 school, which would include additional parking and additional administrative space that could accommodate grades 6-8 in the future. The school would be designed to accommodate approximately 650 elementary students plus 50 employees, and at full build-out, would accommodate approximately 300 middle school students in grades 6-8 plus 25 associated staff, for a total of 950 students and 75 staff. The proposed project includes construction of an administration/student services building, library/media center, gymnasium, classroom buildings, a quad, 200-meter track with one soccer field, an outdoor amphitheater, and outdoor turf and hardcourt play areas, along with fire access, parking spaces, bus lanes, and a student drop-off area. The perimeter of the campus would be fenced. A conceptual site plan is shown in Exhibit 2-2.

The new classrooms, library, gymnasium, and administrative spaces would be located adjacent to one another in several large buildings, which would be connected to outdoor learning spaces and outdoor eating areas. Building exteriors would incorporate modern design features such as cantilevered roofs and covered walkways, and connectivity between indoor and outdoor learning environments. Heating, ventilation, and cooling (HVAC) systems would be enclosed and/or shielded to reduce exterior noise. All school facilities would be designed to comply with the requirements of the Division of the State Architect (DS) and the Americans with Disabilities Act (ADA). The new school buildings would also be designed to comply with the standards contained in California Code of Regulations (CCR) Title 20, Energy Building Regulations, and Title 24, Energy Conservation Standards, which require the design of building shells and building components to conserve energy. Planning, design, construction, use, and occupancy all of the new facilities would be designed in compliance with California Green Building Standards Code (CALGreen) (24 CCR Part 11), which is intended to enhance the design and construction of buildings through the use of building concepts that benefit the environment and public health and encourage sustainability in construction and operations of a building.

The outdoor track and soccer field would not include bleacher seating and would not be lighted at night. However, minor outdoor security lighting would be provided on the new buildings and in the parking lot. All nighttime lighting fixtures would be shielded and directed downward to prevent light spillover, consistent with current design practices. Outdoor track & field and soccer events may occur during the afternoon hours, after

school classes are over, but would not extend into the nighttime hours. Similarly, the outdoor amphitheater would be limited to daytime use only and would include a temporary public address (PA) system. The campus would be equipped with a public address (PA) system, which would be used primarily inside the school classroom buildings; however, occasional broadcasts outside of the buildings, particularly around the campus quad, may occur.

The project site would be landscaped with shade trees, shrubs, and turf grass in the play areas. Drought-tolerant landscaping and small shade structures would be installed around the new buildings and the outdoor gathering and learning areas.

Vehicular access would be provided from Club Center Drive and Nantucket Way.

The proposed project also includes the necessary on-site underground infrastructure, including potable water, wastewater, storm drainage, electricity, and telecommunications, which would be tied in to existing services in Club Center Drive.

All construction equipment and vehicles would be staged on the project site. 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 7am 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 8pm.

2.3 PROJECT PHASING

The school campus is expected to be built in two phases, as described below and shown in Exhibit 2-2.

Phase 1: K-5 Elementary School

- ▶ Classroom buildings for approximately 600 students and 50 staff,
- ▶ Administration/student services building,
- ▶ Library/media center,
- ▶ Central campus quad,
- ▶ Outdoor amphitheater,
- ▶ Outdoor turf and hardcourt playfields,
- ▶ Parking, bus lanes, and student drop-off area,
- ▶ Fire access lanes,
- ▶ Underground infrastructure,
- ▶ Landscaping,
- ▶ Entrances from Club Center Drive and Nantucket Way,
- ▶ Right-turn lane from Club Center Drive, and
- ▶ Sidewalks and perimeter fencing.

Phase 2: Grades 6-8 Middle School

- ▶ Classroom buildings for approximately 300 students and 25 staff,
- ▶ Gymnasium,
- ▶ 200-meter outdoor track for track & fields events, with one soccer field in the center,
- ▶ Additional turf and hardcourt play fields, and
- ▶ Landscaping.

For the purposes of this IS/MND, based on typical elementary and middle school campuses, construction of the facilities in each phase shown in Exhibit 2-2 is anticipated to include the following acreages and square footages:¹

Table 2-1. Proposed Facility Details by Phase^a

Phase 1 Facility^b	Square Footage
Building 1	8,164
Building 2	9,756
Building 3	9,225
Building 4	11,775
Building 5	10,855
Unlabeled Building (associated with the campus quad)	3,007
Total Building Square Footage	52,782
Non-Parking Hard Surfaces	189,901
Parking and Driveways	81,337
Outdoor Landscaped and Turf Play Surfaces	211,172
Phase 2 Facility^b	Square Footage
Building 6	11,789
Building 7	11,297
Building 8	10,976
Total Building Square Footage	34,062
Non-Parking Hard Surfaces	64,392
Parking and Driveways	N/A
Outdoor Landscaped and Turf Play Surfaces	236,682
Project Site Totals	Square Footage
Total Building Square Footage Phase 1	52,782
Total Building Square Footage Phase 2	34,062
Total Site Square Footage	870,329
Total Acreage Phase 1	12.3
Total Acreage Phase 2	7.7
Total Site Acreage	20.0

Notes: N/A = not applicable

^a Numbers have been rounded.

^b Corresponds to the facilities shown in Exhibit 2-2.

Source: Data compiled by AECOM in 2021

¹ It should be noted that the estimated acreages and square footages shown in Table 2-1 are conceptual in nature and may change in the future as project site designs are finalized.

Construction of Phase 1 is anticipated to take approximately 2 years, beginning in the summer of 2021. Construction of Phase 2 is assumed to require approximately 1 year; however, the year when construction of Phase 2 may occur in the future is not known.

2.4 PROJECT OBJECTIVE

The District is responsible for providing sufficient elementary, middle, and high school capacity for the northwest portion of Sacramento County, including the North Natomas Community Plan Area. Because of level of residential development, new schools are needed in North Natomas to avoid exceeding the capacity of existing schools. The objective of the project is to provide necessary public school facilities in the Natomas Park area.



Exhibit 2-1. Project Site Location



Source: Natomas Unified School District 2021

Exhibit 2-2. Conceptual Site Plan

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title:	Dual Immersion K-5 Elementary School (Northpointe Site)
2. Lead Agency Name and Address:	Natomas Unified School District 1901 Arena Blvd Sacramento, CA 95834
3. Contact Person and Phone Number:	Jennifer Mellor, Director, Facilities & Strategic Planning, (916) 567-5468
4. Project Location:	South of Club Center Drive and north of Nantucket Way, City of Sacramento
5. Project Sponsor's Name and Address:	Natomas Unified School District 1901 Arena Blvd Sacramento, CA 95834
6. General Plan Designation:	Public/Quasi-Public
7. Zoning:	R-1 (Residential, Standard Single Family), PUD (Northpointe Park Planned Unit Development [in Natomas Park])
8. Description of Project:	The proposed project involves construction and operation of a new K-5 elementary school, with the potential to accommodate middle school grades 6–8 in the future, to accommodate new students within the District.
9. Surrounding Land Uses and Setting:	Land surrounding the project site is primarily residential, and the approximately 3-acre California Lilac Park is across from the northeastern property boundary.
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
N	Aesthetics	N	Agriculture and Forestry Resources	N	Air Quality
N	Biological Resources	N	Cultural Resources	N	Energy
N	Greenhouse Gas Emissions	N	Geology / Soils	N	Hazards & Hazardous Materials
N	Hydrology / Water Quality	N	Land Use / Planning	N	Mineral Resources
N	Noise	N	Population / Housing	N	Public Services
N	Recreation	N	Transportation	N	Tribal Cultural Resources
N	Utilities / Service Systems	N	Wildfire	N	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.

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3.1 AESTHETICS

3.1.1 ENVIRONMENTAL SETTING

The approximately 20-acre project site is flat, and is currently vacant. The site was graded and fill was emplaced during construction of the surrounding residential development in the late 1990s. 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. On the east, west, and south sides, the project site is surrounded by one- and two-story residential land uses (both single-family and multi-family units) in the Natomas Park area. Solid brown fencing along the perimeter of the adjacent housing developments to the east and west is visible, along with tall trees in the backyards of these homes and multi-family buildings. The residential buildings are composed of white stucco with tan tile roofs. The project site is immediately adjacent to Club Center Drive to the north, which is a paved 2-lane roadway with a center turn lane. Metal poles with high-mast lighting are present along Club Center Drive. Single-family residences (white stucco with tan roofs) and associated landscaping are visible on the north side of Club Center Drive, along with several paved local streets oriented in a north-south direction.

The project site is visible from the southern end of the approximately 3-acre California Lilac Park, which includes trees and turf grass, a walking path, basketball court, picnic area, tot lot, and botanical garden plantings, including lilacs and native wildflowers.

The Walt Ueda Parkway Trail, and the Wolf Ranch Wildlife Sanctuary (which encompasses approximately 60 acres of created wetland and upland habitats), are located approximately 0.75 mile to the northeast. However, the project site is not visible from these recreational facilities due to the intervening residential development and associated landscaping.

3.1.1 DISCUSSION

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

No Impact. There are no scenic vistas at the project site or vicinity, which consists of residential development 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 3.8 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 located south of Club Center Drive and north of Nantucket Way in the urbanized Natomas Park area of the City of Sacramento. The project site is zoned for residential

development and designated for public/quasi-public use, and schools are allowed (with a conditional use permit) in residential areas under the City of Sacramento Zoning Code, Title 17, Chapter 17.204. 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 location 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, 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.” In addition, City General Plan Policy ERC 1.1.2 states that the City will continue to assist in reserving school sites based on each school district’s criteria and the school siting guidelines of the California Department of Education and on the City’s location criteria, which includes the requirement to “[L]ocate, plan, and design new schools to be compatible with adjacent uses.” The school campus would generally 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.

As shown in the conceptual site plan (Exhibit 2-2 in Chapter 2, “Project Description”), the school campus would be designed to cluster buildings at the north end of the site, and open turf play fields and the 200-meter track at the south end of the site. Perimeter fencing would be installed, along with drought-tolerant landscaping and shade trees among the proposed buildings and parking areas, and along the site perimeter.

The proposed project is required to conform to all California Department of Education (CDE) and Division of State Architect (DSA) requirements, which are specific to schools. Because the entire school campus would be designed in a modern style that would complement existing development in the neighborhood, and would generally be consistent with City design guidelines, the visual character and quality of the project site would be improved 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?

Less than Significant with Mitigation Incorporated. As discussed above, the project site is located in the urbanized Natomas Park area. A moderate degree of nighttime lighting associated with residential development is already presented adjacent to the project site on all four sides, and from nighttime lighting associated with residential and commercial development in the project area.

The proposed project would introduce minor new sources of nighttime lighting for security purposes associated with the buildings and facilities, access road, parking lots, and entryways. However, the outdoor sports fields

would not have lighting for nighttime use. Without a lighting plan, nighttime lighting could result in light spillover onto adjacent properties, and could result in nighttime glare and skyglow effects. Therefore, this impact is considered potentially significant.

Mitigation Measure 3.1-1: Prepare and Implement a Lighting Plan.

To reduce impacts associated with light and glare, the District shall prepare and implement a lighting plan for the proposed project that includes the following elements:

- Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties.
- Place and shield or screen flood and area lighting needed for security so as not to disturb adjacent residential areas and passing motorists.
- Light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash, shall not be used. Light-emitting diode (LED) lighting shall be used where feasible.
- Motion-controlled exterior nighttime lighting, rather than lighting that is always on, shall be used where feasible.
- Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriately shielded lighting for signage, to prevent light and glare from adversely affecting adjacent housing and motorists on nearby roadways.

Significance after Mitigation

Implementation of Mitigation Measure 3.1-1 would reduce potentially significant impacts from nighttime lighting, glare, and skyglow effects to a less-than-significant level because a lighting plan with measures specifically designed to reduce light spillover, glare, and skyglow effects would be prepared and implemented by the District.

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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 is designated as Urban and Built-Up Land (DOC 2018). There is no Farmland at the project site or in the immediate project vicinity, which is located in the urbanized Natomas Park area. The project site is zoned and designated for residential and public/quasi-public land use (City of Sacramento Planning 2020).

Farmland of Local Importance, Grazing Land, and Other Land (developed with industrial uses) are present approximately 0.25 to 0.5 mile east/northeast, in a narrow corridor that runs from Del Paso Road on the south to the heavily agricultural area north of West Elkhorn Boulevard (i.e., the “panhandle” area) (DOC 2018). A variety of future land uses have been proposed for this corridor, including light and heavy industrial use, a light-rail train station, and a potential school. The property in the panhandle is zoned primarily for single-family residential use with a small area of agricultural zoning at the northern end, and is designated primarily for Suburban Neighborhood Low Density development (City of Sacramento Planning 2020).

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?

No Impact. The project site consists of Urban and Built-Up Land (DOC 2018). The proposed project involves construction on an existing 20-acre District-owned property that has planned for a school use for the last 20 years. The surrounding area consists of residential development. Thus, the proposed project would not result in conversion of Farmland to a non-agricultural use, and there would be no impact.

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

No Impact. The project site is zoned and designated for residential and public/quasi-public land use (City of Sacramento Planning 2020). There are no Williamson Act contracts at the project site (Sacramento Area Council of Governments 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 land with no trees, surrounded by housing developments. The project site is zoned and designated for residential and public/quasi-public land uses (City of Sacramento Planning 2020), which include the proposed school. 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 Natomas Park area. Neither the project site nor the surrounding area contains any forest land. Thus, there would be 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. There is no Farmland at the project site or the immediate project vicinity. The proposed project is an urban infill project to develop a new school on District-owned property on a vacant lot surrounding by residential development. The proposed project has been planned by the District for the last 20 years, in order to accommodate students generated by surrounding development in North Natomas. As noted above, there is a narrow corridor of agricultural and industrial land approximately 0.25 mile east of the project site; however, this corridor is zoned and designated by the City of Sacramento for primarily single-family residential uses in the future. Thus, the proposed project would not result in conversion of Farmland or forest land 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.

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

The SVAB terrain is relatively flat, bounded by the North Coast Mountain Ranges to the west and the Northern Sierra Nevada Mountains to the east. Climate of the SVAB is characterized by hot, dry summers and cool, rainy winters. Typically, winds transport air pollutants northward out of the SVAB; however, during approximately half of the time from July to September, the wind pattern shifts southward, blowing air pollutants back into the SVAB and exacerbating the concentration of air pollutant emissions in the air basin. The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants in the valley. In addition, between winter storms, high pressure and light winds contribute to low-level temperature inversions and stable atmospheric conditions, resulting in the concentration of air pollutants.

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (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.” With respect to regional air quality, 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. Recent AQAPs include:

- ▶ 2017 Sacramento Regional 2008 8-Hour Ozone Attainment and Further Reasonable Progress Plan (updated via the ARB 2018 Updates to the California State Implementation Plan)
- ▶ 2013 PM_{2.5} Implementation /Maintenance Plan and Redesignation Request for Sacramento PM_{2.5} Nonattainment Area
- ▶ 2010 PM₁₀ Implementation /Maintenance Plan and Redesignation Request for Sacramento County
- ▶ 1991 Air Quality Attainment Plan, to address CAAQS for ozone, carbon monoxide, and PM₁₀
- ▶ 2015 Triennial Report and Progress Plan, to assess progress toward attaining CAAQS

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, 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, limiting vehicle speeds on unpaved roadways to 15 miles per hour, 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 2020a).

CONSTRUCTION

Construction emissions are described as short-term or temporary in duration but have the potential to adversely affect air quality. 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); exhaust emissions from use of off-road equipment, material delivery, and construction worker commutes; building construction; asphalt paving; and application of architectural coatings.

Ozone precursor emissions of ROG and NO_x are associated primarily with construction equipment exhaust and the application of architectural coatings. As discussed above, SMAQMD has not adopted a construction emissions threshold for ROG. However, a mass emission threshold of 85 pounds per day for construction emissions applies to NO_x.

PM emissions are associated primarily with fugitive dust generated during site preparation and grading, and vary depending on the soil silt content, soil moisture, wind speed, acreage of disturbance, vehicle travel to and from the construction site, and other factors. PM emissions are also generated by equipment exhaust and re-entrained road dust from vehicle travel on paved and unpaved surfaces.

Construction emissions were modeled using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Construction would occur in two phases; Phase 1 is planned to support construction of more than 50 percent greater acreage and total building square footage than Phase 2. In addition, Phase 1 construction would occur prior to Phase 2, thereby using a vehicle and equipment fleet mix that would likely result in higher emissions per unit of activity, as fleet turnover that occurs over time typically results increased engine and fuel efficiency to meet increasingly stringent rules and regulations. Therefore, Phase 1 construction was modeled and presented here as a worst-case scenario for maximum daily and total annual construction-related emissions.

Table 3.3-1 summarizes the maximum daily and annual emissions of ROG, NO_x, PM₁₀, and PM_{2.5} during each year of each construction. Refer to AECOM 2021a 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

Year of Construction ¹	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)
2021	4.3	46.5	20.2	11.8	0.4	0.2
2022	23.5	32.2	2.9	1.7	0.3	0.2
2023	2.1	19.0	2.1	1.0	0.1	0.05
Maximum Daily and Annual Emissions	23.5	46.5	20.2	11.8	0.4	0.2
SMAQMD Significance Threshold ²	None	85	80	82	14.6	15
Exceeds Threshold?	Not Applicable	No	No	No	No	No

Notes: lb/day = pounds per day; 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; VOC = volatile organic compounds; SMAQMD = Sacramento Metropolitan Air Quality Management District.

¹ Emissions modeled for Phase 1 construction, which represents a worst-case scenario for the proposed project.

² Significance thresholds listed for PM₁₀ and PM_{2.5} represent thresholds with application of all feasible best available control technology (BACT)/BMPs; without such application, thresholds are zero (0).

Source: Modeled by AECOM in 2021; See AECOM 2021a 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). With incorporation of SMAQMD's Basic Construction Emission Control Practices, this impact is less than significant.

Operations

Daily activities associated with long-term school operations would generate criteria air pollutant emissions and precursors from mobile, energy, and area sources. Mobile sources include vehicle trips arriving at, and departing from the proposed school. Area sources include consumer products (i.e., cleaning supplies, kitchen aerosols, toiletries), natural gas combustion for water and space heating, landscape maintenance equipment, and periodic architectural coatings. While construction emissions are considered short-term and temporary, operational emissions are considered long-term and would occur for the lifetime of the project. Therefore, operational emissions have greater potential to affect the attainment status of an air basin, particularly as a result of increased traffic.

Long-term operational emissions were modeled using CalEEMod, Version 2016.3.2. Table 3.3-2 summarizes the maximum daily and annual emissions of ROG, NO_x, PM₁₀, and PM_{2.5} during the earliest anticipated operational year (2023). Refer to AECOM 2021 for model output files and assumptions.

