June 2019 | **Initial Study and Mitigated Negative Declaration**

SOLANA VISTA ELEMENTARY SCHOOL RECONSTRUCTION

Solana Beach School District

PLACEWORKS

MITIGATED NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act (CEQA; California Public Resources Code Sections 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Sections 15000 et seq.), the Solana Beach School District has completed this Mitigated Negative Declaration (MND) for the project described below based on the assessment presented in the Initial Study.

Lead Agency and Project Proponent: Solana Beach School District

Project Title: Solana Vista Elementary School Reconstruction

Project Location: The project site encompasses the Solana Vista Elementary School at 780 Santa Victoria, in the City of Solana Beach, San Diego County, California (Assessor's Parcel Number 263-291-3400 and 263-291-3300).

Project Description: The proposed project involves demolition of structures and construction of a new main classroom building, a multipurpose building, new loading driveway, and improvements to hardscape and landscaped play areas. The proposed main classroom building would have 24 rooms (16 classrooms and 8 specialty rooms) and would result in a reduction of four classrooms from existing conditions (28 rooms). Capacity of the school would be reduced from 420 seats to 380 seats. The new western driveway would provide ingress via two lanes (drop-off and passing lane) and egress via a one-lane roadway from the site. Improvements to the parking lot and loading zone would be conducted in one phase starting June 2020 concurrently with demolition of the site. During the demolition and construction phase, students in kindergarten through second grade would temporarily attend the Solana Highlands Elementary School and students in third grade would temporarily attend the Skyline Elementary School. Once the new facilities are constructed, all students would return to the new campus buildings at the Solana Vista campus.

Summary of Impacts: The Initial Study analyzed the potential environmental effects that would occur from construction and operation of the proposed Solana Vista Elementary School Reconstruction project. Based on the environmental analysis, the proposed project would have no impact or less-than-significant environmental impacts on the following resources:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems
- Wildfire

Project development would have potentially significant impacts on five resources:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Noise
- Tribal Cultural Resources

Mitigation Measures: The below mitigation measures are required to be incorporated into the project to minimize the potentially significant environmental impacts. Adherence to the mitigation measures would avoid or reduce potentially significant impacts to less than significant levels.

BIO-1 Vegetation clearing/grubbing and construction activities shall be planned, where possible, to occur outside of the general nesting bird/raptor breeding season (between September 1 and January 14). If construction cannot be planned to occur outside of this season, a pre-construction nesting bird survey shall be conducted. Pre-construction surveys must be conducted by a qualified biologist within three days prior to commencement of construction activities (including staging of equipment, clearing and grubbing). The biologist shall survey for signs of breeding and nesting activity. Incidental observations of any sensitive biological resources within 500 feet of the project area shall also be recorded. If access is limited during the pre-construction survey, binoculars shall be used to survey up to 500 feet from the project area, where possible. If a breeding and nesting activity or sensitive biological resource is identified during the pre-construction survey, the potential for direct or indirect impacts from the project shall be evaluated, and an avoidance plan (as deemed appropriate) shall be developed in coordination with the District. The results of the pre-construction survey will be reviewed and approved by the District prior to initiating any construction activities. The avoidance plan shall include proposed measures to be implemented to ensure that disturbance of breeding activities is avoided and implemented to the satisfaction of the District. Monitoring may be required to determine when the nest is no longer active (i.e., the nestlings fledge, the nest fails, or the nest is abandoned, as determined by a qualified biologist). The District will have a contracted Biological Monitor verify and approve that all measures identified in the plan are in place prior to and/or during construction. The District shall be responsible for implementing restrictions on clearing and grubbing of habitats and construction activity that could result in violations to the MBTA or Section 3503 of the Fish and Game Code.

CUL-1 Prior to the start of construction, the project proponent shall retain a qualified professional archaeologist to monitor ground-disturbing activities. The archaeologist shall meet the Secretary of the Interior's professional qualifications standards for archaeology. The archaeologist shall have the authority to stop grading or construction work within 50 feet of any discovery of potential historical or archaeological resources in order to implement the procedures in Mitigation Measure CUL-2 and make a finding of significance under Section 15064.5 of the California Environmental Quality Act Guidelines.

CUL-2 If subsurface deposits believed to be cultural or human in origin are discovered during construction, either with or without an archaeological monitor present, all work must halt within a 50-foot radius of the discovery. The qualified archaeologist shall be called upon to evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

a. If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.

b. If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the District and landowner. The District shall consult on a finding of eligibility and implement appropriate treatment measures if the find is determined to be eligible for inclusion in the CRHR. If the find is reasonably associated with Native American culture, the District shall also contact the liaisons for Native American tribes that requested such notification to determine whether or not the find represents a tribal cultural resource and, if so, to consult on appropriate treatment. Work may not resume within the no-work radius until the District, through consultation as appropriate, determines that the site either: 1) is not a historical resource or tribal cultural resource under CEQA; or 2) that the treatment measures have been completed to its satisfaction.

c. If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the County Coroner or Medical Examiner (as per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Medical Examiner determines the remains are Native American and not the result of a crime scene, the Medical Examiner will notify the NAHC, who then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC may mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the District, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.

GEO-1 Prior to the start of construction, Solana Beach School District shall retain a qualified paleontologist to monitor ground-disturbing activities. The paleontologist shall attend a meeting with the grading contractor, engineering geologist, grading engineer, and school authorities to establish a protocol for monitoring during all earth-disturbing activities. The paleontologist shall be on call and available for monitoring should resources be found during construction. If unique paleontological resources are discovered during excavation and/or construction activities, then construction shall stop within 25 feet of the find, and the qualified paleontologist shall be consulted to determine whether the resource requires further study. The paleontologist shall make recommendations to the Solana Beach School District to protect the discovered resources. Any paleontological resources recovered shall be donated to the San Diego Natural History Museum to preserve for future scientific study.

NOI-1 If final plan drawings locate HVAC equipment within 75 feet of nearby residences, the equipment shall be shielded by a rooftop parapet wall (or wall or enclosure if at ground level) so as to block line-of-sight to nearby residences.

TCR-1 Mitigation Measure CUL-1 requires a professional archaeologist to monitor ground-disturbing activities for the discovery of potential historical or archaeological resources. In the event of the discovery of any cultural resources that may be reasonably associated with Native American culture, the archaeological monitor shall implement the procedures in Mitigation Measure CUL-2(b).

Environmental Impact Finding: With mitigation, the proposed Solana Vista Elementary School Reconstruction project will not have a significant adverse effect on the environment.

June 2019 | Initial Study

SOLANA VISTA ELEMENTARY SCHOOL RECONSTRUCTION

Solana Beach School District

Prepared for:

Solana Beach School District
Contact: Caroline J. Brown, Executive Director
309 North Rios Avenue
Solana Beach, California 92075
858.794.7140

Prepared by:

PlaceWorks
Contact: Mark Teague, Associate Principal
3910 Normal Street, Suite C
San Diego, California 92103
619.299.2700
info@placeworks.com
www.placeworks.com

PLACEWORKS

Table of Contents

Table of Contents

APPENDICES

Table of Contents

List of Figures

List of Tables

Table of Contents

Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
ADT	average daily traffic
APN	assessor's parcel number
BMP	best management practices
CALGreen	California Green Building Code
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CDE	California Department of Education
CEQA	California Environmental Quality Act
CNEL	community noise equivalent level
CO	carbon monoxide
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
EPA	United States Environmental Protection Agency
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gases
HVAC	heating, ventilation, and air conditioning
L_{eq}	equivalent continuous noise level
LOS	level of service
mgd	million gallons per day
MRZ	mineral resource zone
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
O_3	ozone
OEHHA	Office of Environmental Health Hazards Assessment
PM	particulate matter
PPV	peak particle velocity
RAQS	Regional Air Quality Strategy

Abbreviations and Acronyms

RCNM	Roadway Construction Noise Model
REB Plant	R.E. Badger Filtration Plant
SANDAG	San Diego Association of Governments
SB	Senate Bill
SBFD	Solana Beach Fire Department
SBSD	Solana Beach School District
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SFID	Santa Fe Irrigation District
SIP	state implementation plan
SO_X	sulfur oxides
STREAM	Science, Technology, Research, Engineering, Arts, and Math
tpd	tons per day
VdB	velocity decibels
VOC	volatile organic compound
WRF	water reclamation facility

1. Introduction

The Solana Beach School District (District) proposes to reconstruct Solana Vista Elementary School (proposed project). Prior to considering its approval and in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code §§ 21000 et seq.), the District is required to determine the potential environmental effects of its implementation and mitigate the effects to the maximum extent feasible. This initial study evaluates the potential environmental consequences of the proposed project.

1.1 ENVIRONMENTAL REVIEW

The environmental compliance process is governed by two principal regulations: CEQA and the State CEQA Guidelines (California Code of Regulations §§ 15000 et seq.). CEQA was enacted in 1970 by the California Legislature to disclose to decision makers and the public the significant environmental effects of proposed activities and to identify ways to avoid or reduce the environmental effects through feasible alternatives or mitigation measures. Compliance with CEQA applies to California government agencies at all levels: local, regional, and state agencies, boards, commissions, and special districts (such as school districts and water districts). The District is the lead agency for the proposed project and is therefore required to analyze the potential environmental effects associated with the project.

Public Resources Code Section 21080(a) states that analysis of a project's environmental impact is required for any "discretionary projects proposed to be carried out or approved by public agencies…." In this case, the District has determined that an initial study is required to determine whether there is substantial evidence that the proposed project would result in environmental impacts. An initial study is a preliminary environmental analysis to determine whether an environmental impact report (EIR), a mitigated negative declaration, or a negative declaration is required for a project (CEQA Guidelines § 15063). An initial study must have a project description; a description of the environmental setting; an identification of environmental effects by checklist or other similar form; an explanation of environmental effects; a discussion of mitigation for significant environmental effects; an evaluation of the project's consistency with existing, applicable land use controls; the names of persons who prepared the study; and identification of data sources (CEQA Guidelines § 15063(d)).

When an initial study identifies substantial evidence of the potential for significant environmental impacts, the lead agency must prepare an EIR (CEQA Guidelines § 15064); however, if there are no potentially significant impacts or if impacts can be mitigated to a less than significant level, the lead agency can prepare, respectively, a negative declaration or a mitigated negative declaration, which incorporates mitigation measures into the project (CEQA Guidelines § 15070).

1.2 IMPACT TERMINOLOGY

The following terminology is used to describe the level of significance of impacts.

- A finding of ***no impact*** is appropriate if the analysis concludes that the project would not affect the particular topic area in any way.
- An impact is considered ***less than significant*** if the analysis concludes that it would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered ***less than significant with mitigation incorporated*** if the analysis concludes that it would cause no substantial adverse change to the environment with the inclusion of environmental commitments or other enforceable mitigation measures.
- An impact is considered ***potentially significant*** if the analysis concludes that it could have a substantial adverse effect on the environment. If any impact is identified as potentially significant, an EIR would need to be prepared.

1.3 ORGANIZATION OF THE INITIAL STUDY

The content and format of this report are designed to meet the requirements of CEQA through the following sections:

- **Section 1, *Introduction***, identifies the purpose and scope of the initial study and the terminology used.
- **Section 2, *Environmental Setting,*** describes the existing conditions, surrounding land uses, general plan designation, and existing zoning at the project site and surrounding area.
- **Section 3, *Project Description,*** identifies the location and background and describes the proposed improvements.
- **Section 4, *Environmental Checklist,*** presents the CEQA checklist and the significance finding for each resource topic.
- **Section 5, *Environmental Analysis,*** provides an evaluation of the impact categories in the environmental checklist and identifies mitigation measures, if applicable.
- **Section 6, *References,*** identifies all references and individuals cited in this initial study.
- **Section 7, *List of Preparers,*** identifies the individuals who prepared the initial study and technical studies and their areas of specialty.

- **Appendices** present data supporting the analysis or contents of this initial study.
  - Appendix A. Air Quality and Greenhouse Gas Background and Modeling Data
  - Appendix B. South Coast Information Center Report
  - Appendix C. Energy Data
  - Appendix D. Geotechnical Investigation
  - Appendix E. Paleontological Records Search
  - Appendix F. Phase I ESA and Addendum
  - Appendix G. Noise Background and Data
  - Appendix H. Traffic Impact Analysis

This page intentionally left blank.

2. Environmental Setting

2.1 PROJECT LOCATION

The project site is at 780 Santa Victoria, in the City of Solana Beach, San Diego County, California (Assessor's Parcel Numbers [APNs] 263-291-3400 and 263-291-3300). The school is south and east of Santa Victoria, north of San Patricio Drive, and west of residences. Regional access to the school is provided by Interstate 5 (I-5), approximately 0.4 mile west of the site. Figure 1, *Regional Location*, and Figure 2, *Local Vicinity*, show the school from regional and local perspectives. As shown in Figure 1, the City of Solana Beach is surrounded by the cities of Encinitas, Del Mar, and San Diego and by unincorporated San Diego County.

2.2 EXISTING CONDITIONS

Solana Vista Elementary School site is generally circular in shape and encompasses approximately 10 acres. The school was constructed in 1971 and was modernized in 2000. The school offers the following educational programs:

- **Kindergarten through Third-Grade Program.** Most of the elementary-aged students living in the northwest portion of Solana Beach attend Solana Vista School for kindergarten through third grade.
- **Special Education Program.** Special education services include a speech and language program and a learning resource specialist program.
- **Child Development Center Program.** The Center provides before- and after-school childcare starting at 7:00 AM and ending at 6:30 PM. In addition, the Center offers enrichment classes with after-school childcare starting at 3:15 PM and ending at 6:30 PM.
- **Enrichment Programs.** The school's enrichment programs are conducted during fall, winter, and spring after school, and during the summer.

For the latest year of operation, 2018-19, Solana Vista had an enrollment of 348 students. Solana Vista operates a traditional calendar, generally starting near Labor Day and ending in the middle of June. School begins at 8:35 AM and is dismissed at 2:43 PM. On minimum days, the school is dismissed at 12:05 PM. Outside of standard school operating hours, the school has nighttime events, such as Back to School Night, Open House, school performances, athletic clubs, academic competitions, awards ceremonies, and various assemblies. The campus is also available for community uses through the Civic Center Act.[1]

[1] Sections 38130 et seq. of the California Education Code, known as the Civic Center Act, state that every public school in the state must make available a "civic center" for community use. Specific uses and users of the civic center are in the Education Code.

The campus is generally flat and is above grade from the residences to the north and south. Based on a review of the US Geological Survey topographic map of the Encinitas, Rancho Santa Fe, Del Mar, and Del Mar OE W quadrangles, and the project-specific grading plan, surface elevations at the school site range from approximately 230 feet to 240 feet above mean sea level (USGS 2015). Figure 3, *Aerial Photograph,* shows the Solana Vista campus and the surrounding area, and Figures 4a and 4b, *Existing Conditions*, show the project site in its existing condition.

2.2.1 Existing Facilities

The school buildings, parking lot, and hardcourt area are at the northern half of campus, and the grass playfields are at the southern. The campus includes 28 classrooms (21 classrooms and 7 specialty rooms), a hardcourt area, two playgrounds, gardens, and grass field play space with ball fields. The District uses a student loading factor of 20 students per classroom for students aged kindergarten through third grade; therefore, Solana Vista Elementary has a student seating capacity of 420 seats. Figures 4a and 4b show some of the campus amenities.

2.2.2 Parking and Access

The campus has 58-parking stalls across two lots available for staff and visitors. The parking lot is accessed via a loading-only road from the schools' westernmost driveway on Santa Victoria or via an ingress/egress driveway entrance further east on Santa Victoria across from the terminus of Santa Carina.

The majority of student loading activities take place on approximately 400 feet of offsite, loading-designated curb west of the western driveway entrance along Santa Victoria. The remainder of student loading activities occur along an approximately 150-foot loading road onsite that is accessed via the westernmost driveway on Santa Victoria, connecting to the parking area. Pedestrian access is provided by Santa Victoria and an opening to the field on San Patricio Drive.

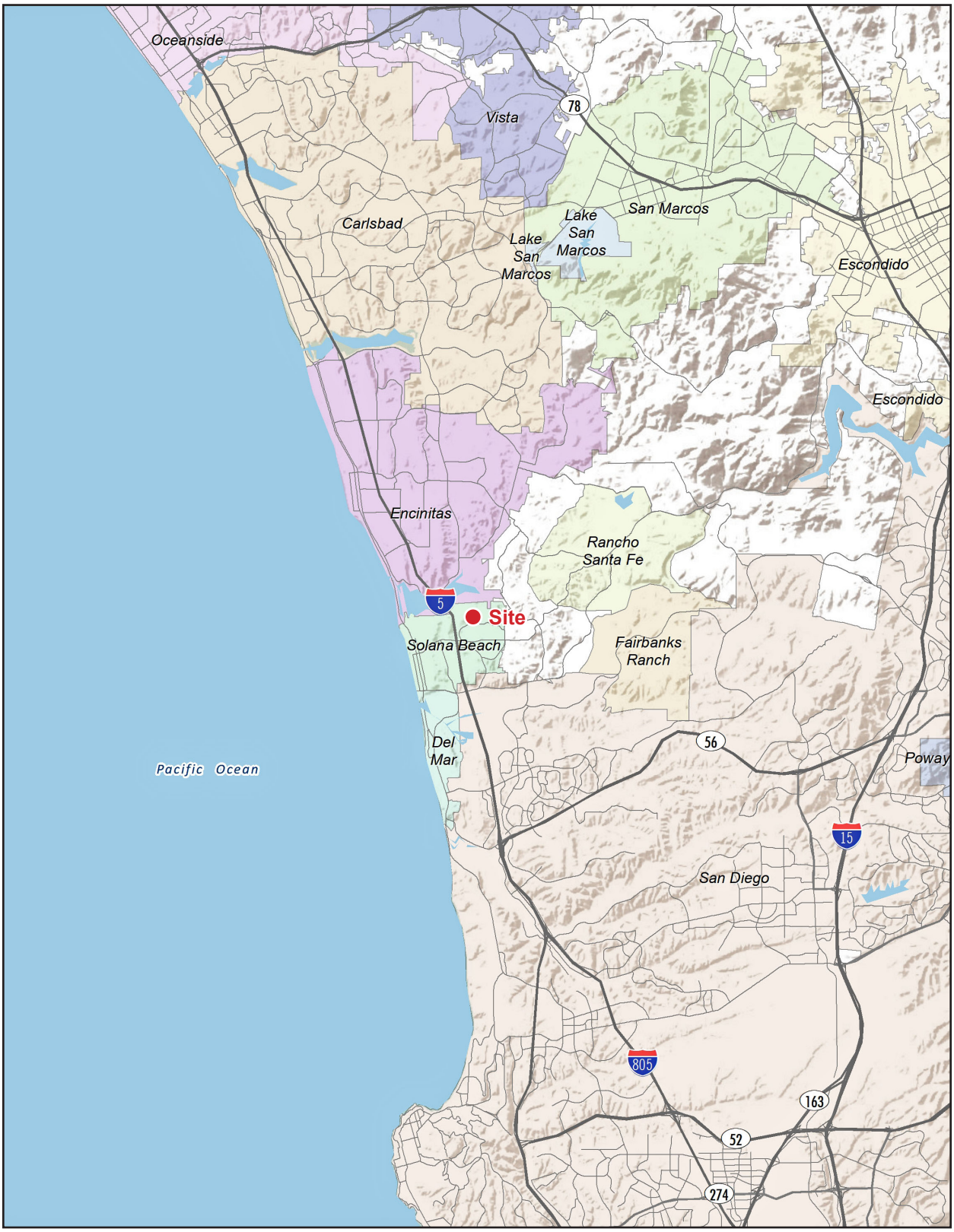
2.3 SURROUNDING LAND USES

Solana Vista Elementary is in a residential neighborhood and is surrounded by residences on all sides. Further west is the I-5, further south and east is the Lomas Santa Fe Golf Course and Country Club, and further north is the San Elijo Lagoon.

2.4 GENERAL PLAN AND ZONING

The City of Solana Beach General Plan land use designation of Solana Vista Elementary School is Public/Institutional (Solana Beach 2014). The City zoning of the project site is Public/Institutional (Solana Beach 2007).

Figure 1 - Regional Location



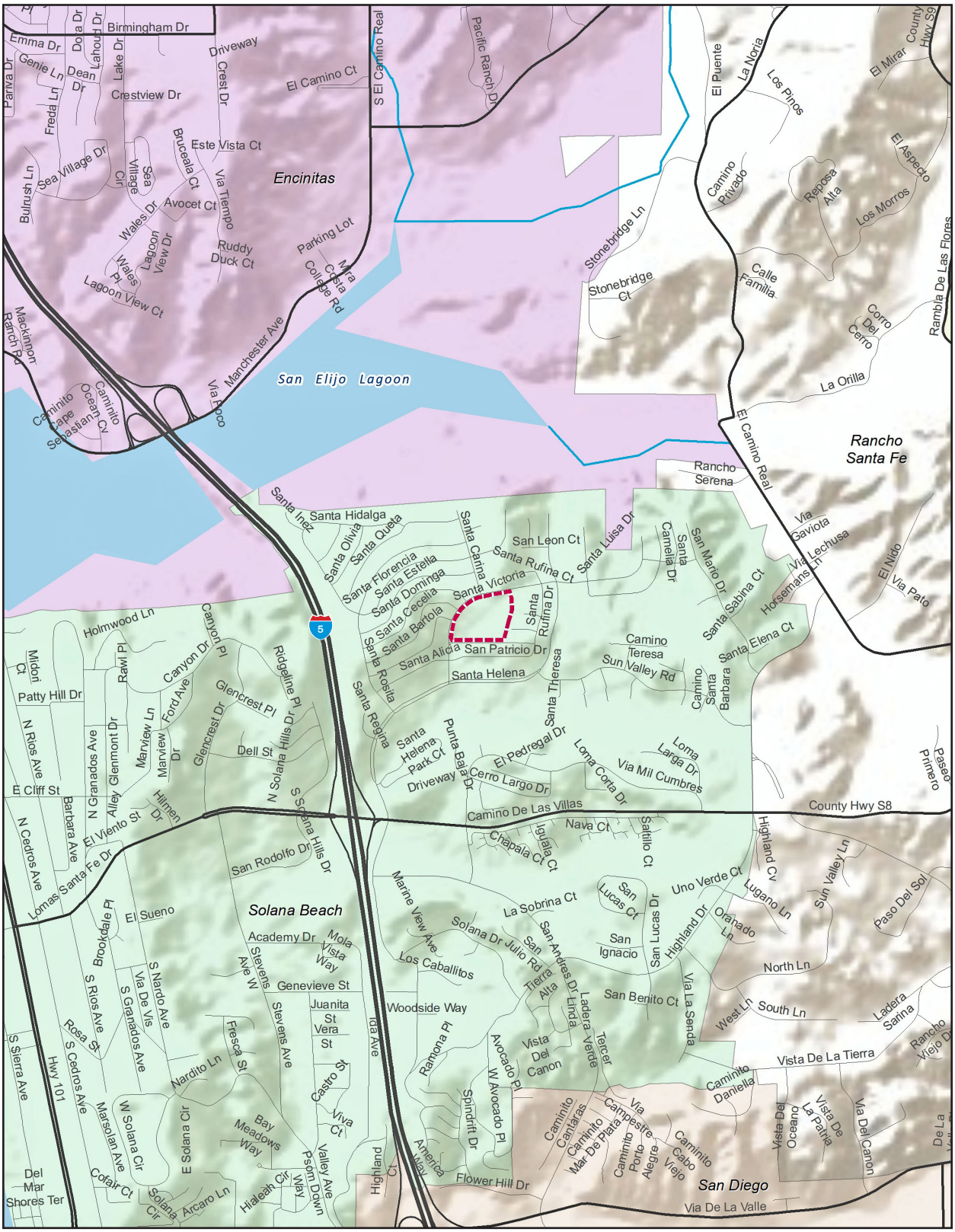
Note: Unincorporated county areas are shown in white.

0 3
Scale (Miles)

Source: ESRI, 2018

This page intentionally left blank.

Figure 2 - Local Vicinity



Note: Unincorporated county areas are shown in white.

Project Site

Source: ESRI, 2018

0 2,000
Scale (Feet)

This page intentionally left blank.

Figure 3 - Aerial Photograph

Project Site

0 500
Scale (Feet)

Source: Google Earth, 2016

This page intentionally left blank.

Figure 4a - Existing Conditions

View of the main driveway entrance into the campus. Note the separated ingress and egress driveways. These driveways would be used for operation of the new parking lot.

View facing north on Santa Victoria. The proposed driveway would be constructed on the right, directly across from Santa Bartola (identified by the blue street sign on the left).

View facing west of the existing loading driveway with ingress from Santa Victoria. The new proposed western driveway would be constructed further south, towards the left of the image.

This page intentionally left blank.

Figure 4b - Existing Conditions

View facing west of the existing baseball fields. The new school buildings would be constructed to the right of the fields.

View facing north of existing play area on the northwestern portion of campus. The play area would be demolished and the new loading driveway would be constructed over its footprint.

View facing south of the existing play structure on southeastern portion of campus. The play structure would be removed and a new play area would be constructed within its general footprint.

This page intentionally left blank.

3. Project Description

3.1 PROPOSED IMPROVEMENTS

The proposed project involves demolition of onsite structures and construction of a new main classroom building, a multipurpose building, new loading driveway, and improvements to hardscape and landscaped play areas. The proposed main classroom building would have 24 rooms (16 classrooms and 8 specialty rooms) and would result in a reduction of 4 classrooms from existing conditions. The proposed improvements would change the existing layout of the campus. Figure 5, *Site Plan*, shows the proposed improvements at the project site.

3.1.1 Proposed Buildings

3.1.1.1 MAIN CLASSROOM BUILDING

The proposed main building and multipurpose building would be constructed at the northern portion of the project site within the general footprint of the existing buildings. The main building would be divided into west and east wings. The east wing includes the kindergarten classrooms and kindergarten collaboration space. The west wing includes classrooms, a media center, broadcast room, STREAM room (Science, Technology, Research, Engineering, Arts, and Math), lobby, nurse's office, principal's office, conference room, speech office, guidance office, psych office, staff lounge, staff workroom, computer lab, and art room.

3.1.1.2 MULTIPURPOSE BUILDING

The multipurpose building would be west of the main building and includes a multipurpose room, stage, music room, and kitchen area. An outdoor lunch courtyard would be constructed to the south of the multipurpose building.

Table 1, *Proposed School Facilities*, provides a breakdown of the proposed facilities within each structure and their respective square footages. The project would result in approximately 57,963 square feet of building area.

3. Project Description

Table 1 Proposed School Facilities

Classroom/Building Facility	Square Footage (SF)
Main Building	
Kindergarten Classrooms	1,307–1,355 SF
Kindergarten Collaboration Space	363 SF
Classrooms	962–967 SF
Media Center	2,732 SF
Broadcast Room	413 SF
STREAM Room	1,253 SF
Lobby	891 SF
Nurse's Office	490 SF
Principal's Office	292 SF
Conference Room	369 SF
Speech Office	356 SF
Guidance Office	398 SF
Psych Office	331 SF
Staff Lounge	972 SF
Staff Workroom	560 SF
Computer Lab	962 SF
Art Room	1,253 SF
Multipurpose Building	
Multipurpose Room	2,274 SF
Stage	604 SF
Music Room	995 SF
Lobby	827 SF
Kitchen Area	1,152 SF

The new buildings would be one story and would be similar to the height of existing buildings on the campus. Exterior finish materials would be stucco with stone wall accents intermixed with beams, trellises, and trims. The buildings would be designed to portray a "village" design concept through the use of varying building component sizes, heights, and window placements, and would include sloping roofs and overall scaling to be compatible with the existing community. The sloping roofs would be finished in metal standing seam panels of a dark complementary color to the stucco walls.

Exterior lighting would be provided for security purposes, and no high-intensity nighttime lighting would be installed at the outdoor recreational facilities. The new school facilities would meet California Building Code (CBC) Title 24 energy standards, and its sustainable features.

3.1.2 Campus Play Areas

3.1.2.1 HARDCOURTS, PLAY STRUCTURE, AND GARDENING AREA

The existing play structures at the eastern and western portions of the site would be removed. A new, approximately 27,499-square-foot hardcourt area would be constructed southwest of the proposed

multipurpose building and lunch court and would be painted for children's games. A media plaza and instructional garden, or "academic court" would be south of the main building near the center of campus and would be approximately 5,647 square feet. A new, approximately 16,715-square-foot kindergarten play area with mixed hard- and softscape and a kindergarten gardening area would be south of the kindergarten classrooms, on the eastern portion of the project site.

3.1.2.2 GRASS PLAYFIELD

The grass playfields and baseball fields would remain in the southern portion of the campus. In total, the field area would be approximately 165,458 square feet. A security fence would be installed to separate the field from the school buildings. Access to the field areas would continue to be maintained via pedestrian walkways through the campus from Santa Victoria and a pedestrian gate on San Patricio Drive.

3.1.3 Pedestrian Access

The project includes walkways and access points for students and staff to traverse throughout campus. There would be a series of paved walkways between the school buildings, the campus play areas, and the parking lot entrance.

3.1.4 Vehicular Circulation and Parking

Vehicular access to the campus would be provided via a new driveway on Santa Victoria and the existing ingress/egress driveway further east. The existing western driveway would be removed, and the eastern ingress/egress driveway on Santa Victoria would be reconstructed to accommodate egress only (see Figure 5, *Site Plan*).

The new western driveway would provide ingress to the site via two lanes and egress via one lane. The ingress roadway would provide access to a drop-off lane (closest to the campus) and a passing lane (north of the drop-off lane). This roadway would provide three options for vehicles: 1) a left turn would lead to a two-lane, 57-space parking lot and egress to the new western driveway on Santa Victoria; 2) driving straight would lead to the reconstructed egress driveway on Santa Victoria; and 3) a right turn would provide access to a two-lane, 20-space parking lot. The project would provide a total of 77 onsite parking stalls.

3.1.5 Vegetation and Landscaping

Project implementation includes the removal of all onsite trees and planting of new trees, including a variety of large canopy, medium and columnar, and small and accent trees (see Figure 5, *Site Plan*). The majority of new trees would be planted along the school frontage on Santa Victoria. Additional trees would be planted in the median areas of the parking lot and on walkways and open hardcourt areas within the campus.

3.2 PROJECT OPERATION

The proposed project would reduce the capacity at Solana Vista by four classrooms to 24 classrooms total. Although the District assumes a classroom loading factor of 20 students per room (80 seats for four

classrooms), for the purposes of this analysis it is assumed the capacity of the school would be reduced by 40 to 380 seats. The school would continue to follow the District's calendar—generally from the end of August/beginning of September to June. The proposed project will not change the existing school hours, currently from 8:35 AM to 2:43 PM, and the school would remain available for community use via the Civic Center Act.

3.3 CONSTRUCTION SCHEDULE AND INTERIM STUDENT PLACEMENT

3.3.1 Construction Schedule

Construction activities include building and asphalt demolition and excavation, site preparation and rough grading, utility trenching, fine grading, building construction, architectural coating, asphalt paving, and finishing and landscaping. Construction would not occur before 7:00 AM or after 7:00 PM Monday through Friday, and before 8:00 AM or after 7:00 PM on Saturday. Construction also would not occur on Sunday or on any of the City-recognized holidays.

Demolition will occur in June 2020. The baseball improvements will be protected in place; however, the fields will be used for construction equipment staging. There would be no public access to the site during project implementation.

A construction worksite traffic control plan would be prepared and implemented by the District. The plan would identify haul routes, hours of construction, protective devices, warning signs, and access. The active construction and staging areas would be on the campus and clearly marked with barriers to separate public access from the construction zone.

3.3.2 Interim Student Placement

Improvements to the parking lot and loading zone would be conducted in one phase starting June 2020, concurrently with demolition of the site. During the demolition and construction phase, students in kindergarten through second grade would temporarily attend Solana Highlands Elementary School, and students in third grade would temporarily attend Skyline Elementary School. Once the new facilities are constructed, all students would return to the new campus buildings.

3.3.2.1 SOLANA HIGHLANDS ELEMENTARY

Kindergarten through second grade students would attend Solana Highlands Elementary for the 2020-21 school year. Existing access to Solana Highlands is via a 500-foot-long curbside and passing lane for student drop-off and pick-ups. The District would provide approximately four to five buses for students that would be relocated to Solana Highlands for both AM and PM hours. As proposed students would be dropped off at Solana Vista Elementary School, then bused to Solana Highlands. Approximately 240 kindergarten through second grade students from Solana Vista would be relocated. Assuming a standard school bus has a capacity of 72 passengers, with four or five buses the District could accommodate 288 to 360 students and would require a maximum of five bus trips to and from the school for the K-2 students.

Figure 5 - Site Plan

Source: Alpha Design Studio. April 16, 2019.

This page intentionally left blank.

3.3.2.2 SKYLINE ELEMENTARY

Approximately 109 Solana Vista Elementary School third-grade students would attend Skyline Elementary during the 2020-21 school year. There is an accessible parking lot with a two-lane curbside drop-off/pick-up area at the parking lot in front of the main building.

3.4 PROJECT APPROVAL AND PERMITS

3.4.1 Lead Agency

Solana Beach School District is the lead agency under CEQA and has approval authority over the proposed project. This initial study and accompanying Mitigated Negative Declaration must be considered for adoption by the District Governing Board of Education, confirming its adequacy in complying with the requirements of CEQA. The board will consider the information in the initial study when deciding whether to approve or deny the proposed project. The analysis in this initial study provides environmental review for the whole of the proposed project, including planning, construction, and interim and permanent operations of the school at Solana Vista and temporary offsite locations.

3.4.2 Responsible Agencies

A public agency other than the lead agency that has discretionary approval power over a project is known as a "responsible agency," as defined by CEQA Guidelines Section 15381. Responsible agencies for the proposed project include:

- California Coastal Commission (Coastal Development Permit)

3.4.3 Reviewing Agencies

Reviewing agencies do not have discretionary powers to approve or deny the proposed project or actions needed to implement it but may review the initial study for adequacy and accuracy. Reviewing agencies for the proposed project may include:

3.4.3.1 STATE

- California Department of General Services, Division of the State Architect

3.4.3.2 REGIONAL

- San Diego Regional Water Quality Control Board
- San Diego Air Pollution Control District

3.4.3.3 LOCAL

- Solana Beach Fire Department

3. Project Description

- Solana Beach Planning Department (Approval of Improvements to Santa Victoria)
- Solana Beach Engineering and Public Works Department (Encroachment Permit for Roadway Improvements, Striping)

4. Environmental Checklist

4.1 BACKGROUND

1. **Project Title:** Solana Vista Elementary School Reconstruction

2. **Lead Agency Name and Address:**
   Solana Beach School District
   309 North Rios Avenue
   Solana Beach, California 92075

3. **Contact Person and Phone Number:**
   Caroline J. Brown, Executive Director
   858.794.7140

4. **Project Location:**
   The project site is the existing Solana Vista Elementary School campus at 780 Santa Victoria, in the City of Solana Beach, San Diego County, California 92075 (Assessor's Parcel Number's 263-291-3400 and 263-291-3300).

5. **Project Sponsor's Name and Address:**
   Caroline Brown, Executive Director, Capital Programs and Technology
   Solana Beach School District
   309 North Rios Avenue
   Solana Beach, California 92075

6. **General Plan Designation:** Public/Institutional (PI)

7. **Zoning:** Public/Institutional (PI)

8. **Description of Project**:
   See Section 3.1, *Project Description*.

9. **Surrounding Land Uses and Setting**:
   The project site is entirely surrounded by residences. The I-5 is approximately 0.4 mile west. Further south and east is the Lomas Santa Fe Golf Course and Country Club, and further north is the San Elijo Lagoon.

10. **Other Public Agencies Whose Approval Is Required**
    California Coastal Commission
    City of Solana Beach

4.2 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.

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

4.3 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

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

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

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

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

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

Caroline J Brown — *Signature*

June 7, 2019 — *Date*

Caroline J. Brown — *Printed Name*

Solana Beach School District — *For*

4.4 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 would 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.

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 Analyses 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. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

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

4. Environmental Checklist

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

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

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

5. Environmental Analysis

5.1 AESTHETICS

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) 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 points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Analysis:

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

Less Than Significant Impact. A scenic vista is an expansive view of a landscape that enhances the aesthetic value of the area. The City of Solana Beach Local Coastal Program Land Use Plan designates view corridors and scenic overlay zones in the city. The project site is not in a designated city view corridor or scenic overlay zone (Solana Beach 2011). However, views of the San Elijo Lagoon, approximately 1,200 feet north of the site, would be considered a scenic vista and would be visible from parts of the northern portion of the project site. The proposed project would construct the improvements generally within the same footprint as the existing buildings, and the proposed buildings would be a similar height and consume a similar viewshed as the existing campus buildings. The project does not propose offsite improvements that would impact northerly-facing views of the lagoon from Santa Victoria. Therefore, project implementation would result in a less than significant impact to scenic vistas.

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-designated scenic highways in Solana Beach. The nearest eligible (not officially designated) state scenic highway is a segment of I-5 that runs from SR-163 in San Diego past the

northern border of San Diego County. Solana Vista is approximately 0.4 mile east of I-5, and due to the distance and intervening structures, Solana Vista is not and would not be in the viewshed of I-5. The proposed improvements would not impact scenic resources within a state scenic highway (Caltrans 2015); therefore, no impact would occur.

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 points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The project site is located in an urbanized community. The proposed improvements would result in the demolition of the existing Solana Vista campus and construction of new school facilities. While construction activities would degrade the aesthetic quality of the site, construction would be temporary, lasting approximately 19 months. Exterior finish materials of the new buildings would be stucco, similar to the existing buildings, with stone wall accents intermixed with beams, trellises, and trims. The buildings would be designed to portray a "village" design concept through the use of varying building component sizes, heights, window placements, and would include sloping roofs and overall scaling to be compatible with the existing community. The sloping roofs would be finished in metal standing seam panels of a dark complementary color to the stucco walls. Additionally, proposed landscaping improvements, including the planting of more trees along the frontage of the site near Santa Victoria, would further enhance the aesthetic quality of the site. The proposed project would not conflict with the applicable zoning for the site or with regulations governing scenic quality. Therefore, impacts to the visual character and quality of the site and surrounding area would be less than significant.

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

Less Than Significant Impact. Artificial light sources can create glare effects and light pollution. The existing nighttime environment includes street lights, headlights from vehicles on Santa Victoria, and security lighting at the school and surrounding residences. The proposed project would provide lighting mainly for safety purposes—walkway and building illumination and security lighting similar to the existing school—and would not create substantial exterior lighting impacts at nearby viewers. The nearest viewers are the adjacent residences north of the campus along Santa Victoria. Nighttime light exposure from project implementation would be similar to existing conditions, and lights for security purposes would be directed toward the campus and away from the residences and other sensitive viewers, such as drivers along Santa Victoria.

The project would increase the number of parking spaces and expand the student loading at the northern portion of the site, and subsequently daytime glare from an increase in vehicles on the school frontage would incrementally increase. However, this area currently experiences glare from its use as a parking lot, and new landscaping and trees along Santa Victoria would shield sensitive viewers such as drivers on Santa Victoria and northerly residences from glare impacts. Additionally, the proposed project would not be constructed with reflective building materials—other than glass for windows and dark metal trims—and would not cause substantial daytime glare impacts. Therefore, the project would result in less than significant lighting and glare impacts.

5.2 AGRICULTURE AND FORESTRY RESOURCES

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Analysis:

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

No Impact. The City of Solana Beach, including the project site, is in the survey area for County of San Diego Farmland Mapping and Monitoring Program map of the California Resources Agency (DOC 2015a). The map designates the project site as Urban and Built-Up Land that does not contain any important farmland. The project site is part of an elementary school campus in an urban area and is currently developed with blacktop, grass playfield, and school facilities. The proposed project would not convert any special status farmland to nonagricultural use, and no impact would occur.

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

No Impact. The project site is zoned Public/Institutional (PI) on the City's zoning map. The proposed uses are consistent with the existing elementary school and would not conflict with any agricultural use or a Williamson Act contract. Therefore, no impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code

Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The project site is zoned Public/Institutional. No rezoning of forest land or timberland would result from project implementation. Therefore, no impact would occur.

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

No Impact. The project site is part of an elementary school campus in an urban area, and no forest land would be lost due to project implementation. Therefore, no impact would occur.

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

No Impact. The proposed project would be on the existing elementary school campus and would not result in the conversion of farmland to nonagricultural use or forest land to nonforest use, and no impact would occur.