Table 3.3-2. Summary of Modeled Maximum Daily and Annual Construction-Related Emissions of Criteria Air Pollutants and Precursors

Operational Emissions Source	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)
Area	2.2	0.001	0.0005	0.0005	0.00006	0.00006
Energy	0.03	0.25	0.02	0.02	0.004	0.004
Mobile	1.6	6.9	5.5	1.5	0.69	0.2
Total Daily and Annual Emissions¹	2.5	7.2	5.5	1.5	0.7	0.2
SMAQMD Significance Threshold ²	65	65	80	82	14.6	15
Exceeds Threshold?	No	No	No	No	No	No

Notes: lb/day = pounds per day; 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; VOC = volatile organic compounds; SMAQMD = Sacramento Metropolitan Air Quality Management District.

¹ Totals do not add due to rounding.

² Significance thresholds listed for PM₁₀ and PM_{2.5} represent thresholds with application of all feasible BACT/BMPs; without such application, thresholds are zero (0).

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

As shown in Table 3.3-2, the school's total operational emissions would not exceed any SMAQMD threshold. This comparison to the SMAQMD thresholds shows that operations would not contribute substantially to any existing or projected air quality violation and would not conflict with efforts to reach attainment of any air quality

standards. Therefore, the school's long-term operational emissions would result in a less-than-significant impact on regional air quality.

Criteria Pollutant Health Risks

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

Health effects associated with ozone include respiratory symptoms, worsening of lung disease, and damage to lung tissue. In recent years, a correlation has also been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality (EPA 2020). ROG and NO_x are precursors to ozone, for which the SVAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of ROG and NO_x to regional ambient ozone concentrations is the result of complex photochemistry. The increases in ozone concentrations in the SVAB due to ozone precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of ozone precursors is speculative.

Health effects associated with short- and long-term exposure to elevated concentrations of PM₁₀ include respiratory symptoms, aggravation of respiratory and cardiovascular diseases, a weakened immune system, and cancer (WHO 2018). PM_{2.5} poses an increased health risk because these very small particles can be inhaled deep in the lungs and may contain substances that are particularly harmful to human health.

In 2020, SMAQMD published *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (SMAQMD 2020b), which provides a screening level analysis estimating the health effects of criteria air pollutants and their precursors, as well as provides guidance for conducting a health effects analysis of a project that satisfies the requirements of the Friant Ranch court decision. The modeling used for the screening level tools derives the estimated health risk associated with project-generated emissions based on increases in concentrations of ozone precursors and PM_{2.5} that were estimated using a photochemical grid model. The concentration estimates are then applied to the U.S. Environmental Protection Agency's Benefits Mapping and Analysis Program (BenMAP) to estimate the resulting health effects from concentration increases. Photochemical grid models and BenMAP were developed to assess air pollution and human health impacts over large areas and populations that far exceed the area of an average land use development project. As noted in SMAQMD's Friant Guidance, "BenMAP estimates potential health effects from a change in air pollutant concentrations, but does not fully account for other factors affecting health such as access to medical care, genetics, income levels, behavior choices such as diet and exercise, and underlying health conditions" (2020).

Although emissions from the proposed project would be well below the SMAQMD thresholds of significance, for illustrative purposes for this impact analysis, the SMAQMD Minor Project Health Screening Tool was used to

evaluate the potential regional effect of the proposed project on regional health. The results of this screening tool are provided in Exhibit 3.3-1. It is important to note that this tool utilizes the project location as an input, but the tools' outputs are based on the simulation of a full year of exposure at the maximum daily average of the increases in air pollution concentrations, assuming a project that emits at a level equal to 82 pounds per day for ozone precursor and PM emissions, which is substantially higher than would occur as a result of the proposed project. As a result, actual project-related health effects may be less than the estimates calculated by the tool. In addition, as noted in the SMAQMD Guidance, "the health effects estimation using this method presumes that effects seen at large concentration differences can be linearly scaled down to (i.e., correspond to) small increases in concentration, with no consideration of potential thresholds below which health effects may not occur. This methodology of linearly scaling health effects is broadly accepted for use in regulatory evaluations and is considered as being health protective, but potentially overstates the potential health effects. In summary, health effects presented using the procedures in this guidance are conservatively estimated, and the actual effects may be zero." Therefore, these results are considered conservative.

While SMAQMD has provided detailed guidance and screening tools, SMAQMD has not adopted thresholds of significance for the assessment of health risks related to the emission of criteria pollutants. Similarly, an industry standard level of significance has not been adopted or proposed. Due to the lack of adopted thresholds of significance, this data is presented for informational purposes.

Mitigation Measure 3.3-2: Implement Mitigation Measure 3.3-1.

Significance after Mitigation

Construction and operational emissions are below the SMAQMD emissions thresholds. Implementation of Mitigation Measure 3.3-1 would further reduce construction-related PM and satisfy the recommendations of SMAQMD. With incorporation of mitigation, this impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

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

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

Sensitive receptors nearest to the project are those within the residential areas surrounding the project site. Residents to the north and south are separated from the project site by the parallel roadways, Club Center Drive and Nantucket Way, respectively.



Minor Project Health Effects Tool

Latitude	38.66972	<-- Step 1: Input latitude (Please chose a value between 38.0 and 39.7)
Longitude	-120.51	<-- Step 2: Input longitude (Please chose a value between -122.5 and -120.0)

PM2.5 Health Endpoint	Age Range ¹	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year) ^{2,5}	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year) ²	Percent of Background Health Incidences Across the 5-Air-District Region ³	Total Number of Health Incidences Across the 5-Air-District Region (per year) ⁴
		(Mean)	(Mean)		
Respiratory					
Emergency Room Visits, Asthma	0 - 99	0.11	0.081	0.00044%	18419
Hospital Admissions, Asthma	0 - 64	0.0067	0.0048	0.00026%	1846
Hospital Admissions, All Respiratory	65 - 99	0.063	0.046	0.00023%	19644
Cardiovascular					
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.026	0.020	0.00082%	24037
Acute Myocardial Infarction, Nonfatal	18 - 24	0.0000098	0.0000071	0.00019%	4
Acute Myocardial Infarction, Nonfatal	25 - 44	0.00073	0.00056	0.00018%	308
Acute Myocardial Infarction, Nonfatal	45 - 54	0.0017	0.0013	0.00017%	741
Acute Myocardial Infarction, Nonfatal	55 - 64	0.0027	0.0021	0.00017%	1239
Acute Myocardial Infarction, Nonfatal	65 - 99	0.014	0.011	0.00021%	5052
Mortality					
Mortality, All Cause	30 - 99	0.42	0.32	0.00071%	44766

Ozone Health Endpoint	Age Range ¹	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year) ^{2,5}	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year) ²	Percent of Background Health Incidences Across the 5-Air-District Region ³	Total Number of Health Incidences Across the 5-Air-District Region (per year) ⁴
		(Mean)	(Mean)		
Respiratory					
Hospital Admissions, All Respiratory	65 - 99	0.019	0.0097	0.000049%	19644
Emergency Room Visits, Asthma	0 - 17	0.062	0.032	0.00054%	5859
Emergency Room Visits, Asthma	18 - 99	0.11	0.056	0.00045%	12560
Mortality					
Mortality, Non-Accidental	0 - 99	0.011	0.0064	0.000021%	30386

1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region.

3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

4. The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.

5. The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District*.

Sac Metro Air District Minor Project Health Effects Tool, version 2, published June 2020

Exhibit 3.3-1. SMAQMD Minor Screening Tool Results for Proposed Project Location

Construction-Related Toxic Air Contaminant Emissions

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). Construction activities may expose nearby receptors to DPM, including residents in adjacent areas. 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 PM_{2.5} (CARB 2021). Therefore, PM_{2.5} represents the upper limit for DPM emissions associated with construction of the proposed project.

During Phase 1 of construction, the nearest sensitive receptors would be residences located primarily along the western perimeter of the project site, with homes approximately 20 feet (6 meters) from the project site boundary. However, construction would occur throughout approximately 12 acres of the project site, and buildings to be constructed would be more internal to the site and further from the site perimeter. During Phase 2 of construction, the nearest sensitive receptors would include the residences along the eastern perimeter of the project site, as well as on-site students. However, as with Phase 1, construction would occur in would take place throughout the project site (nearly 8 acres associated with Phase 2 construction), and not typically focused adjacent to sensitive receptors.

Health risk is a function of the concentration of contaminants in the environment and the duration of exposure to those contaminants. The risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. Health effects from toxic air contaminants (TACs) are often described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs (OEHHA 2015). Construction activities for Phase 1 of the proposed project would be the most intensive and last approximately two years. Construction activities for Phase 2 would be of shorter duration and in proximity to the southwestern portion of the project site and a different set of sensitive receptors adjacent to this portion of the project site. In addition, concentrations of mobile-source DPM emissions are typically reduced by approximately 60 percent at a distance of around 300 feet (100 meters) (Zhu and Hinds 2002). 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. If the duration of construction activities near a sensitive receptor was for the entirety of two years (the longer of the two construction phases), which is not anticipated, then the exposure would be less than 7 percent of the total exposure period used for typical health risk calculations (i.e., 30 years). Finally, during the most intensive construction periods, maximum daily emissions of PM_{2.5} would be less than 15 percent of the SMAQMD daily threshold and less than 2 percent of the SMAQMD annual threshold. Due to the intermittent and temporary nature of construction activities and the dispersive properties of TACs, as well as the fact that PM_{2.5} emissions would be far less than the SMAQMD emission threshold with maximum daily emissions less than 15 percent of the SMAQMD threshold and maximum annual emissions less than 2 percent of the SMAQMD threshold, short-term construction would not expose sensitive receptors to DPM emission levels that would result in a health hazard. As a result, this impact would be less than significant.

Land Use Compatibility and Exposure to Toxic Air Contaminants

The proposed school would result in an increase of daily traffic trips to and from the project site. Because children are particularly sensitive to elevated concentrations of TACs, ARB recommends that the project site be assessed with regard to the compatibility of surrounding land uses that may be sources of TAC emissions. This

recommendation coincides with hazards evaluations required under CEQA and school siting requirements of the California Department of Education, as well.

California Air Resources Board's (CARB's) *Air Quality and Land Use Handbook: A Community Health Perspective* (Land Use Handbook) provides guidance concerning land use compatibility with regard to sources of TAC emissions (CARB 2005). The handbook offers recommendations for siting sensitive receptors near uses associated with TACs (e.g., freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, industrial facilities). While the handbook is advisory and not regulatory, it offers the following recommendations that are pertinent to the proposed project:

- ▶ Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads carrying 100,000 vehicles per day, or rural roads carrying 50,000 vehicles per day.
- ▶ Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard.
- ▶ Avoid siting new sensitive land uses within 300 feet of a large gasoline station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gasoline dispensing facilities.
- ▶ Avoid siting new sensitive land uses within 300 feet of any dry-cleaning operation using perchloroethylene. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult the local air district. Do not site new sensitive land uses in the same building with dry-cleaning operations that use perchloroethylene.

The project site is consistent with all the recommendations described in the 2005 CARB Land Use Handbook. The new school would be located approximately two miles from the nearest freeways (i.e., I-5, SR 99, and I-80), nearly 1 mile from the nearest gasoline station, and over one-half mile from the nearest dry cleaning operations, which exceeds the respective buffers recommended by CARB. In addition, the new school would not be located within 1,000 feet of a major service or maintenance rail yard. Therefore, the proposed school siting would not result in the exposure of sensitive receptors (future students) to TACs that exceed the recommended thresholds. As a result, this impact would be less than significant.

Carbon Monoxide Hotspots

A mobile-source pollutant of localized concern is CO. Continuous engine exhaust may elevate localized CO concentrations, or "hot spots." The SMAQMD CEQA Guide acknowledges that land use development projects do not typically have the potential to result in localized concentrations of criteria air pollutants that expose sensitive receptors to substantial pollutant concentrations, in part, because the predominant source of these pollutants is typically in the form of mobile-source exhaust from vehicle trips that occur throughout a network of roads and are not concentrated in a single location.

Emissions and ambient concentrations of CO have decreased substantially throughout California in the past three decades. The national statewide CO standard is attained statewide in California, and an exceedance of NAAQS or CAAQS in the region was last recorded in 1993. This is primarily attributable to requirements for cleaner vehicle emissions. CO hot spots are typically observed at heavily congested roadway intersections where a substantial number of gasoline-powered vehicles idle for prolonged durations throughout the day. Construction sites are less

likely to result in localized CO hot spots due to the nature of construction activities, which normally utilize diesel-powered equipment for intermittent or short durations.

The proposed project would not result in prolonged idling throughout the day, nor contribute substantially to regionally high-volume, congested roadways. As discussed in Section 3.17, "Transportation," the District includes Board Policies and Administrative Regulations that include design of transportation routes and stops that promote student safety and decreased traffic in and around the schools (NUSD 2018). Estimation of project-related VMT would require the assessment of project trip length based on future project-related students/employees locations, which are not available. However, it is anticipated that the proposed project would not result in substantial increases in VMT in the project area because the project would likely draw from the nearby population to provide necessary public school facilities in the Natomas Park area. This would allow a greater number of student trips during drop-off and pick-up times to be via walking or bicycling, or to allow for shorter vehicle trips compared to a scenario where the school was not constructed. Due to the low level of traffic, long-term planning for this site to serve as a school, and improved vehicle emissions standards for CO, the proposed school would not violate air quality standards for CO. Therefore, this impact is 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, 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. Schools are not typically considered to be sources of objectionable odors. Industries and/or facilities that are likely to emit objectionable odors include wastewater treatment plants, landfills, composting facilities, petroleum refineries, and manufacturing plants. The proposed project would not include any of these types of facilities. Other minor sources of odor that could be generated during operations of the school include landscaping equipment and cooking for the cafeteria. These activities would take place intermittently each day and would not be of substantial scale for a school of this size. As a result, this impact would be less than significant.

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3.4 BIOLOGICAL RESOURCES

3.4.1 ENVIRONMENTAL SETTING

The biological study area includes approximately 20 acres south of Club Center Drive and north of Nantucket Way in Natomas Park, in Sacramento County.

REGIONAL SETTING AND DESCRIPTION OF BIOLOGICAL STUDY AREA

The Natomas region has undergone extensive development. Most of the region is privately owned and developed 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 property was farmed for hay and row crops. According to the *Northpointe Middle School Negative Declaration* (ESA 2000), the project site was previously used for agricultural production but was graded and filled for urban land uses at the same time the rest of the surrounding area was beginning to undergo development. The placement of fill in the parcel is evident today, as the entire site is three to six feet above the grade of the surrounding area. The site is a vacant parcel bounded by roads to the north and south, and residential neighborhoods to the east and west. The biological study area encompasses the proposed project site and adjacent landscaping.

A biological survey was conducted by an AECOM biologist on behalf of Sacramento County on February 9, 2021, within and adjacent to the subject parcel for vegetation type, wetlands/other waters, riparian habitat, wildlife habitats, and general observations of wildlife usage. 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 site is generally flat. Most of the soils on the property are characterized by Clear Lake clay, hardpan substratum, drained, 0 to 1 percent slopes (86.1 percent), except for two small areas of Cosumnes silt loam, drained, 0 to 2 percent slopes (13.9 percent) in the southwest and eastern sections of the site (NRCS 2021). Both soil types are underlain by a restrictive (duripan) layer at depths ranging from 43 to more than 80 inches (NRCS 2021). Both soils are non-saline or very slightly saline (NRCS 2021).

The property is within the Natomas Basin Habitat Conservation Plan (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.



Exhibit 3.4-1. Biological Survey Map

LAND COVER TYPES

The entire parcel consists of ruderal land cover, which is dominated by introduced, non-native species that thrive in disturbed places that have been previously filled and graded. The ruderal land cover type can be best described as a *Brassica nigra*-*Centaurea (solstitialis, melitensis)* Herbaceous Semi-Natural Alliance, according to the Manual of California Vegetation (CNPS 2021b). This vegetation alliance typically is dominated by nonnative mustard species (i.e., *Brassica nigra*, *Brassica rapa*, *Hirschfeldia incana*). In the study area, ruderal habitat is dominated by mustards (*Brassica nigra*), milk thistle (*Silybum marianum*), wild geranium (*Geranium dissectum*), and red stemmed filaree (*Erodium cicutarium*). Other common species include winter vetch (*Vicia villosa*) and annual wild oat grasses (*Avena* sp.).

The proposed project site is not fenced and is accessible to the public. There were several large dump piles scattered along site edges, consisting of pruned tree limbs, soil, concrete chunks, tires, and general household rubbish. The entire site is disked, presumably for fire abatement purposes.

Ruderal habitat provides limited foraging, roosting, resting, and nesting sites for birds and small mammals. During the site survey, several species of migratory birds were observed foraging in the ruderal habitat, including American crow (*Corvus brachyrhynchos*), Say's phoebe (*Sayornis saya*), Brewer's blackbird (*Euphagus cyanocephalus*), red-winged blackbird (*Agelaius phoeniceus*), and western meadowlark (*Sturnella neglecta*). No mammals or their sign were observed in the ruderal vegetation.

Horticultural landscape trees and shrubs occur along project boundaries to the east and in residential yards and as part of landscaping for an apartment complex. Tree species include fruitless plum, coast redwood, several different palms, and Chinese pistache. Many species of migratory birds were observed roosting and foraging in the horticultural landscaping, including flocks of white-crowned sparrows (*Zonotrichia leucophrys*), house sparrows (*Passer domesticus*), and house finch (*Haemorhous mexicanus*). Other birds observed in residential landscaping adjacent to the site included a single red-tailed hawk (*Buteo jamaicensis*) roosting near the top of a large redwood tree near the southwest corner of the project site, and several individual northern mockingbird (*Mimus polyglottos*), California scrub-jay (*Aphelocoma californica*), Anna's hummingbird (*Calypte anna*), Eurasian collared-dove (*Streptopelia decaocto*), black phoebe (*Sayornis nigricans*), rock pigeon (*Columba livia*), and mourning dove (*Zenaida macroura*). The only mammals observed in landscaped areas were eastern fox squirrels (*Sciurus niger*).

SPECIAL STATUS SPECIES

One raptor (i.e., red-tailed hawk) and other migratory birds were the only special-status species observed on the study area during the reconnaissance survey. 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 California Department of Fish and Wildlife (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; 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 2021a) and the CDFW California Natural Diversity Database (CNDDDB 2021) for records of special-status species occurring within a nine-quadrangle area containing and surrounding the property, including Taylor Monument, Citrus Heights, Carmichael, Clarksburg, Florin, Rio Linda, Elk Grove, 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 for Sacramento County (USFWS 2021a), USFWS National Wetlands Inventory (NWI) (USFWS 2021b), USFWS Critical Habitat Mapper (USFWS 2021c), and the most recent biological monitoring report for the NBHCP (ICF 2019).

An AECOM biologist carried out a reconnaissance-level biological survey of the property on February 9, 2021. The work included mapping land cover types and vegetation in the property and assessing habitat conditions for potential to support special-status species, including NBHCP covered species, within and adjacent to the proposed project site.