5.3 AIR QUALITY

Would the project:

Issues		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			X	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c)	Expose sensitive receptors to substantial pollutant concentrations?			X	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

The Air Quality section addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O_3), carbon monoxide (CO), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), nitrogen dioxides (NO_2), and lead (Pb). Areas are classified under the federal and California Clean Air Act as in either attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The San Diego Air Basin (SDAB), which is managed by the San Diego Air Pollution Control District (SDAPCD), is designated under the California AAQS as a nonattainment area for

PM_{10} and $PM_{2.5}$ and designated under both the California AAQS and the Federal AAQS as nonattainment for O_3 (SDAPCD 2019).

This section analyzes the types and quantities of air pollutant emissions that would be generated by the construction and operation of the proposed project. A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the project site, and air quality modeling can be found in Appendix A to this Initial Study.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the environmental determinations.

Analysis:

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

Less Than Significant Impact. A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the San Diego Regional Air Quality Strategy (RAQS). The most current RAQS is the 2016 RAQS (SDAPCD 2016). The RAQS fulfills the CEQA goal of informing decision-makers of the environmental efforts of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals contained in the RAQS. Only new or amended general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the RAQS is based on projections from local general plans. Projects that are consistent with the local general plan or do not trigger the San Diego Association of Governments' intergovernmental review criteria are considered consistent with the RAQS.

The proposed project involves reconstruction of Solana Vista Elementary School. However, reconstruction efforts would not increase the capacity of the school and would reduce overall capacity by 40 seats. In addition, Solana Vista Elementary School would continue to operate as it currently operates after implementation of the proposed project. Therefore, the proposed project would not substantially affect the regional growth projections because the land use is consistent with the City of Solana Beach's underlying general plan land use designation and would not require a general plan or zoning amendment. Furthermore, the proposed project would also not have the potential to substantially affect housing, employment, or population projections within the San Diego region, which is the basis of the RAQS projections. Therefore, the proposed project would not conflict or obstruct implementation of the RAQS, and impacts would be less than significant.

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

Less Than Significant Impact. As stated, the SDAB is designated under the California and federal AAQS as nonattainment for O_3 and under the California AAQS as nonattainment for PM_{10}, and $PM_{2.5}$ (SDACPD 2019). Any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. Air quality impacts of the proposed project were evaluated

based on the County of San Diego's *Guidelines for Determining Significance, Air Quality* (2007). Development projects below the regional significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. The following describes project-related impacts from short-term construction activities and long-term operation of the project.

Short-Term Air Quality Impacts

Construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust emissions from powered construction equipment; 2) dust generated by demolition, grading, earthmoving, and other construction activities; 3) motor vehicle emissions; and 4) emissions of volatile organic compounds from the application of asphalt, paints, and coatings.

Construction of the improvements on the 10-acre project site would involve building and asphalt demolition; site preparation; site grading; construction of the new school facilities; paving; and architectural coating. Construction activities are anticipated to start June of 2020 and be completed by the end of 2021 (approximately 19 months). Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2, based on the project's preliminary construction schedule. Results of the modeling are included in Table 2, *Maximum Daily Regional Construction Emissions*. As shown in the table, air pollutant emissions from project-related construction activities would not exceed the County's regional emissions thresholds. Therefore, air quality impacts from project-related construction activities would be less than significant.

Table 2 Maximum Daily Regional Construction Emissions

Source	Pollutants (lbs/day)[1,2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2020 Building Demolition & Asphalt Demolition Overlap	7	72	46	<1	5	3
2020 Site Preparation	4	43	22	<1	10	6
2020 Grading	3	28	17	<1	4	3
2020 Building Construction	2	22	19	<1	2	1
2021 Building Construction	2	20	19	<1	2	1
2021 Building Construction, Paving, & Architectural Coating Overlap	27	35	36	<1	3	2
Maximum Daily Emissions	27	72	46	<1	10	6
San Diego County's Regional Threshold	75	250	550	250	100	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod, Version 2016.3.2, and San Diego County 2007.

1 Air quality modeling based on a construction schedule and information provided by the District. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment and phasing for comparable projects.

2 Includes implementation of fugitive dust control measures required by SDAPCD under Rule 55, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street.

Temporary Relocation Operation-Related Impacts

During the construction period, the existing students would be temporarily relocated to Skyline Elementary School and Solana Highlands Elementary School. The existing 109 third-grade students that would be temporarily relocated to Skyline Elementary School would generate a total of 174 average daily trips during a weekday (IBI Group 2019). The 240 kindergarten through second-grade students designated for Solana Highlands Elementary School would be bused, which would generate up to 10 bus trips per weekday. The mobile-source emissions associated with the temporary relocation of the existing students were modeled using CalEEMod. Table 3, *Daily Regional Operational Mobile Emissions during Temporary Relocation*, identifies the mobile-source emissions from the temporary relocation of the existing students during construction. As shown in the table, the temporary mobile emissions would not exceed the County's regional emissions thresholds, and impacts would be less than significant.

Table 3 Daily Regional Operational Mobile Emissions during Temporary Relocation

Source	Pollutants (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile Sources – Skyline Elementary School[1]	<1	<1	1	<1	<1	<1
Mobile Sources – Solana Highlands Elementary School[1]	<1	1	<1	<1	<1	<1
Total Maximum Daily Emissions	<1	1	1	<1	<1	<1
San Diego County's Regional Threshold	75	250	550	250	100	55
Exceeds Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod, Version 2016.3.2, and San Diego County 2007.
Note: Highest winter or summer emissions reported. Totals may not total to 100 percent due to rounding.
[1] The analysis is conservative since buses will be provided for students going to Carmel Creek Elementary School during temporary relocation.

Long-Term Operation-Related Impacts

Typical long-term air pollutant emissions generated by a land use would be generated by area sources (e.g., landscape fuel use, aerosols, and architectural coatings), mobile sources from vehicle trips, and energy use (natural gas) associated with the land use. The proposed project would result in the replacement of the existing school buildings with newer, more energy-efficient buildings and would also result in the reduction of student capacity. For purposes of this analysis, it is assumed that implementation of the project would reduce overall seating capacity at the school by 30 seats. Criteria air pollutant emissions for the proposed project were modeled using CalEEMod. Table 4, *Net Maximum Daily Regional Operational Emissions*, identifies the net change in criteria air pollutant emissions from implementation of the proposed project. As shown in the table, implementation of the proposed project would generally result in a net decrease in long-term air pollutant emissions and would not exceed the County's regional emissions thresholds. Therefore, long-term regional air quality impacts would be less than significant.

5. Environmental Analysis

Table 4 Maximum Daily Regional Operational Emissions

Source	Pollutants (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing						
Area	1	<1	<1	0	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	<1	1	<1	<1	<1
Total	**1**	**<1**	**1**	**<1**	**<1**	**<1**
Project						
Area	2	<1	<1	0	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	0	0	0	0	0	0
Total	**2**	**<1**	**<1**	**<1**	**<1**	**<1**
Net Change						
Area	<1	<1	<1	0	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<0	<0	-1	<0	<0	<0
Maximum Daily Emissions	**<1**	**<0**	**-1**	**<0**	**<0**	**<0**
San Diego County's Regional Threshold	75	250	550	250	100	55
Exceeds Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod, Version 2016.3.2, and San Diego County 2007.
Note: Highest winter or summer emissions reported. Totals may not total to 100 percent due to rounding.

As discussed above, project-related construction and operational activities would not result in emissions in excess of County's regional significance thresholds. Therefore, the proposed project would not result in a cumulatively considerable net increase in criteria pollutants, and impacts would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The significance of localized project impacts depends on whether the project would cause substantial concentrations of criteria air pollutants for which the SDAB is designated as nonattainment under the California or National AAQS.

Localized Impacts

Pursuant to the County of San Diego's *Guidelines for Determining Significance and Report Format and Content Requirements, Air Quality* (2007), a project whose stationary source emissions do not exceed or can be mitigated to less than the SDAPCD trigger level would not be considered to violate an air quality standard or contribute substantially to an existing or projected air quality violation. Projects that exceed these thresholds would be required to conduct an air quality impact analysis to determine the concentrations of stationary emissions at nearby sensitive receptors. As identified above, onsite construction and operation of the proposed project would be substantially below the County's thresholds; therefore, localized emissions are also less than significant.

CO Hotspots

Prior to 1998, the SDAB was designated nonattainment under the California AAQS and National AAQS for CO. Concentrations of CO in the SDAB and in the state have steadily declined with the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. In 1998, the SDAPCD was designated in attainment for CO under both the California AAQS and National AAQS and was under a 10-year federal maintenance plan for CO. The current version of the maintenance plan is the *2004 Revision to the California State Implementation Plan (SIP) for Carbon Monoxide Updated Maintenance Plan for Ten Federal Planning Areas*, which was approved as a SIP revision in January 2006 (CARB 2004).

Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017). The proposed project would result in a net reduction of 48 average daily trips and 15 morning peak hour trips, which are substantially less than the volumes cited above. In addition, the potential for CO hotspots to be generated in the SDAB is extremely unlikely because of the improvements in vehicle emission rates and control efficiencies. Typical projects would not expose sensitive receptors to substantial pollutant concentrations, and analysis of CO hotspots is not warranted. Furthermore, the proposed project would not increase exposure at the project site from proximity to the surrounding roadways and freeways. Therefore, a less than significant impact from CO hotspots would occur.

Health Risk

Construction

Neither the SDAPCD nor the County of San Diego require a health risk assessment to be conducted for short-term emissions from construction equipment. Emissions from construction equipment primarily consist of diesel particulate matter (DPM). The Office of Environmental Health Hazards Assessment (OEHHA) adopted new guidance for the preparation of health risk assessments, issued in March 2015. OEHHA has developed a cancer risk factor and noncancer chronic reference exposure level for DPM, but these factors are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM. The proposed project would be developed in approximately 19 months, which would limit the exposure of onsite and offsite receptors. Both the SDAPCD and the County currently do not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. In addition, construction activities would not exceed the significance thresholds. For these reasons, it is anticipated that construction emissions would not pose a threat to onsite and offsite receptors at or near the school, and project-related construction health impacts would be less than significant.

Operation

The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478). In general, CEQA does not require an environmental evaluation to analyze the environmental effects of attracting development and people to an area. However, the environmental evaluation must analyze the

impacts of environmental hazards on future users when the proposed project exacerbates an existing environmental hazard or condition or if there is an exception to this exemption identified in the Public Resources Code. Schools, residential, commercial, and office uses do not use substantial quantities of toxic air contaminants and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects. However, Section 21151.8 of the Public Resources Code requires evaluation of air quality hazards for school site acquisition or construction of K-12 schools.

The proposed project involves construction of new classroom facilities to replace the existing classroom buildings. In addition, it is within a residential community and is not within a quarter mile of any permitted or nonpermitted facilities (e.g., warehousing). Furthermore, there are also no freeways or busy corridors within a quarter mile.[2] Therefore, it is not anticipated that the onsite students and staff would be exposed to an actual or potential endangerment from surrounding emissions sources, and carcinogenic and noncarcinogenic impacts would be less than significant.

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

Less Than Significant Impact. No objectionable odors are anticipated to result from the operational phase of the proposed project. The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project does not fit into these types of facilities and would not generate objectionable odors that would lead to a public nuisance. Furthermore, the project would be required to comply with SDAPCD Rule 51, Public Nuisance, which prohibits the discharge of air contaminants or other materials that would be a nuisance or annoyance to the public. Therefore, operational odor impacts would be less than significant.

During the community meeting held on April 16, 2019, several attendees commented on the odor from diesel exhaust during another school construction project. While some odor will occur, there are few methods of addressing this issue. One method is to require contractors to use Tier 4 equipment. Currently, Tier 4 diesel engine standards are the strictest EPA emissions requirement for off-highway diesel engines. This requirement regulates the amount of particulate matter (PM), or black soot, and nitrogen oxides (NOx) that can be emitted from an off-highway diesel engine. Based on an engine's horsepower rating, Tier 4 requirements were phased in starting in 2008. By the time final Tier 4 regulations were fully implemented in 2015, PM and NOx emissions had been reduced 99 percent compared to 1996 levels. While the temporary construction levels do not rise to the level of mitigation, at the community meeting, the District stated that they were committed to clean air programs. However, any construction-related odor emissions would be low in concentration and temporary, and are not expected to affect a substantial number of people. Impacts associated with construction-generated odors would be less than significant.

[2] Roadways that, on an average day, have traffic in excess of 50,000 vehicles in a rural area, as defined in Section 50101 of the Health and Safety Code, and 100,000 vehicles in an urban area, as defined in Section 50104.7 of the Health and Safety Code.

5.4 BIOLOGICAL RESOURCES

Would the project:

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

Analysis:

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

No Impact. Special status species include those listed as endangered or threatened under the federal Endangered Species Act or California Endangered Species Act; species otherwise given certain designations by the California Department of Fish and Wildlife; and plant species listed as rare by the California Native Plant Society. According to the City of Solana Beach Local Coastal Plan, the project site is not in an area designated with citywide biological resources or environmentally sensitive habitat.

The project site is fully developed with buildings, asphalt, landscaping, and concrete. Vegetation onsite is limited to ornamental trees, shrubs, and turf. Additionally, sensitive animal species are unlikely to appear because the project site and its surroundings are developed, and frequent human disturbances on campus

preclude use of the site by sensitive species. Project development would not impact sensitive species, and no impact would occur.

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

No Impact. Sensitive natural communities are considered rare in the region by regulatory agencies, known to provide habitat for sensitive animal or plant species, or known to be important wildlife corridors. Riparian habitats occur along the banks of rivers and streams. The entire site is developed, and there is no sensitive natural community or riparian habitat onsite (USFWS 2018). Therefore, no impact would occur.

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. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. There are no wetlands on the project site (USFWS 2018). The nearest wetland on the US Fish and Wildlife Service's National Wetlands Mapper is a pond approximately 0.25 mile southwest of the site (USFWS 2018). Project development would not impact wetlands, and 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. The project site is a developed school in a built-out urban area. The project site contains a parking area, classrooms, hardcourt, and grass playfield with ornamental trees, and it is heavily used throughout the week by the school and community. The site has no native habitat and no wildlife corridors and is not available for overland wildlife movement. Migratory nongame native bird species are protected by the California Fish and Game Code, Sections 3503, 3503.5, and 3513, which prohibit the take of all birds and their active nests. The proposed improvements would require the removal of trees from the project site that could potentially support birds during nesting season, between January 15 and August 31. The District would comply with the California Fish and Game Code, which would ensure that if construction occurs during the avian breeding season, appropriate measures would be taken to avoid impacts to nesting birds. Mitigation measure BIO-1 specifies the need for a nesting bird survey. The survey would be conducted no more than three days prior to construction activities. If an active bird nest is observed, the surveyor/biologist shall determine the appropriate buffer around the nest. Buffers are determined on species-specific requirements and nest location. No construction activity would occur within the buffer zone until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting. Compliance with the regulations and BIO-1 would reduce potentially significant impacts to migratory birds to a less than significant level.

BIO-1 Vegetation clearing/grubbing and construction activities shall be planned, where possible, to occur outside of the general nesting bird/raptor breeding season (between September 1 and January 14). If construction cannot be planned to occur outside of this season, a pre-construction nesting bird survey shall be conducted. Pre-construction surveys must be conducted by a qualified biologist within three days prior to commencement of construction activities (including staging of equipment, clearing and grubbing). The biologist shall survey for signs of breeding and nesting activity. Incidental observations of any sensitive biological resources within 500 feet of the project area shall also be recorded. If access is limited during the pre-construction survey, binoculars shall be used to survey up to 500 feet from the project area, where possible. If a breeding and nesting activity or sensitive biological resource is identified during the pre-construction survey, the potential for direct or indirect impacts from the project shall be evaluated, and an avoidance plan (as deemed appropriate) shall be developed in coordination with the District. The results of the pre-construction survey will be reviewed and approved by the District prior to initiating any construction activities. The avoidance plan shall include proposed measures to be implemented to ensure that disturbance of breeding activities is avoided and implemented to the satisfaction of the District. Monitoring may be required to determine when the nest is no longer active (i.e., the nestlings fledge, the nest fails, or the nest is abandoned, as determined by a qualified biologist). The District will have a contracted Biological Monitor verify and approve that all measures identified in the plan are in place prior to and/or during construction. The District shall be responsible for implementing restrictions on clearing and grubbing of habitats and construction activity that could result in violations to the MBTA or Section 3503 of the Fish and Game Code.

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

Less Than Significant Impact. Chapter 3, "Marine and Land Resources," in the City of Solana Beach Local Coastal Program Land Use Plan (LUP) protects biological resources in the City. Specifically, LUP policies 3.51, 3.52, and 3.53 protect native trees and preserve the following: oak, sycamore, alder, willow, and toyon. All of the trees proposed for removal from the project site are ornamental—none are native, candidate, sensitive, or special status species or protected by the City of Solana Beach Local Coastal Plan. Project development would not impact biological resources or violate local policies or ordinances protecting biological resources on public rights-of-way. Therefore, impacts would be less than significant.

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

No Impact. The project site is in the North County Multiple Habitat Conservation Plan area, although the City of Solana Beach has not established a habitat conservation/subarea plan. However, the site is completely developed as a school, and project implementation would not conflict with the provisions of the North County plan. No impact would occur.

5.5 CULTURAL RESOURCES

Would the project:

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

The information in this section is based in part on the following technical report, included as Appendix B of this Initial Study:

- *Proposed Solana Vista Elementary School Reconstruction Project in the City of Solana Beach,* South Coastal Information Center, April 25, 2018.

Analysis:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

No Impact. Section 15064.5 of the CEQA Guidelines defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally, a resource is considered "historically significant" if it meets one of the following criteria:

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

ii) Is associated with the lives of persons important in our past.

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

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

Solana Vista Elementary School was constructed in 1971 and modernized in 2000; therefore, the existing school buildings would not meet the minimum eligibility requirements (50 years or older) for listing as a National or California Historic Resource. Additionally, the existing facilities are not designated as a locally significant historical resource. None of the facilities embody a distinct type, period, region, or method of

construction that has potential to yield important historical information. Therefore, no impacts to historical resources would occur.

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

Less Than Significant Impact with Mitigation Incorporated. A cultural resources records search was conducted by the South Coastal Information Center to determine the project site's sensitivity to the discovery of archaeological resources (Appendix B). The project site was previously graded during school construction in 1971 and contains fills up to a depth of up to 19.5 feet below ground surface. According to the records search, there are 15 previously recorded cultural resources within 0.5 mile of the site, three of which are within 0.25 mile, and two of which are within 0.15 mile. Due to the number of cultural resources recorded within a half-mile radius of the project site and because the project site has not been surveyed, there is potential for encountering unrecorded cultural resources on the project site during excavation. Additionally, as discussed in section 5.7(f), project development would require excavation to a minimum depth of six feet below existing grades or to a depth of competent materials, and over-excavation of up to at least five feet beyond the lateral limits and from the bottom of the footing to suitable underlying material. Therefore, excavation required for construction of the proposed improvements could encounter native soils. Implementation of Mitigation Measures CUL-1 and CUL-2, would reduce potential impacts to archaeological resources to a less than significant level.

CUL-1 Prior to the start of construction, the project proponent shall retain a qualified professional archaeologist to monitor ground-disturbing activities. The archaeologist shall meet the Secretary of the Interior's professional qualifications standards for archaeology. The archaeologist shall have the authority to stop grading or construction work within 50 feet of any discovery of potential historical or archaeological resources in order to implement the procedures in Mitigation Measure CUL-2 and make a finding of significance under Section 15064.5 of the California Environmental Quality Act Guidelines.

CUL-2 If subsurface deposits believed to be cultural or human in origin are discovered during construction, either with or without an archaeological monitor present, all work must halt within a 50-foot radius of the discovery. The qualified archaeologist shall be called upon to evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

a. If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.

b. If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the District and landowner. The District shall consult on a finding of eligibility and implement appropriate treatment measures if the find is determined to be eligible for inclusion in the CRHR. If the find is reasonably associated with Native American culture, the District shall

also contact the liaisons for Native American tribes that requested such notification to determine whether or not the find represents a tribal cultural resource and, if so, to consult on appropriate treatment. Work may not resume within the no-work radius until the District, through consultation as appropriate, determines that the site either: 1) is not a historical resource or tribal cultural resource under CEQA; or 2) that the treatment measures have been completed to its satisfaction.

c. If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the County Coroner or Medical Examiner (as per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Medical Examiner determines the remains are Native American and not the result of a crime scene, the Medical Examiner will notify the NAHC, who then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC may mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the District, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.

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

Less Than Significant Impact. There are no known human remains in the project area, and the project site is operating as an existing school. California Health and Safety Code Section 7050.5 requires that if human remains are discovered on a project site, disturbance of the site shall halt until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and has made recommendations concerning their treatment and disposition to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and has reason to believe they are Native American, he or she shall contact the NAHC by telephone within 24 hours. Impacts to human remains would be less than significant.

5.6 ENERGY

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

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 consume energy from long-term operational activities and short-term construction activities. In accordance with Appendix F of the State CEQA Guidelines, this analysis includes relevant information and analyses that address the energy implications of the proposed project. This section represents a summary of the proposed project's anticipated energy needs, impacts, and conservation measures that have the potential to reduce the project's long-term energy demand. Information found herein, as well as other aspects of the proposed project's energy implications and regulations regarding energy use, is discussed in 5.3, *Air Quality*, and 5.17, *Transportation*, of this Initial Study. Energy calculations are included in Appendix C to this Initial Study.

Construction

Construction of the proposed project would consume energy in the short term through electricity use, construction vehicles and equipment fuel consumption, and bound energy in construction materials (e.g., asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass).

Electricity

Construction of the proposed project would require electricity use to power the construction-related equipment. The electricity use during construction would vary during different phases of construction, where the majority of construction equipment during grading would be gas-powered or diesel-powered, and later construction phases, such as interior construction and architectural coatings, would require electricity-powered equipment. The use of electricity would be temporary and would fluctuate according to the phase of construction. The proposed project would not result in wasteful or unnecessary electricity demands. Therefore, the proposed project would not result in a significant impact related to electricity.

5. Environmental Analysis

Transportation

Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment (off-road), delivery and haul trucks (on-road), and construction employee passenger vehicles (on-road). The majority of construction equipment during grading would be diesel-powered. The use of fuel by on-road and off-road vehicles would be temporary and would fluctuate according to the phase of construction. Construction fuel use for the proposed project would cease upon completion of project construction. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or state. The construction contractors are anticipated to minimize idling of construction equipment during construction in accordance with the California Air Resources Board's (CARB) in-use, off-road airborne toxic control measure. Such required practices would limit wasteful and unnecessary energy consumption. Therefore, it is expected that construction fuel associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than similar development projects.

Construction Materials

Construction building materials may include recycled materials and products originating from nearby sources in order to reduce costs of transportation. With increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. The type of construction is conventional and would be similar to other school reconstruction projects in the City of Solana Beach. Substantial reductions in energy inputs for construction materials can be achieved by building with recycled materials, which require less energy to produce than nonrecycled materials. The California Green Building Standards code requires construction contractors to reduce construction waste by recycling and/or salvaging a minimum of 65 percent of the construction and demolition debris. The incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ reasonable energy conservation practices in the interest of minimizing the cost of doing business.

Operation

Although the project would result in a reduction in the number of classrooms from existing conditions, overall building square footage would increase. Therefore, operation of the project would create increased demand for electricity but less demand for natural gas compared to existing conditions. The project would result in increased transportation energy use during interim housing conditions but would reduce transportation energy during operation of the project. Operational use of energy would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems, security, and control center functions; use of onsite equipment and appliances; and indoor, outdoor, perimeter, and parking lot lighting.

Electricity and Gas

The CalEEMod model used to calculate air quality impacts also generates natural gas and electricity usage. As shown in Table 5, the proposed project would result in less natural gas but more electricity use than the existing uses. Although the project would result in greater electricity use, the reduction in natural gas use would offset the electricity use by the equivalent of 14,521 kWh per year in natural gas,[3] and the project would result in an energy demand increase of 4,978 kWh per year compared to existing conditions, or a 1.8 percent increase. Therefore, energy demands as a result of the project would result in a less than significant impact.

Table 5 Building Energy Changes

Land Use	Natural Gas (kBTU/year)	Electricity (kWh/year)
Existing Conditions		
Existing Buildings to be Replaced[1]	298,104	275,139
Total	**298,104**	**275,139**
Proposed Project Conditions		
Proposed New Buildings[2]	248,545	277,295
Other Asphalt Surfaces	0	0
Other Non-Asphalt Surfaces	0	0
Parking Lot	0	17,343
Total	**248,545**	**294,638**
Net Change	**-49,559**	**19,499**

[1] Utilized the default California Emissions Estimator Model (CalEEMod), version 2016.3.2, historical energy rates, which are based on the 2005 Building Energy Efficiency Standards.

[2] Utilizes the default CalEEMod, Version 2016.3.2, default energy rates. Also assumes the new proposed buildings would be built to meet the 2019 Building Energy Efficiency Standards. Buildings in compliance with the 2019 Standards are general 30 percent more energy efficient than buildings in compliance with the 2016 Standards.

Transportation Energy and Fuel Usage

According to the traffic impact analysis prepared for the proposed project, the proposed project would result in the reduction of up to 48 average daily trips compared to existing conditions. The existing 109 third-grade students that would be temporarily relocated to Skyline Elementary School would generate a total of 174 average daily trips during a weekday (IBI Group 2019). The 240 kindergarten through second-grade students designated for Solana Highlands Elementary School would be bused, which would generate up to 10 bus trips per weekday.

The CalEEMod program estimates average trips associated with commercial and employment land uses. The estimate of vehicle miles traveled (VMT) ranges from 6.9 to 14.7 miles for commercial-customer and commercial-work trips, or an average trip length of approximately 10.8 miles. Because the project would reduce the capacity and trips to the school, VMT associated with operation of Solana Vista would be reduced. However, during interim housing, VMT would be increased for trips to Skyline and Solana Highlands Elementary Schools. VMT and fuel demands as a result of project implementation during existing

[3] 49,559 kBTU x 0.293kWh/kBTU = 14,520.78 kWH.

conditions and proposed operational conditions, including interim trips associated with interim housing at Solana Highlands and Skyline, are provided in Table 6.

Table 6 Operational Transportation Energy and Fuel Usage

	Gas		Diesel		CNG		Electricity	
Year	VMT	Gallons	VMT	Gallons	VMT	Gallons	VMT	Gallons
Existing Year 2019: Vehicle Trips to Be Eliminated								
2019	74,138	2,618	689	16	0	0	771	258
Total	**74,138**	**2,618**	**689**	**16**	**0**	**0**	**771**	**258**
Existing Year 2021: Vehicle Trips to Be Eliminated								
2021	73,762	2,599	731	17	0	0	1,105	366
Total	**73,762**	**2,599**	**731**	**17**	**0**	**0**	**1,105**	**366**
Interim Vehicle Trips to Skyline Elementary								
2020	34,329	1,244	331	8	0	0	428	143
Total	**34,329**	**1,244**	**331**	**8**	**0**	**0**	**428**	**143**
Interim Vehicle Trips to Solana Highlands Elementary								
2020*	0	0	8,672	1,103	0	0	0	0
Total	**0**	**0**	**8,672**	**1,103**	**0**	**0**	**0**	**0**

*Assumes all buses are diesel powered.

As shown in Table 6, the project would result in approximately 75,598 fewer VMT during 2019 and 2021 conditions, and an increase of 35,088 VMT to Skyline Elementary and 8,672 VMT to Solana Highlands during 2020 interim conditions. Although VMT would increase during interim conditions, the reduction in VMT during operation of the project would be greater than the increase during interim conditions, and a less than significant impact would occur.

Fuel Usage

CARB publishes the EMFAC2017 Web Database, which was used to calculate fuel consumption for the 662,256 new vehicle miles traveled, as shown in Table 6. The database search was limited to San Diego County and assumed the 2019 calendar year and light-duty private vehicles with a range of model years and fuel types.

As shown in Table 6, during 2019, vehicle trips associated with the project would result in a decrease in fuel use of 2,634 gallons, and 2,616 fewer gallons of fuel during 2021. During the 2020 interim condition, vehicle trips associated with the project would result in a fuel demand increase of 1,252 gallons for interim trips to Skyline Elementary and 1,103 gallons for interim trips to Solana Highlands. Although fuel demands would increase during interim conditions, the reduction in fuel demands during operation of the project would be greater than the increase during interim conditions; therefore, a less than significant impact would occur.

The proposed project would not result in inefficient, wasteful, and unnecessary consumption of energy. As shown in Table 6, the proposed project would result in an overall reduction in energy used for transportation compared to existing conditions.

The City of Solana Beach and its surrounding area are highly urbanized, with numerous gasoline fuel facilities and infrastructure. Consequently, the proposed project would not result in a substantial demand for energy that would require expanded supplies, the construction of other infrastructure, or expansion of existing facilities. This impact is considered less than significant.

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

Less Than Significant. Operational use of energy would include heating, cooling, and ventilating buildings; water heating; operation of electrical systems; use of onsite equipment and appliances; indoor, outdoor, perimeter, and parking lot lighting; and transportation energy. The proposed project would not conflict with state or local plans for renewable energy or energy efficiency (see Section 5.6[a]). The proposed project would comply with applicable policies for energy efficiency, including the current Building, Energy, and Green Building Standards codes. Therefore, impacts would be less than significant.

5.7 GEOLOGY AND SOILS

Would the project:

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

5. Environmental Analysis

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

The information in this section is based in part on the following technical reports, included as Appendices D and E of this Initial Study:

- *Geotechnical Investigation Proposed Modernization Solana Vista School 780 Santa Victoria Solana Beach, California,* Construction Testing and Engineering, Inc., May 10, 2019.
- *Paleontological Records Search: Solana Vista Elementary School Reconstruction Project,* San Diego Natural History Museum (SDNHM), May 8, 2018.

Analysis:

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 Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. Based on a review of the Alquist-Priolo Earthquake Fault Zoning Map and the City of Solana Beach General Plan, the project site is not on a known fault zone. According to the geotechnical investigation (see Appendix D), no active faults underlie or project toward the project site. The closest active fault, Rose Canyon, is approximately 4.5 miles southwest of the project site. Rupture of this fault has the potential to create moderate to severe ground shaking on the project site. However, the subject site is at no greater risk to impacts from rupture than the surrounding development and infrastructure. The proposed improvements would not be constructed over an active fault and would not be constructed within distances that would expose people or structures to direct hazards from surface rupture. Impacts from fault rupture would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. A number of faults in the southern California area are considered active, and the project site is expected to experience strong seismic ground shaking in the future. The project site and City of Solana Beach are not in an earthquake fault zone according to the California Department of Conservation's Earthquake Hazard Maps and the geotechnical report prepared for the project. The closest faults to the project site are the Rose Canyon fault zone (4.5 miles west), the

Newport-Inglewood Fault (14.8 miles west) and the Coronado Bank fault zone (17.8 miles west) (see Appendix D). Although seismic activity from these faults could potentially affect the project site, the subject site is at no greater risk than the surrounding development and infrastructure. According to the geotechnical report prepared for the project, all structures built for the project would adhere to the 2016 California Building Code (CBC) (California Code of Regulations, Title 24, Part 2), which provides minimum standards to protect property and public welfare by regulating design and construction to mitigate the effects of seismic shaking and adverse soil conditions. Compliance with the standards of the 2016 CBC would reduce impacts from seismic ground shaking to a less than significant level.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction refers to loose, saturated sand or gravel deposits that lose their load supporting capability when subjected to intense shaking. During intense shaking, any buildings or structures on these sediments may float, sink, or tilt as if on water. Liquefaction potential varies based on three main factors: 1) cohesionless, granular soils with relatively low densities (usually of Holocene age); 2) shallow groundwater (generally less than 50 feet); and 3) moderate to high seismic ground shaking. Lateral spreading refers to lateral displacement of large, surficial blocks of soil as a result of pore pressure buildup or liquefaction in a subsurface layer.

According to the City of Solana Beach General Plan (2014), potentially hazardous liquefaction zones in the Solana Beach area are located between Stevens Avenue and Valley Avenue and in the area north of Via de La Valley between Del Mar Downs and Stevens Avenue, approximately 1.5 miles south of the project site. However, as stated in Section 5.6.a.i, above, proposed improvements would comply with the 2016 CBC standards, which would result in minimal impacts due to liquefaction hazards. Additionally, the geotechnical investigation indicates that due to the lack of shallow groundwater and the presence of medium dense fill and dense to very dense Torrey Sandstone beneath the site, liquefaction, seismic settlement, and secondary effects would not occur at the project site. Therefore, potential impacts from liquefaction would be less than significant.

iv. Landslides?

Less Than Significant Impact. Susceptibility of slopes to landslides and other slope failures depend on several factors, which are usually present in combination—steep slopes, condition of rock and soil materials, presence of water, formational contacts, geologic shear zones, seismic activity, etc.

Topographically, the site is generally flat and is above the grade of residences to the north and south. The project site is completely developed, and project implementation would regrade the site to accommodate the new facilities. Based on a review of the US Geological Survey's topographic map of Encinitas, Rancho Santa Fe, Del Mar, and Del Mar OE W quadrangles, surface elevation of the subject site ranges from approximately 230 feet to 240 feet above mean sea level (USGS 2015). According to the City of Solana Beach General Plan (2014), the principal areas of concern for landslides are on the coastal bluffs, 1.5 miles to the west. According to the geotechnical report, the site is considered "Generally Susceptible" to landslides (Tan 1995). However, landslides are not mapped in the site area nor were observed during

the field exploration. Additionally, based on the lack of landslide features and site slopes consisting of engineered fill placed during previous grading, the risk for landslides would be less than significant.

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

Less Than Significant Impact. Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed, or dissolved, and removed from one place and transported to another. Precipitation, water, waves, and wind are all agents of erosion. Ordinarily, erosion proceeds so slowly as to be imperceptible, but when the natural equilibrium of the environment changes, the rate of erosion can be greatly accelerated. This can create aesthetic and engineering problems. Accelerated erosion in an urban area can cause damage by undermining structures; blocking storm sewers; and depositing silt, sand, or mud in roads and tunnels. Eroded materials may eventually be deposited in local waters, where the carried silt can remain suspended in the water for some time, constituting a pollutant and altering the normal balance of plant and animal life.

The proposed project would remove the existing facilities from Solana Vista Elementary School and regrade the site to accommodate the new facilities. Construction of the proposed improvements would involve demolition, excavation, and grading that would temporarily leave soil exposed and potentially result in soil erosion. Because the project site is larger than one acre, the project would require a National Pollutant Discharge Elimination System Permit and develop a stormwater quality management plan that identifies best management practices (BMPs) that would be implemented during construction to reduce potential impacts from soil erosion. Additionally, soil exposure would be temporary during grading and excavation activities. During operation, stormwater runoff from the project would be collected in a new on-site system installed to accommodate drainage from the proposed improvements, which would be carried into the stormwater drainage facilities on the campus or percolate through the two biofiltration areas and landscaped areas onsite. Therefore, impacts related to soil erosion during construction and operation of the proposed facility would not be significant.

The project would result in disturbance of 6,000 cubic yards of soil and would require the removal of 885 cubic yards of soil. The project site is generally flat, and soil removal would not significantly change the topography of the site. During construction of the improvements, adherence to the BMPs in the stormwater plan would reduce impacts associated with grading, removal, exposure, and export of 885 cubic yards of soil from the project site to a less than significant level. A less than significant impact would occur from topsoil removal.

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

Less Than Significant Impact. Based on information provided by the United States Department of Agriculture, Soil Conservation Service (USDA 2018), and the geotechnical investigation, the project site contains Loamy alluvial land (LvF3), Carlsbad (Cbd), and Las Flores loamy fine sand (LeD2) soil types. The site soils are generally loamy and well drained.

Natural soils may be susceptible to expansion, consolidation, and collapse (including hydrocollapse). Consolidation occurs when enough load is placed on soil with a low relative density to compress pore spaces and, where saturated, squeeze water out. Hydrocollapse occurs when soil that can carry more load when dry collapses upon saturation. Based on testing conducted for the geotechnical report, the existing onsite fill is considered to be potentially compressible and could result in some consolidation. The geotechnical report provides recommendations for these soils—such as overexcavation to a depth of competent underlying materials, because underlying Torrey Sandstone would not be as compressible. Therefore, with compliance with the recommendations of the geotechnical report, implementation of standard grading technologies, and compliance with current grading requirements of the CBC, impacts would be less than significant.

Subsidence of the ground surface has been reported in alluvial basins where significant amounts of groundwater (often in an overdraft condition; e.g., Lofgren 1971), oil, or natural gas are withdrawn over several decades. The project site is not above a groundwater basin, and project implementation would not result in subsidence related to groundwater withdrawal. The site is not near an oil field, and potential for subsidence due to oil or gas withdrawal would be negligible (DOC 2001). No significant impacts related to subsidence would occur. Therefore, impacts from unstable soils would be less than significant.

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

Less Than Significant Impact. Expansive soils swell when they become wet and shrink when they dry out, resulting in the potential for cracked building foundations. Based on the laboratory testing of the borings taken for the geotechnical report, the site soils exhibit low to medium expansion potential, with an Expansion Index (EI) of 90 or less. Therefore, with compliance with the recommendations of the geotechnical report—such as select grading or blending to place soils with a low expansion potential (EI of 50 or less) within the upper four feet of surface for structural improvement areas or placing moderately expansive soils in areas with no structures—impacts from expansive soils 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. Development of the proposed project would not require the installation of a septic tank or alternative wastewater disposal system. The project site is already connected to the local sewer system and would remain so. Therefore, no impact would result from septic tanks or other onsite wastewater disposal systems.

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

Less Than Significant Impact with Mitigation Incorporated. A paleontological records search was conducted by the SDNHM to determine the project site's sensitivity for the discovery of paleontological resources (Appendix E). The search identified five fossil localities within a one-mile radius of the site in marine deposits within Pleistocene-age Bay Point Formation. The project site is underlain by Torrey Sandstone, and, according to the records search, project construction would not impact Pleistocene-age Bay

Point Formation localities. However, the Torrey Sandstone beneath the project site has a moderate sensitivity for paleontological resources. The SDNHM does not have any recorded fossil localities from Torrey Sandstone within a one-mile radius of the project site. Project development would require excavation to a minimum depth of six feet below existing grades or to a depth of competent materials, and overexcavation of up to at least five feet beyond the lateral limits and from the bottom of the footing to suitable underlying material. Torrey Sandstone was uncovered in borings at depths of three feet below the surface. Therefore, excavation for the proposed improvements could result in the removal of Torrey Sandstone where there would be potential for discovery of paleontological resources. Implementation of mitigation measure GEO-1 would reduce potential impacts to paleontological resources to a less than significant level.

GEO-1 Prior to the start of construction, Solana Beach School District shall retain a qualified paleontologist to monitor ground-disturbing activities. The paleontologist shall attend a meeting with the grading contractor, engineering geologist, grading engineer, and school authorities to establish a protocol for monitoring during all earth-disturbing activities. The paleontologist shall be on call and available for monitoring should resources be found during construction. If unique paleontological resources are discovered during excavation and/or construction activities, then construction shall stop within 25 feet of the find, and the qualified paleontologist shall be consulted to determine whether the resource requires further study. The paleontologist shall make recommendations to the Solana Beach School District to protect the discovered resources. Any paleontological resources recovered shall be donated to the San Diego Natural History Museum to preserve for future scientific study.

5.8 GREENHOUSE GAS EMISSIONS

This section analyzes the project's contribution to global climate change impacts in California through an analysis of project-related greenhouse gas (GHG) emissions. Information on manufacture of cement, steel, and other "life-cycle" emissions that would occur as a result of the project are not applicable and are not included in the analysis.[4] A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix A to this Initial Study.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

[4] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analyses was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials are also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

Would the project:

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

Analysis:

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

Less Than Significant Impact. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Typical long-term GHG emissions generated by a project would be from vehicle trips, energy use (indirectly from purchased electricity use and directly through fuel consumed for building heating), area sources (e.g., equipment used onsite, consumer products, coatings), water/wastewater generation, and waste disposal.

Annual average construction emissions and mobile emissions during temporary student relocation were amortized over 20 years and included in the emissions inventory to account for GHG emissions from the construction phase of the project. Project-related GHG emissions are shown in Table 7, *Net Change* in *GHG Emissions*. As shown in the table, the net change in GHG emissions resulting from implementation of the proposed project would be 31 $MTCO_2e$ per year and would not exceed the bright-line threshold of 900 $MTCO_2e$ per year. Therefore, GHG emissions generated by the project would be less than significant.