Weather conditions during the survey were partly cloudy, with a high temperature of 64 degrees Fahrenheit and calm winds. Plant communities in the property were characterized and evaluated for their potential to support the special-status species identified during the pre-field research. Every plant that was encountered in the study area was identified to the taxonomic level necessary to determine whether it was a special-status species. Wildlife observations included an inventory of all species encountered.

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	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 (CNDDDB 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	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 (CNDDDB 2021).	No potential to occur; there are no suitable habitats (elderberry shrubs) in or within 200 feet of the proposed project site.
<i>Lepidurus packardii</i>	vernal pool tadpole shrimp	Federally endangered	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 (CNDDDB 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>Agelaius tricolor</i>	tricolored blackbird	State threatened	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 (CNDDDB 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 (CNDDDB 2021).
<i>Buteo swainsoni</i> (nesting)	Swainson’s hawk	State threatened	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 (CNDDDB 2021).	Not likely to nest but could forage in the project site; although there are large trees (redwoods) adjacent to the project site, these trees are in a highly urbanized and disturbed area and are not likely to be used for nesting. 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 (CNDDDB 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 (CNDDDB 2021).

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<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 0.5 mile of the proposed project site, and the species could forage in the project site. There are four records of this species within 3 miles (CNDDDB 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>	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 (CNDDDB 2021).	No potential to occur; there is no suitable habitat (riparian forest) in or near the proposed project site.
<i>Laterallus jamaicensis coturniculus</i>	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 (CNDDDB 2021).	No potential to occur; there are no suitable habitats (marshes or swamps) in or near the proposed project site.
<i>Riparia riparia</i>	bank swallow	State threatened	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 (CNDDDB 2021).	No potential to occur; there are no suitable habitats (vertical banks) in or near the proposed project site.
<i>Vireo bellii pusillus</i>	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. (CNDDDB 2021).	No potential to occur; there are no suitable habitats (brush or scrub) in or near the proposed project site.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Athene cunicularia</i>	western burrowing owl	CDFW Species of Special Concern	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.
<i>Lanius ludovicianus</i>	loggerhead shrike	CDFW Species of Special Concern	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 require low/sparse herbaceous cover and a variety of perch sites, neither of which are available in the proposed project site.
<i>Thamnophis gigas</i>	giant gartersnake	Federally threatened, and state threatened	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 (CNDDDB 2021).	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	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 500 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	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 (CNDDDB 2021).	No potential to occur; there are no suitable habitats (vernal pools or seasonal wetlands) in 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 (CNDDDB 2021).	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 (CNDDDB 2021).	No potential; 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 (CNDDDB 2021).	No potential; 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 (CNDDDB 2021).	No potential; 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 (CNDDDB 2021).	No potential; 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 (CNDDDB 2021).	No potential; 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 Apr through May (CNDDDB 2021).	No potential; no suitable habitat (meadows, seeps, or subalkaline flats) present.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Carex comosa</i>	bristly sedge	California Rare Plant Rank 2B.1	Coastal prairie, marshes and swamps along lake margins, and mesic sites in valley and foothill grassland. Elevation range is 0 to 2050 feet. Blooms May through September (CNDDDB 2021).	Not likely to occur; the project site consists of highly disturbed ruderal annual vegetation in an urban setting.
<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 vernally mesic valley and foothill grassland on alkaline soils. Elevation range is 0 to 1,380 feet. Blooms March through November (CNDDDB 2021).	No potential; no suitable habitat (vernal mesic or alkaline soils) present.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	California Rare Plant Rank 2B.2	Freshwater marshes and swamps. Elevation range is 45 to 920 feet. Blooms July through October (CNDDDB 2021).	No potential; no suitable habitat (marsh or swamp) present.
<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 (CNDDDB 2021).	No potential; no suitable habitat (vernal pools or vernally mesic soil) present.
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	State endangered; California Rare Plant Rank 1B.2	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 (CNDDDB 2021).	No potential; 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 (CNDDDB 2021).	No potential; no suitable habitat (marsh or swamp) present.
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	California Rare Plant Rank 1B.2	Valley and foothill grassland, where it is restricted to the edges of vernal pools. Elevation range is 50 to 350 feet. Blooms March through May (CNDDDB 2021).	No potential; no suitable habitat (vernal pools) present.
<i>Legenere limosa</i>	legenere	California Rare Plant Rank 1B.1	Wet areas, vernal pools, and ponds. Elevation range is 0 to 3,300 feet. Blooms Apr through June (CNDDDB 2021).	No potential; 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. (CNDDDB 2021).	No potential; no suitable habitat (pond, marsh, swamp or ditch) present.
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	California Rare Plant Rank 1B.1	Brackish or freshwater marshes and swamps, and riparian scrub. Elevation range: 0 to 30 feet. Blooms April through November (CNDDDB 2021).	No potential; no suitable habitat (marsh, swamp or riparian scrub) present.

Scientific Name	Common Name	Regulatory Status	Distribution and Habitat	Potential for Occurrence
<i>Orcuttia tenuis</i>	slender Orcutt grass	Federally threatened, State endangered; and California Rare Plant Rank 1B.1	Vernal pools, often with gravel. Elevation range is 110 to 5,775 feet. Blooms May through September, sometimes October (CNDDDB 2021).	No potential; no suitable habitat (vernal pools) present.
<i>Orcuttia viscida</i>	Sacramento Orcutt grass	Federally endangered, state endangered; and California Rare Plant Rank 1B.1	Vernal pools. Elevation range is 95 to 330 feet. Blooms April through July, sometimes through September (CNDDDB 2021).	No potential; no suitable habitat (vernal pools) present.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	California Rare Plant Rank 1B.2	Assorted shallow freshwater marshes and swamps. Elevation range is 0 to 2,135 feet. Blooms May through October, sometimes November (CNDDDB 2021).	No potential; no suitable habitat (marsh or swamp) present.
<i>Symphyotrichum 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 (CNDDDB 2021).	No potential; 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 (CNDDDB 2021).	No potential; no suitable habitat (marsh, swamp, or mesic/alkaline soils) present.

Notes: CDFW = California Department of Fish and Wildlife; CNDDDB = California Natural Diversity Database

CRPR = 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: CNDDDB 2021

Special-Status Plant Species

The database searches resulted in 16 special-status plant species being evaluated for their potential to occur in the property or vicinity, including the 5 plant species covered by the NBHCP: Sacramento Orcutt grass (*Orcuttia viscida*), slender Orcutt grass (*Orcuttia tenuis*), legenere (*Legenere limosa*), Bogg's Lake hedge hyssop (*Gratiola heterosepala*), and Sanford's arrowhead (*Sagittaria sanfordii*). 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 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 property or a 250-foot buffer. Due to a lack of hydrology and emergent habitat, the study area does not provide suitable habitat for Sanford's arrowhead.

Special-Status Wildlife Species

The database searches resulted in 21 special-status wildlife species being evaluated for their potential to occur in the property or vicinity, including the 13 species covered by the NBHCP: vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), 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*), Swainson's hawk (*Buteo swainsoni*), loggerhead shrike (*Lanius ludovicianus*), and bank swallow (*Riparia riparia*).

The results of the biological survey determined that suitable foraging habitat is present in the proposed project site for two species of special-status birds – Swainson's hawk and white-tailed kite. The Swainson's hawk is a Covered Species under the NBHCP (City of Sacramento, et al. 2003), and the white-tailed kite is a CDFW Fully Protected species (CNDDDB 2021). 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 one raptor (red-tailed hawk) and migratory birds, no special-status wildlife species were observed in the study area during the biological survey.

The CNDDDB lists 10 occurrences of Swainson's hawk within 3 miles of the property, with nests in large willow and cottonwood trees, or in large oak trees (*Quercus* sp.) or eucalyptus groves in urban areas, adjacent to grassland or pasture foraging habitat (CNDDDB 2021). Swainson's hawk usually forage within a 0.5 mile of a nest site. The nearest occurrence is a nest recorded in a valley oak tree approximately 0.5 mile away, documented in 2002 immediately adjacent to an expansive open grassland and row-crop agriculture (CNDDDB 2021). Another nearby nest location was reported from the Natomas Regional Park within 0.5 mile to the southwest, with one record of the species nesting in 2000, in a large willow tree along the park boundary adjacent to open grassland (CNDDDB 2021). Other occurrences of nesting Swainson's hawks in the region are near the Sacramento International Airport and Sacramento River, and other riparian areas, where there are groves of large trees and extensive areas of adjacent foraging habitat (CNDDDB 2021). The species may forage in the ruderal habitat present within the proposed project site. Given the overall lack of small-mammal activity or other sign (i.e., burrows) in the project site, Swainson's hawks are not expected to rely on the project site as a major source of prey, but they may stop through the site on occasion.

The CNDDDB lists 4 occurrences of nesting white-tailed kite within 3 miles of the property, with nests in valley oak (*Quercus lobata*) trees adjacent to grassland or pasture foraging habitat (CNDDDB 2021). Suitable nest trees and foraging habitat may also be present in the Natomas Regional Park within 0.75 mile to the southwest, and the species may forage in the ruderal habitat present in the proposed project site. Given the overall lack of small-mammal activity or other sign (i.e., burrows) in the project site, white-tailed kites are not expected to rely on the project site as a major source of prey, but they may stop through the site on occasion.

The ruderal herbaceous cover and numerous trees adjacent to 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.

CRITICAL HABITAT

The USFWS designates critical habitats for species listed as threatened or endangered under the ESA. These habitats include specific geographic areas that contain features essential for the conservation of a threatened or endangered species and may include an area that will be needed for a species' recovery. Critical habitat for the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) is approximately 5 miles to the southeast of the study area in the vicinity of the American River Parkway in oak woodland riparian habitat (USFWS 2021c). Critical habitat for the Delta smelt (*Hypomesus transpacificus*) is designated in the northern Sacramento-San Joaquin Delta, approximately 5 miles to the southwest of the study area (USFWS 2021c). No critical habitats are mapped in or near the study area; therefore, the project will have no potential effect on critical habitat.

SENSITIVE HABITATS

Sensitive habitats are those that are of special concern to resource agencies or afforded specific consideration through the State CEQA Guidelines, California Fish and Game Code Section 1602, Section 404 of the Clean Water Act, and the State's Porter-Cologne Act. No project features or activities are proposed within a water body/water course. In addition, during the site reconnaissance, no riparian habitat or sensitive natural communities were observed in the study area.

According to the National Wetlands Inventory, there are no wetlands or other waters in the proposed project site (USFWS 2021b). No seasonal wetlands or vernal pools are mapped in the NWI within the parcel or surrounding area (USFWS 2021b). No indicators of wetlands or other waters, 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 property or a 250-foot survey buffer.

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. One raptor (red-tailed hawk) and numerous migratory birds were observed utilizing the project site and/or adjacent areas for roosting and foraging during the reconnaissance-level survey.

Two special-status bird species could use the site for foraging (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 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 residential 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 0.5 mile to the east, or the Natomas Regional Park 0.75 mile to the southwest. CDFW guidelines recommend implementation of a 0.25-mile-wide buffer for Swainson's hawk, and the size of the buffer may be adjusted such an adjustment would not be likely to adversely affect the nest. Since potential nesting areas are more than 0.25 mile away, and there are busy roadways and residential neighborhoods between the proposed project site and potential nesting areas that would act as visual and acoustic barriers to project construction, 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 and the shrubs, trees, and structures adjacent to the project area 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.

A total of 52 landscape trees are rooted adjacent to (i.e., within 20 feet of) the project footprint that may be indirectly (i.e., trimmed) affected by project activities, potentially resulting in removal or destruction of nests and/or nesting birds and raptors. Ground-nesting birds, such as western meadowlark, could use the ruderal vegetation for nesting and rearing of young. During project construction, temporary increases in noise levels from equipment mobilization, trenching, grading, and earth-moving, as well as increased levels of human movement could disrupt the nesting and foraging behavior of birds and raptors within or adjacent to the project footprint, causing adults to abandon nests or neglect young chicks. The impact would be potentially significant.

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

Vegetation must be removed, and trees trimmed 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?

No Impact. No project activities are proposed within a water body/water course; therefore, project-related activities would cause no direct fill or indirect temporary or permanent loss of State or federally protected wetlands. Equipment mobilization and vegetation removal activities would be on existing uplands (i.e., ruderal areas), so that these activities would not directly affect any State or federally protected wetlands. Therefore, no impact would occur.

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 ditches and 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 52 trees mapped within 20 feet of the project boundaries. All trees mapped are rooted in neighboring properties in residential yards and as landscaping for an apartment complex. No trees are rooted in the project footprint, although some trees are large enough to have canopies that overlap with the project. Tree species that were mapped as part of the biological survey and their locations in relation to the project footprint are shown in Exhibit 3.4-1.

Table 3.4-2 below summarizes the types of trees along with their approximate trunk diameter at standard height (i.e., 4.5 feet above the ground surface) and canopy widths that were mapped adjacent to (i.e., within 20 feet of) the proposed project footprint. The tree identification numbers (IDs) listed below do not reflect a tagged tree number but instead represent the order that the tree was mapped in the field. Trees were mapped using the ESRI® Collector® mobile application.

Table 3.4-2. Trees Mapped within 20 feet of the Proposed Dual Immersion K-5 Elementary School (Northpointe Site)

Tree ID Number	Tree Type	Approximate Trunk Diameter (inches)	Approximate Canopy Width (feet)	Location Notes
Tree ID No. 1	Palm	14	20	Residential front yard
Tree ID No. 2	Redwood	18	22	Residential backyard
Tree ID No. 3	Redwood	14	20	Residential backyard
Tree ID No. 4	Monterey pine	15	30	Residential backyard
Tree ID No. 5	Privet	16	30	Residential backyard
Tree ID No. 6	Privet	16	25	Residential backyard
Tree ID No. 7	Prunus	20	35	Apartment landscaping
Tree ID No. 8	Prunus	20	40	Apartment landscaping
Tree ID No. 9	Prunus	28	35	Apartment landscaping
Tree ID No. 10	Redwood	15	15	Apartment landscaping
Tree ID No. 11	Redwood	18	20	Apartment landscaping
Tree ID No. 12	Redwood	14	18	Apartment landscaping
Tree ID No. 13	Redwood	18	20	Apartment landscaping
Tree ID No. 14	Redwood	22	30	Apartment landscaping
Tree ID No. 15	Prunus	20	35	Apartment landscaping
Tree ID No. 16	Prunus	24	40	Apartment landscaping
Tree ID No. 17	Prunus	25	30	Apartment landscaping
Tree ID No. 18	Chinese elm	14	40	Apartment landscaping
Tree ID No. 19	Prunus	10	25	Residential backyard
Tree ID No. 20	Maple	15	15	Residential backyard
Tree ID No. 21	Redwood	12	18	Residential backyard
Tree ID No. 22	Chinese pistache	7	15	Residential front yard
Tree ID No. 23	Chinese pistache	10	15	Residential front yard
Tree ID No. 24	Chinese pistache	20	20	Residential front yard
Tree ID No. 25	Chinese pistache	10	18	Residential front yard
Tree ID No. 26	Chinese pistache	8	20	Residential front yard
Tree ID No. 27	Palm	14	20	Residential backyard

Tree ID Number	Tree Type	Approximate Trunk Diameter (inches)	Approximate Canopy Width (feet)	Location Notes
Tree ID No. 28	Palm	7	10	Residential backyard
Tree ID No. 29	Palm	15	25	Residential backyard
Tree ID No. 30	Redwood	20	30	Residential backyard
Tree ID No. 31	Chinese pistache	8	18	Residential backyard
Tree ID No. 32	Prunus	24	30	Residential backyard
Tree ID No. 33	Liquidambar	6	24	Residential backyard
Tree ID No. 34	Prunus	20	35	Residential backyard
Tree ID No. 35	Fan palm	4	10	Volunteer along wall
Tree ID No. 36	Prunus	24	25	Residential backyard
Tree ID No. 37	Lemon	8	10	Residential backyard
Tree ID No. 38	Lemon	6	10	Residential backyard
Tree ID No. 39	Mandarin	9	15	Residential backyard
Tree ID No. 40	Mandarin	10	18	Residential backyard
Tree ID No. 41	Unknown	7	15	Residential backyard
Tree ID No. 42	Unknown	11	16	Residential backyard
Tree ID No. 43	Unknown	7	12	Residential backyard
Tree ID No. 44	Redwood	5	10	Residential backyard
Tree ID No. 45	Unknown	8	15	Residential backyard
Tree ID No. 46	Pear	12	16	Residential backyard
Tree ID No. 47	Pear	13	18	Residential backyard
Tree ID No. 48	Pear	22	20	Residential backyard
Tree ID No. 49	Palm	14	15	Residential backyard
Tree ID No. 50	Prunus	18	28	Residential backyard
Tree ID No. 51	Italian cypress	12	10	Residential backyard
Tree ID No. 52	Maple	6	15	Residential front yard

All the trees adjacent to the project footprint are large landscape trees rooted in private properties to the east and west of the project site. Chapter 12.56 of the Sacramento City Code (2016) defines private protected trees as meeting one or the following criteria:

- ▶ A tree that is designated by city council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property;
- ▶ Any native Valley Oak (*Quercus lobata*), Blue Oak (*Quercus douglasii*), Interior Live Oak (*Quercus wislizenii*), Coast Live Oak (*Quercus agrifolia*), California Buckeye (*Aesculus californica*), or California Sycamore (*Platanus racemosa*), that has a trunk diameter measured at standard height (DSH) of 4.5 feet from the ground surface of 12 inches or more, and is located on private property;
- ▶ A tree that has a DSH of 24 inches or more located on private property that:
 - 1. is an undeveloped lot; or
 - 2. does not include any single unit or duplex dwellings; or

- ▶ A tree that has a DSH of 32 inches or more located on private property that includes any single unit or duplex dwellings.

A tree permit is required for the removal of private protected trees (City of Sacramento 2016). No 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. Furthermore, the project site would be landscaped with shade trees, which would lead to a net gain of urban tree canopy for the neighborhood. Since none of the trees with canopies overlapping the proposed project site meet the above-listed criteria of a private protected trees (i.e., native oaks, DSH greater than 32 inches), and no trees are proposed for removal, Chapter 12.56 of Sacramento City code does not apply and there is no impact.

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

Less-than-Significant Impact. Since the property is within the NBHCP Permit Area, NUSD will be required to comply with all applicable avoidance and minimization measures (AMMs) as provided in Chapter 7 of the NBHCP (City of Sacramento, et al. 2003). Since there are no aquatic habitats, elderberry shrubs, trees, or other suitable habitats in or within 500 feet of the proposed project site for species covered by the NBHCP, none of the AMMs listed in Chapter 7 of the NBHCP apply to the proposed project. However, 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 ruderal habitat mapped in the property, totaling approximately 19.01 acres of habitat, would require mitigation. The HCP fees were paid for the project area in 1997 (City of Sacramento 2020b). Therefore, the proposed project would not conflict with provisions of an adopted Habitat Conservation Plan and impacts would be less than significant.