5. Environmental Analysis

Table 7 Net Change in GHG Emissions

Source	Existing ($MTCO_2e$/year)[1]	Proposed ($MTCO_2e$/year)	Net Change ($MTCO_2e$/year)
Total Construction	*NA*	*804*[2]	*804*[2]
20-Year Amortized Construction	NA	40	40
Operational Mobile Emissions during Temporary Relocation	*NA*	*27*[3]	*27*[3]
20-Year Amortized Interim Operation	NA	1	1
Area Sources	<1	<1	<1
Energy Use	106	124	17
Mobile	25	0	-25
Waste	1	0	-1
Water	1	0	-1
Total	133	165[4]	31[4]
GHG Bright-Line Threshold	NA	NA	900 $MTCO_2e$/Year
Exceeds GHG Threshold?	NA	NA	No

Source: CalEEMod, Version 2016.3.2.
Note: Annual emissions reported. $MTCO_2e$, metric tons of carbon dioxide-equivalent. Percent changes from each source may not total to 100 percent due to rounding.
1 Represents the emissions associated with the existing buildings and student capacity that would be eliminated after project implementation. For purposes of this analysis, it is assumed that student capacity would be reduced by 30 seats after project implementation.
2 Represents the total emissions related to project-related construction activities.
3 Represents the total mobile-source emissions related to the temporary relocation of Solana Vista Elementary students to Skyline Elementary School and Solana Highlands Elementary School.
4 Includes the amortized construction and interim emissions.

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

No Impact. The following state and regional GHG reduction plans have been adopted.

CARB Scoping Plan

CARB's Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by Assembly Bill (AB) 32, which is to return to 1990 emission levels by year 2020 (CARB 2008). The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Since adoption of the 2008 Scoping Plan, state agencies have adopted programs identified in the plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the Corporate Average Fuel Economy standards, and other early action measures as necessary to ensure the state is on target to achieve the GHG emissions reduction goals of AB 32. New buildings are required to comply with the latest Building Energy Efficiency Standards and California Green Building Standards Code (CALGreen). On December 24, 2017, CARB adopted the Final 2017 Climate Change Scoping Plan Update to address the new 2030 target to

achieve a 40 percent reduction below 1990 levels by 2030, which was established by Senate Bill 32 (SB 32) (CARB 2017b). While measures in the Scoping Plan apply to state agencies and not the proposed project, the project's GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore, the proposed project would be consistent with the CARB Scoping Plan, and no impact would occur.

SANDAG's San Diego Forward: The Regional Plan

In addition to AB 32, the California legislature passed Senate Bill 375 (SB 375) to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plans to achieve the per capita GHG reduction targets. The San Diego Association of Governments (SANDAG) adopted San Diego Forward: The Regional Plan (Regional Plan), which is the region's SCS, on October 8, 2015. The SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives to governments and developers for consistency. The proposed project would construct replacement school facilities at the existing school and is consistent with the underlying General Plan land use designation. Furthermore, implementation of the proposed project would result in the reduction of up to 48 average daily trips compared to existing conditions. Therefore, the proposed project would not interfere with SANDAG's ability to implement the regional strategies outlined in The Regional Plan. The proposed project would not have the potential to interfere with the State of California's or SANDAG's ability to achieve GHG reduction goals and strategies, and no impact would occur.

5.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X

5. Environmental Analysis

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

The information in this section is based in part on the following technical reports, included as Appendix F of this Initial Study:

- *Phase I Environmental Site Assessment (ESA) Solana Vista Elementary School Modernization for Solana Beach School District,* PlaceWorks, March 2019.

Analysis:

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

Less Than Significant Impact. The proposed project involves the reconstruction of Solana Vista Elementary School within the same property boundaries. Project-related construction activities would require the use of hazardous materials such as fuels, lubricants, and greases in construction equipment. Onsite construction equipment would require routine or emergency maintenance that would result in the release of oil, diesel fuel, transmission fluids, and other materials. However, the amount used would not be present in such quantities or stored in such a manner as to pose a significant safety hazard or environmental threat.

The proposed project would not change the operation of the project site from its current use as a school. Project implementation would not result in transportation, use, or disposal of hazardous materials in conjunction with school operations. Maintenance of the new campus would likely require the use of cleaners, solvents, paints, and other janitorial products that are potentially hazardous. However, these materials would be utilized in relatively small quantities, similar to existing uses employed on campus, and would be stored in compliance with established state and federal requirements. With the exercise of normal operational safety practices, as currently employed at the school, significant impacts would not occur.

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

Less Than Significant Impact. The project site is on the Solana Vista Elementary School campus, which does not use significant quantities of hazardous materials in its operation. Construction activities would not involve a significant amount of hazardous materials, and their use would be temporary. Project construction and operational workers would be trained on the proper use, storage, and disposal of hazardous materials.

The use and disposal of hazardous materials would comply with applicable local, state, and federal regulations.

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

Less Than Significant Impact. The proposed project is on an existing elementary school campus. There are no schools within a quarter mile of the project site; the closest school to the project site is Skyline Elementary, approximately 0.6 mile southwest. Operation of the proposed project would maintain its use as a school and would not result in the release of hazardous emissions. No significant amounts of hazardous materials, substances, or wastes would be transported, used, or disposed of in conjunction with the school's operation. The onsite use of hazardous materials at the proposed facility would be restricted to typical cleaning solvents and paints already used by the school's janitorial and/or maintenance staff. These materials would be utilized in small quantities and stored in compliance with established state and federal requirements. No significant impacts would occur to the occupants at the proposed project or nearby schools.

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

Less Than Significant Impact. Based on a review of the Department of Toxic Substances Control's EnviroStor and the State Water Resources Control Board's GeoTracker websites, the site is not known to have hazardous waste (DTSC 2019; SWRCB 2015). The project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In addition, all construction activities would occur within the existing site boundaries and would not disturb any offsite properties.

A Phase I Environmental Site Assessment (Phase I ESA) and Phase I ESA Addendum were completed for Solana Vista Elementary School (Appendix F). According to the Phase I ESA, the school is listed as a HAZNET site because of asbestos-containing waste that was removed from the school in 2016. Approximately 755 feet to the east of the project site is a land disposal site, Solana Beach Burnsite; as of January, 13 2014, the cleanup status of the site was listed as closing with monitoring (SWRCB 2015). According to the Phase I ESA, based on regulatory status and ongoing oversight of the DTSC, this facility is not expected to have had an impact on the project site.

Additionally, the Phase I ESA did not identify the project site for any recognized environmental conditions related to present or past operations of the site. Section 17213 of the California Education Code and Section 21151.8 of the California Public Resources Code prohibit construction of a school on a current or former hazardous waste or solid waste disposal site. Based on the site inspection and information in the Phase I ESA, the existing school site is not located on a current or former disposal site. Therefore, impacts related to hazardous materials would be less than significant.

5. Environmental Analysis

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

No Impact. The nearest airport is the McClellan-Palomar Airport, approximately 8.5 miles north of the project site. However, the project site is not in an airport land use plan area and is not in the Airport Influence Area of the McClellan-Palomar Airport (ALUC 2010). Federal Aviation Regulation 77.23 generally requires a 200-foot height restriction for development in the height restriction zone. The project site is not in a height restriction zone, and the proposed improvements would be of similar height to the existing campus buildings. Therefore, no impact would occur.

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

Less Than Significant Impact. The proposed project would not conflict with adopted emergency response and evacuation plans. The proposed design of the reconstructed campus would accommodate emergency response. The proposed site plan includes an additional vehicular access driveway into the campus, and the school's facilities, including its fields, could be used during a regional emergency. Although the project would close the existing western loading driveway, a new driveway would be constructed further west and would continue to provide access to the school frontage with an expanded drive aisle. Emergency access to the field area and the southern side of the proposed buildings would be provided via the proposed western driveway aisle and the western hardcourt area. The project does not propose offsite improvements that could impact surrounding properties. In the event that construction would require the temporary closure of a city street, the District would notify the City with the construction schedule and plans. The City of Solana Beach and Solana Beach Fire Department have reviewed the proposed project plans and have not indicated concern with the improvements proposed. Therefore, a less than significant impact would occur from project implementation.

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 entirely surrounded by suburban residential development. According to CAL FIRE, the project site is not within a fire hazard severity zone (CAL FIRE 2009). The proposed improvements would be reconstructed within the campus boundaries. The proposed improvements would not exacerbate risks associated with wildland fire.

Furthermore, the Solana Beach Fire Department has reviewed and approved proposed improvements. According to SBFD, the proposed project provides adequate access roads, fire lane markings, pavers and gate entrances and is compliant with the California Fire Code Title 24, Part 9, related to automatic fire extinguishing systems. The project site is adequately served by fire hydrants under existing conditions, and the location and distribution of fire hydrants during project operation would continue to comply with the California Fire Code and meet the requirements of the local fire authority. Therefore, impacts related to wildland fires would be less than significant.

5.10 HYDROLOGY AND WATER QUALITY

Would the project:

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

Analysis:

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

Less Than Significant Impact. The project site is within the jurisdiction of the San Diego Regional Water Quality Control Board. Drainage and surface water discharges during construction and operation of the proposed project would not violate any water quality standards or waste discharge requirements. However, site preparation and other soil-disturbing activities during construction of the project could temporarily increase the amount of soil erosion and siltation entering the local stormwater drainage system. Post-construction, the project site would continue to operate as a school, and water quality and waste discharges would be similar or less than existing conditions.

5. Environmental Analysis

Construction

The area to be disturbed by the proposed project would be approximately 10 acres. Pursuant to Section 402 of the Clean Water Act, the US Environmental Protection Agency has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control direct stormwater discharges. In California, the State Water Resources Control Board administers the NPDES permitting program and is responsible for developing permitting requirements. The NPDES program regulates industrial pollutant discharges, including construction activities for sites larger than one acre. Since implementation of the proposed project would disturb more than one acre, the proposed project would be subject to the NPDES Construction General Permit requirements (Order No. 2009-0009-DWQ). Additionally, it is standard practice for the District's contractors to implement appropriate best management practices (BMPs) to control erosion and prevent any discharge of sediments from the site.

A stormwater quality management plan (SWPPP) is being prepared for the proposed project. The SWPPP would include BMPs that would be implemented during project construction. The BMPs in the SWPPP would be prepared in accordance with Chapter 13.10 of the Solana Beach Municipal Code, Minimum Best Management Practices for All Dischargers, which includes the following minimum best management practices: measures for eroded soils, pollution prevention, prevention of illegal discharges, maintenance of slopes, storage of materials and waste, and use of materials. Other examples of BMPs include jute bales to slow and direct stormwater flow, concrete wash-out areas, and covering of stockpiles. Implementation of the SWPPP would reduce water quality impacts during construction to a less than significant level.

Operation

The project would result in reconstruction of an existing school, and waste discharges would be similar to that under existing conditions. The proposed improvements include construction of two biofiltration basins: one at the western portion of the site near the new driveway; and one at the southeastern portion of the site, south of the proposed kindergarten play area. The biofiltration areas would capture surface runoff and retain it until the runoff gradually percolates into the ground. With construction of biofiltration areas and because waste discharges would be similar to existing conditions, the improvements would result in a beneficial impact to water quality during project operation, and a less than significant impact would occur.

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

Less Than Significant Impact. The project site is not above a groundwater basin and is developed with blacktop, classroom facilities, and a grass playfield. The project site has not historically been used as an area for groundwater recharge, nor does it contain wells or direct groundwater connections. The project site would remain an elementary school. Project implementation would include construction of two biofiltration basins, which would allow runoff to percolate into the ground. The improvements would not substantially deplete groundwater supplies, and operation of the new facilities would not be significantly different than current operations. A less than significant impact to the local groundwater table would result from project implementation.

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

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

Less Than Significant Impact. The project site is developed with blacktop, classroom facilities, and a grass playfield. The proposed project would demolish the existing buildings and parking lot on campus and would construct new buildings and a parking lot. Drainage improvements include construction of new onsite drainage capture facilities and two biofiltration basins: one at the western portion of the site near the new proposed driveway; and one on the eastern portion of the site, south of the proposed kindergarten play area. The proposed improvements would have a similar flow pattern to existing conditions, and the outfall points would remain unchanged. Project implementation would not alter the course of a stream or river. Additionally, implementation of BMPs in the SWPPP would ensure that erosion and siltation impacts during construction and operation phases would be reduced to a less than significant level.

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. Project implementation would alter the existing drainage on campus. The proposed improvements would not significantly alter flow patterns, and drainage from the project site would be connected to the existing municipal storm drainage system. Additionally, the outfall points would remain unchanged, and project implementation would not alter the course of a stream or river. The proposed improvements include new storm drains and two bioretention areas to control and reduce stormwater flows so that conditions are similar or less than existing levels. The proposed design of the project would limit flooding on- or offsite. Impacts would be less than significant.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. The project site is developed with impervious blacktop and classroom facilities and pervious grass playfield. The proposed improvements would reconstruct the site with a new main classroom building, multipurpose building, hardscape and landscape areas, and drainage facilities to accommodate the proposed improvements. Project development would result in a similar amount of pervious and impervious surfaces compared to existing conditions. Runoff from the project site would be controlled by the new drainage facilities and conveyed to two biofiltration areas that would filter, treat, and detain stormwater prior to discharging it from the site. Drainage improvements include new storm drains and the two bioretention areas to control and reduce stormwater flows so they are similar to or less than existing levels. Appropriate BMPs would be implemented during construction to ensure that impacts associated with runoff volumes are reduced to a less than significant level. Operation of the proposed facilities would generate similar urban runoff pollutants as existing conditions and would not result in additional sources of polluted runoff. Impacts would not be significant.

iv) impede or redirect flood flows?

No Impact. The project site is currently developed. The proposed project would take place within the footprint of the project site, which is outside 100-year flood zones. The project site is in Flood Zone X, which is defined as having a 0.2 percent annual chance floodplain hazard zone (Flood Insurance Rate Maps ID# 06073C1045G and #06073C1063G) (FEMA 2012). As the likelihood of floods in the project area is low, the proposed project would have a no impact on impeding or redirecting flood flows.

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

Less Than Significant Impact. A tsunami is earthquake-induced flooding that is created from a large displace of the ocean floor. The project site is 1.6 miles inland from the Pacific Ocean and is not in a tsunami inundation area (DOC 2009). A seiche is a surface wave created when an inland water body is shaken, usually by earthquake activity. There are no inland water bodies near the project site that could pose a flood hazard to the site due to a seiche. As stated in section 5.10(c)(iv), the project site is in Flood Zone X. Therefore, impacts related to the release of pollutants due to site inundation would be less than significant.

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

Less Than Significant Impact. The proposed project would not obstruct or conflict with the implementation of a water quality control plan or sustainable water management plan. The proposed project would comply with the water quality and water-use requirements of these plans through the implementation of BMPs and compliance with the City of Solana Beach's stormwater ordinance. Therefore, impacts would be less than significant.

5.11 LAND USE AND PLANNING

Would the project:

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

Analysis:

a) Physically divide an established community?

No Impact. The project site is currently developed with blacktop, school facilities, and grass playfield as part of the existing Solana Vista campus. The proposed project would result in the reconstruction of the existing school and would not physically divide an established community. Therefore, no impact would occur.

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

Less Than Significant Impact. The project site is designated Public/Institutional in the Solana Beach General Plan and Public/Institutional on the zoning map. The PI zone is intended to provide areas for civic uses, public safety, or public utility. Educational facilities are permissible developments. The proposed project would reconstruct the Solana Vista Elementary School campus and maintain the existing programs. Project implementation would not conflict with the Solana Beach General Plan.

The project site is within the coastal zone and subject to the California Coastal Act (Public Resources Code Sections 30000 et seq.). Solana Beach has a local coastal program and land use plan; however, it does not have an adopted local implementation plan and cannot issue coastal development permits. Therefore, the California Coastal Commission has purview over the proposed project and would be the responsible agency that would issue the coastal development permit for the proposed project. Table 8, *Project Consistency with Coastal Resources Planning and Management Policies*, lists the policies in Chapter 3 of the Coastal Act that are applicable to the proposed project and explains how the proposed project conforms with them. As documented, the project is consistent, and impacts would be less than significant.

Table 8 Project Consistency with Coastal Resources Planning and Management Policies

Coastal Act Policies	Proposed Project Consistency
• Public Access (Sections 30210–30214) concerns maintaining public access to recreational facilities within the coastal zone.	The project site is 1.5 miles from the coast. There is existing urban development between the project site and beach. Project implementation would not obstruct public beach access.
• Recreation (Sections 30220–30224) concerns the protection of lands that are suitable for coastal recreational activities.	The project site is developed with a school and has no environmentally sensitive areas. Project implementation would require the removal of mature trees. Compliance with California Fish and Game Code, Sections 3503, 3503.5, and 3513, which prohibit the take of all birds and their active nests, and implementation of Mitigation Measure BIO-1 would reduce potential impacts to migratory birds to less than significant levels. See Section 5.4, *Biological Resources,* of this Initial Study.
• Marine Environment (Sections 30230–30237) concerns the protection of marine resources, including those of special biological or economic significance.	The project site is developed with a school and has no environmentally sensitive areas. The project would not impact marine resources or habitat. Project implementation would require the removal of trees that could support nesting birds. Compliance with California Fish and Game Code, Sections 3503, 3503.5, and 3513, which prohibit the take of all birds and their active nests, and implementation of Mitigation Measure BIO-1 would reduce potential impacts to migratory birds to less than significant levels. See Section 5.4, *Biological Resources,* of this Initial Study.

Table 8 Project Consistency with Coastal Resources Planning and Management Policies

• Land Resources (Sections 30240–30244) concerns the compatibility of development and land resources, including environmentally sensitive habitat, prime agriculture, timberlands, and subsurface cultural resources.	The project site does not contain any agricultural or timberland uses and is not environmentally sensitive. Construction activities, however, would require excavation of up to 25 feet below ground surface. Mitigation Measures CUL-1, CUL-2, GEO-1, and TCR-1 would minimize potential impacts to subsurface archaeological, tribal, and/or paleontological resources.
• Development (Sections 30250–30255) concerns environmental impacts caused by physical development, including aesthetics, beach access, geologic, flood, fire hazard, air quality, and energy consumption.	The proposed new school facilities and associated offsite improvements would be constructed within the boundaries of an existing developed site. The project would include sustainable features and have energy-efficient improvements. The project would comply with the applicable state building code standards to minimize risks to life and property and comply with applicable regulations enforced by the San Diego Air Pollution Control District. Project implementation would not affect any scenic resources. The project's negative effects, as mitigated, are documented in this Initial Study.
• Industrial Development (Sections 30260–30265.5) concerns coastal-dependent industrial facilities.	The project is not an industrial development. This section is not applicable.

Source: Public Resources Code Sections 30000 et seq.

5.12 MINERAL RESOURCES

Would the project:

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

Analysis:

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

No Impact. The City of Solana Beach has mapped its mineral resources designation pursuant to the California Surface Mining and Reclamation Act of 1975. Four mineral resource zones (MRZ) classify sand, gravel, and crushed rock resources:

- **MRZ-1.** Adequate information indicates that no significant mineral deposits are present or likely to be present.

- **MRZ-2.** Adequate information indicates that significant mineral deposits are present or there is a high likelihood for their presence, and development should be controlled.
- **MRZ-3.** The significance of mineral deposits cannot be determined from the available data.
- **MRZ-4.** There is insufficient data to assign any other MRZ designation.

The project site is in MRZ-3 (DOC 1982), where the significance of mineral deposits cannot be determined. This mineral resource designation is intended to prevent incompatible land use development on areas determined to have significant mineral resource deposits. The project site and its surrounding areas are developed with housing and a school, and there are no ongoing mineral extractions. The proposed project is consistent with the existing use as a school, and no loss of availability of known resources would result from project implementation. Therefore, no impact would occur.

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

No Impact. The project site is not a locally important mineral resource recovery site delineated in the City of Solana Beach General Plan. Implementation of the proposed project would not result in the loss of availability of a locally important mineral resource. Therefore, no impact would occur.

5.13 NOISE

Noise is most often defined as unwanted sound. Although sound can be measured, the perception of noise and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness." The following are brief definitions of terminology used in this section. Additional information on noise and vibration fundamentals, pertinent local regulations and calculations for construction noise can be found in Appendix G to this Initial Study.

Terminology and Noise Descriptors

- **Sound.** A vibratory disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unit-less measure of sound on a logarithmic scale.
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a

stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.

- **Statistical Sound Level (L_n).** The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.

- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 pm to 10:00 pm and 10 dB from 10:00 pm to 7:00 am. For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive, that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.

- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

- **L_{max}.** The maximum root-mean-square noise level during a measurement period.

- **Peak Particle Velocity (PPV)**. The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.

Existing Noise Environment

Noise sources in the vicinity of the project site include motor vehicles on local streets such as Santa Victoria and Santa Helena, school operational noise, and typical noises from residential uses including people talking and property maintenance. Review of the Future CNEL Noise Contours figure and Future Traffic Noise Contours table from the Solana Beach General Plan Noise Element indicate that the noise environment in the immediate vicinity of the project is within the 60 dBA CNEL noise contour.

Sensitive Receptors

Solana Vista Elementary School is immediately surrounded by single-family homes to the north, east, south and west. Further east and south is the Lomas Santa Fe Golf Course.

Regulatory Setting

Solana Beach General Plan Noise Element

The noise element of a general plan is a comprehensive program for including noise control in the planning process. Noise elements typically include policies and standards that coincide with the city's municipal code and are meant to limit excessive noise at sensitive receptors. They also serve as tools for local planners to use in achieving and maintaining compatible land use with environmental noise levels. A noise element contains criteria designed to integrate noise considerations into land use planning to prevent noise/land use conflicts. However, it is important to note that with a recent California Supreme Court decision regarding the assessment of the environment's impacts on proposed projects, it is generally no longer the purview of the CEQA process to evaluate the impact of existing environmental conditions on any given project. *California Building Industry Association v. Bay Area Air Quality Management District* (2015) (Case No. S213478). Therefore, exterior noise effects from nearby noise sources relative to land use compatibility of the project is no longer a topic for impact evaluation under CEQA, and no statement of impact significance is germane. For reference, the Solana Beach Noise Element is included in Appendix G.

Solana Beach Municipal Code

The City of Solana Beach noise regulations are implemented and enforced through the municipal code, which is intended to establish citywide standards to regulate noise. Although noise issues are covered in several parts of the municipal code, the bulk of noise-related regulations are in Chapter 7.34, Noise Abatement and Control, under Title 7, Public Peace, Morals and Welfare. The applicable code is included in Appendix G.

Operational Noise Standards

The Solana Beach Municipal Code sets limits for exterior noise levels. Municipal code section 7.34.040 states that it shall be unlawful for any person to cause or allow the creation of any noise to the extent that the one-hour average sound level (Leq), at any point on or beyond the boundaries of the property on which the sound is produced, exceeds the applicable limits set forth in Table 9, *Allowable Exterior 1 Hour Leq Limit (DBA)*. Section 7.34.170 exempts reasonable sounds emanating from authorized school bands, school athletic and school entertainment events from the noise standards.

5. Environmental Analysis

Table 9 Allowable Exterior 1 Hour L_{eq} Limit (dBA)

Land Use	7:00 AM to 10:00 PM	10:00 PM to 7:00 AM
Estate Residential, Low/Low-Medium/Medium Residential	50	45
Medium-High/High Residential	55	45
Public Institutional, Right-of-Way Zone, Open Space Park/Recreational	60	45
General Commercial, Light Commercial, Office Professional	60	55
Light Industrial, Special Commercial	70	60

Source: Solana Beach Municipal Code, Section 7.34.040.

Construction Noise Standards

Municipal code section 7.34.100 sets allowable hours and establishes a noise level limit for construction activities; specifically, erection, demolition, alteration, or repair of any building structure or grading or excavation of land that creates disturbing, excessive, or offensive noise is not allowed:

- Before 7:00 AM or after 7:00 PM Monday through Friday, and before 8:00 AM or after 7:00 PM on Saturday.
- All day on Sunday, New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

Construction noise levels shall not exceed 75 dBA L_{eq} for more than eight hours during any 24-hour period when measured at or within property lines of any property which is developed and used either in part or in whole for residential purposes.

Pertinent Vibration Standards

Since neither the City of Solana Beach nor the County of San Diego sets quantitative vibration level standards for structural damage, impacts are defined as significant if they exceed the Federal Transit Administration (FTA) standards for vibration. For structural damage, FTA guidelines define an impact as significant if it exceeds 0.20 inches/second peak particle velocity (in/sec PPV) for nonengineered timber and masonry buildings, and 0.30 in/sec PPV for engineered concrete and masonry (no plaster) buildings.

Would the project result in:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		

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

Analysis:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact with Mitigation Incorporated.

Operational Noise Impacts

With respect to projected-related increases, noise impacts can be broken into three categories. The first is "audible" impacts, which refer to increases in noise level that are perceptible to humans. Audible increases in general community noise levels generally refer to a change of 3 dBA or more since this level has been found to be the threshold of perceptibility in exterior environments. The second category, "potentially audible" impacts, refers to a change in noise level between 1 and 3 dBA. This range of noise levels was found to be noticeable to sensitive people in laboratory environments. The last category includes changes in noise level of less than 1 dBA that are typically "inaudible" to the human ear except under quiet conditions in controlled environments. Only "audible" changes in noise levels at sensitive receptor locations (i.e., 3 dBA or more) are considered potentially significant. A doubling of traffic flows (e.g., 10,000 vehicles per day to 20,000 per day) would be needed to create a 3 dBA CNEL increase in traffic-generated noise levels.

Roadway Noise

The majority of people driving to the school campus would enter the facility from Santa Victoria roadway. Existing conditions include a total capacity of 420 students, and the proposed project would result in a decreased student capacity of 380 students. For potential traffic-generated noise, the proposed project will result in a decrease of approximately 30 students (conservatively). This would result in a decrease of 48 trips (IBI 2019). A traffic noise increase due to the project would not occur; therefore, this impact would be less than significant.

Student Recreational Noise

The proposed project would result in a decrease in student population. This would result in an overall decrease or no change to noise generated from recess, lunch, and other outdoor student-related activities on

campus. It should also be noted that Section 7.34.170 of the municipal code exempts reasonable sounds emanating from authorized school bands, school athletic and school entertainment events from the noise standards. As the site is already a school, there is no permanent noise increase due to project-related activities.

Stationary Noise

Heating, ventilation, and air conditioning (HVAC) systems will be installed at the new proposed buildings. The nearest residences to the new proposed buildings are east approximately 50 feet from the property line. Typical HVAC equipment generates noise levels ranging up to 72 dBA at distance of 3 feet, which would attenuate to approximately 48 dBA at a distance of 50 feet. The municipal code requires that noise levels not exceed 50 dBA during daytime hours and 45 dBA during nighttime hours. Depending on the ultimate location of HVAC equipment, the nighttime noise standard of 45 dBA could be exceeded, and this would be considered a potentially significant impact. Parapet walls that block line of sight can reduce noise levels by 5 dBA. This would reduce noise levels to 43 dBA or less, which would be in accordance with Solana Beach Municipal Code nighttime noise limits of 45 dBA. With mitigation implementation NOI-1, project-related operational HVAC noise would be reduced to a level of less than significant.

NOI-1 If final plan drawings locate HVAC equipment within 75 feet of nearby residences, the equipment shall be shielded by a rooftop parapet wall (or wall or enclosure if at ground level) so as to block line-of-sight to nearby residences.

Construction Noise

Construction would not occur before 7:00 AM or after 7:00 PM Monday through Friday, and before 8:00 AM or after 7:00 PM on Saturday. Construction also would not occur on Sunday or on any of the recognized holidays.

Construction Vehicles

The transport of workers and materials to and from the construction site would temporarily increase noise levels along Santa Victoria and Santa Helena streets. Haul trips will take place during building demolition, asphalt demolition, and grading. Building demolition and asphalt demolition will overlap and potentially generate an average of 15 daily haul trips. Haul truck pass-bys including individual construction vehicles may create momentary noise levels of up to approximately 85 dBA (L_{max}) at 50 feet from the vehicle, but these occurrences would generally be infrequent and short lived.

Construction generates temporary trips from workers and vendors. Project construction is anticipated to have seven stages, of which some will generate more or less construction related trips. Building construction, paving, and architectural coating are overlapping stages. The overlapping stages are anticipated to generate the most daily trips—92 worker and 25 vendor daily trips (117 total). Out of those trips, 64 are associated with building construction, 15 for paving, and 13 for architectural coating during 350 workdays for building construction and 26 workdays for paving and architectural coating.

Existing average daily trips (ADT) along Santa Victoria from Santa Carina to Santa Helena are 662 (IBI 2019). The addition of worker, vendor trips, and haul trips would result in less than 1 dB increase. Therefore, noise

impacts from construction-related truck traffic would be less than significant at noise-sensitive receptors along the construction routes.

Temporary Student Relocation Trips

Due to construction activities, Solana Vista Elementary would not hold any classes until the completion of the building construction and improvements. Students would be temporarily relocated to either Solana Highlands Elementary or Skyline Elementary School.

Grades kindergarten through second grade would be relocated to Solana Highlands Elementary School at 3520 Long Run Drive in San Diego. Approximately 240 students would be bused to Solana Highlands. Each bus has a capacity of 72 total seats, resulting in a total of 4 to 5 bus trips to and from the schools. This would result in a less than significant noise increase because it would not double existing traffic on roadways and thus would result in noise increase of less than 3 dBA.

The third-grade class would not be bused to the new temporary school, Skyline Elementary School, located at 606 Lomas Santa Fe Drive, approximately 0.6 mile to the southwest. As discussed in the *Project Description*, 109 third-grade students would be moved to Skyline Elementary during the 2020-21 school year. Driveway access to the school is off of Lomas Santa Fe Drive. ADT along Lomas Santa Fe Drive is summarized in Table 10, showing the estimated noise increase due to temporary relocation of 109 third-grade students, conservatively assuming that all trips could occur on a given roadway.

Table 10 Existing ADT along Lomas Santa Fe Drive and Associated Noise Increase

Segment	Existing ADT[1]	Total Potential Trips Generated[2]	Temporary Noise Increase in dBA
Lomas Santa Fe Drive – Stevens Avenue to Solana Hills Drive	25,900	175	0.03
Lomas Santa Fe Drive – Solana Hills Drive to Interstate 5	35,600	175	0.02
Lomas Santa Fe Drive – Interstate 5 to Marine View/Santa Helena	21,200	175	0.04
Lomas Santa Fe Drive – Marine View/Santa Helena to Highland Drive	11,000	175	0.07

Sources: [1] SANDAG 2019. [2] IBI Group 2019 (1.6 trips per student x 109 students = 174.4).

As shown in Table 10, temporary traffic noise increases due temporary relocation of the third-grade class to Skyline Elementary would be much less the 1 dBA and would, therefore, result in a less than significant impact.

Construction Equipment

Noise generated during construction depends on the type of equipment used, the location of the equipment relative to sensitive receptors, and the timing and duration of the noise-generating activities. Each stage of construction involves different kinds of construction equipment and therefore has its own distinct noise

characteristics. Noise levels are dominated by the loudest piece of equipment. The dominant noise source is typically the engine, although work piece noise (such as dropping of materials) can also be noticeable. Noise levels from project-related construction activities were calculated from the simultaneous use of all applicable construction equipment at spatially averaged distances (i.e., from the center of the general construction area) to the property line of the closest sensitive receptors. Although construction may occur across the entire site, the center of the proposed project best represents the potential average construction-related noise levels to the various sensitive receptors during the overall construction portion of the proposed project.

Construction activities associated with the proposed project would not require blasting or pile driving. Demolition and grading typically generate the highest noise levels because they require the largest equipment. Construction noise quite often exhibits a high degree of variability because factors such as noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction stage result in different noise levels at a given sensitive receptor. Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels in excess of 80 dBA at 50 feet. Since noise from construction equipment is intermittent and diminishes at a rate of 6 dB per doubling of distance, the average noise levels at noise-sensitive receptors would be lower, because mobile construction equipment would move around the site with different loads and power requirements.

To calculate construction noise as it affects sensitive receptors, the Federal Highway Administration's Roadway Construction Noise Model (RCNM) calculation methodology was used. The RCNM includes reference noise levels for numerous equipment pieces. Since the RCNM calculations do not account for shielding due to intervening buildings and structures, ground effects, or air absorption, the results of these calculations are conservative (that is, they represent a "worst case" scenario). Using information provided by the project applicant and methodologies and inputs employed in the air quality assessment, the expected construction equipment mix was estimated and categorized by construction activity.

Students would be temporarily relocated during construction of the proposed project. Third-grade students would be relocated to Skyline Elementary School, and kindergarten through second-grade students would be relocated to Solana Highlands Elementary School. Therefore, there would be no onsite sensitive receptors during construction and there would be no impact.

Offsite Sensitive Receptors

The closest offsite sensitive receptors are the surrounding residences. The nearest residential receptors from the acoustical center of the site are approximately 250 feet away. The associated, aggregate sound levels—grouped by construction activity—are summarized in Table 11.

Table 11 Project-Related Construction Noise Levels, Energy-Average (L_{eq}) Sound Levels

Construction Activity	Nearest Sensitive Receptor at 250 ft.
Demolition	73 dBA
Site Preparation	71 dBA
Grading	72 dBA
Paving	73 dBA
Architectural Coating	60 dBA

Note: Calculations performed with the FHWA's RCNM software are included in Appendix G. Distance measurements were taken using Google Earth (2018) from the acoustical center of the project site.

As shown in Table 11, average noise levels during construction could reach 73 dBA L_{eq} at the nearest receptor, which does not exceed the City's construction noise level threshold of 75 dBA L_{eq}. Provided construction activities take place between 7:00 AM and 7:00 PM on weekdays, 8:00 AM and 7:00 PM on Saturdays, and no construction on Sundays or holidays, construction noise would result in a less than significant impact.

b) Generate excessive groundborne vibration or groundborne noise levels.

Less Than Significant Impact. Potential vibration impacts associated with development projects are usually related to (1) the use of heavy construction equipment during demolition and grading phases of construction and/or (2) the operation of large trucks over uneven surfaces during project operations. Impacts are defined as significant if they exceed the FTA standards for vibration.

Operational Vibration Impacts

The operation of the proposed project would not generate substantial levels of vibration because there are no notable sources of vibrational energy associated with the project. The proposed project would maintain its existing operation as a school. Therefore, no significant vibration effects from operation would occur

Construction Vibration Impacts

Construction can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures.

For reference, a PPV of 0.2 in/sec is used as the limit for nonengineered timber and masonry buildings (which would apply to the surrounding structures) (FTA 2018). At a distance of 25 feet or greater, construction-generated vibration levels at the nearest building would be less than the 0.2 in/sec PPV

vibration damage criterion. Table 12 summarizes vibration levels for typical construction equipment at the nearest sensitive receptors.

Table 12 Architectural Damage Vibration Levels from Construction Equipment

Equipment	PPV (in/sec) at 25 feet	PPV (in/sec) at nearest sensitive receptor (70 feet)
Vibratory Roller	0.21	0.045
Hoe Ram, Large Bulldozer, Caisson Drilling	0.089	0.019
Loaded Trucks	0.076	0.016
Jackhammer	0.035	0.007
Small Bulldozer	0.003	0.001

Source: FTA 2018.

The nearest structures to construction activity requiring the use of a vibratory roller are residences to the east at 70 feet, which would result in vibration levels less than 0.2 in/sec PPV, therefore resulting in a less than significant impact. The nearest structure to the project site is a residential home approximately 20 feet south east of the proposed Kindergarten Gardening and Play Area. This area of the project would not utilize vibratory rollers but may utilize other equipment such as a bulldozer. A large bulldozer would generate a vibration level of 0.124 in/sec PPV at 20 feet. This is less than 0.2 in/sec PPV vibration damage threshold. Therefore, construction induced vibration impacts would result in a less than significant impact.

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 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. There are no near private airstrips or airports within 2 miles of the proposed project. The nearest airport to the project site is McClellan-Palomar Airport, approximately 8.5 miles to the north. Therefore, there would be no impact.

5.14 POPULATION AND HOUSING

Would the project:

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Analysis:

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

No Impact. The proposed project would not increase the capacity or change the educational use of the school. No construction of homes or businesses is proposed, nor extensions of roads or other infrastructure. Project implementation would result in no impact to population growth.

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

No Impact. The proposed project would occur within the existing Solana Vista campus, and no housing units or people would be displaced. No replacement housing construction is necessary, and no impact would occur.

5.15 PUBLIC SERVICES

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

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

Analysis:

a) Fire protection?

Less Than Significant Impact. Fire protection and emergency medical services for Solana Vista are provided by the Solana Beach Fire Department (SBFD). The nearest fire station is 1 mile west of campus, at 500 Lomas Santa Fe Drive. Construction of the improvements may result in a brief increased need for fire protection services during the 19-month construction period. Interim housing for Solana Vista students would incrementally increase attendance at Solana Highlands and Skyline elementary schools. However, this increase would be temporary, the schools are adequately served by the SBFD.

5. Environmental Analysis

The new facilities would reduce the capacity of Solana Vista by 40 seats during operation of the site and would reduce fire protection demands from existing conditions. Additionally, the final design of the proposed improvements would be reviewed for consistency with applicable code requirements. The Division of the State Architect would assess the new campus's structural safety and evaluate its compliance with state fire and building codes (California Code of Regulations, Title 24). The Solana Beach Fire Department has reviewed the proposed project plans for fire access and emergency response plan and would provide approval of the final building plans when submitted (see Section 5.9.f). Project implementation would not impact the availability of services such that new or physically altered government facilities would be required, and existing response times would not be affected. Impacts to fire protection services would be less than significant.

b) Police protection?

Less Than Significant Impact. Law enforcement and police protection services are provided by the San Diego County Sheriff's North Coastal Station at 175 North El Camino Real in Encinitas, approximately 3 miles north of the project site. Construction of the improvements may result in a brief increased need for police protection services during the 19-month construction period. Interim housing for Solana Vista students would incrementally increase attendance at Solana Highlands and Skyline elementary schools. However, this increase would be temporary, the schools are adequately served by the San Diego County Sheriff's Department.

The new facilities would reduce the capacity of Solana Vista by 40 seats during operation of the site and would reduce police services demands from existing conditions. Therefore, project implementation would result in a less than significant impact to police protection services.

c) Schools?

No Impact. The proposed project would be the reconstruction of the existing Solana Vista campus. The project would reduce the capacity of Solana Vista by 40 seats from existing conditions. The new facilities would serve the existing Solana Vista programs.

During the project's 19-month construction period, the District would provide offsite interim classroom housing. Solana Vista's approximately 240 kindergarten through second-grade students would be housed at Solana Highlands Elementary for the 2020-21 school year, and approximately 109 third-grade students would be moved to Skyline Elementary. The District would provide buses to transport students to and from Solana Highlands. Once the improvements at Solana Vista Elementary School are completed, the programs would return to the reconstructed campus. Solana Highlands and Skyline have sufficient classroom capacity to support the Solana Vista students during the temporary construction period for the proposed project. Implementation of the project would not adversely impact the provision of school services by the District. Therefore, no impact would occur.

d) Parks?

No Impact. Impacts to parks are generally caused by a project's inducement of population or employment growth. The proposed project is the reconstruction of the Solana Vista campus, including its recreational facilities. Project implementation would reduce the capacity of the school by 40 seats and would therefore result in an proportionate reduction in demand on recreational facilities. The new grass fields would continue to serve Solana Vista's existing programs and the surrounding community after school hours via the Civic Center Act when not in use by the school or District. Therefore, with the improved recreational facilities, the project would have a beneficial effect on existing park spaces, and no impact would occur.

e) Other public facilities?

No Impact. The proposed project is the reconstruction of the Solana Vista campus. Existing school uses and programs would not change. The proposed improvements include learning resource center rooms, which function as libraries for the students. The learning resource centers would adequately serve as library and learning facilities for the increase of students at Solana Vista. The project would not directly or indirectly create a need for other public facilities, and no impact would occur.

5.16 RECREATION

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

Analysis:

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. The demand for recreational facilities increases with growth-inducing projects that increase population, such as residential development. The proposed project would serve the existing programs of Solana Vista and would reduce the capacity of the school by 40 seats. The new facilities would provide play areas and adequate park space and would not directly increase population in the area. Although the project would temporarily remove two baseball fields that are currently used by the Solana Beach Little League during construction of the improvements, these games could be relocated to another league field (Child Development Center, Richardson Field in Rancho Santa Fe, etc.). Although during construction of the improvements other fields in the vicinity of Solana Beach would be used, this impact

would be temporary. Additionally, during operation of the project the new grass fields would continue to serve Solana Vista's existing programs and the surrounding community after school hours via the Civic Center Act when not in use by the school or District. Project implementation would not deteriorate existing neighborhood or regional parks, and a less than significant impact would occur.

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

Less Than Significant Impact. The proposed project involves the reconstruction of the Solana Vista campus, including its recreational amenities. The improvements would serve the existing school and surrounding communities. The environmental effects related to the proposed improvements are discussed throughout this Initial Study. Impacts, as mitigated, would be less than significant, and no additional mitigation measures are required.