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3.5 CULTURAL RESOURCES

3.5.1 ENVIRONMENTAL SETTING

AECOM prepared a Cultural Resources Assessment for the proposed project in February 2021 (AECOM 2021b). The study included a records search with the California Historical Resources Information System, Native American tribal outreach, archival map review, and a field survey. As part of the literature review for the project, AECOM staff also reviewed the California Register of Historical Resources, National Register of Historic Places, the California Historical Landmarks list, the Archaeological Determination of Eligibility list, and the California State Historic Resources Inventory list. The records identified 10 previously conducted cultural resources studies within a 0.25-mile radius of the project site. Of these, five cultural resources studies include portions or the entire project site.

As detailed in the Cultural Resources Assessment (AECOM 2021b), the previous investigations did not result in the identification of cultural resources or historic properties within the project site. While records search identified the Reclamation District (RD) 1000 Rural Historic Landscape District within the project site footprint, none of the contributing elements are within the proposed Dual Immersion K-5 Elementary School (Northpointe Site) footprint. Potential significant impacts on the California Register of Historical Resource contributing elements of RD 1000 that may result from improvements and development within the Natomas Basin have been fully mitigated (see Peak and Associates 1997).

Assembly Bill (AB) 52 consultation was conducted as part of the CEQA process. As part of the Native American Tribal Outreach, AECOM contacted the Native American Heritage Commission (NAHC) on February 4, 2021 to request a search of the Sacred Lands File (SLF) of the project site. A response was received from the NAHC on March 4, 2021 stating the SLF search had been completed with positive results. In addition, NUSD reached out to local Native American groups. See Section 11, Tribal Cultural Resources, for a summary of Native American tribal consultation efforts under AB 52.

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. As detailed above, the cultural resource assessment did not identify historical resources within the project site. Therefore, based on the results of the Cultural Resources Assessment, 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. As detailed above, cultural resource assessment did not identify archaeological resources within the project site and since the land was subject to frequent flooding and was essentially uninhabitable before the 20th century, it is unlikely that prehistoric archaeological deposits would be discovered during project implementation. Therefore, based on the results of the Cultural Resources Assessment, impacts to archaeological resources would be less than significant with implementation of Mitigation Measure 3.5-1 in the event of an unanticipated discovery, work would be halted 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 (National Park Service 1983) 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.

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

Less-than-Significant Impact. The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a most likely descendant. The most likely descendant will complete the inspection of the site and provide recommendations for treatment to the landowner within 48 hours of being granted access. 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

The proposed project would be situated at an existing undeveloped District school property that is flat and has been previously graded during construction of the surrounding housing developments.

ELECTRICAL SERVICES

Electrical service at the project site would be 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).

NATURAL GAS

Natural gas service is provided in the city of Sacramento, including the project site, by Pacific Gas and Electric Company (PG&E) through portions of PG&E's approximately 42,800 miles of natural gas distribution pipelines. In 2016, PG&E generated approximately 33,525 GWh net electricity and purchased an additional 41,691 GWh of electricity (PG&E 2017). Natural gas consumption within the PG&E service area was approximately 4,971 million therms in 2019 (CEC 2020b), approximately 6.2 percent (311 million therms) of which was provided to users in Sacramento County (CEC 2020c).

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 2020d). The 2005 Renewable Fuel Standard Program and 2007 Energy Independence and Security Act establish requirements for renewable fuel use to replace petroleum-based fuels.

3.1.1 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 project would not increase consumption or inefficient energy use. Construction equipment

and haul trucks would consume fuel during the construction process; however, the project's small size and the previous grading that has already occurred at the site would minimize the energy consumed. The proposed project does not include unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites.

During operations, the project would require fuel for vehicles and equipment used by on-site employees and buses for school children, which would be typical of any public school throughout the Sacramento area. The site's energy use would not increase the area's peak demand for power. Furthermore, the proposed project would be designed with energy efficient buildings that will 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.

Structures built as part of the proposed project would comply with Titles 20 and 24 of the California Code of Regulations, which serve to reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. Therefore, 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 Before Present [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 15–17 feet above mean sea level, sloping gently from north to south.

A *Geologic Hazards Report* prepared in 2000 by Wallace Kuhl & Associates, Inc. (WKA 2000) indicated that the project site consists of artificial fill that was appropriately placed in lifts, moisture conditioned, and compacted as engineered fill (with a thickness of 1–2 feet) during construction of the surrounding Northpointe Park Villages. Soil borings advanced to a maximum depth of 15 feet encountered highly expansive stiff silty clay underlain by a discontinuous stratum of silty fine sand, below the engineered fill. Groundwater was encountered at depths of 12–13 feet.

The Sacramento Valley has historically experienced a very low level of seismic activity. The nearest potentially active faults are located approximately 21 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, WKA 2000).

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. The results of soil borings conducted by WKA in 2000 confirmed the presence of these Basin Deposits to a depth of 15 feet (the maximum boring depth). Since the Pleistocene-age Riverbank Formation (which is paleontologically sensitive) outcrops at the surface approximately 0.5 mile northeast, the Riverbank Formation is likely present at the project site, but below the maximum boring depth advanced by WKA in 2000. Since project-related excavation would not exceed 4–5 feet below the ground surface, earthmoving activities would be confined to the recent engineered fill and Holocene Basin Deposits, and would not encounter the Riverbank Formation.

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 Building Standards Code (CBC) requires a site-specific calculation of the PGA for use in earthquake-resistant design. As calculated by WKA in 2000, there is a 1-in-10 probability that an earthquake within 50 years would result in a PGA of 0.21g (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 school buildings are required by law to be designed and constructed in accordance with the current edition of the CBC, which contains engineering and design requirements (including preparation of a geotechnical report) 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.

WKA (2000) indicated that the project site is not underlain by a thick layer of loose, cohesionless soils, and due to the distance from active and potentially active faults, liquefaction, ground lurching, differential settlement, or lateral spreading would not represent a hazard 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 earthmoving activities on an approximately 20-acre site. The project site is flat, and consists of engineered, compacted artificial fill; thus, there is a low wind and water erosion hazard. Earthwork would include trenching and pipe installation; installation of building, road, and parking lot foundations; and landscaping. Construction activities during the winter months would expose soils to rain events, which could mobilize loose soil and result soil erosion. Subsequent soil

transport during storm events could result in sedimentation both within and downstream of the project site. Furthermore, earthmoving activities during the summer months could result in wind erosion.

However, 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.

Furthermore, as discussed in detail in Section 3.10, “Hydrology and Water Quality,” because the proposed project would disturb more than 1 acre of land, the District would be required by law to prepare a Storm Water Pollution Prevention Plan (SWPPP) and to implement associated Best Management Practices (BMPs) that are specifically designed to reduce construction-related erosion. Construction techniques that could be implemented to reduce the potential for stormwater runoff may include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that could be implemented to reduce erosion may include silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, trench plugs, terraces, water bars, soil stabilizers and re-seeding and mulching to revegetate disturbed areas.

Compliance with CDE requirements along with preparation of a SWPPP and implementation of BMPs designed to control stormwater runoff and reduce erosion, 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 entire project site is composed of engineered, compacted artificial fill underlain by silty clay with a discontinuous layer of silty sand. WKA (2000) found that the project site would not be subject to hazards from unstable soils, including lateral spreading, subsidence, liquefaction, or collapse. Furthermore, compliance with the CBC and CDE requirements to prepare geotechnical engineering reports that include specific recommendations for construction in unstable soils would ensure that buildings, roads, and parking lots 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 1–2 feet of soil at the project site consists of moisture-conditioned, compacted, artificial fill. Based on soil borings conducted by WKA (2000), soil below the engineered fill contains highly expansive soil. 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. Retaining walls and underground utilities may be damaged for the same reasons.

The IS/MND prepared in 2000 found that this impact was significant and included a mitigation measure to prepare a geotechnical report. However, Chapter 18 of the CBC regulates the excavation of foundations and retaining walls. This chapter regulates the preparation of a preliminary soil report, engineering geologic report, geotechnical report, and supplemental ground-response report. Chapter 18 also regulates analysis of expansive soils and the determination of the depth to groundwater table. Compliance with the CBC is required by law. The

CBC and CDE require preparation of geotechnical engineering reports that include specific recommendations for construction in expansive soil, which would ensure that buildings, roads, and parking lots 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 project site is located within the area served by a municipal wastewater system. Wastewater generated by the proposed school would be conveyed to the Sacramento Regional Wastewater Treatment Plant for treatment. Because the proposed project would not require installation of a septic system or an alternative wastewater disposal system, there would be no impact.

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

No Impact. The top 1–2 feet of soil at the project site is composed of engineered fill emplaced in the late 1990s, underlain by Holocene-age Basin Deposits to a depth of at least 15 feet below the ground surface. Project-related excavation would not exceed a depth of 4–5 feet below the ground surface, and therefore would be located entirely within Holocene-age deposits. 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. Therefore, construction-related earthmoving activities associated with the proposed project would have no impact on unique paleontological resources or unique geologic features.

3.8 GREENHOUSE GAS EMISSIONS

3.8.1 ENVIRONMENTAL SETTING

Greenhouse gas (GHG) emissions 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.

Certain gases in the earth's atmosphere, classified as 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 back 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.

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 with Mitigation Incorporated. Implementation of the proposed project would generate short-term construction and long-term operational GHG emissions. Construction-related GHG emissions would cease following construction of the proposed project. Operational emissions are assumed to occur for the lifetime of the project.

Addressing impacts associated with the generation of GHG emissions requires an agency to make a determination as to what constitutes a significant impact. As stated in Appendix G of the CEQA Guidelines, the significance criteria established by the applicable air quality management district may be relied on to make the above determinations.

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.

In April 2020, the Sacramento Metropolitan Air Quality Management District (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 best management practices (BMPs) that should be applied to project operations in order to demonstrate consistency with the Climate Change Scoping Plan. Per these guidelines, consistency can be demonstrated if the following criteria are met, or equivalent on-site or off-site mitigation is incorporated.

- ▶ The SMAQMD recommends that all projects implement Tier 1 BMPs (BPM 1 and 2):
 - BMP 1 – projects shall be designed and constructed without natural gas infrastructure;
 - BMP 2 – projects shall meet the current CalGreen Tier 2 standards, except all electric vehicle capable spaces shall instead be electric vehicle ready.
- ▶ Projects that exceed 1,100 metric tons/year after implementation of Tier 1 BMPs must implement Tier 2 BMPs (BMP 3)
 - BMP 3 – residential projects shall achieve a 15 percent reduction in vehicle miles traveled per resident and office projects shall achieve a 15 percent reduction in vehicle miles traveled per worker compared to existing average vehicle miles traveled for the county, and retail projects shall achieve a no net increase in total vehicle miles traveled to show consistency with SB 743.

Construction-related exhaust GHG emissions would be generated from a variety of sources during construction of the proposed project including, but not limited to heavy-duty construction equipment, haul trucks, material delivery trucks, and construction worker vehicles. Operational GHG emissions are distinguished by direct and

indirect GHG emissions. Direct GHG emissions are those emissions that are generated at the location of consumption or use. For example, mobile-source emissions are direct emissions because GHG emissions are generated as a vehicle begins to move. Conversely, indirect emissions are those emissions that occur at a different time or location from the point of consumption or use. For example, electricity related GHG emissions are indirect emission because as a consumer uses electricity at their home, the fuel combustion and emissions associated with creating that electricity likely occurred off-site or at a different time. Other indirect GHG emissions include emissions associated with solid waste disposal and water consumption.

CalEEMod, Version 2016.3.2, was used to estimate direct emissions associated vehicle and heavy-duty equipment use during construction, using the year 2021 as the earliest possible year of construction. CalEEMod was also used estimate the generation of GHG emissions during from operational sources, including the proposed project's mobile (e.g., staff and student-related vehicles), area (e.g., landscape maintenance equipment), and energy (e.g., natural gas) sources, and indirect operational emissions associated with energy (i.e., electricity), water (i.e., conveyance and distribution), and solid waste (i.e., decomposition) sources, using the year 2023 as the earliest possible year for operations. 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. Modeled Greenhouse Gas Emissions for Construction and Operations of the Proposed Project

Emissions Source	Greenhouse Gas Emissions (MT CO ₂ e per year)
Construction GHG Emissions	
2021	261
2022	571
2023	242
Maximum Annual Construction Emissions	571
Operational GHG Emissions	
Area	0.03
Energy	141
Mobile	712
Waste	87
Water	7
Total Annual Operational Emissions ¹	947

Notes: MT CO₂e = metric tons carbon dioxide equivalents

¹ Totals do not add due to rounding.

Source: Modeled by AECOM in 2021

GHG emissions generated by construction activities would occur over the short term, primarily from equipment and vehicle exhaust, both on-site and traveling to and from the project site. The maximum annual emissions would be substantially less than the SMAQMD-recommend threshold of significance for the construction phase of a project. Impacts related to the generation of GHG emissions during construction is less than cumulatively considerable.

Operationally, while the Dual Immersion K-5 Elementary School (Northpointe Site) is not pursuing environmental certification (i.e. LEED, CHPS), it will be designed to the high sustainability standards set by those programs, often exceeding the CalGreen mandatory standards. Building orientation to maximize natural daylighting in the learning environments was a key driver in the site development of the campus. Because of its size, the project will

require commissioning of HVAC systems. The project will be net zero ready. The District is proactive in implementing energy efficiency and energy conservation programs as a part of its operations. The NUSD published its Conservation and Building Management Guidelines in March 2016 (revised April 2016), which identifies energy conservation guidelines to serve as a standard for facilities and strategic planning. To reduce gas and electric demand, the guidelines include operational measures, such as use of natural lighting, limiting use of interior and exterior lights to only necessary locations and levels, using cross-ventilation as an alternative to air conditioning when possible, use of Energy Star microwaves, discouraging the use of space heaters and individual coffee pots, and several other operational measures (NUSD 2016). Many of these actions may be small independently, but cumulatively can result in measurable energy reductions for a campus.

The proposed project cannot, at this time, preclude the use of natural gas and, therefore, will not demonstrate consistency with the SMAQMD-recommended BMP 1. As stated above, the project will be designed to high sustainability standards, often exceeding the CalGreen mandatory building requirements, including implementing energy efficiency and conservation as a component of facility operations, and designing and constructing the building to be net zero ready to facilitate future installation of solar facilities.

As shown in Table 3.8-1, annual operational emissions are estimated to be approximately 947 MT CO₂e per year; 50.72 MT of which result from the modeled uses of natural gas for a school of this size. Although these emissions would not exceed SMAQMD's 1,100 MT CO₂e per year screening threshold, because the proposed project cannot commit to implementation of the SMAQMD-recommended Tier 1 BMPs, the following mitigation measures are recommended:

Mitigation Measure 3.8-1: Design for Net-Zero Ready Electric Capability.

The NUSD, as part of final project design, shall ensure that the proposed school has the capacity to be all-electric in the future, including any pre-wiring necessary so that the building is ready for future retrofit to all-electric.

Mitigation Measure 3.8-2: EV Charging Facilities.

The NUSD, as part of final project design, shall be designed to meet the current CalGreen Tier 2 standards for electric vehicle capable spaces, except that electric vehicle spaces shall instead be electric vehicle ready, not just electric vehicle capable.

Significance after Mitigation

The operational emissions associated with the proposed project are less than SMAQMD's screening threshold of 1,100 MT CO₂e per year. The proposed project is intended to be designed and constructed to be net zero ready. Mitigation Measure 3.8-1 ensures this is incorporated as a part of final design, and is thereby in alignment with the State's 2045 carbon neutrality goal. Implementation of Mitigation Measure 3.8-2 would support consistency with the SMAQMD-recommended BMP 2 to require electric vehicle parking spaces that are installed to be electric vehicle ready.

In addition, the siting of the school is intended to serve the surrounding neighborhood and is expected to result in shorter average trip lengths and provide more opportunity for walking and biking to this school compared to existing conditions and compared to a future scenario that does not have this neighborhood school. It is

anticipated that the proposed project would not result in substantial increases in vehicle miles traveled (VMT) in the project area because the project would likely draw from the nearby population to provide necessary public school facilities in the Natomas Park area. This would allow a greater number of student trips during drop-off and pick-up times to be via walking or bicycling, or to allow for shorter vehicle trips. Additionally, developing a new school at the project site in the Natomas Park area is consistent with the Governor's Office of Planning and Research recommendations on potential measures to reducing VMT, which include increasing access to schools and other services (OPR 2018).

Therefore, implementation of Mitigation Measures 3.8-1 and 3.8-2, as well as VMT reducing measures associated with project siting, would reduce the proposed project's greenhouse gas emissions to a level that is considered less than cumulatively considerable with mitigation.

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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 1.3 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 4.5 miles east, at the former McClellan Air Force Base (U.S. Environmental Protection Agency [USEPA] 2021).

SCHOOLS

There are no existing schools within 0.25 mile of the project site. The Regency Park Elementary School is approximately 0.67 miles north of the project site.

AIRPORTS

The Rio Linda Airport is approximately 2.75 miles east of the project site. The project site is not located within any of Rio Linda Airport’s designated safety zones (Sacramento Area Council of Governments [SACOG] Airport Land Use Commission 2021), and is not within the area covered by the *Rio Linda Airport Land Use Compatibility Plan* (SACOG 1992).

WILDLAND FIRE

The project site is located in an urbanized area. 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 800 feet west of the project site, on the north side of Club Center Drive.

EMERGENCY PLANNING

The City of Sacramento Office of Emergency Management (OEM) coordinates the planning, preparedness, communication, response, and recovery during man-made or natural disasters. OEM also has oversight over the Emergency Operations Center (EOC). The EOC is activated to support the on-scene response during an escalating incident. The EOC is a physical location staffed with personnel trained for and equipped with mechanisms for communicating with the incident site and obtaining resources. In 2021, the City of Sacramento is partnering with Sacramento County, other incorporated communities, and numerous special districts to update the *2016 Sacramento Countywide Local Hazard Mitigation Plan* (Foster Morrison Consulting 2016), which addresses

potential damage from flooding, wildland fires, and geologic hazards. In addition, every school and site in the Natomas Unified School District maintains and adheres to an individual Emergency Preparedness Plan.

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. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans), and use of these materials is regulated by DTSC, as outlined in CCR Title 22. The District and its construction contractors would be required to use, store, and transport hazardous materials in compliance with applicable federal and State regulations during project construction and operation. Because the project would be required to implement and comply with existing hazardous material regulations, and because 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, 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 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. Furthermore, because the proposed project would disturb more than 1 acre of land, the District is required by law to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) with appropriate best management practices (BMPs), such as spill prevention and contingency measures to reduce the potential for accidental spills and procedures for implementation of appropriate and timely cleanup activities if spills do occur. Therefore, this impact would be less than significant.

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

Less-than-Significant Impact. There are no existing schools within 0.25 mile of the project site; however, the proposed project itself involves construction and operation of a new school. Minor amounts of hazardous materials such as fertilizers, pesticides, paints, solvents, and fuels would be present on site during project construction and operation. However, the handling and use of these materials is heavily regulated at both the federal and State level. The construction area would be surrounded by exclusionary fencing, and long-term storage of hazardous materials on site would occur in locked areas to exclude students. None of the materials used at the project site would be acutely hazardous. Therefore, 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 2001, DTSC approved the final Preliminary Endangerment Assessment prepared for the project site (ENSR Corporation 2000), which found that no actual or potential hazardous materials release was indicated at the site that would pose a threat to human health or the environment under any type of land use. DTSC

therefore determined that no further action was necessary with regards to remediation of hazardous substances. 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, USEPA 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 Rio Linda Airport is approximately 2.75 miles east of the project site. The project site is not located within any of Rio Linda Airport’s designated safety zones or noise contours (Sacramento Area Council of Governments [SACOG] Airport Land Use Commission 2021), and is not within the area covered by the *Rio Linda Airport Land Use Compatibility Plan* (SACOG 1992). 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?

Less-than-Significant Impact. All construction materials and equipment would be staged on the project site. Modifications to Club Center Drive to create the required right-turn lane in the eastbound direction would require a short-term and temporary closure of the adjacent roadway lane. However, flagmen would be engaged by the District’s construction contractor to provide for traffic safety and allow for the continued passage of emergency vehicles. Club Center Drive ends approximately 970 feet east of the project site. Therefore, if an emergency situation were to arise that required evacuation, such evacuation would occur on the westbound lane of Club Center Drive; in addition, the existing center turn lane could also be utilized to provide for increased westbound traffic during an evacuation. Project site access would also be provided on the south side from Nantucket Way.

School operations would be confined to the approximately 20-acre project site. The school site would be designed for appropriate emergency ingress and egress (including fire lanes) per CDE requirements. Furthermore, every school and site in the Natomas Unified School District maintains and adheres to an individual Emergency Preparedness Plan, which provides guidance to students and employees in terms of procedures that will be implemented to provide for safety during an emergency.

For the reasons stated above, short-term and temporary project-related construction in Club Center Drive, and long-term project operation, would not impede emergency vehicles or adopted emergency evacuation plans, and this impact would be less than significant.

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

Less-than-Significant Impact. The project site is located in an urbanized area. The site is flat and is covered with annual and perennial grasses and weeds. The surrounding area consists of medium- and high-density housing with associated landscaping, and paved local streets. The approximately 3-acre California Lilac Park across the street

to the northeast consists primarily of turf grass, with landscape trees and shrubs. 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 800 feet west of the project site, on the north side of 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 this impact is considered less than significant.

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. Dry Creek, which is a tributary of the Sacramento River, is approximately 1 mile to the east. 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. Reclamation of the Natomas Basin for agricultural development required construction of two major ditch and canal systems in the Basin: an irrigation system owned and operated by Natomas Central Mutual Water Company, and a drainage system owned and operated by Reclamation District (RD) 1000. Because the Natomas Basin is surrounded by levees, all excess drainage within the Natomas Basin must be pumped out. In general, water is pumped into the Natomas Basin from the Sacramento River and the Natomas Cross Canal as irrigation water, and is returned to the perimeter drainage channels via RD 1000's interior drainage system.

The project site lies within the 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. Developed flow discharges to the RD 1000 system are limited to approximately 0.1 cubic foot per second (cfs) per acre, which is generally the standard for development in North Natomas. Runoff from the project site drains south to North Natomas Basin No. 4, which is approximately 0.25 mile to the southwest (City of Sacramento Department of Finance 2011). Basin No. 4 discharges to RD 1000's East Drainage Canal, which conveys water to its confluence with the Main Drainage Canal northwest of the Interstate 80 (I-80)/Interstate 5 (I-5) interchange approximately 3.5 miles southwest 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 Regional Water Quality Control Board (RWQCB) through the *Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins* (Central Valley RWQCB 2018). Section 303 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 Basin Plan designates beneficial uses for Sacramento River water from the Colusa Basin Drain to the I Street Bridge that consist of municipal and domestic supply, agricultural irrigation, contact and non-contact recreation, warm and cold freshwater habitat, warm and cold migration, warm and cold spawning, wildlife habitat, and navigation (Central Valley RWQCB 2018).

CWA Section 303(d) requires states to identify waters where the permit standards, any other enforceable limits, or adopted water quality standards are still unattained. The law requires states to develop Total Maximum Daily Loads (TMDLs) to improve the water quality of impaired water bodies. TMDLs are the quantities of pollutants that can be safely assimilated by a water body without violating water quality standards. TMDLs are developed for impaired water bodies to maintain beneficial uses, achieve water quality objectives, and reduce the potential for future water quality degradation. National Pollutant Discharge Elimination System (NPDES) permits for water discharges (for both construction and operation) must take into account the pollutants for which a water body is listed as impaired.

The project site does not contain any surface water bodies. The surface water resource nearest to the project site is the East Drainage Canal. 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 these canals are regulated by RD 1000, and are also regulated by the City and County of Sacramento under the Sacramento Areawide NPDES Municipal Separate Storm Sewer System (MS4) permit (Central Valley RWQCB 2008).

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

Most of the rainfall in the Sacramento area occurs during the months of November through March. Major storm events can produce high flows throughout the Sacramento and American River systems, including its tributaries such as Steelhead Creek/Natomas East Main Drainage Canal and Dry Creek (approximately 0.75 and 1 mile east of the project site, respectively). 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.

In December 2008, the Federal Emergency Management Agency (FEMA) determined that levees in the Natomas area were not sufficient to protect the area from flooding and changed the area's flood zone designation to AE, which corresponds to the 100-year (0.01 annual exceedance probability [AEP]) floodplain. In the following years, the needed levee improvements were completed by SAFCA, which was formed in 1989 to address the Sacramento area's vulnerability to flooding. Between approximately 2007 and 2015, SAFCA completed substantial levee improvements along the Sacramento River east levee and Natomas Cross Canal and on June 16, 2015, the USACE recertified the Natomas Basin levees, allowing FEMA to improve the area's flood zone designation to A99, and allowing permitting of new structures. 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 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 the California Department of Water Resources 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).

In the Natomas Basin, groundwater levels vary seasonally with precipitation and runoff in this area and may rise closer to the ground surface during wet years. In addition, groundwater levels are influenced locally by pumping, as the groundwater is withdrawn regularly during spring and summer for irrigation, and throughout the year for general use by most of the local growers north and west of Natomas; as a result, groundwater is generally higher in March and lower in October. Regional groundwater flow direction can be affected, at least temporarily, by agricultural groundwater pumping, time of year, and stage fluctuation of local creeks, drainage canals, and the nearby Sacramento River. Groundwater levels in the vicinity of the project site ranged from 30 to 40 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. Stormwater from the project site would drain to Natomas Basin No. 4, then to RD 1000's East Drainage Canal, then to the Main Drainage Canal, and then to the Sacramento River. The Sacramento River is included on the SWRCB's 303(d) list of impaired water bodies for a variety of pollutants such as chlordane, DDT, PCBs, and toxicity (SWRCB 2018).

Construction of the proposed project would affect short-term water quality would result in soil disturbance during trenching and subsequent finish grading and use and staging of equipment, which can result in sediment and other pollutant transport during the winter rainy season in stormwater runoff. The construction process could also result in the accidental release of other pollutants to surface waters, including oil and grease, petroleum hydrocarbons, chemical substances used during construction, waste concrete, and wash water. Intense rainfall and associated stormwater runoff in relatively flat areas could result in short periods of sheet erosion within areas of exposed or stockpiled soils. However, because the proposed project would disturb more than 1 acre of land, 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. BMPs that could be implemented include, but would not be limited to, temporary erosion control and soil stabilization measures, sedimentation ponds, inlet protection, perforated riser pipes, check dams, and silt fences. As part of the Construction General Permit, the SWPPP must also identify spill prevention and contingency measures, including measures to prevent or clean up accidental spills of hazardous waste and of hazardous materials used for equipment operation, and emergency procedures for responding to accidental spills. Groundwater quality can be affected either by direct contact during construction-related earthmoving activities, or by indirect contact as a result of percolation of stormwater. Earthmoving activities that could encounter groundwater are issued WDRs by the Central Valley RWQCB through the project-specific permitting process; the WDRs contain provisions that are specifically intended to protect groundwater quality. Given that groundwater in the project vicinity ranges from 30–40 feet below the ground surface, the need for construction dewatering or WDRs is unlikely.

Buildout of the proposed project would affect long-term water quality by adding impervious surfaces (in the form of pavement and buildings) and thereby increasing urban stormwater runoff. New development activity has the potential to alter the types, quantities, and timing of contaminant discharges in stormwater runoff. The project site is currently undeveloped, and changes to a more developed state, if not properly managed, can adversely affect water quality because additional urban runoff pollutants such as sediment, trash, organic contaminants, nutrients, trace metals, pathogens (e.g., bacteria and viruses), and oil and grease compounds can degrade receiving water quality. The SWRCB requires implementation of BMPs where a discharge has the potential to cause or contribute to pollution or contamination of stormwater, an existing storm drainage system, or receiving waters. Receiving waters include both groundwater and surface water. Long-term protection of surface water and groundwater quality from stormwater runoff and percolation is accomplished through compliance with the SWRCB's *Waste Discharge Requirements (WDRs) for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems* (Phase II Small MS4 General Permit), Water Quality Order No. 2013-0001-DWQ, NPDES General Permit No. CAS000004. The District would comply with requirements of the WDRs issued under the Sacramento Areawide NPDES MS4 Permit (Central Valley RWQCB 2008, Order No. R5-2008-0142, NPDES No. CAS082597)—which apply to new development and redevelopment in the City and County of Sacramento, along with the cities of Folsom, Rancho Cordova, Elk Grove, Galt, and Citrus Heights—during project operation (Central Valley RWQCB 2008). The WDRs require that projects include source and/or treatment control measures on new development and redevelopment projects, in order to fulfill the CWA requirement to reduce the discharge of pollutants in municipal storm water to the maximum extent practicable from new development and redevelopment activities. Source control BMPs are intended to keep pollutants from contacting site runoff. Treatment control measures are intended to remove pollutants that have already been mobilized in runoff.

For the reasons stated above, the proposed project would not violate water quality standards or 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. Potable water would be obtained from the City of Sacramento through an existing underground water supply line located in Club Center Drive. The City's conjunctive 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.

Approximately 50 to 65 percent of the project site (i.e., 10-13 acres) would be developed with new impervious surfaces consisting of buildings, sidewalks, parking areas, and drive isles. However, the remainder of the site (i.e., 7 acres) would be vegetated with turf grass, drought-tolerant landscape plantings, and shade trees. The project site has been planned for development as part of the North Natomas Community Plan for the last 20 years, and therefore the partial loss of groundwater recharge at the project site was accounted for under the City of Sacramento 2035 General Plan Master Environmental Impact Report (City of Sacramento 2014). The City's 2035 General Plan indicates (based on data provided by DWR) that substantial sources of groundwater recharge consist of active river and stream channels, inflow of groundwater from outside the policy area, and deep percolation of applied surface water and precipitation. None of these processes are occurring at the project site, which consists of a flat, vacant parcel of land surrounding by housing developments.

As previously noted, a GSP for the North American Groundwater Subbasin is the process of being prepared, and completion is anticipated by mid-2021 (Sacramento Groundwater Authority GSA 2020). The GSP will take into account all of the development that is planned in the North Natomas Community Plan Area, including the proposed project.

Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially would groundwater recharge, and this impact is considered less than significant.

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

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

Less-than-Significant Impact. As discussed in a) above, construction of the proposed project would alter the existing drainage pattern of the site, which could result in erosion or siltation. However, 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, 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 off-site;

Less than Significant with Mitigation Incorporated. Project implementation would entail development of urban uses on approximately 20 acres of undeveloped land. The proposed project consists of school buildings, outdoor sports fields, parking areas, and landscaped open space, along with supporting infrastructure. Approximately 50 to 65 percent of the project site (i.e., 10 to 13 acres) would be developed with new impervious surfaces consisting of buildings, sidewalks, parking areas, and drive isles. Hydromodification from increased impervious surfaces includes increased runoff volumes and dry weather flows, increased frequency and number of

runoff events, increased long-term cumulative duration of flows, as well as increased peak flows. These increased flows can result in on- or off-site flooding.

There is no existing on-site stormwater drainage infrastructure. The District would need to engineer a drainage system that would be designed to minimize runoff and to promote water quality treatment. Stormwater and irrigation water must be routed off-site through an existing drainage line in Club Center Drive to Natomas Basin No. 4, which then drains to RD 1000's East Drainage Canal, then to the Main Drainage Canal, and then to the Sacramento River. The project's stormwater discharge rate must meet or exceed RD 1000's criteria for accepting runoff, which is 0.1 cubic feet per second per acre (0.1 cubic feet per second per acre [cfs/acre]). In addition, stormwater runoff that is discharged to RD 1000 drainage canals must maintain flood stages for 100- and 200-year events. The design criteria for storm drainage systems are contained in the *Sacramento City/County Drainage Manual Volume 2: Hydrology Standards* (Drainage Manual) (City and County of Sacramento 2006). The Drainage Manual presents the accepted methods for estimating surface water runoff peak flows and volumes for the analysis and design of drainage facilities in the City and County of Sacramento to control hydromodification effects, including flooding. Direction related to selecting and sizing stormwater quality control measures is contained in the *Stormwater Quality Design Manual for the Sacramento and South Placer Regions* (Sacramento Stormwater Quality Partnership 2018), which was developed to ensure compliance with the regional MS4 Permit. Although the District is not legally required to implement the requirements of the Stormwater Quality Design Manual, it will consider implementing stormwater quality control measures such as those described in the manual as part of the proposed project.

A drainage plan for the proposed project has not yet been prepared. Therefore, the appropriate hydrologic calculations necessary to determine the types, locations, and sizes of on-site stormwater controls, and the dimensions and locations of the proposed underground pipes that are intended to carry stormwater runoff to the trunk lines in Club Center Drive, have not yet been performed. Furthermore, hydromodification management features, including permanent erosion control features, BMPs, and low impact development (LID) techniques have not yet been identified. Therefore, this impact is considered potentially significant.

Mitigation Measure 3.10-1: Prepare a Drainage Plan and Implement Requirements Contained in the Plan.

The District shall design an on-site drainage system that limits peak discharges into Natomas Basin No. 4 and the RD 1000 drainage system per the requirements of the North Natomas Comprehensive Drainage Plan and the Sacramento Areawide NPDES MS4 Permit.

The District shall prepare a final drainage plan that incorporates Central Valley RWQCB requirements to appropriately convey off-site upstream runoff through the project site, and demonstrate that project-related on-site runoff would be appropriately contained in detention basins and managed with through other improvements (e.g., source controls) to reduce flooding and hydromodification impacts. The drainage plan shall include, but is not limited to, the following items:

- ▶ an accurate calculation of pre-project and post-project runoff scenarios, obtained using appropriate engineering methods (which may consist of those contained in the *Sacramento City/County Drainage Manual Volume 2: Hydrology Standards*), that accurately evaluates potential changes to runoff, including increased surface runoff;

- ▶ runoff calculations for the 10-year and 100-year (0.01 AEP) storm events (and other, smaller storm events as required) shall be performed and the trunk drainage pipeline sizes confirmed based on alignments and detention facility locations finalized in the design phase;
- ▶ a description of the proposed maintenance program for the on-site drainage system;
- ▶ project-specific standards for installing drainage systems;
- ▶ a description of on-site LID features designed to treat stormwater and maintain stormwater quality before it is discharged from the project site (e.g., vegetated swales, infiltration trenches, and constructed wetland filter strips); and
- ▶ stormwater management BMPs that are designed to limit hydromodification and maintain current stream geomorphology. These may include, but are not limited to, the following:
 - LID techniques to limit increases in stormwater runoff at the point of origination (these may include, but are not limited to: surface swales; replacement of conventional impervious surfaces with pervious surfaces [e.g., porous pavement]; impervious surfaces disconnection; and trees planted to intercept stormwater);
 - detention basin inlet and outlet water control structures that are designed to reduce the rate of stormwater discharge;
 - enlarged detention basins to minimize flow changes and changes to flow duration characteristics;
 - minimize slope differences between any stormwater or detention facility outfall channel with the existing receiving channel gradient to reduce flow velocity; and
 - minimize to the extent possible detention basin sizes, embankments, culverts, and other encroachments into the channel and floodplain corridor, and utilize open bottom box culverts to allow sediment passage on smaller drainage courses.

Significance after Mitigation

Implementation of Mitigation Measure 3.10-1 would reduce the significant impact associated with increased risk of flooding and hydromodification from increased stormwater runoff to a less-than-significant level because the District would demonstrate that the project would conform with applicable State and local regulations regulating operational surface water runoff, which are designed to meet applicable State and local regulations. Specific project design standards as required in this mitigation measure would, when implemented, safely convey on-site and off-site flows through the project site, would reduce the effects of hydromodification on stream channel geomorphology, and would prevent substantial increased flood hazard on downstream areas by limiting peak discharges of flood flows to levels that are at or below pre-project conditions.

- 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 with Mitigation Incorporated. For the same reasons described in c) ii) above, operation of the proposed project could contribute runoff water that would exceed the capacity of existing stormwater drainage systems and provide additional sources of polluted runoff. A drainage plan for the proposed project has not yet been prepared. Therefore, the appropriate hydrologic calculations necessary to determine the types, locations, and sizes of on-site stormwater controls, and the dimensions and locations of the proposed underground pipes that are intended to carry stormwater runoff to the trunk lines in Club Center Drive, have not yet been performed. Furthermore, hydromodification management features, including permanent erosion control features, BMPs, and LID techniques have not yet been identified. Therefore, this impact is considered potentially significant.

Mitigation Measure 3.10-2: Implement Mitigation Measure 3.10-1 (Prepare a Drainage Plan and Implement Requirements Contained in the Plan).

Significance after Mitigation

Implementation of Mitigation Measure 3.10-2 would reduce the significant impact associated with exceedance of stormwater drainage systems and increased pollutant runoff to a less-than-significant level because the District would demonstrate that the project would conform with applicable State and local regulations regulating operational surface water runoff, which are designed to meet applicable State and local regulations. Specific project design standards as required in this mitigation measure would, when implemented, prevent exceedance of the capacity of downstream drainage systems (including Natomas Basin No. 4 and the RD 1000 drainage canals) by limiting peak discharges of stormflows to levels that are at or below pre-project conditions, and would protect downstream water quality by requiring implementation of on-site stormwater treatment measures such as vegetated swales.

- iv) **Impede or redirect flood flows.**

Less than Significant with Mitigation Incorporated. As discussed above in detail in the “Environmental Setting” subsection, the project site is located in the Natomas Basin, which is protected from flooding by a network of levees. From 2007–2015, SAFCA completed substantial levee improvements along the Sacramento River east levee and Natomas Cross Canal and in June 2015, USACE recertified the Natomas Basin levees, allowing FEMA to improve the area’s flood zone designation to A99. An A99 designation refers to areas that are subject to inundation by a 100-year (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]). Zone A99 may only be used when the flood protection system has reached specified statutory progress toward completion. In an A99 zone, no Base Flood Elevations (BFEs) or depths are available for planning purposes. The A99 designation allows permitting and construction of new structures in advance of the completion of flood protection improvements. In addition, the project site and the surrounding area are also within the 200-year (0.005 AEP) floodplain. SAFCA is continuing to implement the National Flood Insurance Program (NFIP) (most of which has been completed); upon full completion, the project site and surrounding area will be protected from 100- and 200-year floods.