5.17 TRANSPORTATION

Would the project:

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

The analysis in this section of the Initial Study was based on part on the traffic impact analysis prepared for the proposed project, and is included as Appendix H to this Initial Study:

- *Solana Vista Elementary School Modernization Traffic Analysis*, IBI Group, April 5, 2019.

Analysis:

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

Less Than Significant Impact with Mitigation Incorporated. Existing and new students would continue to come from within the school's attendance boundaries and use the local roadways of Santa Victoria and Santa Helena Drive to access the school. Therefore, per discussions with the City of Solana Beach, the traffic

analysis evaluated the weekday AM peak commute hour, which has the highest volume of commute and school traffic, for the following intersections in the project vicinity:

1. Santa Carina and Santa Victoria
2. Santa Cecelia and Santa Victoria
3. Santa Bartola and Santa Victoria

Additionally, the following roadway segment was selected for analysis.

1. Santa Victoria from Santa Carina to Santa Helena

A map showing the study area and intersection geometrics and traffic control is provided in Figure 6, *Existing Intersection Geometry*. Based on the school hours of operation (8:00 AM to 3:00 PM), analysis of the study area intersections focused on the AM peak hour, as trips to and from the site would typically not occur during the PM peak period (generally 4:00 PM to 6:00 PM).

Existing Conditions

Average Daily Traffic

The average daily traffic under the Existing Year 2018-19 Without Project scenario is provided in Table 13, *Existing Year (2018-19) Without Project Roadway Segment Summary*.

Table 13 Existing Year (2018-19) With Project Roadway Segment Summary

ID	Roadway	Source	Existing No Project ADT
1	Santa Victoria from Santa Carina to Santa Helena	Counts Unlimited, June 2018	662

Intersection Level of Service

A summary of the AM peak hour intersection level of service analysis results for the Existing Year (2018-19) With Project scenario is presented in Table 14, *Existing Year (2018-19) With Project Intersection LOS*. The results of the proposed project would not generate significant impacts to the study intersections.

Table 14 Existing Year (2018-19) With Project Intersection LOS

Intersection		Intersection Control	Existing	
			V/C or Delay (S)	LOS
1	Santa Carina and Santa Victoria	AWSC	7.4	A
2	Santa Cecelia and Santa Victoria	TWSC	8.7	A
3	Santa Bartola and Santa Victoria	TWSC	9.2	A

5. Environmental Analysis

The traffic impact analysis evaluated traffic operations for the study area intersections and roadway segment under the following scenarios:

- Existing Conditions (2018-19)
- Existing Conditions (2018-19) with Project
- Opening Year (2021-22) without Project
- Opening Year (2021-22) with Project

The opening year traffic analysis included cumulative traffic from other development projects in the city plus ambient background traffic growth (2 percent per year) to forecast future volumes.

Significance Criteria

Per City of Solana Beach and San Diego County requirements, the study area intersections were analyzed using the *Highway Capacity Manual* "Operations" methodology (HCM 2010). The degree of congestion at an intersection is described by the level of service, which ranges from level of service (LOS) A to LOS F, with LOS A representing free-flow conditions with little delay, and LOS F representing over-saturated traffic flow throughout the peak hour. Brief descriptions of the six levels of service for intersections are shown in Table 15, *Level of Service Definitions*.

Table 15 Level of Service Definitions

Level of Service	Control Delay in Seconds (signalized intersection)	Control Delay in Seconds (unsignalized intersection)
A	0.0 – 10.0 seconds	0.0 – 10.0 seconds
B	10.1 – 20.0 seconds	10.1 – 15.0 seconds
C	20.1 – 35.0 seconds	15.1 – 25.0 seconds
D	35.1 – 55.0 seconds	25.1 – 35.0 seconds
E	55.1 – 80.0 seconds	35.1 – 50.0 seconds
F	80.1 seconds or greater	50.1 seconds or greater

The City of Solana Beach uses the SANTEC/ITE Traffic Study Guidelines to define project impact thresholds corresponding to the type of facility. These thresholds are generally based upon an acceptable increase in vehicle delays for intersections. Table 16, *Measure of Significant Project Traffic Impacts*, shows the allowable change in LOS due to a project.

Table 16 Measure of Significant Project Traffic Impacts

	Allowable Change due to Project Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering
Level of Service with Project	V/C	Speed (mph)	V/C	Speed	Delay (sec.)	Delay (min.)
D, E, & F (or ramp meter delays above 15 min.)	0.01	1	0.02	1	2	2

Source: SANTEC/ITE *Guidelines for Traffic Impact Studies in the San Diego Region*.

Notes: All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis (using Table 2 or a similar LOS chart for each jurisdiction). The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. These changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible mitigation (within the Traffic Impact Study [TIS] report) that will maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see above note), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating significant impact changes.

V/C = Volume to Capacity ratio

Delay = Average stopped delay per vehicle measured in seconds for intersections or minutes for ramp meters.

Trip Generation

Weekday daily and AM peak hour trip generation estimates for the proposed project were developed based on actual traffic counts collected at the school during a typical weekday on Tuesday, June 12, 2018, during the AM peak period (7:00 AM to 9:00 AM). Trip generation was estimated using Elementary School trip rates in SANDAG's "(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region" (2002). The project is anticipated to generate a negative net daily count of 48 trips from existing conditions, with a decrease of 9 inbound and 6 outbound trips during the AM peak hour. Table 17, *Project Trip Generation and Rates*, shows the AM peak hour trip generation as a result of the proposed project.

Table 17 Project Trip Generation and Rates

			Trip Generation			
				AM Peak Hour		
Source	Land Use	Students	Daily	In	Out	Total
Rates						
SANDAG	Elementary School	-30	1.6	0.31	0.2	0.51
Project Trips						
SANDAG	Elementary School	-30	-48	-9	-6	-15

Trip Generation Rates: SANDAG 2002.

Project Construction

As discussed in Chapter 3, *Project Description*, during the demolition and construction phase, students in kindergarten through second grade would be temporarily housed at Solana Highlands Elementary School and students in third grade would be temporarily housed at Skyline Elementary School. Once the new facilities are constructed, all students would return to the new campus buildings. Construction traffic will involve

movement of heavy equipment to the site, then workers community to/from the site during construction. Delivery of materials will be made to the sports field used as a staging area. Construction trips are expected to average less than 117 per day, which is well below existing average daily trips of 662.

Solana Highlands Elementary

The existing kindergarten through second-grade students would be housed at Solana Highlands Elementary for the 2020-21 school year. Existing access to the site is via a 500-foot long curbside and passing lane for student drop-off and pick-up. The District would provide approximately four to five buses to transport students to and from Solana Highlands. Approximately 240 kindergarten through second-grade students would be relocated, which would result in 384 daily trips (123 AM peak [75 inbound and 48 outbound]). Capacity of a standard school bus is 72 passengers. Therefore, with four or five buses the District could accommodate 288 to 360 students, and the K-2 students would generate a maximum of five bus trips to and from the school (10 total).

Skyline Elementary

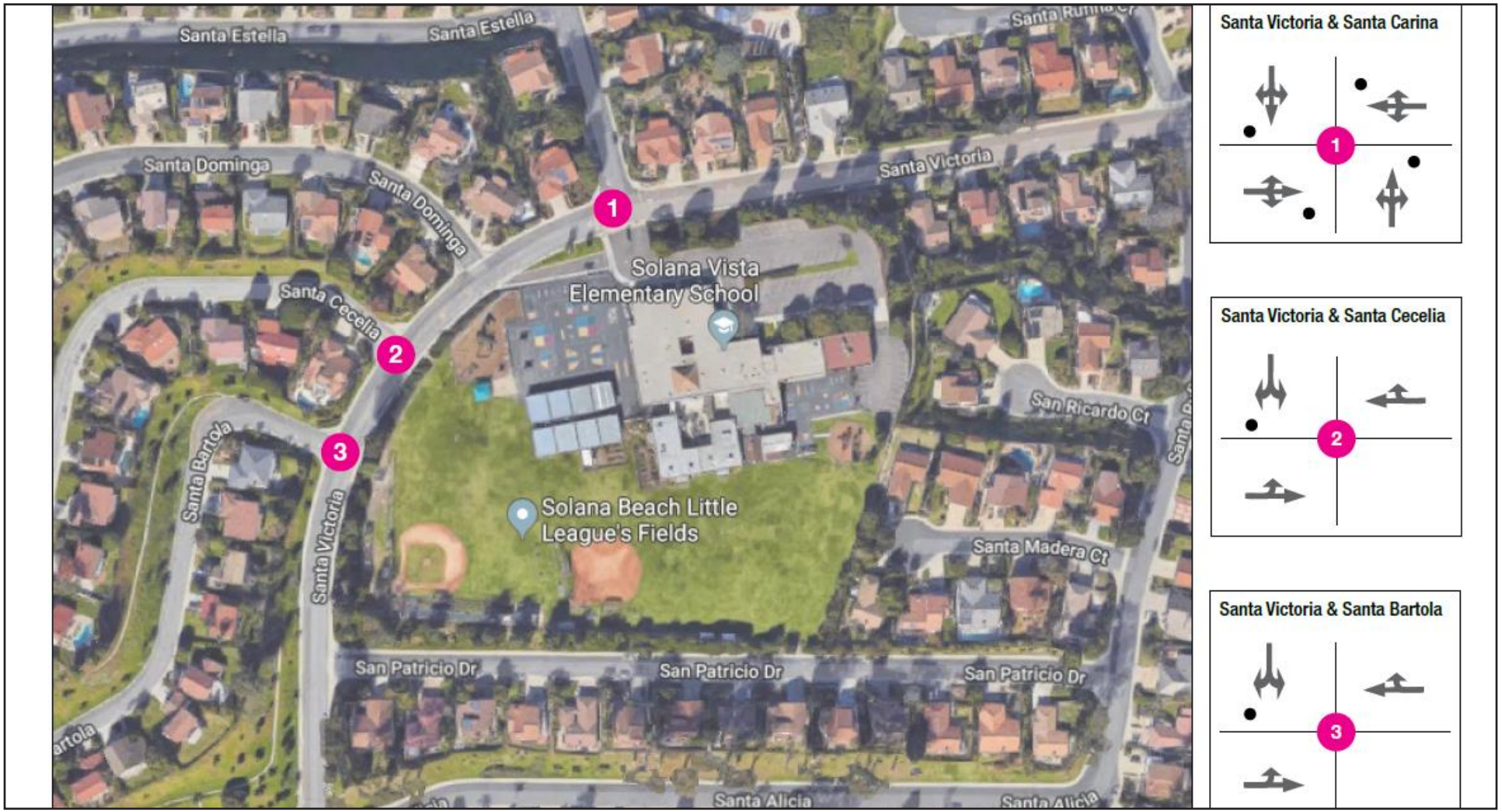
As construction of the improvements would take approximately 19 months to complete, the temporary increase in students at Skyline would not require construction of any new facilities and does not result in a significant impact.

Project Site Access and Internal Circulation

The main entrance point for parents and staff would be provided on Santa Victoria between Santa Cecelia and Santa Bartola via two entry lanes (one drop-off lane for queueing and one passing lane to existing or access the parking lot). The two-lane ingress provides approximately 800 feet of stacking per lane. With project implementation, the school would continue to operate the 400 feet of offsite-loading-designated curb, west of the western driveway entrance along Santa Victoria, and would increase the onsite loading space from 150 feet under existing conditions to 400 feet, an increase in 250 feet of onsite loading space.

A queuing length of approximately 16 vehicles was observed during the existing conditions analysis conducted for the TIA, and some vehicles extended from the queue into Santa Victoria near the Santa Dominga access point. The proposed improvements would be able to accommodate queueing of 16 vehicles because the proposed loading lanes would be longer than the required 320 feet of driveway. Additionally, the egress driveway at Santa Carina and Santa Victoria would be able to accommodate the queueing of vehicles leaving the campus. Queues at this intersection would be less than one car under existing year and opening year scenarios.

Figure 6 - Existing Intersection Geometry



Source: IBI Group, April 5, 2019.

This page intentionally left blank.

Pedestrian Plans

The proposed improvements would reconfigure the loading area and pedestrian access to the project site. A new marked pedestrian crosswalk would be installed west of the eastern driveway and would provide access from Santa Carina to the campus buildings. Crosswalks would also be painted parallel to Santa Victoria at Santa Carina and Santa Cecelia. An additional crosswalk would be painted across Santa Victoria near the Santa Bartola and Santa Victoria intersection to provide access to the site south of the new driveway. With the proposed crosswalks, students would have access to the campus without having to cross school ingress or egress driveways, which would improve pedestrian safety for site access.

Traffic Analysis

The analysis of the study area intersections, consisting of three signalized intersections, used the Synchro (version 10) LOS and queuing analysis software, which is consistent with the HCM 2010 methodology. The existing conditions and opening year (2021-22) traffic conditions were analyzed without and with the proposed project. The opening year traffic analysis includes ambient traffic growth plus cumulative trips.

Existing Year 2018-19 With Project

Average Daily Traffic

The average daily traffic under the Existing Year 2018-19 With Project scenario is provided in Table 18. As shown, the project would reduce average daily trips from existing conditions by 48 trips.

Table 18 Existing Year (2018-19) With Project Roadway Segment Summary

ID	Roadway	Source	Existing No Project ADT	Existing With Project ADT
1	Santa Victoria from Santa Carina to Santa Helena	Counts Unlimited, June 2018	662	614

Intersection Level of Service

A summary of the AM peak hour intersection level of service analysis results for the Existing Year (2018-19) With Project scenario is presented in Table 19. The results show the proposed project would not generate significant impacts to the study intersections.

Table 19 Existing Year (2018-19) With Project Intersection LOS

	Intersection	Intersection Control	Existing		With Project	
			V/C or Delay (S)	LOS	V/C or Delay (S)	LOS
1	Santa Carina and Santa Victoria	AWSC	7.4	A	7.4	A
2	Santa Cecelia and Santa Victoria	TWSC	8.7	A	8.7	A
3	Santa Bartola and Santa Victoria	TWSC	9.2	A	9.1	A

5. Environmental Analysis

Opening Year 2021-22 Without Project

Average Daily Traffic

The average daily traffic under the Opening Year 2021-22 Without Project scenario is provided in Table 20. As shown, by opening year 2021-21 without the project, ADT at the site would increase by 27 from existing conditions.

Table 20 Opening Year (2021-22) Without Project Roadway Segment Summary

ID	Roadway	Source	Existing Without Project ADT	Opening Year Without Project ADT
1	Santa Victoria from Santa Carina to Santa Helena	Counts Unlimited, June 2018	662	689

Intersection Level of Service

A summary of the AM peak hour intersection level of service analysis results for the Opening Year (2021-22) Without Project scenario is presented in Table 21. As shown in Table 21, Opening Year (2021-22) would not generate significant impacts to the study intersections.

Table 21 Opening Year (2021-22) Without Project Intersection LOS

Intersection		Intersection Control	Existing (2018-19)		Opening Year (2021-22)	
			V/C or Delay (S)	LOS	V/C or Delay (S)	LOS
1	Santa Carina and Santa Victoria	AWSC	7.4	A	7.5	A
2	Santa Cecelia and Santa Victoria	TWSC	8.7	A	8.7	A
3	Santa Bartola and Santa Victoria	TWSC	9.2	A	9.3	A

Opening Year 2021-22 With Project

Average Daily Traffic

The average daily traffic under the Opening Year 2021-22 With Project scenario is provided in Table 22. As shown, the project would result in a decrease in ADT by 48 from opening year 2021-21 conditions.

Table 22 Opening Year (2021-22) With Project Roadway Segment Summary

ID	Roadway	Source	Opening Without Project ADT	Opening With Project ADT
1	Santa Victoria from Santa Carina to Santa Helena	Counts Unlimited, June 2018	689	641

Intersection Level of Service

A summary of the AM peak hour intersection level of service analysis results for the Opening Year (2021-21) With Project scenario is presented in Table 23. The proposed project would not generate significant impacts to the study intersections.

Table 23 Opening Year (2021-22) With Project Intersection LOS

	Intersection	Intersection Control	Opening Year Without Project (2021-22)		Opening Year With Project (2021-22)	
			V/C or Delay (S)	LOS	V/C or Delay (S)	LOS
1	Santa Carina and Santa Victoria	AWSC	7.5	A	7.5	A
2	Santa Cecelia and Santa Victoria	TWSC	8.7	A	8.8	A
3	Santa Bartola and Santa Victoria	TWSC	9.3	A	9.2	A

Based on the results of the level of service analysis, the proposed modernization and reconstruction of Solana Vista Elementary would result in a less than significant impact to study intersections and Santa Victoria from Santa Carina to Santa Helena.

Bicycle Plans

The City of Solana Beach adopted a Comprehensive Active Transportation Strategy (CATS) that proposes bicycle and pedestrian improvements in Solana Beach through 2030 (Solana Beach 2015). According to the City of Solana Beach CATS, there are no existing bicycle facilities on the roadways adjacent to the site, including Santa Victoria and San Patricio Drive. The nearest bicycle facilities are on Santa Helena (approximately 550 feet south), which has a Class II and Class III bicycle route. The Solana Beach CATS proposes that the Santa Helena bicycle lanes be maintained and that the Santa Victoria segment adjoining the site be configured as a Residential Bicycle Boulevard, which primarily serves residential neighborhoods and utilizes signs, pavement markings, and traffic-calming measures to reduce speeds. The existing segment of Santa Victoria adjoining the school site includes school area warning signs (i.e., SCHOOL XING, SLOW SCHOOL XING), stop signs, and 25 mph speed limit signs. These signs would be maintained with project implementation, which support reduced speeds and improve bicycle safety. Therefore, the project would not directly impact bicycle plans near the project site.

Public Transit

According to the Solana Beach CATS, the nearest bus route to the project site is at the Solana Hills Drive and Lomas Santa Fe intersection, approximately 0.6 mile southwest of the project site. Due to the distance to the nearest bus route, the proposed improvements would not impact operation of public transit.

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

Less Than Significant Impact. According to CEQA Guidelines Section 15064.3 subdivision (b), vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects that would decrease VMT compared to existing conditions should be considered to have a less than significant transportation impact.

As shown in Table 6, the project would result in approximately 75,598 less VMT during 2019 and 2021 conditions, and an increase in 35,088 VMT to Skyline Elementary and 8,672 VMT to Solana Highlands during 2020 interim conditions. Although VMT would increase during interim conditions, the reduction in VMT during operation of the project would be greater than the increase during interim conditions, and a less than significant impact would occur. As the project would reduce capacity of the school and would result in a reduction in VMT during operation of the project, the project would not conflict with Section 15064.3 subdivision (b), and a less than significant impact would occur.

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

Less than Significant Impact. The proposed project would reconfigure and improve the student loading area and parking lot at the northern portion of the school. As shown in the site plan, the existing loading driveway at the western portion of the site would be removed and a new access driveway would be constructed at a new driveway at Santa Victoria between Santa Bartola and Santa Cecelia. The new driveway would increase the total onsite and offsite student loading area to 800 feet, increase onsite loading by 250 feet, and eliminate existing queuing hazards (see section 5.17.a, above). As discussed in 5.17.a, the proposed improvements would be able to accommodate queueing of 16 vehicles because the proposed loading lanes would be longer than the required 320 feet of driveway. Additionally, the egress driveway on the eastern portion of the site at Santa Carina and Santa Victoria would be able to accommodate the queueing of vehicles leaving the campus. Queues at this intersection would be less than one car under existing year and opening year scenarios.

The new driveway would provide a two-lane drive aisle (east to west) that would serve as the only entrance into the site and one lane for egress. The two-lane drive aisle would use one lane for loading along the campus frontage along the student-drop off area and one would be parallel to the north for bypass. Although the project would include a new egress lane at the western driveway, the project would continue to use the existing 400 feet of loading area on Santa Victoria and would also include a crosswalk and signage at the intersection of Santa Bartola and Santa Victoria that would reduce vehicular traffic speeds. Additionally, the longer onsite loading area along the school frontage would allow for less vehicles to use the Santa Victoria loading area, which would reduce potential for vehicular and student conflicts at the proposed crosswalk on Santa Bartola.

In addition, under Existing Conditions (2018-19) With Project and Opening Year (2021-22) With Project, the project would not change the LOS of adjacent intersections or street segments. Therefore, the proposed project would have a less than significant impact from design feature hazards related to the reconfigured

driveway access layout and internal circulation, including student loading area. Therefore, impacts would be less than significant.

d) Result in inadequate emergency access?