At a minimum, the floodplain management and building requirements of Section 60.3 of the NFIP regulations—specifically, Subsections 60.3 (a)(1) through (a)(4)(i) and Subsections 60.3 (b)(5) through (b)(8)—apply in areas designated Zone A99 on an effective FIRM (FEMA 2014).

A community can choose to adopt and enforce higher regulatory standards, which are documented in a local floodplain management ordinance. Sacramento County has adopted a Floodplain Management Ordinance (Sacramento County Zoning Code, SZC-2014-0007), which describes the types of development activities that are allowed and how proposed development may be permitted in floodplains. All proposed development activity in floodplains, defined as those areas designated by FEMA on the FIRMs for Sacramento County (Community Number 060262) and other areas subject to flooding, must be reviewed and permitted by the County’s Floodplain Administrator before construction.

The project proposes to discharge stormwater runoff into Natomas Basin No. 4 (per the North Natomas Comprehensive Drainage Plan), which discharges into RD 1000’s East Drainage Canal. RD 1000 requires that new development mitigate all impacts to the RD 1000 drainage and flood control system, including discharge requirements to maintain current canal stages for the 100-year and 200-year events in the interior drainage system per Urban Levee Design Criteria (ULDC) (DWR 2012) standards. When the Planned Unit Development (PUD) overlay was established in North Natomas, an agreement was entered into between the City and the developers to establish a network of drainage basins throughout the North Natomas Community Plan Area that would meet RD 1000 requirements. However, a site-specific drainage plan for the proposed project has not yet been prepared. Thus, a site-specific base flood elevation or depth for project design purposes has not been calculated. Furthermore, site-specific design calculations have not been prepared to demonstrate that the proposed project would be adequately protected from flooding and that the proposed project would not substantially impede flood flows such that downstream development would be subject to an increased chance of flooding. Therefore, the impact from placement of structures that could impede flood flow within a 100-year and 200-year floodplain is considered potentially significant.

Mitigation Measure 3.10-3a: Implement Mitigation Measure 3.10-1 (Prepare a Drainage Plan and Implement Requirements Contained in the Plan).

Mitigation Measure 3.10-3b: Obtain a CLOMR from FEMA and Implement Requirements of the City of Sacramento Floodplain Management Ordinance.

Before the approval of grading plans, site improvements, and/or building permits, the District shall obtain an approved Conditional Letter of Map Revision (CLOMR) from FEMA and submit final drainage plans demonstrating to the satisfaction of the City Floodplain Administrator that the proposed project would appropriately accommodate 10-year, 100-year (0.01 AEP), and 200-year (0.005 AEP) flood flows.

The District shall comply with the standards set forth in the City of Sacramento Floodplain Management Ordinance (City of Sacramento Code of Ordinances Chapter 15.104), which includes obtaining a Floodplain Management Permit (Section 15.104.045). In support of the permit application, the District shall comply with the new construction standards and provide the City with the detailed information required in Section 15.104.050, “Requirements for Flood Hazard Reduction” and demonstrate compliance with the City’s Comprehensive Flood Management Plan as required in Section 15.104.070.

Significance after Mitigation

Implementation of Mitigation Measures 3.10-3a and 3.10-3b would reduce the significant impact from placement of structures that could impede or redirect flood flows to a less-than-significant level because project site facilities would be designed and constructed in accordance with flood protection requirements contained in the City of Sacramento Flood Control Ordinance; would result in design and operation of a drainage conveyance system capable of conveying and appropriately detaining prior to discharge, on-site flood protection during the 10-year, 100-year (0.01 AEP), and 200-year (0.005 AEP) storm events; and would demonstrate to the satisfaction of RD 1000 and the City that proposed project flows into the Natomas Basin No. 4, the East Drainage Canal, and the Main Drainage Canal would maintain existing canal 100-year (0.01 AEP) and 200-year (0.005 AEP) flood stages per ULDC requirements.

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

Less than Significant with Mitigation Incorporated. As described in detail in c) above, the FEMA classification for the project site is A99, which means the project site is currently designated as being within in a 100-year flood zone, but it will ultimately be protected upon completion of an under-construction federal flood protection system. The A99 classification means that enough progress has been made on the construction of a protection system to consider it complete for insurance rating purposes (FIRM). In addition, the project site and the surrounding area are also within a 200-year floodplain. All proposed development activity in 100-year floodplains, defined as those areas designated by FEMA on the FIRMs for Sacramento County (Community Number 060262) and other areas subject to flooding, must be reviewed and permitted by the County's Floodplain Administrator before construction. SAFCA is continuing to implement the NLIP (most of which has been completed); upon full completion, the project site and surrounding area will be protected from 100- and 200-year floods.

Storage of hazardous materials at the project site during both the construction and operational phases could result in a release of pollutants that could contaminate soil, groundwater, and surface water, because the project site is currently classified as a 100- and 200-year flood zone. This impact is considered potentially significant.

Mitigation Measure 3.10-4a: Implement Mitigation Measure 3.10-1 (Prepare a Drainage Plan and Implement Requirements Contained in the Plan).

Mitigation Measure 3.10-4b: Implement Mitigation Measure 3.10-3b (Obtain a CLOMR from FEMA and Implement Requirements of the City of Sacramento Floodplain Management Ordinance).

Significance after Mitigation

Implementation of Mitigation Measures 3.10-4a and 3.10-4b would reduce the significant impact from release of pollutants due to project inundation to a less-than-significant level because project site facilities would be designed and constructed in accordance with flood protection requirements contained in the City of Sacramento Flood Control Ordinance; would result in design and operation of a drainage conveyance system capable of conveying and appropriately detaining prior to discharge, on-site flood protection during the 10-year, 100-year (0.01 AEP), and 200-year (0.005 AEP) storm events; and would demonstrate to the satisfaction of RD 1000 and the City that proposed project flows into the Natomas Basin No. 4, the East Drainage Canal, and the Main Drainage Canal would maintain existing canal 100-year (0.01 AEP) and 200-year (0.005 AEP) flood stages per ULDC requirements.

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

Less-than-Significant 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. Therefore, this impact would be less than significant.

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3.11 LAND USE AND PLANNING

3.1.2 ENVIRONMENTAL SETTING

The project site is located in the Natomas Park area of the City of Sacramento. The site is vacant, and is surrounded by medium- and high-density residential uses. The approximately 3-acre California Lilac Park is across the street (on the north side of Club Center Drive) from the project site's northeastern property boundary.

The *Sacramento 2035 General Plan* (City 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 R-1 (Residential, Standard Single Family) with a Northpointe Park Planned Unit Development (PUD) overlay. The City of Sacramento General Plan land use designation is Public/Quasi-Public (City of Sacramento Planning 2020). Schools are allowed, with a conditional use permit, in areas that are zoned residential under the City of Sacramento County Zoning Code, Title 17, Chapter 17.204.

3.1.3 DISCUSSION

a) Physically divide an established community?

No Impact. The approximately 20-acre project site has been planned for school uses for the last 20 years, and is surrounded by the Northpointe Park housing development. The North Natomas Community Plan requires inclusion of an elementary school within each of the North Natomas neighborhoods, and states that elementary schools should serve as neighborhood focal points (City of Sacramento 2015a: 3-NN-4 and 3-NN-5). North Natomas Community Plan Policy NN.LU 1.6 states that the City shall locate an elementary school as the focal point near the center of each neighborhood serving 1,500 to 3,000 dwelling units. Access to the school would be provided from Club Center Drive to the north and from Nantucket Way to the south. 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 would be consistent with existing land use and zoning designations. The proposed project would not conflict with policies or objectives adopted in the City General Plan or the North Natomas Community Plan. Thus, there would be no impact.

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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 California Geological Survey (CGS) and on input from agencies and the public. The project site lies within the designated Sacramento-Fairfield Production-Consumption Region for Portland cement concrete aggregate. CGS has classified the entire project site as MRZ-1: areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence (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 designated locally important area of known mineral resources under the Sacramento 2035 General Plan (City of Sacramento 2015b).

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. 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 Natomas Park area, which is classified as MRZ-1: areas where no significant minerals are present (Dupras 1999). 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 2035 General Plan (City of Sacramento 2015b) 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 mineral resources at the project site or in the immediate project vicinity, which consists of medium- and high-density housing. Thus, there would be no impact.

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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 school buildings and playgrounds, long-term impacts from the operation of school facilities, and traffic noise increases along area roadways.

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.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ears decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). All noise levels reported in this section are in terms of A-weighting. There is a strong correlation between A-weighted sound levels and community response to noise. As discussed above, doubling sound energy results in a 3-dB increase in sound. In typical noisy environments, noise-level changes of 1 to 2 dB are generally not perceptible by the healthy human ear; however, people can begin to detect 3-dB increases in noise levels. An increase of 5 dB is generally perceived as distinctly noticeable and a 10-dB increase is generally perceived as a doubling of loudness. The following are the sound level descriptors commonly used in environmental noise analysis:

- ▶ Equivalent sound level (L_{eq}): An average of the sound energy occurring over a specified time period. In effect, the L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted equivalent sound level ($L_{eq[h]}$) is the energy average of A-weighted sound levels occurring during a 1-hour period.
- ▶ Maximum sound level (L_{max}): The highest instantaneous sound level measured during a specified period.

- ▶ L_{dn} (Day-Night Noise Level): The 24-hour L_{eq} with a 10 dB “penalty” applied during nighttime noise-sensitive hours, 10:00 p.m. through 7:00 a.m. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.
- ▶ L_n (Statistical Descriptor): The noise level exceeded n percent of a specific period of time, generally accepted as an hourly statistic. An L_{10} would be the noise level exceeded 10 % 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 with increased distance.

GROUNDBORNE VIBRATION

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

Vibration is an oscillatory motion that can be described in terms of 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 Club Center Drive, Nantucket Way, Dynasty Way, and distant vehicular traffic on Natomas Boulevard. Existing park activities (California Lilac Park) and people walking and talking contribute to the noise environment in the area. Intermittent noise from outdoor activities at the surrounding residences (e.g., people talking, operation of landscaping equipment, car doors slamming, and dogs barking), also influence the existing noise environment.

An ambient noise survey was conducted in the vicinity of the project site from January 20, 2021, through January 21, 2021. The purpose of the survey was to establish existing noise conditions. Ambient noise measurements were conducted near existing noise-sensitive uses at various locations within the project site. The results of the noise survey are shown in Table 3.13-1. Exhibit 3.13-1 shows the locations of the ambient noise measurement sites. Four short-term measurements (ST-1 through ST-4) of ambient noise levels were conducted during daytime hours. One long-term (24-hour) measurement was conducted on the proposed school field within the project site. Long-term measurement site LT-1 measured ambient noise levels of 49 dBA, L_{eq} and 49 dBA, L_{dn} , respectively,



Exhibit 3.13-1. Ambient Noise Survey

which is relatively low considering that the sound level meter at ST-1 and ST-3 were exposed to Club Center Drive and Nantucket Way traffic noise. As shown in Table 3.13-1, measured ambient noise levels at the noise-sensitive land uses closest to the project site range from 42 to 62 dBA, L_{eq} .

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

Site	Location	Date	Time	Duration	L_{eq}^1	L_{max}^1	L_{50}^1	L_{90}^1	L_{dn}^1
LT-01	Within the Project Site, Middle Area	01-20/21-2021	18:00	24 Hour	49.1	84.7	47.2	82.8	49.2
ST-01	North of Project Site, along Club Center Drive	01-21-2021	14:42	15 Minutes	61.7	76.5	NA	NA	NA
ST-02	Within and West of Project Site, By Natomas Park Apartments	01-21-2021	15:01	30 Minutes	42.0	51.7	NA	NA	NA
ST-03	Within and South of Project Site, By Nantucket Way	01-21-2021	15:41	30 Minutes	53.1	78.4	NA	NA	NA
ST-04	Within and East of Project Site, By Residents along Dynasty Way	01-21-2021	16:16	30 Minutes	42.0	56.8	NA	NA	NA

Notes: dB = decibels; L_{eq} = equivalent sound level (the sound energy averaged over a continuous period of time); L_{max} = maximum instantaneous sound level; ST = short-term measurement; LT = long-term measurement.

¹ Measured Sound Level, dB Daytime (7 a.m.–7 p.m.)

Noise-level measurements were completed using a Larson Davis Laboratories (LDL) Model 820 and 831 precision integrating sound-level meter. The meter was calibrated before the measurements using an LDL Model CAL200 acoustical calibrator. The meter was programmed to recorded A-weighted sound levels using a “slow” response. The equipment used complies with all pertinent requirements of the American National Standards Institute for Class 1 sound-level meters (ANSI S1.4).

Source: Data compiled by AECOM in 2021; See AECOM 2021c

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 with Mitigation Incorporated. 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.

If the ambient noise level exceeds that permitted by any of the first four noise-limit categories listed in [Table 3.11-9], 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.

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

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.
- ▶ **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 3.13-4 of this IS/MND], to the extent feasible.
- ▶ **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.
- ▶ **Policy EC 3.1.11: Alternatives to Sound Walls.** The City shall encourage the use of design strategies and other noise reduction methods along transportation corridors in lieu of sound walls to mitigate noise impacts and enhance aesthetics.

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.

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.

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
(Site Preparation)	Backhoe	80	76
(Site Preparation)	Front End Loader	80	76
(Site Preparation)	Tractor	84	80
(Site Preparation)	Dozer	85	81
Max. and Combined Noise Level	Site Preparation Total	85	85
Grading	Excavator	85	81
Grading	Dozer	85	81
Grading	Grader	85	81
Grading	Front End Loader	80	76
Grading	Scraper	85	81
Max. and Combined Noise Level	Grading Total	85	86
Building Structure	Crane	85	77
Building Structure	Man Lift	85	78
Building Structure	Generator	82	79
Building Structure	Backhoe	80	76
Building Structure	Front End Loader	80	76
Building Structure	Tractor	84	80
Building Structure	Welder / Torch	73	60
Max. and Combined Noise Level	Building Structure Total	85	86
Pavement	Paver	85	82
Pavement	Roller	85	78
Pavement	Drum Mixer	80	77
Combined Noise Level	Pavement Total	85	84
Architectural Coating	Compressor (air)	80	76
Combined Noise Level	Architectural Coating Total	80	76
Combined Predicted Noise Level (L_{max} dBA at 50 feet)	Total	85	-
Maximum Predicted Noise Level (L_{eq} dBA at 50 feet)	Total	-	86

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 2021c

As indicated in Table 3.13-5, project-related construction activities would generate noise levels ranging from 60 to 82 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 86 dB L_{eq} at 50 feet. The nearest off-site noise-sensitive land uses in the vicinity of the project site are single-family residences located approximately 50 feet east and west of the project site boundary. The project-related construction noise level of 86 dB L_{eq} at the nearest off-site sensitive receptors would exceed the thresholds established by the City (Tables 3.13-2 through 3.13-4). The Noise Ordinances of the City exempt daytime construction noise from applicable standards, as described above, but this does not alleviate the potential for construction-related noise impacts. Table 3.13-6 summarizes modeled construction noise levels compared to existing noise levels at noise-sensitive locations measured during the ambient noise survey. Noise Monitoring locations are shown in Exhibit 3.13-1.

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	Interior Noise Level –Project Noise, Doors/Windows Open	Interior Noise Level–Project Noise, Doors/Windows Closed (EPA)
LT-1 - Within the central portion of the project site	250 ft	49 dBA L_{eq}	86 dBA L_{eq}	71 dBA L_{eq}	61 dBA L_{eq}
ST-1 - North of project site, along Club Center Drive	100 ft	62 dBA L_{eq}	86 dBA L_{eq}	71 dBA L_{eq}	61 dBA L_{eq}
ST-2 - Within and west of project site, near the Natomas Park Apartments	50 ft	42 dBA L_{eq}	86 dBA L_{eq}	71 dBA L_{eq}	61 dBA L_{eq}
ST-3 - Within and south of project site, By Nantucket Way	50 ft	53 dBA L_{eq}	86 dBA L_{eq}	71 dBA L_{eq}	61 dBA L_{eq}
ST-04 - Within and east of project site, near residences along Dynasty Way	50 ft	42 dBA L_{eq}	86 dBA L_{eq}	71 dBA L_{eq}	61 dBA L_{eq}

Refer to AECOM 2021 for modeling input parameters and output results.

dBA = A-weighted decibels

EPA = U.S. Environmental Protection Agency

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 2021c

Noise from permitted construction activities that do not occur during the more noise-sensitive hours (e.g., evening, nighttime, and early morning) is exempt from regulation under the City's daytime noise standards, assuming construction equipment is fitted with feasible noise control devices. However, construction could expose existing off-site sensitive receptors to equipment noise levels that result in a substantial increase in ambient noise levels. As shown in Table 3.13-6, daytime project construction noise levels at the closest noise-sensitive backyard area, located approximately 50 feet from the acoustical center of proposed construction activities, could reach as high as 86 dB L_{eq} . As indicated in Table 3.13-1, average daytime hourly noise levels at the project site and in the vicinity ranged from 42 to 62 dBA, L_{eq} . Therefore, the project-related construction noise level of 86 dB L_{eq} (from construction activities within the project site) would result in a substantial temporary increase above the measured ambient noise levels of 42 to 62 dBA, L_{eq} at nearby noise-sensitive land uses. As a result, the construction-generated noise would be considered a potentially significant, short-term impact.

Project-related construction would involve approximately 225 daily worker trips and 88 delivery trips² over the peak construction period (building construction), which would occur over approximately 410 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. Conservatively, assuming one truck trip per hour and 113 worker trips per hour (113 trip to the site in the mornings and 113 trips from the site at the end of work day, a total of 225 trips per day), the construction-related traffic noise would be up to 55 dBA, L_{eq} (See AECOM 2021 for Project Noise Calculations) along the Club Center Drive, assuming all construction trips would use this road. 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 even lower. Existing traffic noise along Club Center Drive were measured at 62 dBA, L_{eq} as shown in Table 3.13-1, represented by ST-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 Club Center Drive. The incremental addition of the proposed project construction-related traffic would not cause a doubling of the volumes along Club Center Drive. Consequently, 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 (building construction). As a result, this impact would be less than significant.

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

Mitigation Measure 3.13-1: Use Noise-Suppression Devices on Construction Equipment, Limit Construction to Daytime Hours, and Locate Stationary Equipment Away from Sensitive Noise Receptors to Reduce Noise Levels During Construction.