Less than Significant Impact. The proposed project would reconfigure and improve the student loading area and parking lot in front of the school and construct a new access driveway to increase vehicular loading capacity. Emergency vehicles would continue to enter the western portion of the site from Santa Victoria. Access to the field area and the southern side of the proposed buildings would be provided via the proposed western driveway aisle and the western hardcourt area. Therefore, with the improved loading area, improved circulation and parking lot in front of the school, and the provision of an emergency service vehicle road that traverses the back of the campus, emergency access would be adequate, and impacts to emergency access would be less than significant.

5.18 TRIBAL CULTURAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				**X**
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		**X**		

Analysis:

e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural

landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

No Impact. The field survey and research conducted for the archaeological survey did not identify any evidence of prehistoric, Native American, or historic resources. The project site has historically operated as an elementary school, and no tribal cultural resources have been identified on the project site since its construction. Additionally, as elaborated in Section 5.5.a, there are no structures that are listed or eligible for listing in the California Register of Historical Resources and therefore, no impact would occur.

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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation Incorporated. The field survey and research for the archaeological survey did not identify any evidence of prehistoric or Native American resources on the project site. Additionally, a records search for sacred land files by the Native American Heritage Commission concluded negative results. Prior to its current development as an elementary school, the property was undeveloped, and it is unknown whether construction of the existing school uncovered any Native American resources. Since its opening in 1971, however, no resources have been identified. Pursuant to Assembly Bill 52, the District contacted Michael Mirelez, Cultural Resources Coordinator of the Torrez Martinez Desert Cahuilla Indians on May 10, 2019. Implementation of Mitigation Measures CUL-1 and CUL-2, have been identified because project implementation would require disturbance of subsurface soils that have potential to yield archaeological resources. In addition to Mitigation Measures CUL-1 and CUL-2, Mitigation Measure TCR-1 would be implemented to reduce potential impacts to a tribal cultural resources to a less than significant level.

TCR-1 Mitigation Measure CUL-1 requires a professional archaeologist to monitor ground-disturbing activities for the discovery of potential historical or archaeological resources. In the event of the discovery of any cultural resources that may be reasonably associated with Native American culture, the archaeological monitor shall implement the procedures in Mitigation Measure CUL-2(b).

5.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

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

Analysis:

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

Less Than Significant Impact. The Solana Vista campus and the surrounding uses are currently connected to the municipal water distribution, wastewater collection, stormwater drainage, electricity, natural gas, and telecommunications systems. Upon implementation of the proposed project, the proposed improvements would be connected to the existing utility lines on the project site.

Wastewater Treatment

Wastewater treatment for the proposed project is provided by the San Elijo Water Reclamation Facility (WRF). This facility has the capacity to treat 5.25 million gallons of wastewater per day (mgd), and current flows are 3 mgd, with peak flows of up to 6 mgd (Kennedy/Jenks 2015). Therefore, the San Elijo WRF has a remaining treatment capacity of approximately 2.25 mgd and has available treatment capacity to serve the proposed project. The project would reduce the number of classrooms by four and seating capacity by 40, thereby reducing the capacity to 380 seats. Therefore, the project would reduce wastewater generated at the site, and impacts to wastewater treatment would be less than significant.

5. Environmental Analysis

Water Treatment

Water treatment facilities filter and/or disinfect water before it is delivered to customers. The Santa Fe Irrigation District (SFID) supplies water to the project site and surrounding area. The water is treated at the R.E. Badger Filtration (REB) Plant, which is jointly owned and operated by the SFID and the San Dieguito Water District. The REB plant has the capacity to treat up to 40 mgd of water and treats over 7 billion gallons of water annually; therefore, the REB plant has a remaining daily treatment capacity of approximately 20,821,918[5] gpd and is currently able to treat water demanded by the school facilities (SEJPA 2016). Because the proposed project would reduce the capacity by four classrooms and 40 seats to 380 seats and would not change operations of the site as a school use, the SFID would continue to be able to treat water required for operation of the school. Therefore, the project would not require new or expanded water treatment facilities, and a less than significant impact would occur.

Other Utilities

The proposed improvements would be connected to the existing onsite electricity, gas, and telecommunications facilities. The buildings would be constructed to meet the 2019 Building Energy efficiency standards and would have a reduced operating capacity compared to existing conditions; the project would not require an expansion of electricity or gas services (see Section 5.6, *Energy*). Onsite stormwater drainage would be reconfigured to accommodate the proposed improvements but would not alter offsite storm drainage (see Section 5.10, *Hydrology and Water Quality*). Therefore, the project would not require new or expanded utilities and a less than significant impact would occur.

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

Less Than Significant Impact. Construction of the proposed improvements may result in a temporary increase water demand to the project site, but operation would reduce the capacity of the school by 40 seats and would reduce water demands compared to existing conditions. Water supply is provided to the project site by SFID and consists of imported water from northern California and the Colorado River, local water from Lake Hodges and the San Dieguito Reservoir, and recycled water. Total water demands for SFID were 11,239 acre-feet per year for the year 2015. According to the 2015 SFID Urban Water Management Plan, the SFID has sufficient water supply to meet current and projected water demands during normal, single-dry, and multiple-dry years over the next 25-year planning horizon (RMC 2016).

The project would reduce the capacity of the school and would not change the operation of the site as an educational use. There are sufficient water supplies available to serve the project, and new or expanded entitlements are not required. Impacts on water supply would be less than significant.

[5] 40,000,000 gpd x 365 days = 14,600,000,000 gallons per year (gpy) – 7,000,000,000 gpy = 7,600,000,000 gpy / 365 days = 20,821,918 gpd.

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

Less Than Significant Impact. See response to Section 5.18.b, above. The San Elijo WRF has a remaining treatment capacity of 2.25 mgd. The proposed improvements would not result in an increase in wastewater generation. Therefore, impacts 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, otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Waste from the project site is collected and transported to the Escondido Waste Transfer Station at 1044 West Washington Avenue, Escondido, which is owned and operated by Escondido Disposal Inc. Waste is then transported to the Republic Services Sycamore Landfill at 8514 Mast Boulevard in Santee. The maximum daily capacity of the Sycamore Landfill is 5,000 tons per day (tpd) (CalRecycle 2016). According to the CalEEMod estimates, building demolition would result in 1,993 tons of waste and asphalt demolition would result in 1,700 tons of waste (see Appendix A). Building and asphalt demolition material would be hauled over the course of 25 days, or 147.7 tpd. Therefore, the temporary increase in waste generation would be approximately 3 percent of the daily intake capacity for 25 days. Although there may be a brief increase in waste generation during construction of the project, operation of the project would reduce the capacity of the school and would result in reduced waste generation compared to existing conditions. Therefore, project impacts on landfill capacity would be less than significant.

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

Less Than Significant Impact. The District would comply with all county and state solid waste diversion, reduction, and recycling mandates, including the Countywide Integrated Waste Management Plan. To reduce the amount of waste going into local landfills from schools, the state passed the School Diversion and Environmental Education Law, SB 373, which required CalRecycle to develop school waste reduction tools for use by school districts. In compliance with this law, CalRecycle encourages school districts to establish and maintain a paper recycling program in all classrooms, administrative offices, and other areas owned and leased by the school district. Participation in this and other such programs would reduce solid waste generated from the proposed project and assist in compliance with AB 939.

The District and its construction contractor would comply with all applicable laws and regulations and make every reasonable effort to reuse and/or recycle the construction debris that would otherwise be taken to a landfill. They would dispose of hazardous wastes, including paint used during construction, only at facilities permitted to receive them and in accordance with local, state, and federal regulations. The proposed project would comply with all applicable federal, state, and local statues and regulations related to solid waste disposal. Impacts to federal, state, and local statutes concerning solid waste would be less than significant.

5.20 WILDFIRE

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

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

Analysis:

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

Less Than Significant Impact. The proposed project would not conflict with adopted emergency response and evacuation plans. The proposed design of the reconstructed campus would accommodate emergency response. The proposed site plan includes an additional vehicular access driveway into the campus, and the school's facilities, including its fields, could be used during a regional emergency. Although the project would close the existing western loading driveway, a new driveway would be constructed further west and would continue to provide access to the school frontage with an expanded drive aisle. Emergency access to the field area and the southern side of the proposed buildings would be provided via the proposed western driveway aisle and the western hardcourt area. The project does not propose offsite improvements that could impact surrounding properties. In the event that construction would require the temporary closure of a city street, the District would notify the City with the construction schedule and plans. The City of Solana Beach and Solana Beach Fire Department have reviewed the proposed project plans and have not indicated concern with the improvements proposed. Therefore, the proposed project would not result in inadequate emergency access and impacts to adopted emergency response and evacuation plans are less than significant.

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

Less Than Significant Impact. There are three primary factors used in assessing wildfire hazards—topography, weather, and fuel. The project site is relatively flat and is located in an urbanized environment. The proposed project would require small amounts of fuel during construction; however, the handling, use, transport, and disposal of the fuel would comply with existing regulations and would not exacerbate wildfire risks. Further, the project site is not in a very high fire severity zone (CALFIRE 2009). Therefore, impacts of exposing project occupants to pollutant concentrations from a wildfire or exacerbating a wildfire would be less than significant.

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

Less Than Significant Impact. Existing utility infrastructure on the project site (electricity, telecommunications, natural gas, and water and utilities) would be reconfigured to accommodate the proposed building improvements. As substantiated in section 5.20(b), the project site is not located in a very high fire severity zone but in a highly urbanized portion of the City. The proposed project would not add infrastructure such as roads or overheard power lines in areas with wildland vegetation and would not result in an increase in fire fuel (continuous brush, downed vegetation, dry brush) at the project site. Therefore, impacts to exacerbating fire risks to the environment would be less than significant.

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

Less Than Significant Impact. The project site is relatively flat. The surface elevation of the subject site ranges from approximately 230 feet to 240 feet above mean sea level (USGS 2015). The principal areas of concern for landslides are on the coastal bluffs, 1.5 miles to the west, according to the City of Solana Beach General Plan (2014). Moreover, the project site is in Flood Zone X, which is defined as having a 0.2 percent annual chance floodplain hazard zone (Flood Insurance Rate Map ID# 06073C1045G and #06073C1063G) (FEMA 2012). Therefore, it is unlikely that the site would be susceptible to downslope or downstream flooding or landslides as a result of post-fire slope instability. The project site is not located in a very high fire hazard severity zone. Impacts would be less than significant.

5.21 MANDATORY FINDINGS OF SIGNIFICANCE

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		

5. Environmental Analysis

	Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?		X		
c)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X		
d)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Analysis:

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 Impact With Mitigation Incorporated. The project site is in an urban setting and surrounded by roadways and built-out properties. It does not contain any special-status vegetation or animal species. Project development would not degrade the quality of the environment or reduce the population, range, or habitat of a species of fish or wildlife or a rare or endangered plant or animal species. However, project development would remove trees from the project site that could be used as habitat for nesting birds. Additionally, project grading would encounter natural soils and could result in potential impacts to California history, prehistory, and Native American resources. Impacts to nesting birds, archaeological, paleontological, and Native American resources would be reduced to a less than significant level after implementation of Mitigation Measures BIO-1, CUL-1, CUL-2, NOI-1, GEO-1, and TCR-1.

b) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

Less Than Significant Impact With Mitigation Incorporated. The project would improve the existing Solana Vista Elementary School and would not result in adverse long-term environmental impacts. Additionally, after implementation of Mitigation Measures CUL-1 and CUL-2, in Section 5.5, *Cultural Resources*; GEO-1 in Section 5.7, *Geology and Soils*; and TCR-1 in Section 5.18, *Tribal Cultural Resources*, impacts to long-term or short-term environmental goals would be reduced to acceptable industry standards. Impacts would be less than significant with mitigation incorporated. No additional mitigation is required.

c) 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 With Mitigation Incorporated. The analysis in the Initial Study accounts for nearby projects and considers the potential additive environmental effects. With the imposition of mitigation identified in this Initial Study, the proposed project's impacts, when combined with the other projects' impacts, are less than significant, and no additional mitigation is required.

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

Less Than Significant Impact With Mitigation Incorporated. The proposed project would reduce the capacity of Solana Vista Elementary School and would involve the reconstruction and improvement of campus facilities. As demonstrated in this Initial Study, the proposed development and operation of the new campus, as mitigated, would not have environmental effects that would directly or indirectly affect human beings. No additional mitigation measures are required.

5. Environmental Analysis

This page intentionally left blank.

6. References

Airnav LLC. 2019, May 16 (accessed). http://www.airnav.com/ airport.

Airport Land Use Commission (ALUC). 2010, March 4. McClellan-Palomar Airport Land Use Compatibility Plan. http://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=24907.

Bay Area Air Quality Management District (BAAQMD). 2017, May. California Environmental Quality Act Air Quality Guidelines.

CAL FIRE. 2009, June 11. Very High Fire Hazard Severity Zones in LRA Map for Solana Beach. http://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/san_diego/Solana_Beach.pdf.

California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2016.3.2. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.

California Air Resources Board (CARB). 2004. 2004 Revision to the California State Implementation Plan (SIP) for Carbon Monoxide Updated Maintenance Plan for Ten Federal Planning Areas. https://www.arb.ca.gov/planning/sip/co/final_2004_co_plan_update.pdf.

———. 2008, October. Climate Change Proposed Scoping Plan, a Framework for Change.

———. 2017a, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. https://www.arb.ca.gov/cc/shortlived/shortlived.htm.

———. 2017b, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

California Department of Education (CDE). 2018. K-3 Public School Enrollment. Accessed April 4, 2018. http://dq.cde.ca.gov/dataquest/.

_____. 2017. School Accountability Report Card. https://www.sbsd.k12.ca.us/domain/335.

California Department of Forestry and Fire Protection (CAL FIRE). 2009, June 11. Very High Fire Hazard Severity Zones in LRA: Solana Beach. http://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/san_diego/Solana_Beach.pdf.

6. References

California Department of Resources Recycling and Recovery (CalRecycle). 2016. Facility/Site Summary Details: Sycamore Landfill (37-AA-0023). http://www.calrecycle.ca.gov/SWFacilities/Directory/37-AA-0023/Detail/.

California Department of Transportation (Caltrans). 2011, September 7. California Scenic Highway Mapping System: San Diego. Accessed May 9, 2016. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

Construction Testing and Engineering, Inc. 2019, May 10. Geotechnical Investigation Proposed Modernization Solana Vista School 780 Santa Victoria Solana Beach, California.

Department of Conservation (DOC). 2015a, June 16. San Diego County Important Farmland 2012. State of California. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/sdg12_w.pdf.

_____. 2015b. Fault Activity Map of California. http://maps.conservation.ca.gov/cgs/fam/.

_____. 2014. California Important Farmland Finder. http://maps.conservation.ca.gov/ciff/ciff.html.

_____. 2009, June 1. Tsunami Inundation Map for Emergency Planning. https://www.conservation.ca.gov/cgs/Documents/Tsunami/Maps/Tsunami_Inundation_DelMar_Quad_SanDiego.pdf.

_____. 2001. Oil, Gas, and Geothermal Fields in California. ftp://ftp.consrv.ca.gov/pub/oil/maps/Map_S-1.pdf.

_____. 1982. SMARA Study Areas. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_153/SR-153_Plate-16.pdf.

Department of Toxic Substances Control (DTSC). 2019. Envirostor. Accessed February 18, 2019. http://www.envirostor.dtsc.ca.gov/public/.

Federal Emergency Management Agency (FEMA). 2012, May 16. Flood Insurance Rate Map. Map Numbers 06073C1045G and 06073C1063G. https://msc.fema.gov/portal/search#searchresultsanchor.

Federal Highway Administration (FHWA). 2006, August. *Construction Noise Handbook*.

Federal Transit Administration (FTA). 2018, September. *Transit Noise and Vibration Impact Assessment Manual.* US Department of Transportation.

Governor's Office of Planning and Research (OPR). 2008, June. Technical Advisory, CEQA and Climate Change: Addressing Climate Change Through CEQA Review. http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf.

Harris, Cyril M. 1998. *Handbook of Acoustical Measurements and Noise Control.* 3rd edition. Woodbury, NY: Acoustical Society of America.

6. References

IBI Group. 2019, April 5. Solana Vista Elementary School Modernization Traffic Analysis.

Kennedy/Jenks. 2015. The San Elijo Water Reclamation Facility. http://www.sejpa.org/PDFfiles/4C%20WR%20Facility%20Link%202.pdf.

Lofgren, B.E. 1971. Estimated Subsidence in the Chino-Riverside and Bunker Hill-Yucaipa Areas in Southern California for a Postulated Water-Level Lowering, 1965-2015. U.S. Geological Survey Open-File Report.

Natural Resources Conservation Service (NRCS). 2016. Web Soil Survey. United States Department of Agriculture. Accessed April 5, 2018. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

Office of Environmental Health Hazard Assessment (OEHHA). 2015, February. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf.

PlaceWorks. 2019, March. Phase I Environmental Site Assessment: Solana Vista Elementary School Modernization for Solana Beach School District, PlaceWorks.

RMC Inc. 2016, June 1. Santa Fe Irrigation District 2015 Urban Water Management Plan. https://www.sfidwater.org/DocumentCenter/View/177

San Diego Association of Governments (SANDAG). 2019. Average Traffic Volumes: Local Jurisdictions, City of Solana Beach 2015. Accessed: May 16, 2019. https://www.sandag.org/resources/demographics_and_other_data/transportation/adtv/index.asp.

_____. 2015, October 9. San Diego Forward: The Regional Plan. http://www.sdforward.com/.

———. 2002. "(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region." http://sandiegohealth.org/sandag/sandag_pubs_2009-7-25/publicationid_1140_5044.pdf.

San Diego County Air Pollution Control District (SDAPCD). 2016, December. 2016 Revision of the Regional Air Quality Strategy For San Diego County. http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/2016%20RAQS.pdf.

———. 2019. Attainment Status. Accessed May 15, 2019. http://www.sandiegocounty.gov/content/sdc/apcd/en/air-quality-planning/attainment-status.html.

San Diego, County of. 2007, March 19. Guidelines for Determining Significance and Report Format and Content Requirements, Air Quality. http://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf.

San Diego Natural History Museum (SDNHM). 2018, May 8. Paleontological Records Search: Solana Vista Elementary School Reconstruction Project.

6. References

San Elijo Joint Powers Authority (SEJPA). 2016. R.E. Badger Filtration Plant. http://www.sfidwater.org/modules/showdocument.aspx?documentid=585.

Solana Beach, City of. 2015, June. City of Solana Beach Comprehensive Active Transportation Strategy. https://bikewalksolana.org/pdf/CATS_FINALREPORT.pdf.

_____. 2014a, November 19. General Plan. http://www.codepublishing.com/CA/SolanaBeach/#!/SolanaBeachGP/SolanaBeachGPNT.html.

_____. 2007, May. Official Zoning Map. http://www.ci.solana-beach.ca.us/vertical/Sites/%7B840804C2-F869-4904-9AE3-720581350CE7%7D/uploads/Zoning_Map.pdf.

State Water Resources Control Board (SWRCB). 2015. Geotracker. Accessed February 18, 2019. http://geotracker.waterboards.ca.gov/.

Tan, Siang S., 1995 "Landslide Hazards in the Northern Part of The San Diego Metropolitan Area, San Diego County, California, Relative Landslide Susceptibility and Landslide Distribution Map, Rancho Santa Fe Quadrangle" and "Encinitas Quadrangle." Map No. 4.

US Fish and Wildlife Service (USFWS). 2018, March 15. National Wetlands Mapper. http://www.fws.gov/wetlands/data/mapper.HTML.

———. 2015. Enviromapper. Accessed June 6, 2016. http://www.epa.gov/emefdata/em4ef.home.

United States Geological Survey (USGS), 2015. 7.5' Topographic Series, Encinitas, Rancho Santa Fe, Del Mar, and Del Mar OE W, California Quadrangle Maps, scale 1:24,000.

7. List of Preparers

Solana Beach School District

Caroline J. Brown, Executive Director

IBI Group

Vivian Hang, Junior Transportation Engineer

PlaceWorks

Mark Teague, Associate Principal

John Vang, Senior Associate, Air Quality/GHG

Joshua Carman, Senior Associate, Noise and Vibration

Izzy Garcia, Project Planner

Michael Paul, Project Planner

Jasmine Osman, Planner

7. List of Preparers

This page intentionally left blank.