NUSD will implement the following noise-reduction and noise-control measures during construction activities:

- ▶ Construction equipment will be properly maintained per manufacturers' specifications and fitted with feasible noise suppression devices (e.g., mufflers, silencers, wraps).
- ▶ Using less noisy equipment.
- ▶ All impact tools will be shrouded or shielded, and all intake and exhaust ports on power equipment will be muffled or shielded.
- ▶ Construction will take place between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday, and between the hours of 9:00 a.m. and 6:00 p.m. on Sunday.

² per CalEEMOD default values for project construction.

- ▶ Construction equipment will be shut down when not in use and will not idle for extended periods of time near noise-sensitive receptors.
- ▶ Fixed/stationary equipment (e.g., generators, compressors, cement mixers) will be located as far as practicable from noise-sensitive receptors.
- ▶ Noise control blanket barriers will be used during construction near noise-sensitive uses.
- ▶ Utilize noise control blankets on a building structure as the building is erected to reduce noise emission from the site.
- ▶ Residences within 500 feet of construction sites shall be notified of the construction schedule prior to the beginning of construction. Designate a “construction liaison” that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site. If conflicts occurred which were irresolvable by the above mitigation measures, erect temporary noise control blanket barriers on the all sides of the project site.
- ▶ Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings housing sensitive uses.

Significance after Mitigation

Implementation of Mitigation Measure 3.13-1 would reduce the potentially significant impact resulting from construction activities because it would ensure that construction activities would avoid noise-sensitive hours and would include noise-reducing measures, limits idling, and designates a construction liaison. Also, the City Noise Ordinances provide an exemption for construction noise occurring during daytime hours. With respect to increase above ambient noise levels, as discussed above, the average daytime hourly noise levels at the project site and in the vicinity ranged from 42 to 62 dBA, L_{eq} . The project-related construction noise level of 86 dB L_{eq} would result in a substantial temporary increase above the measured ambient noise levels by 24 to 44 dB at nearby noise-sensitive land uses. Construction noise was conservatively assumed multiple construction equipment operation and at 50 feet, which would only occur in rare cases, and most of the time only one piece of equipment could be operating as close as 50 feet to the adjacent noise-sensitive uses. The measures would include the use of noise-suppression devices that would provide at least a 5 dB reduction in noise. Physically attached shields are excellent for reducing noise on stationary equipment. Sound aprons are typically designed from absorptive mats that are draped on the frames attached to the equipment. The material can be constructed from PVC layers, lead-filled fabric, or rubber. Sound aprons are most useful when the equipment only needs partial shielding or has to be regularly moved. Enclosures can be used for stationary work. The walls could be lined up with sound absorptive material to further dampen the sound. The level of noise reduction from shielding the impact tools and all intake and exhaust ports on power equipment will depend on the distance between the equipment and the noise receiver, but a 5 dB reduction would be a reasonable minimum reduction in noise to assume. Using less noisy equipment is one of the most effective ways to reduce the noise caused by individual equipment and can provide a minimum 5 dB reduction in noise. Electric compressors are much quieter than gasoline and diesel engine powered compressors. Constructing temporary sound barriers using plywood or similar material bearing the same sound-attenuating effectiveness as plywood between portions of the construction sites and sensitive receptors will be very effective in reducing construction site noise. These

temporary sound barriers, which could also consist of construction grade sound blankets/curtains, should be at least 12 feet in height. Noise control blanket barriers can provide a minimum 10 to 15 dB reduction in noise. Also, temporarily improving the noise reduction capability of adjacent buildings housing sensitive uses would provide a minimum 5 to 10 dB reduction in noise.

The ability to successfully monitor construction noise is closely tied to the commitment to meet the requirements detailed in the contract specifications and special provisions. Monitoring and evaluating the feasibility of noise control at the receivers and reducing project-related construction noise to less-than-significant level would meet the required noise level reduction criteria. This impact would be less than significant with implementation of mitigation measures.

Long-Term Project-Generated Stationary Source Noise

The project will introduce a new source of noise associated with the school activities such as the playfields, public announcement systems, heating and ventilation systems of the school buildings, and school parking lot noise.

Mechanical HVAC Equipment

HVAC equipment is often mounted on rooftops, located on the ground, or located within mechanical equipment rooms. The noise sources could take the form of fans, pumps, air compressors, and chillers. Packaged rooftop units contain all necessary mechanical equipment, such as fans, pumps, condensers, and compressors, within a single enclosure. Noise levels from commercial heating, ventilation, and air conditioning (HVAC) equipment can reach 100 dBA at a distance of three feet (EPA 1971). However, these units are typically fitted with noise shielding cabinets, placed on the roof or in mechanical equipment rooms to reduce noise levels. Noise from mechanical equipment associated with the operation of the proposed project is required to comply with the California Building Standards Code requirements pertaining to noise attenuation.

AECOM has measured noise levels from schools' HVAC systems. HVAC equipment noise at high schools would be approximately 70 dBA L_{eq} at a distance of 6 feet (AECOM 2013)³. This would result in a noise level of 52 dBA at a distance of 50 feet.

The closest off-site noise-sensitive land uses in the vicinity of the project site are single-family residences located approximately 100 feet east and west of the project site. Based on the cooling capacity of the packaged systems and their locations with respect to sensitive uses, noise levels for mechanical HVAC systems would be less than 46 dBA L_{eq} at the nearest noise-sensitive receptor east and west of the project site. Therefore, HVAC equipment would not exceed the City's performance standard of 55 dB L_{eq} for noise-sensitive land uses affected by non-transportation noise during the daytime period, 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. This impact would be less than significant.

Playfields Activities

As measured at the closest point, the ambient noise at the project site would be 49 dBA L_{eq} (49 dB L_{50}), as represented by ambient noise measurement LT-1. Based on the proposed site design, the proposed playfields

³ Long Beach Unified School District. Jordan High School Major Renovation Project Draft EIR. September 2013: <http://lbschoolbonds.net/jordanhs.cfm>.

activities would be located at a distance of approximately 100 feet from the school boundary or from the nearest residences to the project site. 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 nearest noise-sensitive receptor to the proposed playfields is located approximately 100 feet to the east from the proposed playfields (Exhibit 2-1). The resulting noise level at the nearest noise-sensitive receptors would be 60 dB L_{eq} . However, the residences along this segment of the road are shielded by a sound wall. With the existing sound wall, assuming an average 7 dB⁴ reduction by the sound wall, the predicted noise levels from playfield activities would be 53 dBA, 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. Based on noise modeling, playfield activities would not substantially increase ambient noise levels. In addition, playfield activities 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). Therefore, this impact is considered less than significant.

Also, 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. Existing ambient noise levels at the residential uses to the west of the project site range between 42 and 62 dBA L_{eq} . The increase above ambient due to playground activities would be 0 to 3 dB. A 3-dB increase is barely perceptible. Therefore, noise levels associated with school playground would not be distinguishable from the existing ambient noise levels. As a result, this impact would be less than significant.

Parking Lot Activities

The proposed project would introduce approximately 160 new parking stalls along Club Center Drive and approximately 100 feet from adjacent noise-sensitive residential uses to the north. Based upon previous noise measurements, the sound exposure level (SEL) associated with a parking event is approximately 71 dB SEL at 50 feet. Assuming that each parking stall adjacent to residential uses were to fill and empty (160 parking events total) during the peak hour, the noise level is predicted to be 51 dBA L_{eq} at 100 feet from the center of the parking stalls. Existing ambient noise levels at the residential uses to the north of the project site were measured at 60 dBA L_{eq} , represented by ST-1. Therefore, noise levels associated with parking would not be distinguishable from the existing ambient noise levels. As a result, this impact would be less than significant.

Increase in Project Area Traffic

Exterior incremental noise standards for projects under the City of Sacramento's jurisdiction are established by the City's 2035 General Plan, Policy EC 3.1.2 at any of the studied roadway segments. Policy EC 3.1.2 references Table EC 2, which is reproduced above as Table 3.13-2. The existing daily traffic volume along Club

⁴ Effective noise barriers typically reduce noise levels by 5 to 10 decibels (dB), cutting the loudness of traffic noise by as much as one half (FHWA 2017).

Center Drive near the proposed project site is approximately 3,154 trips⁵. The project would add approximately 814 weekday daily trips⁶ on adjacent roadways. Traffic noise was predicted using the Federal Highway Administration's (FHWA) traffic noise prediction model (FHWA-RD-77-108) for the major roadway segments. As shown in Table 3.13-7, predicted traffic noise levels in the project vicinity would not exceed the exterior noise standards established in the City's General Plan. As a result, this impact would be less than significant.

Table 3.13-7. Predicted Traffic Noise Levels, Existing and with Project

Roadway	Segment From	Segment To	Existing	Allowable Noise Increment ^a	Plus Project 2020	Increase above Existing	Significant Impact?
Club Center Drive	Natomas Boulevard	End of Club Center Drive to the East	59 L _{dn} at 50 Feet, dB	3b L _{dn} at 50 Feet, dB	60 L _{dn} at 50 Feet, dB	1 L _{dn} at 50 Feet, 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 2021c

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 have to double before the associated increase in noise levels is noticeable (3 dBA, L_{dn}) along roadways (Caltrans 2013). The dominant traffic noise source in the project area is Club Center Drive. The incremental addition of proposed project traffic would not cause a doubling of the volumes along Club Center Drive. Long-term, off-site operational traffic source noise would not result in a substantial permanent increase in ambient noise levels in the project vicinity above 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. As discussed above, on-site construction equipment could include scrapers, dozers, loaders, and motor graders. 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) peak particle velocity (PPV) and 87 vibration decibels [VdB referenced to 1 microinch per second (μin/sec) and based on the root mean square (RMS) velocity amplitude] at 25 feet. Table 3.13-8 summarizes modeled construction vibration levels at noise-sensitive locations.

⁵ City of Sacramento Traffic Counts: <https://www.cityofsacramento.org/Public-Works/Transportation/Traffic-Data-Maps/Traffic-Counts>.

⁶ Using CalEEMOD/ITE Trip Generated rates for similar schools.

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 Residences	To the west	50	0.031	78
Nearest Residences	To the east	50	0.031	78

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

PPV = peak particle velocity

VdB = vibration decibels

Modeled by AECOM 2021; See AECOM 2021c

Using FTA's recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels of approximately 0.031 in/sec PPV and 78 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, Rio Linda Airport, is located approximately 2.7 miles to the east of the project site, and Sacramento International Airport is located approximately 4.4 miles northwest 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. No mitigation would be required.

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3.14 POPULATION AND HOUSING

3.14.1 ENVIRONMENTAL SETTING

The project site is located in the Natomas Park area of North Natomas, in the City of Sacramento. Based on U.S. Census American Community Survey data from 2016, the population in Natomas Park is approximately 9,000, and the population in the Natomas area as a whole is approximately 90,000 (Cedar Lake Ventures 2018, City of Sacramento Economic Development 2020). Approximately 30.5 percent of the Natomas Park population is white, 28.2 percent is Hispanic, 25.2 percent is Asian, and 11.9 percent is black. The median household income in Natomas Park is approximately \$97,000. Unemployment in Natomas Park (as reported in 2016) was approximately 4.3 percent.

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 project site has been planned for development with a school for the last 20 years. North Natomas Community Plan Policy NN.LU 1.6 states that the City shall locate an elementary school as the focal point near the center of each neighborhood serving 1,500 to 3,000 dwelling units (City of Sacramento 2015a). The project site is surrounded by medium- and high-density housing in the Natomas Park area of North Natomas. The proposed project would not involve constructing new homes or businesses that would generate new population growth. The source of the construction labor force is unknown at this time, but workers would come from the local labor pool, as the District has a local hiring policy. A portion of the school's 75 new teachers and staff could move from outside the school district; however, most positions would be filled by existing residents and transfers from within the district. The school would have a capacity for up to 650 students in grades K through 5 and up to 300 students in grades 6 through 8, in order to meet the needs of the existing and planned residences in the North Natomas Community Plan area. The proposed project would be accessed from existing developed roadways including Club Center Drive on the north and Nantucket Way on the south, and would utilize existing water, sewer, stormwater, electrical, and telecommunications infrastructure that is already present in Club Center Drive; therefore, the proposed project would not include the extension of roads or other infrastructure that could facilitate substantial development. New on-site infrastructure and tie-ins to existing off-site infrastructure would be sized and designed to meet the needs of the proposed school 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 school 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.

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3.15 PUBLIC SERVICES

3.15.1 ENVIRONMENTAL SETTING

Fire services to the project site would be provided by the City of Sacramento Fire Department. The nearest fire station, No. 30, is approximately 800 feet west of the project site, at 1901 Club Center Drive (City of Sacramento Fire Department 2020).

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 4.5 miles to the southeast (City of Sacramento Police Department 2020).

The project is a proposed K–5 elementary school that would serve up to 650 elementary students, with the potential to serve middle school grades 6–8 in the future.

The approximately 3-acre California Lilac Park, across the street from the project site's northeastern boundary, includes trees and turf grass, a walking path, basketball court, picnic area, tot lot, and botanical garden plantings including lilacs and native wildflowers. Recreational facilities necessary to serve the new K–5 elementary school students would be provided at the project site.

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 District would be required to incorporate California Fire 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. In addition, the California Fire Code requires that every public or private school building having an occupant load of 50 or more students or more than one classroom have an automatic fire alarm system using the California Fire Code Signal outlined in the California Education Code (Sections 32000–32004). Furthermore, the California Education Code requires new schools to install an automatic fire sprinkler system (Section 17074.52).

Incorporation of all California Fire Code and California Education Code 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?

Less-than-Significant 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. The District routinely contracts with the City of Sacramento Police Department for school resource officers and a supervisor; these officers monitor and respond to campus concerns.

Given the type and scale, the proposed project would not substantially increase the Police Department calls for service. The site would be lit at night for security purposes to help discourage crime. 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 result in environmental effects. Therefore, this impact would be less than significant.

Schools?

Less-than-Significant Impact. The proposed project is a school project. A new K–5 elementary school that would serve up to 650 elementary students, with the potential to serve approximately 300 middle school students in grades 6–8 in the future, would be developed on the District’s 20-acre property. The project site is currently vacant, and has been planned for a school use for the last 20 years. The proposed project would enable the District to meet the needs of students generated in the North Natomas Community Plan area. Environmental impacts associated with development of a new school 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?

No Impact. The proposed project involves construction of a new elementary school on District-owned property. All recreational facilities necessary for children attending the school during school hours would be provided on campus as required by CDE. The project does not include new housing that would result in a demand for additional off-campus park facilities. Furthermore, the District has entered into an agreement with the City that would allow for public use of the outdoor sports facilities at the school campus (when not in use by the District). Therefore, the proposed project would result in a benefit in terms of increased recreational amenities for use by the surrounding community. No adverse impact would occur. Thus, there would be no impact.

Other public facilities?

No Impact. The proposed project involves construction of a new elementary school on District-owned property. The new elementary school campus 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 the urbanized Natomas Park 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 approximately 3-acre California Lilac Park, across the street from the project site's northeastern boundary, includes trees and turf grass, a walking path, basketball court, picnic area, tot lot, and botanical garden plantings including lilacs and native wildflowers. The 39-acre North Natomas Community Park is approximately 700 feet southwest of the project site, and includes baseball and soccer fields, volleyball courts, lighted tennis courts, children's playgrounds, group picnic area, restrooms, and paved walking paths. The approximately 41-acre Regency Community Park is approximately 0.25 mile north of the project site, and includes a 2-mile walking trail, disc golf course, baseball and soccer fields, volleyball courts, skate park, two dog parks, group picnic areas, and restrooms (City of Sacramento 2020).

The Walt Ueda Parkway Trail (approximately 12.5 miles of which have been developed), and the Wolf Ranch Wildlife Sanctuary (which encompasses approximately 60 acres of created wetland and upland habitats), are located approximately 0.75 mile to the northeast.

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?**

Less-than-Significant Impact. The proposed project does not involve the construction of any new housing that would generate new residents who would increase the use of existing recreational facilities. The proposed new school would include all necessary recreational facilities for the student population at the project site, as required by CDE. Therefore, the proposed project would result in a benefit in terms of increased recreational amenities for use by the surrounding community. No adverse 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 new school would include all necessary recreational facilities for the student population at the project site, as required by CDE. The on-site school-related recreational facilities are evaluated throughout this Initial Study as part of the proposed project. Where necessary, mitigation measures are included as part of each topic area analysis to reduce all project impacts to a less-than-significant level.

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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. Site access is currently provided by Club Center Drive on the north side of the site and Nantucket Way on the south side of the site. The site is in a residential area, characterized by single-family homes and California Lilac Park to the north. The internal roadway network in this area is characterized by cul-de-sacs and limited connectivity across developed areas. Several streets, including Alvoca Way, Buckwood Way, Calabria Way, and Dasco Way terminate at Club Center Drive, adjacent to the project site. Primary local roadway access for the site is provided by Natomas Boulevard via Club Center Drive and Danbrook Drive via Nantucket Way. Club Center Drive is an east-west, two-way roadway with one lane in each direction and a center turn lane, extending for two miles across Natomas. Nantucket Way is a small local roadway extending for just over 0.25 miles to provide access to single-family homes and the project site. 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 Club Center & Natomas via Route 11, approximately 0.5 miles to the west. In addition, the North Natomas Jibe operates the Jibe Express Route 170. This route operates along Danbrook Drive in the project area. However, due to low ridership as a result of the COVID-19 pandemic, all Jibe Express service routes were suspended as of January 2021.

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 the adjacent roadways. There are several existing and planned bikeways in the project area. Club Center Drive 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?**

Less-than-Significant Impact. Development of the proposed project in an area designated Public/Quasi-Public and on a site that has been planned for school uses for the last 20 years, with the assumption of accessing existing transportation facilities, would not conflict with a program plan, ordinance, or policy addressing the circulation system that would lead to an adverse physical environmental effect. The North Natomas Community Plan Policy NN.LU 1.6 states that the City shall locate an elementary school as the focal point near the center of each neighborhood serving 1,500 to 3,000 dwelling units, in addition to policies stating that elementary schools should serve as neighborhood focal points (City of Sacramento 2015a: 3-NN-4 and 3-NN-5). The District also includes Board Policies and Administrative Regulations that includes design of transportation routes and stops that promote student safety and decreased traffic in and around the schools (NUSD 2018).

Existing sidewalks along Club Center Drive and Nantucket Way, in addition to bicycle lanes on Nantucket Way, would safely accommodate the expected pedestrian and bicycle traffic. Typical safety measures during student's drop-off and pick-up times would also be in place under the project operation to improve and enhance pedestrian and bicycle circulation and safety. The project would not change the availability of that transit service, nor would it interrupt service during construction. Therefore, this impact would be less than significant.

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

Less-than-Significant Impact. Section 15064.3 (b)(3) of the State CEQA Guidelines allows a qualitative analysis of potential impacts related to vehicle miles traveled (VMT). Estimation of project-related VMT would require the assessment of project trip length based on future project-related students/employees locations, which are not available. However, it is anticipated that the proposed project would not result in substantial increases in VMT in the project area because, based on enrollment patterns at other District schools and the planning for this school, the project would likely draw from the nearby population. The objective of the project is to provide necessary public school facilities in the Natomas Park area. This would allow a greater number of student trips during drop-off and pick-up times to be via walking or bicycling, or to allow for shorter vehicle trips compared to baseline conditions and compared to a scenario where the school was not developed. Additionally, developing a new school at the project site in the Natomas Park area is consistent with the Governor's Office of Planning and Research (OPR) recommendations on potential measures to reducing VMT, which include increasing access to schools and other services (OPR 2018).

Any adverse physical environmental impacts associated with increases in VMT, such as greenhouse gas emissions and transportation-related noise, are identified in relevant sections throughout this document, in connection with discussions of the impacts of overall school development and operation. Mitigation measures are identified for potentially significant operation-related impacts to ensure that those impacts would be reduced to a less-than-significant level. There are no additional significant impacts beyond those comprehensively considered throughout the other sections of this document. Therefore, this impact would be less than significant.

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

Less-than-Significant Impact. The proposed project would not change the existing street network in the project vicinity. However, the proposed project would include designing a right-turn lane from Club Center Drive into the proposed parking area. Main campus access would be provided from Club Center Drive and Nantucket Way. During construction activities, heavy truck vehicles, such as haul trucks or flatbed trailers, would access the project site via Club Center Drive. Slow-moving trucks entering and exiting at this location could pose a hazard to other vehicles traveling on the area roadways. However, construction activities would be temporary, and a clear line of sight is available in both directions.

The proposed project would be required to comply with applicable access and circulation requirements of the City's Street Design Standards (2009). City Street Design Standard are designed to avoid hazardous design features, such as including compatible geometric designs and appropriate site distances. No unusual angles or other hazardous design elements would exist in the proposed circulation and access that would adversely impact public safety on area roadways. Therefore, project construction and operation would not substantially increase hazards due to a design feature or incompatible use and this 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, and site ingress/egress points would be provided from Club Center Drive and Nantucket Way. Slow-moving trucks entering and exiting the project site could slightly delay the movement of emergency vehicles. However, the trucks would typically pull to the side of the road when emergency vehicles use their sirens. Additionally, truck traffic would be temporary and intermittent during construction. Construction staging would occur on-site, and no public roads would require closure during project construction.

The proposed project would contribute a small percentage of the overall traffic, mainly occurring during school pick-up and drop-off times, therefore project operation would not result in inadequate emergency access. Proposed project construction and operation would not pose a significant obstacle to emergency response vehicles and this impact would be less than significant.

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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 February 4, 2021, AECOM contacted the Native American Heritage Commission (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 March 4, 2021, the NAHC stated that a search of the SLF database of the project area did identify Tribal Cultural Resources/Traditional Cultural Properties at or near the project site (AECOM 2021).

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 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 United Auburn Indian Community (UAIC) on March 19, 2021 and Wilton Rancheria on March 29, 2021.

UAIC noted that their databases do not show any resources on-site, but identified the project area as potentially sensitive for Tribal Cultural Resources and requested consultation to discuss the project, project timeline, and UAIC's preferred measures to mitigate adverse effects to Tribal Cultural Resources. The District consulted with UAIC during a phone conversation on March 30, 2021. In an email response dated March 30, 2021 from the UAIC following the phone conversation with the District, UAIC determined there are no Tribal Cultural Resources on the project site, though there are Tribal Cultural Resources in the vicinity (Pers Comm., Anna Starkey 2021). UAIC requested a post ground disturbance site visit to occur during the initial clearing, grubbing, and ground disturbance, and implementation of Workers Awareness Training Program (WEAP) and unanticipated discoveries mitigation measures. The District developed and incorporated mitigation measures into this IS/MND based on the input received from UAIC.

In a response to the District provided on March 29, 2021, Wilton Rancheria identified cultural resources within the project footprint and requested a Tribal Monitor to be present during all ground disturbance. Wilton Rancheria also noted preservation in place is the preferred method of treatment for Tribal Cultural Resources. The District responded to Wilton Rancheria on March 29, 2021 noting the District would allow a tribal monitor on-site and would notify the Tribe of dates when deep excavation would occur at the project site. The District developed and incorporated mitigation measures into this IS/MND with the input received from Wilton Rancheria and UAIC.

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 site reconnaissance survey. However, tribal outreach conducted under AB 52 indicated that Tribal Cultural Resources may be present in the vicinity of the project site or within the project footprint and 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: Construction Monitoring

During the initial excavation for the project, NUSD will retain a qualified geoarchaeologist to assess the potential for the presence of buried archaeological sites, including Tribal Cultural Resources and human remains.

NUSD will provide Native American Tribes that are traditionally and culturally affiliated with resources in the project area a schedule for the initial clearing, grubbing, and ground disturbance, and will extend an invitation for tribal monitors to observe on-site, ground disturbance work contingent on compliance with construction safety measures. NUSD will identify the schedule for the deepest on-site excavation, which is associated with installation a sewer line, and NUSD will compensate tribal monitors for up to 8 hours using the established hourly rate. The Native American Monitor shall have the authority to halt work and/or divert ground disturbing activities in the event of an unanticipated cultural resource discovery.

Mitigation Measure 3.18-3: 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, Mitigation Measure 3.18-2, and Mitigation Measure 3.18-3 would reduce potentially significant impacts to Tribal Cultural Resources to a less-than-significant level by requiring worker training and an on-site Native American monitor prior to and during ground disturbing activities, in addition to implementing appropriate measures in the unlikely event that a Tribal Cultural Resource is discovered to minimize potential impacts.

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3.19 UTILITIES AND SERVICE SYSTEMS

3.19.1 ENVIRONMENTAL SETTING

WATER SUPPLY

Water supply would be provided by the City of Sacramento from an existing underground line in Club Center Drive. 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. An SASD local collection pipeline is located in Club Center Drive, which drains to a Sacramento Regional County Sanitation District (Regional San) interceptor⁷ located in Natomas Boulevard (SASD 2010). The Regional San interceptor conveys wastewater southward 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).

ELECTRICITY AND NATURAL GAS

Electrical service to the project site would be provided by SMUD. SMUD is a community-owned, not-for-profit electrical service. SMUD employs a variety of energy efficiency programs and renewable power technologies; as a result, approximately 50 percent of SMUD's power comes from non-carbon-emitting resources (SMUD 2019). SMUD's service area includes 900 square miles and nearly 11,000 miles of electrical power lines. In 2019, SMUD provided approximately 10,214 GWh of electricity to its customers (CEC 2020a). Underground electrical lines are present in Club Center Drive on the north side of the project site.

⁷ Interceptors are sanitary sewers that are designed to carry flows in excess of 10 million gallons per day [mgd].

PG&E is responsible for provision of electricity and natural gas to the City and the project site, through portions of its approximately 42,800 miles of natural gas distribution pipelines.

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 within the City. Depending on the selected hauler, solid waste would be transported either to the North Area Recovery Station approximately 6 miles southeast 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 on-site water supply conveyance facilities. Potable and fire protection water supply are available to the school by connecting to existing infrastructure in Club Center Drive along the northern border of the project site. Off-site water conveyance facilities have the capacity to provide water supplies to 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 amount and type of proposed development, based on the City's Standards and Specifications for Public 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 project is 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 Club Center Drive was designed to provide service to development in the project vicinity, including the project site, and would be connected to the school 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 school facilities based on SASD's Standards and Specifications. The project is required to pay applicable SASD wastewater connection fees before building permits are issued.

The proposed project would require installation of on-site underground electrical lines that would connect with existing underground lines in Club Center Drive. The District would consult with SMUD and would prepare and submit electrical plans that depict the locations and appropriate sizes of all required electrical infrastructure.

Proposed on-site electrical lines would be designed and sized to provide adequate service to the project site for the amount of electricity that would be needed by the school facilities based on SMUD standards.

Potential environmental impacts associated with construction of stormwater drainage facilities are evaluated in Section 3.10, “Hydrology and Water Quality.”

Physical impacts associated with construction of utilities to serve the proposed project are evaluated throughout this IS/MND. The placement of these utilities has been considered in the other sections of this IS/MND, such as Air Quality, Biological Resources, etc., which specifically analyze the potential impacts from project construction and implementation. 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 increase the demand for municipal water supplies. Based on the City’s Water Supply Assessment worksheet, the City’s water demand estimate for public uses (including school uses) is 0.17 acre feet per year (afy) per employee (City of Sacramento 2013). The school would accommodate up to approximately 950 students and approximately 75 staff members; therefore, water demand for the proposed school uses would be 174.25 afy (1,025 employees/students x 0.17 afy). The City estimates water demand for landscape irrigation as approximately 6.6 afy per acre. The landscaped portion of the project site would be approximately 10 acres; therefore, the water demand for landscape irrigation would be 66 afy (10 acres x 6.6 afy per acre). The City will provide water for the school campus through an agreement with the District.

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 Natomas Park area 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 (240.25 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. SASD (2019:48) assumes that a school for grades K–8 with approximately 1,000 students generates 25,000 gallons per day (or 0.02 mgd) of average dry-weather flow that would be conveyed to the SRWTP. 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). Furthermore, the proposed project is part of the Natomas Park area of the North Natomas Community Plan Area, which has been accounted for by Regional San in future planning. The SRWTP would have adequate capacity to treat wastewater flows generated by the

proposed project as well as future development within the SASD service area. 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 are not required. The construction process would generate minor amounts of solid wastes, including scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and non-recyclable construction-related wastes. 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 increased long-term generation of solid waste. 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 school campus would accommodate up to approximately 950 students and 75 staff members. Based on CalRecycle's 2014 waste characterization study, the education sector generated 0.5 tons of solid waste per employee per year and 3.67 tons of solid waste per 100 students per year (CalRecycle 2015). Therefore, the proposed project would generate approximately 72 tons per year (or 0.2 tons per day) of solid waste. These totals do not account for recycling programs required by AB 1826 or other County recycling programs. Therefore, the actual amount of solid waste generated by the proposed project would be less than this estimate.

The estimated 0.2 tpd of solid waste generated by the proposed project would be less than 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. Therefore, 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. 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 800 feet west 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 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 flat and is surrounded by residential development and the approximately 3-acre California Lilac Park. 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 a new K–5 school campus, which would consist of buildings, parking areas, turf and hardcourt play fields, and ornamental landscape plantings around the buildings. Project-related infrastructure would have no effect on fire risk. Fire services to the project site would be provided by the City of Sacramento Fire Department. The nearest fire station, No. 30, is approximately 800 feet west 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 currently consists of a vacant, flat, 20-acre parcel surrounded by residential development and the approximately 3-acre California Lilac Park. 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.

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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. However, as discussed in Section 3.4, Biological Resources, with implementation of Mitigation Measure 3.4-1 impacts to protected wildlife species 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, 3.18-2, and 3.18-3, 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 CO₂ 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 Dual Immersion K-5 Elementary School (Northpointe Site) 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 with Mitigation Incorporated. Based on background research, site visits, and the analysis presented herein, project implementation potentially could cause substantial adverse effects on human beings in relation to noise. Specifically, the project could impact human beings through a substantial temporary increase in ambient noise levels in the direct vicinity of the project site, near existing noise-sensitive land uses. Thus,

Mitigation Measure 13.1-1 would be required to ensure that construction activities would avoid noise-sensitive hours and would include noise-reducing measures.

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 with mitigation incorporated.

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 development of the Dual Immersion K-5 Elementary School (Northpointe Site). All impacts of the proposed project will be reduced to a less-than-significant level by mitigation measures identified in this section.

4.1 AESTHETICS

Mitigation Measure 3.1-1: Prepare and Implement a Lighting Plan.

To reduce impacts associated with light and glare, the District shall prepare and implement a lighting plan for the proposed project that includes the following elements:

- Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties.
- Place and shield or screen flood and area lighting needed for security so as not to disturb adjacent residential areas and passing motorists.
- Light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash, shall not be used. Light-emitting diode (LED) lighting shall be used where feasible.
- Motion-controlled exterior nighttime lighting, rather than lighting that is always on, shall be used where feasible.
- Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriately shielded lighting for signage, to prevent light and glare from adversely affecting adjacent housing and motorists on nearby roadways.

4.2 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 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.

Mitigation Measure 3.3-2: Implement Mitigation Measure 3.3-1.

4.3 BIOLOGICAL RESOURCES

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

Vegetation must be removed, and trees trimmed 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.

4.4 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 (National Park Service 1983) 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.

4.5 GREENHOUSE GAS EMISSIONS

Mitigation Measure 3.8-1: Design for Net-Zero Ready Electric Capability.

The NUSD, as part of final project design, shall ensure that the proposed school has the capacity to be all-electric in the future, including any pre-wiring necessary so that the building is ready for future retrofit to all-electric.

Mitigation Measure 3.8-2: EV Charging Facilities.

The NUSD, as part of final project design, shall be designed to meet the current CalGreen Tier 2 standards for electric vehicle capable spaces, except that electric vehicle spaces shall instead be electric vehicle ready, not just electric vehicle capable.

4.6 HYDROLOGY AND WATER QUALITY

Mitigation Measure 3.10-1: Prepare a Drainage Plan and Implement Requirements Contained in the Plan.

The District shall design an on-site drainage system that limits peak discharges into Natomas Basin No. 4 and the RD 1000 drainage system per the requirements of the North Natomas Comprehensive Drainage Plan and the Sacramento Areawide NPDES MS4 Permit.

The District shall prepare a final drainage plan that incorporates Central Valley RWQCB requirements to appropriately convey off-site upstream runoff through the project site, and demonstrate that project-related on-site runoff would be appropriately contained in detention basins and managed with through other improvements (e.g., source controls) to reduce flooding and hydromodification impacts. The drainage plan shall include, but is not limited to, the following items:

- an accurate calculation of pre-project and post-project runoff scenarios, obtained using appropriate engineering methods (which may consist of those contained in the *Sacramento City/County Drainage Manual Volume 2: Hydrology Standards*), that accurately evaluates potential changes to runoff, including increased surface runoff;
- runoff calculations for the 10-year and 100-year (0.01 AEP) storm events (and other, smaller storm events as required) shall be performed and the trunk drainage pipeline sizes confirmed based on alignments and detention facility locations finalized in the design phase;
- a description of the proposed maintenance program for the on-site drainage system;
- project-specific standards for installing drainage systems;
- a description of on-site LID features designed to treat stormwater and maintain stormwater quality before it is discharged from the project site (e.g., vegetated swales, infiltration trenches, and constructed wetland filter strips); and
- stormwater management BMPs that are designed to limit hydromodification and maintain current stream geomorphology. These may include, but are not limited to, the following:
 - LID techniques to limit increases in stormwater runoff at the point of origination (these may include, but are not limited to: surface swales; replacement of conventional impervious surfaces with pervious surfaces [e.g., porous pavement]; impervious surfaces disconnection; and trees planted to intercept stormwater);
 - detention basin inlet and outlet water control structures that are designed to reduce the rate of stormwater discharge;
 - enlarged detention basins to minimize flow changes and changes to flow duration characteristics;
 - minimize slope differences between any stormwater or detention facility outfall channel with the existing receiving channel gradient to reduce flow velocity; and
 - minimize to the extent possible detention basin sizes, embankments, culverts, and other encroachments into the channel and floodplain corridor, and utilize open bottom box culverts to allow sediment passage on smaller drainage courses.

Mitigation Measure 3.10-2: Implement Mitigation Measure 3.10-1 (Prepare a Drainage Plan and Implement Requirements Contained in the Plan)

Mitigation Measure 3.10-3a: Implement Mitigation Measure 3.10-1 (Prepare a Drainage Plan and Implement Requirements Contained in the Plan)

Mitigation Measure 3.10-3b: Obtain a CLOMR from FEMA and Implement Requirements of the City of Sacramento Floodplain Management Ordinance.

Before the approval of grading plans, site improvements, and/or building permits, the District shall obtain an approved Conditional Letter of Map Revision (CLOMR) from FEMA and submit final drainage plans demonstrating to the satisfaction of the City Floodplain Administrator that the proposed project would appropriately accommodate 10-year, 100-year (0.01 AEP), and 200-year (0.005 AEP) flood flows.

The District shall comply with the standards set forth in the City of Sacramento Floodplain Management Ordinance (City of Sacramento Code of Ordinances Chapter 15.104), which includes obtaining a

Floodplain Management Permit (Section 15.104.045). In support of the permit application, the District shall comply with the new construction standards and provide the City with the detailed information required in Section 15.104.050, “Requirements for Flood Hazard Reduction” and demonstrate compliance with the City’s Comprehensive Flood Management Plan as required in Section 15.104.070.

Mitigation Measure 3.10-4a: Implement Mitigation Measure 3.10-1 (Prepare a Drainage Plan and Implement Requirements Contained in the Plan).

Mitigation Measure 3.10-4b: Implement Mitigation Measure 3.10-3b (Obtain a CLOMR from FEMA and Implement Requirements of the City of Sacramento Floodplain Management Ordinance).

4.7 NOISE

Mitigation Measure 3.13-1: Use Noise-Suppression Devices on Construction Equipment, Limit Construction to Daytime Hours, and Locate Stationary Equipment Away from Sensitive Noise Receptors to Reduce Noise Levels During Construction.

NUSD will implement the following noise-reduction and noise-control measures during construction activities:

- Construction equipment will be properly maintained per manufacturers’ specifications and fitted with feasible noise suppression devices (e.g., mufflers, silencers, wraps).
- Using less noisy equipment.
- All impact tools will be shrouded or shielded, and all intake and exhaust ports on power equipment will be muffled or shielded.
- Construction will take place between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday, and between the hours of 9:00 a.m. and 6:00 p.m. on Sunday.
- Construction equipment will be shut down when not in use and will not idle for extended periods of time near noise-sensitive receptors.
- Fixed/stationary equipment (e.g., generators, compressors, cement mixers) will be located as far as practicable from noise-sensitive receptors.
- Noise control blanket barriers will be used during construction near noise-sensitive uses.
- Utilize noise control blankets on a building structure as the building is erected to reduce noise emission from the site.
- Residences within 500 feet of construction sites shall be notified of the construction schedule prior to the beginning of construction. Designate a “construction liaison” that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site. If conflicts occurred which were irresolvable by the above mitigation measures, erect temporary noise control blanket barriers on the all sides of the project site.
- Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings housing sensitive uses.

4.8 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: Construction Monitoring

During the initial excavation for the project, NUSD will retain a qualified geoarchaeologist to assess the potential for the presence of buried archaeological sites, including Tribal Cultural Resources and human remains.

NUSD will provide Native American Tribes that are traditionally and culturally affiliated with resources in the project area a schedule for the initial clearing, grubbing, and ground disturbance, and will extend an invitation for tribal monitors to observe on-site, ground disturbance work contingent on compliance with construction safety measures. NUSD will identify the schedule for the deepest on-site excavation, which is associated with installation a sewer line, and NUSD will compensate tribal monitors for up to 8 hours using the established hourly rate. The Native American Monitor shall have the authority to halt work and/or divert ground disturbing activities in the event of an unanticipated cultural resource discovery.

Mitigation Measure 3.18-3: 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.

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